

# COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

U.S. Department of Agriculture  
and State Agricultural Colleges  
Cooperating

Extension Service  
Division of Cooperative Extension  
Washington, D.C.

## COMBINED ANNUAL REPORT OF COUNTY EXTENSION WORKERS

This report form is for use by county extension agents in making a combined statistical report on all extension work done in the county during the year. Agents resigning during the year should make out this report before quitting the service.

State NEVADA County \_\_\_\_\_

### REPORT OF

Mary Stilwell Buol  
(Name) *Home Demonstration Agent.*

From Nov. 1, 1936 to Oct. 31, 1937

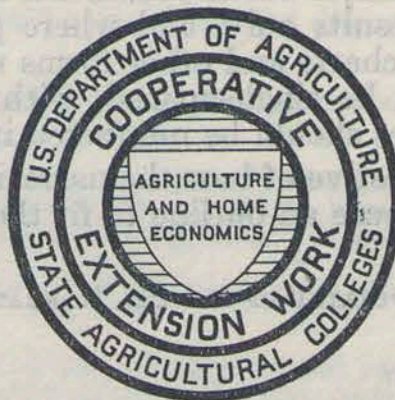
\_\_\_\_\_  
*4-H Club Agent.*

From \_\_\_\_\_ to \_\_\_\_\_, 193

Thomas E. Buckman  
*Agricultural Agent.*

From Nov. 1, 1936 to Oct. 31, 1937

### READ SUGGESTIONS, PAGES 2 AND 3



Approved: \_\_\_\_\_

Date \_\_\_\_\_

State Extension Director.

## SUGGESTIONS RELATIVE TO THE PREPARATION OF THE COUNTY EXTENSION AGENT'S ANNUAL REPORT

The annual report should be a summary, with analysis and interpretations, for presentation to the people of the county, the State, and the Nation of the extension activities in each county for the year, and the results obtained by the county extension agents assisted by the subject-matter specialists. The making of such a report is of great value to the county extension agents and the people of the county in showing the progress made during the year as a basis for future plans. It is of vital concern also to the State and Nation as a measure of rural progress and a basis for intelligent legislation and financial support of extension work.

At least four copies of the annual report should be made: One copy for the county officials, one copy for the agent's files, one copy for the State extension office, and one copy for the Extension Service, United States Department of Agriculture. *The report to the Washington office should be sent through the State extension office.*

### STATISTICAL SUMMARY

Where two or more agents are employed in a county they should submit a single statistical report showing the combined activities and accomplishments of all county extension agents employed in the county during the year. Results obtained through assistance rendered agents by specialists should also be included. This report shows, insofar as possible, the part each agent has taken in forwarding the extension program. The county totals should be the sum of the activities and accomplishments of individual agents *minus duplications due to two or more agents participating in the same activity or accomplishment*. The county totals, when properly recorded, show the progress made in the county during the year in forwarding the entire extension program. Negro men and women agents should prepare a combined statistical report separate from that of the white agents.

The statistical summary should be a report of this year's activities and results that can be verified by records on file in the county office. Where records are not available careful estimates are desired. Such estimates should be marked "Est."

### NARRATIVE SUMMARY

A separate narrative report is desired from the leader of each line of work, such as county agricultural agent, home demonstration agent, boys' and girls' club agent, and Negro agent. Where an assistant agent has been employed during a part or all of the year, the report of his or her work should be included with the report of the leader of that line of work. Where an agent in charge of a line of work has quit the service during the year, the information contained in his or her report should be incorporated in the annual report of the agent on duty at the close of the report year, and the latter report so marked.

The narrative report should summarize and interpret, under appropriate subheadings, the outstanding results accomplished and the extension methods used for each project. Every statement should be clear-cut, concise, forceful, and, where possible, reenforced with necessary data from the statistical summary. Use a descriptive style of writing, giving major accomplishments first under each project. Give extension methods fully relating to outstanding results only, and where practicable illustrate with photographs, maps, diagrams, blueprints, or copies of charts and other forms used. Full credit should be given to all cooperating agencies. The lines should be single-spaced, with double space between the paragraphs and reasonably good margins. The pages should be numbered in consecutive order.

The following outline is merely suggestive of how the narrative report may be clearly and systematically presented. Each agent should prepare an outline to fit the situation and the work to be reported.

### SUGGESTIVE OUTLINE OF ANNUAL NARRATIVE REPORT

- I. Cover and title page.
- II. Table of contents.
- III. Summary of activities and accomplishments, preferably of one or two typewritten pages only, placed at the beginning of the narrative report.
- IV. Changes in county extension organization.
  - (1) Form.
  - (2) General policies.
  - (3) Procedure.
- V. County program of work.
  - (1) Factors considered and methods used in determining program of work.
  - (2) Project activities and results.

Under appropriate headings and subheadings present in some detail for each major project or line of work the goals set up, the methods used, the results achieved, and the significance of these results in terms of improved farms and homes and of better community life.
- VI. Outlook and recommendations, including suggestive program of work for next year.

## TERMINOLOGY

To insure reports which convey the intended meaning to others and to facilitate the compilation of satisfactory national statistics on extension, it is extremely important that terms be used in accordance with accepted definitions. The following definitions of extension terms have been approved by the United States Department of Agriculture and the Association of Land Grant Colleges and Universities. Agents should read these definitions before starting to write the annual reports.

## DEFINITIONS OF EXTENSION TERMS

1. A program of work is a statement of the specific projects to be undertaken by the extension agents during a year or a period of years.

2. A plan of work is a definite outline of procedure for carrying out the different phases of the program of work. Such a plan provides specifically for the means to be used and the methods of using them. It also shows what, how much, when, and where the work is to be done.

3. A community is a more or less well-defined group of rural people with common interests and problems. Such a group may include those within a township, trade area, or similar limits. For the purpose of this report a community is one of the several units into which a county is divided for conducting organized extension work.

4. A project leader, local leader, or committeeman is a person who, because of special interest and fitness, is selected to serve as a leader in advancing some phase of the local extension program. A project leader may be either an organization or a subject-matter leader.

5. Demonstrations as contemplated in this report are of two kinds—method demonstrations and result demonstrations. A method demonstration is a demonstration given by an extension worker or other trained leader for the purpose of showing how to carry out a practice. Examples: Demonstrations of how to can fruits and vegetables, mix spray materials, and cull poultry.

A result demonstration is a demonstration conducted by a farmer, home maker, boy, or girl under the direct supervision of the extension worker, to show locally the value of a recommended practice. Such a demonstration involves a substantial period of time and records of results and comparisons, and is designed to teach others in addition to the person conducting the demonstration. Examples: Demonstrating that the application of fertilizer to cotton will result in more profitable yields, that underweight of certain children can be corrected through proper diet, that the use of certified seed in growing potatoes is a good investment, or that a large farm business results in a more efficient use of labor.

The adoption of a farm or home practice resulting from a demonstration or other teaching activity employed by the extension worker as a means of teaching is not in itself a demonstration.

6. A result demonstrator is an adult, a boy, or a girl who conducts a result demonstration as defined above.

7. A cooperator is a farmer or home maker who agrees to adopt certain recommended practices upon the solicitation of an extension worker. The work is not directly supervised by the extension agent and records are not required, but reports on the success of the practices may be obtained.

8. A 4-H Club is an organized group of boys and/or girls with the objectives of demonstrating improved practices in agriculture or home economics, and of providing desirable training for the members.

9. 4-H Club members enrolled are those boys and girls who actually start the work outlined for the year.

10. 4-H Club members completing are those boys and girls who satisfactorily finish the work outlined for the year.

11. A demonstration meeting is a meeting held to give a method demonstration or to start, inspect, or further a result demonstration.

12. A leader-training meeting is a meeting at which project leaders, local leaders, or committeemen are trained to carry on extension activities in their respective communities.

13. An office call is a call in person by an individual or a group seeking agricultural or home-economics information, as a result of which some definite assistance or information is given. A telephone call differs from an office call in that the assistance or information is given or received by means of the telephone. Telephone calls may be either incoming or outgoing.

14. A farm or home visit is a call by the agent at a farm or home at which some definite information relating to extension work is given or obtained.

15. Days in office should include time spent by the county extension agent in the office, at annual and other extension conferences, and on any other work directly related to office administration.

16. Days in field should include all days spent on official duty other than "days in office."

17. Letters written should include all original letters on official business. (Duplicated letters should not be included.)

18. An extension school is a school usually of 2 to 6 days' duration, arranged by the Extension Service, where practical instruction is given to persons not resident at the college. An extension short course differs from an extension school in that it is usually held at the college or another educational institution and usually for a longer period of time.

19. Records consist of definite information on file in the county office that will enable the agent to verify the data on extension work included in this report.

20. The county extension association or committee is that county organization, whether a membership or a delegate body, which is recognized officially in the conduct of extension work in the county.

## GENERAL ACTIVITIES

Report Only This Year's Extension Activities and Results That Can Be Verified

1. List below the names, titles, and periods of service of the county extension agents whose work is included in this report. Include time of assistants with that of regular agent.

AGENT	Total months of service this year	Days devoted to agr'l-conservation and adjustment programs	Days devoted to relief work	Total days in office	Total days in field
	(a)	(b)	(c)	(d)	(e)
(Name) Home demonstration agent.....	48		151	349½	815½
Asst. home demonstration agent.....					
4-H Club agent.....	4	15	0	90	43
Assistant county agent in charge of club work.....					
Agricultural agent.....	120	606	38	1651	1539½
Assistant agricultural agent.....					

2. County extension association or committee:
- (a) Agricultural extension: (2) Number of members 1024
  - (1) Name .....
  - (b) Home demonstration: (2) Number of members .....
  - (1) Name .....
  - (c) 4-H Club: (2) Number of members .....
  - (1) Name .....
3. Number of communities in county where extension work should be conducted 218 3
4. Number of above communities in which the extension program has been planned cooperatively 176 4  
by extension agents and local committees.
5. Number of different voluntary county or community project leaders or committeemen actively engaged in forwarding the extension program:
- (a) Adult work { (1) Men 411 (2) Women 632 (b) 4-H Club work { (1) Men 21 (2) Women 119 (3) Older club boys 15 (4) Older club girls 26 } 5
6. Number of different paid local leaders engaged in agricultural-conservation and adjustment programs: { (a) Men 75 (b) Women .....
7. Number of clubs or other groups organized to carry on adult home demonstration work 166 7
8. Number of members in such clubs or groups 3907 8

ITEM	Home demonstration agents (a)	4-H Club agents (b)	Agricultural agents (c)	County total (d)
9. Number of 4-H Clubs.....	54		52	106
10. Number of different 4-H Club members enrolled.....	(1) Boys <sup>2</sup> 5		323	328
	(2) Girls <sup>2</sup> 353		132	485
11. Number of different 4-H Club members completing.....	(1) Boys <sup>3</sup> 5		245	250
	(2) Girls <sup>3</sup> 311		92	403

12. Number of different members enrolled in 4-H Club work for:<sup>4</sup>

MEMBERS	1st year	2d year	3d year	4th year	5th year	6th year and over
(a) Boys.....	142	58	63	20	26	19
(b) Girls.....	196	128	73	35	27	26

County total should equal sum of preceding three columns minus duplications due to two or more agents participating in the same activity or

12a. Number of Senior 4-H Club members in County. . . . (a) Boys 92 12a  
 (b) Girls 137

		County Total (d)	1
33a.	Farm Bureau Director's meetings . . . . .	No. <u>82</u>	33a
		Att. <u>442</u>	
33b.	Farm Bureau Committee meetings . . . . .	No. <u>62</u>	33b
		Att. <u>1332</u>	
33c.	Farm Bureau Center meetings . . . . .	No. <u>113</u>	33c
		Att. <u>3128</u>	
33d.	County Farm Bureau Department meetings . . . . .	No. <u>27</u>	33d
		Att. <u>506</u>	

NOTE: #33 will equal total of 33a, 33b, 33c, 33d, plus any "other meetings of an extension nature participated in but not previously reported."

	HDA (a)	Agric. Agents. (c)	County Total (d)	1
33e.	County Club Council meetings No. <u>8</u>	<u>18</u>	<u>26</u>	33e
	NOTE: 33i is included in 27 (2) Att. <u>95</u>	<u>70</u>	<u>165</u>	
33f.	Days devoted to 4-H Club work. . . . .	<u>156</u>	<u>426<sup>3</sup>/<sub>4</sub></u>	<u>582<sup>3</sup>/<sub>4</sub></u> 33f

<sup>1</sup> County Total should equal sum of preceding two columns, minus duplications

33g.	Number of Farm Bureau centers active at any time during the year <u>29</u>	33g
33h.	Number of Farm Bureau Departments active at any time during the year <u>12</u>	33h

34 <sup>1</sup> .	Number of above meetings held by agents or local leaders at which discussion group method of presentation was followed	(a) Number . . . . .	<u>558</u>	<u>7</u>	<u>159</u>	<u>724</u>
		(b) Total attendance . . . . .	<u>3046</u>	<u>81</u>	<u>805</u>	<u>3932</u>
			<u>75</u>	<u>7</u>	<u>129</u>	<u>211</u> 34 <sup>1</sup>

### SUMMARY OF EXTENSION INFLUENCE FOR YEAR

It is highly desirable for extension workers to consider the proportion of farms and farm homes in the county which have been definitely influenced to make some substantial change in farm or home operations as a result of the extension program for men, women, boys, and girls. It is recognized that this information is very difficult for agents to report accurately, so a conservative estimate based upon such records, surveys, and other sources of information as are available will be satisfactory. Such estimates should be marked "Est."

Include results of emergency activities as well as the regular extension program.

35.	Number of farms in county . . . . .	<u>3155</u>	35
36.	Number of farms on which changes in practices have definitely resulted from the agricultural extension program . . . . .	<u>1703</u>	36
37.	Number of farm homes in which changes in practices have definitely resulted from the home demonstration program . . . . .	<u>1817</u>	37
38.	Number of other homes in which changes in practices have definitely resulted from the home demonstration program . . . . .	<u>1875</u>	38
39.	Number of farm homes with 4-H Club members enrolled . . . . .	<u>724</u>	39
40.	Number of other homes with 4-H Club members enrolled . . . . .	<u>264</u>	40
41.	Total number of different farm families influenced by some phase of the extension program . . . . . (Include questions 36, 37, and 39, minus duplications.)	<u>3821</u>	41
42.	Total number of different other families influenced by some phase of extension program . . . . . (Include questions 38 and 40, minus duplications.)	<u>3173</u>	42

<sup>1</sup> County total should equal sum of preceding three columns minus duplications due to two or more agents participating in the same activity or accomplishment.

NOTE.—Questions 18-34 refer to the total number of different activities conducted this year. The totals should equal the sums of the corresponding information reported on following pages minus duplications where the same activity relates to two or more lines of work.

		County Total	
		(d)	1
33a.	Farm Bureau Director's meetings . . . . .	No. 82	33a
		Att. 442	
33b.	Farm Bureau Committee meetings . . . . .	No. 62	33b
		Att. 1332	
33c.	Farm Bureau Center meetings . . . . .	No. 115	33c
		Att. 3128	
33d.	County Farm Bureau Department meetings . . . . .	No. 27	33d
		Att. 506	

NOTE: #33 will equal total of 33a, 33b, 33c, 33d, plus any "other meetings of an extension nature participated in but not previously reported."

		HDA (a)	Agric. Agents. (c)	County Total (d) 1
33e.	County Club Council meetings No.	8	18	26 33e
	NOTE: 33i is included in 27 (2) Att.	95	70	165
			3 3/4	588 3/4 33f

not participated in by agents or specialists and not reported elsewhere (2) 4-H club	(a) Number	558	7	159	724
	(b) Total attendance	3046	81	805	3932
344. Number of above meetings held by agents or local leaders at which discussion group method of presentation was followed		75	7	129	211 344

### SUMMARY OF EXTENSION INFLUENCE FOR YEAR

It is highly desirable for extension workers to consider the proportion of farms and farm homes in the county which have been definitely influenced to make some substantial change in farm or home operations as a result of the extension program for men, women, boys, and girls. It is recognized that this information is very difficult for agents to report accurately, so a conservative estimate based upon such records, surveys, and other sources of information as are available will be satisfactory. Such estimates should be marked "Est."

Include results of emergency activities as well as the regular extension program.

35. Number of farms in county	3155	35
36. Number of farms on which changes in practices have definitely resulted from the agricultural extension program	1703	36
37. Number of farm homes in which changes in practices have definitely resulted from the home demonstration program	1817	37
38. Number of other homes in which changes in practices have definitely resulted from the home demonstration program	1875	38
39. Number of farm homes with 4-H Club members enrolled	724	39
40. Number of other homes with 4-H Club members enrolled	264	40
41. Total number of different farm families influenced by some phase of the extension program (Include questions 35, 37, and 39, minus duplications.)	3821	41
42. Total number of different other families influenced by some phase of extension program (Include questions 38 and 40, minus duplications.)	3173	42

<sup>1</sup>County total should equal sum of preceding three columns minus duplications due to two or more agents participating in the same activity or accomplishment.  
NOTE.—Questions 18-34 refer to the total number of different activities conducted this year. The totals should equal the sums of the corresponding information reported on following pages minus duplications where the same activity relates to two or more lines of work.

LEGUMES CEREALS<sup>1</sup>

Report Only This Year's Extension Activities and Results That Can Be Verified

ITEM	Corn (a)	Wheat (b)	Oats (c)	Rye (d)	Barley (e)	Grain sorghums, rice, and other cereals (f)	
43. Days devoted to line of work by:							
(1) Home demonstration agents.....							} 43
(2) 4-H Club agents.....							
(3) Agricultural agents.....	8	39 $\frac{1}{2}$	5	3	5 $\frac{1}{2}$	2	
(4) Specialists.....							
44. Number of communities in which work was conducted.....		1					44
45. Number of voluntary local leaders or committeemen assisting.....	9	22	16	13	16	8	45
46. Days of assistance rendered by voluntary leaders or committeemen.....	1	13	3	3	8	0	46
47. Number of adult result demonstrations conducted.....	2	18	2	3	6	0	47
48. Number of meetings at result demonstrations.....		4			1		48
49. Number of method-demonstration meetings held.....							49
50. Number of other meetings held.....							50
51. Number of news stories published.....	3						51
52. Number of different circular letters issued.....	2	16					52
53. Number of farm or home visits made.....	1	6	1		1	4	53
54. Number of office calls received.....	10	47	5	7	13	10	54
55. Number of 4-H Club members enrolled.....	12	330	19	16	43	3	} 55
(1) Boys.....							
(2) Girls.....							
56. Number of 4-H Club members completing.....							} 56
(1) Boys.....							
(2) Girls.....							
57. Number of acres in projects conducted by 4-H Club members completing.....							57
58. Total yields of crops grown by 4-H Club members completing.....	bu.	bu.	bu.	bu.	bu.	bu.	58
59. Number of farmers following fertilizer recommendations.....							59
60. Number of farmers following insect-control recommendations.....							60
61. Number of farmers following disease-control recommendations.....		70		12	7		61
62. Number of farmers following marketing recommendations.....		8	1		2		62
63. Number of farmers assisted in using timely economic information as a basis for readjusting enterprise.....	84	68	20	10	16	30	63
66. Number of farmers following other specific practice recommendations: <sup>4</sup>							} 66
(1).....							
(2) Smut Control.....		6	18		7		
(3) Pasture.....				6			
(4) Securing Seed.....		5	4	3	6		
(5).....							

<sup>1</sup> Report fall-sown crops the year they are harvested.

<sup>2</sup> Indicate crop by name.

<sup>4</sup> For the sake of uniformity it is suggested that each State prepare a list of the more important practices to be reported upon by all agents in that State.



## LEGUMES AND FORAGE CROPS

Report Only This Year's Extension Activities and Results That Can Be Verified

ITEM	Alfalfa (a)	Sweet- clover (b)	Red, bur, and other clovers (c)	Vetch (d)	Lespedeza (e)	Pastures (f)	
67. Days devoted to line of work by:							
(1) Home demonstration agents.....						5	} 67
(2) 4-H Club agents.....	6 $\frac{1}{3}$	3				23 $\frac{3}{4}$	
(3) Agricultural agents.....	64 $\frac{1}{3}$	2	8			2	
(4) Specialists.....	1		1			26	
68. Number of communities in which work was conducted.....	44	12	4				68
69. Number of voluntary local leaders or committeemen assisting.....	16	1				5	69
70. Days of assistance rendered by voluntary leaders or committeemen.....	19	2				7	70
71. Number of adult result demonstrations conducted.....	57					13	71
72. Number of meetings at result demonstrations.....						1	72
73. Number of method-demonstration meetings held.....	1						73
74. Number of other meetings held.....	5		3			4	74
75. Number of news stories published.....	13					6	75
76. Number of different circular letters issued.....	6		3			4	76
77. Number of farm or home visits made.....	140		14		1	48	77
78. Number of office calls received.....	170	25	9		2	87	78
79. Number of 4-H Club members enrolled.....							} 79
(1) Boys.....							
(2) Girls.....							
80. Number of 4-H Club members completing.....							} 80
(1) Boys.....							
(2) Girls.....							
81. Number of acres in projects conducted by 4-H Club members completing.....							81
82. Total yields of crops grown by 4-H Club members completing.....							} 82
(1) Seed.....	bu.	bu.	bu.	bu.	bu.	x x x x	
(2) Forage.....	tons	tons	tons	tons	tons	x x x x	
83. Number of farmers following fertilizer recommendations.....	40					1	83
84. Number of farmers following insect-control recommendations.....	7						84
85. Number of farmers following disease-control recommendations.....							85
86. Number of farmers following marketing recommendations.....	37	1					86
87. Number of farmers assisted in using timely economic information as a basis for readjusting enterprise.....	146		53			111	87
90. Number of farmers following other specific practice recommendations: <sup>1</sup>							} 90
(1) Variety Tests.....	8					10	
(2) Planting in Fall.....	66	4				2	
(3) Plowing Old Stands.....	41	7				29	
(4) Late Irrigation.....	25					24	
(5) Cutting Early.....	10						

<sup>1</sup> For the sake of uniformity it is suggested that each State prepare a list of the more important practices to be reported upon by all agents in that State.

## POTATOES, COTTON, TOBACCO, AND OTHER SPECIAL CROPS

Report Only This Year's Extension Activities and Results That Can Be Verified

ITEM	Irish pota- toes (a)	Sweetpota- toes (b)	Cotton (c)	Tobacco (d)	All other special crops <sup>1</sup> (e)	
91. Days devoted to line of work by:						
(1) Home demonstration agents.....						} 91
(2) 4-H Club agents.....						
(3) Agricultural agents.....	17½				15¼	
(4) Specialists.....					2	
92. Number of communities in which work was conducted.....	14				12	92
93. Number of voluntary local leaders or committeemen assisting.....	3				8	93
94. Days of assistance rendered by voluntary leaders or commit- teemen.....	3				6½	94
95. Number of adult result demonstrations conducted.....	3				29	95
96. Number of meetings at result demonstrations.....					2	96
97. Number of method-demonstration meetings held.....						97
98. Number of other meetings held.....					4	98
99. Number of news stories published.....	4				3	99
100. Number of different circular letters issued.....	5				2	100
101. Number of farm or home visits made.....	25				60	101
102. Number of office calls received.....	89				62	102
103. Number of 4-H Club members enrolled.....						} 103
(1) Boys.....	4					
(2) Girls.....						
104. Number of 4-H Club members completing.....						} 104
(1) Boys.....	3					
(2) Girls.....						
105. Number of acres in projects conducted by 4-H Club members completing.....					1	105
106. Total yields of crops grown by 4-H Club members completing.....	bu.	bu.	lb. <sup>2</sup>	lb.		106
107. Number of farmers following fertilizer recommendations.....					27	107
108. Number of farmers following insect-control recommendations.....					4	108
109. Number of farmers following disease-control recommendations.....	9					109
110. Number of farmers following marketing recommendations.....	29				25	110
111. Number of farmers assisted in using timely economic informa- tion as a basis for readjusting enterprise.....					27	111
114. Number of farmers following other specific practice recom- mendations: <sup>3</sup>						} 114
(1) <u>Seed control</u> .....	11					
(2) <u>Cultivation</u> .....	12					
(3) <u>Storage</u> .....	18					
(4) <u>Wild Morning Glory Control</u> .....					25	
(5).....						

<sup>1</sup> Indicate crop by name.

<sup>2</sup> Report yield of cotton in pounds of seed cotton.

<sup>3</sup> For the sake of uniformity it is suggested that each State prepare a list of the more important practices to be reported upon by all agents in that State.

# POTATOES, COTTON, TOBACCO, AND OTHER SPECIAL CROPS

Report Only This Year's Extension Activities and Results That Can Be Verified

ITEM	Irish pota- toes	Sweetpota- toes	Cotton	Tobacco	All other special crops <sup>1</sup>	
	(a)	(b)	(c)	(d)	(e)	
91. Days devoted to line of work by:						91
(1) Home demonstration agents.....						
(2) 4-H Club agents.....						
(3) Agricultural agents.....	17½				15½	
(4) Specialists.....					2	
92. Number of communities in which work was conducted.....	14				12	92
93. Number of voluntary local leaders or committeemen assisting.....	3				8	93
94. Days of assistance rendered by voluntary leaders or commit- teemen.....	5				6½	94
95. Number of adult result demonstrations conducted.....	3				29	95
96. Number of meetings at result demonstrations.....					2	96
97. Number of method-demonstration meetings held.....						97
98. Number of other meetings held.....					4	98
99. Number of news stories published.....	4				3	99
100. Number of different circular letters issued.....	5				2	100
101. Number of farm or home visits made.....	25				60	101
102. Number of office calls received.....	89				62	102
103. Number of 4-H Club members enrolled.....						103
(1) Boys.....	4					
(2) Girls.....						
104. Number of 4-H Club members completing.....						104
(1) Boys.....	3					
(2) Girls.....						
105. Number of acres in projects conducted by 4-H Club members completing.....					1	105
106. Total yields of crops grown by 4-H Club members completing.....	bu.	bu.	lb. <sup>2</sup>	lb.		106
107. Number of farmers following fertilizer recommendations.....					27	107
108. Number of farmers following insect-control recommendations.....					4	108
109. Number of farmers following disease-control recommendations.....	9					109
110. Number of farmers following marketing recommendations.....	29				25	110
111. Number of farmers assisted in using timely economic informa- tion as a basis for readjusting enterprise.....					27	111
114. Number of farmers following other specific practice recom- mendations: <sup>3</sup>						114
(1) Seed control.....	11					
(2) Cultivation.....	12					
(3) Storage.....	18					
(4) Wild Morning Glory Control.....					25	
(5).....						

<sup>1</sup>Indicate crop by name.

<sup>2</sup>Report yield of cotton in pounds of seed cotton.

<sup>3</sup>For the sake of uniformity it is suggested that each State prepare a list of the more important practices to be reported upon by all agents in that State.

FRUITS, VEGETABLES, AND BEAUTIFICATION OF HOME GROUNDS

Report Only This Year's Extension Activities and Results That Can Be Verified

ITEM	Home gardens	Market gardening, truck, and canning crops	Beautification of home grounds	Tree fruits	Bush and small fruits	Grapes	
	(a)	(b)	(c)	(d)	(e)	(f)	
115. Days devoted to line of work by:							
(1) Home demonstration agents.....	3 1/2		13 3/4				115
(2) 4-H Club agents.....	10	9					
(3) Agricultural agents.....	3	12 1/4	27 1/2	1			
(4) Specialists.....		1					
116. Number of communities in which work was conducted.....	44	5	47	1			116
117. Number of voluntary local leaders or committeemen assisting.....	45	5	51				117
118. Days of assistance rendered by voluntary leaders or committeemen.....	68	29	62				118
119. Number of adult result demonstrations conducted.....	864	1	499	2			119
120. Number of meetings at result demonstrations.....	9		16				120
121. Number of method-demonstration meetings held.....	22	1	36				121
122. Number of other meetings held.....		4	34				122
123. Number of news stories published.....	7	1	29				123
124. Number of different circular letters issued.....	7	4	5				124
125. Number of farm or home visits made.....	97	19	237	5			125
126. Number of office calls received.....	79	2	299	6			126
127. Number of 4-H Club members enrolled.....							127
(1) Boys.....	58	12	11				
(2) Girls.....	2						
128. Number of 4-H Club members completing.....							128
(1) Boys.....	43	9	10				
(2) Girls.....	2		1				
129. Number of acres in projects conducted by 4-H Club members completing.....	7	6	x x x x				129
130. Total yields of crops grown by 4-H club members completing.....	400 bu.	42 bu.	x x x x	bu.	bu.	bu.	130
131. Number of farms or homes where fertilizer recommendations were followed.....	5	8	33				131
132. Number of farms or homes where insect-control recommendations were followed.....	28	26	173				132
133. Number of farms or homes where disease-control recommendations were followed.....	3	3	16	2			133
134. Number of farms or homes where marketing recommendations were followed.....		10	x x x x				134
135. Number of farms or homes where assistance was given in using timely economic information as a basis for readjusting enterprise.....			x x x x				135
136. Number of homes where recommendations were followed as to establishment or care of lawn.....	x x x x	x x x x	123	x x x x	x x x x	x x x x	136
137. Number of homes where recommendations were followed regarding planting of shrubbery and trees.....	x x x x	x x x x	330	x x x x	x x x x	x x x x	137
138. Number of homes where recommendations were followed as to treatment of walks, drives, or fences.....	x x x x	x x x x	173	x x x x	x x x x	x x x x	138
139. Number of homes where recommendations were followed as to improving appearance of exterior of house and outbuildings.....	x x x x	x x x x	198	x x x x	x x x x	x x x x	139
140. Number of homes where other specific practice recommendations were followed: <sup>1</sup>			Plant Exp.				140
(1) Green Leafy Vegetables.....	818		550				
(2) Asparagus Beds.....	42		2457	96	225	2	
(3) Hot Beds and Cold Frames.....	34		79				
(4) Irrigation and Cultivation.....			15				

<sup>1</sup> For the sake of uniformity it is suggested that each State prepare a list of the more important practices to be reported upon by all agents in that State.

FORESTRY, WILDLIFE CONSERVATION, AND AGRICULTURAL ENGINEERING

Report Only This Year's Extension Activities and Results That Can Be Verified

ITEM	Forestry	Wildlife conservation, fur and game farming	Agricultural engineering <sup>1</sup> (farm and home)	
	(a)	(b)	(c)	
141. Days devoted to line of work by:				
(1) Home demonstration agents.....				} 141
(2) 4-H Club agents.....				
(3) Agricultural agents.....	11	15	95½	
(4) Specialists.....	10		45	
142. Number of communities in which work was conducted.....	32	1	30	142
143. Number of voluntary local leaders or committeemen assisting.....	2	1	44	143
144. Days of assistance rendered by voluntary leaders or committeemen.....	2	12	194	144
145. Number of adult result demonstrations conducted.....	7		50	145
146. Number of meetings at result demonstrations held.....		2	8	146
147. Number of method-demonstration meetings held.....			6	147
148. Number of other meetings held.....	2		24	148
149. Number of news stories published.....	22		10	149
150. Number of different circular letters issued.....	6	4	13	150
151. Number of farm or home visits made.....	139	6	203	151
152. Number of office calls received.....	101	7	329	152
153. Number of 4-H Club members enrolled.....	8	2		} 153
(1) Boys.....				
(2) Girls.....				
154. Number of 4-H Club members completing.....		1		} 154
(1) Boys.....				
(2) Girls.....				
154½. Number of 4-H Club members not in special project clubs who participated in forestry or wildlife conservation activities.....				} 154½
(1) Boys.....				
(2) Girls.....				
155. Number of units handled by 4-H Club members completing.....				} 155
(1) Transplant beds.....		Coverts <sup>2</sup> improved or built 2	Acres terraced.....	
(2) Acres planted to forest trees.....		Nest boxes, feed trays for song birds.....	Machines or equipment repaired.....	
(3) Acres improved.....		Feeding stations operated.....	Articles made.....	
(4) Acres of woodland protected from fire.....		Animals or birds produced 4	Equipment installed 8	

FORESTRY—Continued

156. Number of farms on which new areas were reforested by planting with small trees.....	20	156
157. Acres involved in preceding question.....	73	157
158. Number of farmers planting windbreaks or shelterbelts.....	75	158
159. Number of farmers planting trees for erosion control.....	4	159
160. Number of farmers making improved thinnings and weedings.....		160
161. Number of farmers practicing selection cutting.....		161
162. Number of farmers pruning forest trees.....	5	162
163. Number of farmers cooperating in prevention of forest fire.....	18	163
164. Number of farmers adopting improved practices in production of naval stores.....		164
165. Number of farmers adopting improved practices in production of maple sugar and sirup.....		165

<sup>1</sup> 4-H farm shop clubs should be reported under this heading.

<sup>2</sup> Include food patches planted or left standing for wildlife.

DAIRY CATTLE, PIGS, FORESTRY—Continued, BIRDS, TWINE, AND HORSES

Report Only This Year's Extension Activities and Results That Can Be Verified

166. Number of farmers assisted in timber estimating and appraisal.....	166
167. Number of farmers following wood-preservation recommendations.....	167
168. Number of farmers following recommendations in the marketing of forest products.....	168

WILDLIFE CONSERVATION—Continued

169. Number of farms on which specific improvements for wildlife have been made.....	2	169
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ITEM	RABBITS		FOXES AND OTHER FUR ANIMALS		GAME BIRDS		CONSERVATION CAMPS	
	4-H members (a)	Adults (b)	4-H members (c)	Adults (d)	4-H members (e)	Adults (f)	4-H members (g)	Adults (h)
169½. Number of individuals engaged or assisted in activity.....	2					2		
169½. Number of animals or birds produced by such individuals.....	7					7	x x x x	x x x x

AGRICULTURAL ENGINEERING—Continued

Engineering activities	Number of farms (a)	Number of units (b)	Total value of service or savings (c)
170. Terracing complete with outlets and contour cultivation.....		acres.	\$.....
170½. Contour tillage alone.....		acres.	
170½. Gully control alone.....	58	4063 acres.	4500
171. Drainage practices.....	95	10500 acres.	
172. Irrigation practices.....	116	15140 acres.	2700
173. Land-clearing practices.....		acres.	
174. Better types of machines.....	5	1 machines.	
175. Maintenance and repair of machines.....		machines.	
176. Efficient use of machinery.....		x x x x x x x x x	
177. All buildings constructed (include silos).....	5	8 buildings.	700
178. Buildings remodeled, repaired, painted.....	35	37 buildings.	10455
179. Farm electrification.....	120	120 farms. <sup>1</sup>	210
180. Home equipment (include sewing machines).....	46	149	150
181. Total of columns (a) and (c).....	480 farms.	x x x x x x x x x	\$ 18715

182. Number of machines repaired as reported in questions 175 and 180, by types:	
(a) Tractors.....	(d) Plows.....
(b) Tillage implements.....	(e) Mowers.....
(c) Harvesters and threshers.....	(f) Planters.....
	(g) Sewing machines..... 1
	(h) Other..... 1

183. Number of buildings and equipment improved as reported in questions 177, 178, 179, 180, by types:	
(a) Dwellings constructed according to plans furnished..... 1	(h) Dairy buildings.....
(b) Dwellings remodeled according to plans furnished.....	(i) Silos.....
(c) Sewage systems installed..... 5	(1) Regular.....
(d) Water systems installed..... 8	(2) Trench or pit..... 1
(e) Heating systems installed..... 40	(j) Hog houses..... 1
(f) Lighting systems installed..... 7	(k) Poultry houses..... 4
(g) Home appliances and machines..... 67	(l) Storage structures..... 1
	(m) Other.....

<sup>1</sup> Report the number of farms using electricity in farm enterprises for income-producing purposes such as electric milk/ ; milk cooling, incubating, brooding, hotbed heating, etc.

POULTRY AND BEES

Report Only This Year's Extension Activities and Results That Can Be Verified

ITEM	Poultry (including turkeys) (a)	Bees (b)	
184. Days devoted to line of work by:			
(1) Home demonstration agents.....			} 184
(2) 4-H Club agents.....	1		
(3) Agricultural agents.....	56½		
(4) Specialists.....	5		
185. Number of communities in which work was conducted.....	36	10	185
186. Number of voluntary local leaders or committeemen assisting.....	22	4	186
187. Days of assistance rendered by voluntary leaders or committeemen.....	54	5	187
188. Number of adult result demonstrations conducted.....	10	4	188
189. Number of meetings at result demonstrations.....		1	189
190. Number of method-demonstration meetings held.....	24	1	190
191. Number of other meetings held.....	17	8	191
192. Number of news stories published.....	10		192
193. Number of different circular letters issued.....	13	4	193
194. Number of farm or home visits made.....	183	17	194
195. Number of office calls received.....	375	8	195
196. Number of 4-H Club members enrolled.....	(1) Boys..... 26 (2) Girls..... 2	5	} 196
197. Number of 4-H Club members completing.....	(1) Boys..... 13 (2) Girls..... 1	3	
198. Number of units in projects conducted by 4-H Club members completing.....	834 chickens	16 colonies	198

POULTRY—Continued

199. Number of families following an organized improved breeding plan as recommended.....	9	199
200. Number of families following recommendations in purchasing baby chicks.....	49	200
201. Number of families following recommendations in chick rearing.....	70	201
202. Number of families following production-feeding recommendations.....	89	202
203. Number of families following sanitation recommendations in disease and parasite control.....	97	203
204. Number of families improving poultry-house equipment according to recommendations.....	44	204
205. Number of families following marketing recommendations.....	200	205
206. Number of families assisted in using timely economic information as a basis for readjusting enterprise.....	50	206
207. Number of families following other specific practice recommendations: <sup>1</sup>		
(a) .....		} 207
(b) .....		

BEES—CONTINUED

208. Number of farmers following recommendations in transferring colonies to modern hives.....		208
209. Number of colonies involved in question 208.....		209
210. Number of farmers following disease-control recommendations.....		210
211. Number of farmers following requeening recommendations.....		211
212. Number of farmers following marketing recommendations.....		212
213. Number of farmers following other specific practice recommendations: <sup>1</sup>		
(a) .....		} 213
(b) .....		

<sup>1</sup> For the sake of uniformity it is suggested that each State prepare a list of the more important practices to be reported upon by all agents in that State.

## DAIRY CATTLE, BEEF CATTLE, SHEEP, SWINE, AND HORSES

Report Only This Year's Extension Activities and Results That Can Be Verified

ITEM	Dairy cattle (a)	Beef cattle (b)	Sheep (c)	Swine (d)	Horses and mules (e)	Other livestock <sup>1</sup> (f)	
214. Days devoted to line of work by:							
(1) Home demonstration agents.....							} 214
(2) 4-H Club agents.....							
(3) Agricultural agents.....	115½	272¼	104½	51¼	56¼	70½	
(4) Specialists.....	6	2		4	4	2	
215. Number of communities in which work was conducted.....	29	75	40	23	17	30	215
216. Number of voluntary local leaders or committeemen assisting.....	23	26	11	13	17	19	216
217. Days of assistance rendered by voluntary leaders or committeemen.....	93	79	29	40	21	36	217
218. Number of adult result demonstrations conducted.....	22	2	1	1	2	4	218
219. Number of meetings at result demonstrations.....	3	5		2	1	2	219
220. Number of method-demonstration meetings held.....	26	4	8	5			220
221. Number of other meetings held.....	39	28	7	15	4	11	221
222. Number of news stories published.....	40	53	37	10	35	5	222
223. Number of different circular letters issued.....	26	44	24	15	5	10	223
224. Number of farm or home visits made.....	362	695	117	166	149	59	224
225. Number of office calls received.....	385	781	561	107	264	393	225
226. Number of 4-H Club members enrolled.....							} 226
(1) Boys.....	68	37	12	76			
(2) Girls.....	2	12	1	1			
227. Number of 4-H Club members completing.....							} 227
(1) Boys.....	58	32	10	51			
(2) Girls.....	2	11		1			
228. Number of animals in projects conducted by 4-H Club members completing.....	70	60	25	111			228
229. Number of farmers assisted in obtaining purebred sires.....	14	71	35	7	20		229
230. Number of farmers assisted in obtaining high-grade or purebred females.....	4	7	1	11	10		230
231. Number of bull, boar, ram, or stallion circles or clubs organized or assisted.....							231
232. Number of members in preceding circles or clubs.....							232
233. Number of herd or flock-improvement associations organized or assisted.....	2					1	233
234. Number of members in these associations.....	24						234
235. Number of farmers not in associations keeping performance records of animals.....	5						235
236. Number of families assisted in home butchering meat.....			3	4	x x x x		236
241a. Number of farmers influenced to control contagious abortion. . .	102	241a	x x x	x x x x	x x x x	x x x x	237
241b. Number of farms testing cows for production . . . . .	8	241b	1	11			238
241c. Number of cows being tested for production . . . . .	277	241c	3	6	116		239
241d. Number of cows discarded as result of test(from 241b and 241c)	170	241d	30	39	2		240
			20	10	2	57	241



AGRICULTURAL ECONOMICS

Report Only This Year's Extension Activities and Results That Can Be Verified

ITEM	Public problems and economic planning on county or community basis <sup>1</sup>	FARM MANAGEMENT			Outlook	Marketing, buying, selling, and financing	
		Farm records (inventories, accounts, etc.)	Individual farm planning	Farm and home financing (short and long time)			
	(a)	(b)	(c)	(d)	(e)	(f)	
244. Days devoted to line of work by:							
(1) Home demonstration agents.....				3			} 244
(2) 4-H Club agents.....		1					
(3) Agricultural agents.....	110 <sup>3</sup> / <sub>4</sub>	11 <sup>1</sup> / <sub>2</sub>	3	123 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	275 <sup>3</sup> / <sub>4</sub>	
(4) Specialists.....	54	9		19	2	28	
245. Number of communities in which work was conducted.....	53	17	5	59	14	81	245
246. Number of voluntary local leaders or committeemen assisting.....	65	4		12		40	246
247. Days of assistance rendered by voluntary leaders or committeemen.....	58 <sup>1</sup> / <sub>2</sub>	(7)		26		133	247
248. Number of adult result demonstrations conducted.....	1	19		4		1	248
249. Number of meetings at result demonstrations.....						3	249
250. Number of method-demonstration meetings held.....						17	250
251. Number of other meetings held.....	40			18		64	251
252. Number of news stories published.....	21	2		11	2	80	252
253. Number of different circular letters issued.....	33					99	253
254. Number of farm or home visits made.....	172	35		215		540	254
255. Number of office calls received.....	407		26	1003	7	2129	255
256. Number of 4-H Club members enrolled.....							} 256
(1) Boys.....	x x x x			x x x x	x x x x	x x x x	
(2) Girls.....	x x x x			x x x x	x x x x	x x x x	
257. Number of 4-H Club members completing.....							} 257
(1) Boys.....	x x x x			x x x x	x x x x	x x x x	
(2) Girls.....	x x x x			x x x x	x x x x	x x x x	
258. Number of farmers keeping farm accounts throughout the year under supervision of agent.....					{(a) Regular.....	44	} 258
					{(b) A.A.A.....	7	
259. Number of farmers keeping cost-of-production records under supervision of agent.....						45	259
260. Number of farmers assisted in summarizing and interpreting their accounts.....						50	260
261. Number of farmers assisted in making inventory or credit statements.....						122	261
262. Number of farmers assisted in obtaining credit.....						53	262
263. Number of farmers assisted in making mortgage or other debt adjustments.....						5	263
264. Number of farm credit associations assisted in organizing during the year.....						4	264
265. Number of farm business or enterprise-survey records taken during year.....						10	265
266. Number of farmers making recommended changes in their business as result of keeping accounts or survey records.....						431	266
267. Number of other farmers adopting cropping, livestock, or complete farming systems according to recommendations.....						65	267
268. Number of farmers advised relative to leases.....						38	268
269. Number of farmers assisted in developing supplemental sources of income.....						23	} 270
270. Number of families assisted in reducing cash expenditure:						8	
(a) By exchange of labor or machinery.....						7	
(b) By bartering farm or home products for other commodities or services.....							
(c) By producing larger part of food on farm.....							
(d) By making own repairs of buildings and machinery.....							

<sup>1</sup> Include county agricultural planning, taxation, land utilization, and economic basis of extension programs.

AGRICULTURAL ECONOMICS—Continued

Report Only This Year's Extension Activities and Results That Can Be Verified

271. Number of urban families moving to farms who have been assisted in getting established.....	9	271
272. Number of farm families on relief assisted to become self-supporting.....	40	272
273. Number of marketing associations or groups <sup>1</sup> assisted in organizing during the year.....		273
274. Number of marketing associations or groups <sup>1</sup> previously organized assisted by extension agents this year.....	26	274
275. Membership in associations and groups organized or assisted (273 and 274).....	603	275
276. Number of individuals (not in associations) assisted with marketing problems.....	621	276
277. Number of families following other specific practice recommendations.....	388	277

ITEM	Standard-izing, packaging, or grading	Processing or manu-facturing	Locating markets and transpor-tation	Use of current market informa-tion	Financing	Organiza-tion	Accounting	Keeping member-ship informed	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	
278. Number of organizations assisted with problems of.....	7	1	14	18	4	3	5	22	278
279. Number of individuals (not in or-ganizations) assisted with prob-lems of.....	79		320	820	x x x x	x x x x	x x x x	x x x x	279

ITEM	Hay and grain	Cotton	Tobacco	Dairy products	Livestock	Wool	
	(a)	(b)	(c)	(d)	(e)	(f)	
280. Value of products sold by all asso-ciations or groups organized or assisted.....	\$1,350	\$.....	\$.....	\$.....	\$79,803	\$19,200	280
281. Value of products sold by indi-viduals (not in organizations) assisted.....	\$84,350	\$.....	\$.....	\$.....	\$409,000	\$51,550	281

ITEM	Fruits and vegetables	Poultry and eggs	Home products		(k)	(l)	
			Food	Handicraft			
			(i)	(j)			
280. Value of products sold by all asso-ciations or groups organized or assisted.....	\$.....	\$135,543	\$.....	\$.....	\$.....	\$.....	280
281. Value of products sold by indi-viduals (not in organizations) assisted.....	\$.....	\$ 5,000	\$.....	\$.....	\$.....	\$.....	281

ITEM	Livestock	Feed for livestock	Farm equipment	Oil and gas	Fertilizer, seed, and other farm supplies	Home equipment	Home supplies	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
282. Value of supplies purchased by all associations or groups or-ganized or assisted.....	59,775	23,359	\$.....	\$.....	\$9,782	\$ 652	\$.....	282
283. Value of supplies purchased by individuals (not in organiza-tions) assisted.....	16,000	\$1,100	\$.....	\$.....	\$.....	\$.....	\$.....	283

<sup>1</sup> Include independent local associations, units of federations, branches of centralized organizations, terminal sales agencies, production associations which do buying or selling, and curb and home demonstration club markets.

## FOODS AND NUTRITION

Report Only This Year's Extension Activities and Results That Can Be Verified

ITEM	Food selection and preparation	Food preserva- tion	
	(a)	(b)	
284. Days devoted to line of work by:			
(1) Home demonstration agents.....	214½		} 284
(2) 4-H Club agents.....			
(3) Agricultural agents.....	6	2	
(4) Specialists.....	14	2	
285. Number of communities in which work was conducted.....	85	39	285
286. Number of voluntary local leaders or committeemen assisting.....	114	23	286
287. Days of assistance rendered by voluntary leaders or committeemen.....	591½	133	287
288. Number of adult result demonstrations conducted.....	1492	698	288
289. Number of meetings at result demonstrations.....	118	11	289
290. Number of method-demonstration meetings held.....			} 290
(1) By agents or specialists.....	219	42	
(2) By leaders.....	138	17	
291. Number of other meetings held.....			} 291
(1) By agents or specialists.....	45	(2)	
(2) By leaders.....	70	11	
292. Number of news stories published.....	62	18	292
293. Number of different circular letters issued.....	75	34	293
294. Number of farm or home visits made.....	522	250	294
295. Number of office calls received.....	416	241	295
296. Number of 4-H Club members enrolled.....			} 296
(1) Boys.....	5		
(2) Girls.....	178	20	
297. Number of 4-H Club members completing.....			} 297
(1) Boys.....	5		
(2) Girls.....	159	17	
298. Number of units in projects conducted by 4-H Club members completing:			
(a) Dishes of food products prepared.....	3266		} 298
(b) Meals planned and served.....		2151	
(c) Quarts canned.....	1976		
(d) Other containers of jelly, jam, and other products.....		427	
(e) Pounds of vegetables and fruits stored or dried.....		1543	
299. Number of families budgeting food expenditure for a year.....		357	299
300. Number of families following food-buying recommendations.....		908	300
301. Number of families serving better-balanced meals.....		1684	301
302. Number of families improving home-packed lunches according to recommendations.....		868	302
303. Number of schools following recommendations for a hot dish or school lunch.....		58	303
304. Number of children involved in question 303.....		1908	304
305. Number of families following recommended methods of child feeding.....		1603	305
306. Number of individuals adopting recommendations for corrective feeding (such as weight control, anemia, pellagra, and constipation).....		1526	306
307. Number of families producing and preserving home food supply according to annual food-supply budget.....	643		307
308. Number of families assisted in the canning or otherwise preserving of fruits, vegetables, and meats.....	721		308
309. Number of quarts canned by families reported under question 308. (Do not include 4-H Club members).....		108,342	309
310. Number of other containers of jam, jelly, or other products made by families reported under question 308. (Do not include 4-H Club members).....		21,933	310
311. Total estimated value of all products canned or otherwise preserved (questions 298, 309, 310) \$.....	40,104		311
312. Number of families following recommendations for the storage of home food supply.....		398	312
313. Number of families assisted in using timely economic information as a basis for readjusting family food supply.....		747	313

## CHILD DEVELOPMENT AND PARENT EDUCATION

Report Only This Year's Extension Activities and Results That Can Be Verified

314. Days devoted to line of work by:			
(a) Home demonstration agents.....	33 <sup>3</sup> / <sub>4</sub>	}	314
(b) 4-H Club agents.....			
(c) Agricultural agents.....	1		
(d) Specialists.....	10		
315. Number of communities in which work was conducted.....	51		315
316. Number of voluntary local leaders or committeemen assisting.....	75		316
317. Days of assistance rendered by voluntary leaders or committeemen.....	95		317
318. Number of adult result demonstrations conducted.....	279		318
319. Number of meetings at result demonstrations.....	21		319
320. Number of method-demonstration meetings held.....		{	} 320
	(a) By agents or specialists..... 99		
	(b) By leaders..... 8		
321. Number of other meetings held.....		{	} 321
	(a) By agents or specialists..... 4		
	(b) By leaders.....		
322. Number of news stories published.....	18		322
323. Number of different circular letters issued.....	13		323
324. Number of farm or home visits made.....	83		324
325. Number of office calls received.....	68		325
326. Number of 4-H Club members enrolled.....		{	} 326
	(a) Boys.....		
	(b) Girls.....		
327. Number of 4-H Club members completing.....		{	} 327
	(a) Boys.....		
	(b) Girls.....		
328. Number of 4-H Club members not in special child-development projects who participated in definite child-development work.....	49		328
329. Number of families improving habits of children.....	498		329
330. Number of families substituting positive methods of discipline for negative ones.....	178		330
331. Number of families providing recommended play equipment.....	85		331
332. Number of families following recommendations regarding furnishings adapted to children's needs.....	38		332
333. Number of different individuals participating in child-development and parent-education program.....		{	} 333
	(a) Men..... 90		
	(b) Women..... 399		
334. Number of children involved in question 333.....	521		334
335. Number of families following other specific practice recommendations: <sup>1</sup>			
(a).....	31	}	335
(b).....	370		
(c).....	13		
(d).....	95		
(e).....			

<sup>1</sup> For the sake of uniformity it is suggested that each State prepare a list of the more important practices to be reported upon by all agents in that State.

CLOTHING

Report Only This Year's Extension Activities and Results That Can Be Verified

336. Days devoted to line of work by:			
(a) Home demonstration agents.....	198 1/2		} 336
(b) 4-H Club agents.....	1		
(c) Agricultural agents.....	11		
(d) Specialists.....	6		
337. Number of communities in which work was conducted.....	62		337
338. Number of voluntary local leaders or committeemen assisting.....	113		338
339. Days of assistance rendered by voluntary leaders or committeemen.....	411		339
340. Number of adult result demonstrations conducted.....	558		340
341. Number of meetings at result demonstrations.....	32		341
342. Number of method-demonstration meetings held.....		(a) By agents or specialists 173	} 342
		(b) By leaders 413	
343. Number of other meetings held.....		(a) By agents or specialists 38	} 343
		(b) By leaders 80	
344. Number of news stories published.....	77		344
345. Number of different circular letters issued.....	80		345
346. Number of farm or home visits made.....	599		346
347. Number of office calls received.....	403		347
348. Number of 4-H Club members enrolled.....		(a) Boys.....	} 348
		(b) Girls..... 300	
349. Number of 4-H Club members completing.....		(a) Boys.....	} 349
		(b) Girls..... 245	
350. Number of articles made by 4-H Club members completing.....		(a) Dresses..... 207	} 350
		(b) Other..... 841	

ITEM	Adults	Juniors	
	(a)	(b)	
351. Number of individuals following recommendations in construction of clothing.....	529	240	351
352. Number of individuals following recommendations in the selection of clothing.....	556	229	352
353. Number of individuals keeping clothing accounts.....	135	157	353
354. Number of individuals budgeting clothing expenditures.....	194	135	354
355. Number of families following clothing-buying recommendations.....	572	x x x x x	355
356. Number of individuals improving children's clothing according to recommendations.....	313	86	356
357. Number of individuals following recommendations in improving care, renovation, and remodeling of clothing.....	484	213	357
358. Number of families assisted in using timely economic information in determining how best to meet clothing requirements.....	477	x x x x x	358
359. Total estimated savings due to clothing program.....	\$ 5926	\$ 1357	359
360. Number of individuals following other specific practice recommendations: <sup>1</sup>			
(a).....	771	95	} 360
(b).....	383	17	

<sup>1</sup> For the sake of uniformity it is suggested that each State prepare a list of the more important practices to be reported upon by all agents in that State.

(c) No. communities where assistance is given in relief & rehabilitation problems.....	8
No. families involved.....	25

## HOME MANAGEMENT—Continued

390. Number of families having increased time for rest and leisure activities as a result of the home-management program.....	168	390
391. Total estimated saving due to home-management program.....	\$ 6,375.00	391
392. Number of families following other specific practice recommendations: <sup>1</sup>		
(a) .....	46	} 392
(b) .....	155	

## HOUSE FURNISHINGS—Continued

393. Number of families improving the selection of household furnishings.....	339	393
394. Number of families following recommendations in improving methods of repairing, remodeling, or refinishing furniture.....	179	394
395. Number of families following recommendations in improving treatment of windows (shades, curtains, draperies).....	257	395
396. Number of families following recommendations in improving arrangement of rooms (other than kitchens).....	209	396
397. Number of families improving treatment of walls, woodwork, and floors.....	379	397
398. Number of families applying principles of color and design in improving appearance of rooms.....	240	398
399. Total estimated savings due to house-furnishings program.....	\$ 7,715.00	399
400. Number of families following other specific practice recommendations: <sup>1</sup>		
(a) .....	102	} 400
(b) .....	198	

## HANDICRAFT—Continued

401. Number of families following recommendations regarding handicraft.....		401
402. Number of families following other specific practice recommendations: <sup>1</sup>		
(a) .....		} 402
(b) .....		

## HOME HEALTH AND SANITATION

Report Only This Year's Extension Activities and Results That Can Be Verified

403. Days devoted to line of work by:		
(a) Home demonstration agents.....	16½	} 403
(b) 4-H Club agents.....		
(c) Agricultural agents.....		
(d) Specialists.....		
404. Number of communities in which work was conducted.....	53	404
405. Number of voluntary local leaders or committeemen assisting.....	34	405
406. Days of assistance rendered by voluntary leaders or committeemen.....	74	406
407. Number of adult result demonstrations conducted.....	643	407
408. Number of meetings at result demonstrations.....	8	408
409. Number of method-demonstration meetings held.....		
(a) By agents or specialists.....	51	} 409
(b) By leaders.....	13	
410. Number of other meetings held.....		
(a) By agents or specialists.....	3	} 410
(b) By leaders.....	3	
411. Number of news stories published.....	3	411
412. Number of different circular letters issued.....		412
413. Number of farm or home visits made.....	7	413
414. Number of office calls received.....	9	414

<sup>1</sup> For the sake of uniformity it is suggested that each State prepare a list of the more important practices to be reported upon by all agents in that State

HOME MANAGEMENT—Continued

390. Number of families having increased time for rest and leisure activities as a result of the home-management program.....	168	390
391. Total estimated saving due to home-management program.....	\$ 6,375.00	391
392. Number of families following other specific practice recommendations: <sup>1</sup>		
(a) .....	46	} 392
(b) .....	155	

HOUSE FURNISHINGS—Continued

393. Number of families improving the selection of household furnishings.....	339	393
394. Number of families following recommendations in improving methods of repairing, remodeling, or refinishing furniture.....	179	394
395. Number of families following recommendations in improving treatment of windows (shades, curtains, draperies).....	257	395
396. Number of families following recommendations in improving arrangement of rooms (other than kitchens).....	209	396
397. Number of families improving treatment of walls, woodwork, and floors.....	379	397
398. Number of families applying principles of color and design in improving appearance of rooms.....	240	398
399. Total estimated savings due to house-furnishings program.....	\$ 7,715.00	399
400. Number of families following other specific practice recommendations: <sup>1</sup>		
(a) .....	102	} 400
(b) .....	198	

HANDICRAFT—Continued

401. Number of families following recommendations regarding handicraft.....		401
402. Number of families following other specific practice recommendations: <sup>1</sup>		
(a) .....		} 402
(b) .....		

HOME HEALTH AND SANITATION

Report Only This Year's Extension Activities and Results That Can Be Verified

403. Days devoted to line of work by:		
(a) Home demonstration agents.....	16½	} 403
(b) 4-H Club agents.....		
(c) Agricultural agents.....		
(d) Specialists.....		
404. Number of communities in which work was conducted.....	53	404
405. Number of voluntary local leaders or committeemen assisting.....	34	405
406. Days of assistance rendered by voluntary leaders or committeemen.....	74	406
407. Number of adult result demonstrations conducted.....	643	407
408. Number of meetings at result demonstrations.....	8	408
409. Number of method-demonstration meetings held.....		
(a) By agents or specialists.....	51	} 409
(b) By leaders.....	13	
410. Number of other meetings held.....		
(a) By agents or specialists.....	3	} 410
(b) By leaders.....	3	
411. Number of news stories published.....	3	411
412. Number of different circular letters issued.....		412
413. Number of farm or home visits made.....	7	413
414. Number of office calls received.....	9	414

<sup>1</sup> For the sake of uniformity it is suggested that each State prepare a list of the more important practices to be reported upon by all agents in that State

## HOME HEALTH AND SANITATION—Continued

415. Number of 4-H Club members enrolled.....	(a) Boys.....	46	} 415
	(b) Girls.....	60	
416. Number of 4-H Club members completing.....	(a) Boys.....	41	} 416
	(b) Girls.....	57	
417. Number of 4-H Club members not in special health projects who participated in definite health-improvement work.....	(a) Boys.....	94	} 417
	(b) Girls.....	159	
418. Number of individuals having health examination on recommendation of extension workers or participating in health contests.....	(a) 4-H Club members.....	184	} 418
	(b) Others.....	1688	
419. Number of individuals improving health habits according to recommendations.....		2136	419
420. Number of individuals improving posture according to recommendations.....		718	420
421. Number of individuals adopting recommended positive preventive measures to improve health (immunization for typhoid, diphtheria, smallpox, etc.).....		783	421
422. Number of families adopting better home-nursing procedure according to recommendations.....		335	422
423. Number of families installing sanitary closets or outhouses according to recommended plans.....		224	423
424. Number of homes screened according to recommendations.....		5	424
425. Number of families following other recommended methods of controlling flies, mosquitoes, and other insects.....		5	425
426. Number of individuals enjoying improved health as a result of health and sanitation program.....		2566	426
427. Number of families following other specific practice recommendations: <sup>1</sup>			
(a) .....		308	} 427
(b) .....		708	

## EXTENSION ORGANIZATION AND COMMUNITY ACTIVITIES

Report Only This Year's Extension Activities and Results That Can Be Verified

ITEM	Extension organization and program making	Community or country-life activities	
	(a)	(b)	
428. Days devoted to line of work by:			
(1) Home demonstration agents.....	267 <sup>3</sup> / <sub>4</sub>	86 <sup>3</sup> / <sub>4</sub>	} 428
(2) 4-H Club agents.....	2	29	
(3) Agricultural agents.....	240	249 <sup>3</sup> / <sub>4</sub>	
(4) Specialists.....	26	2	
429. Number of communities in which work was conducted.....	75	69	429
430. Number of voluntary local leaders or committeemen assisting.....	157	220	430
431. Days of assistance rendered by voluntary leaders or committeemen.....	559	624	431
432. Number of meetings held.....	282	769	432
433. Number of news stories published.....	111	135	433
434. Number of different circular letters issued.....	71	163	434
435. Number of farm or home visits made.....	350	1002	435
436. Number of office calls received.....	818	1333	436

<sup>1</sup> For the sake of uniformity it is suggested that each State prepare a list of the more important practices to be reported upon by all agents in that State.



## Supplemental Report

WORK IN COOPERATION WITH OTHER FEDERAL AGENCIES<sup>1</sup>

The purpose of this supplemental report is to bring together in one place all the work done in relation to the programs of these agencies, regardless of duplication. Include all related work reported under regular project headings on preceding pages, and in addition all other assistance rendered such agencies.

ITEM	Agricultural Conservation and Domestic Allotment (A. A. A.) (a)	Soil Conservation Service (b)	Rural Rehabilitation and Re-settlement (c)	Rural Electrification (d)	Tennessee Valley Authority (e)	
467. Days devoted to line of work by:						
(1) Home demonstration agents.....			272 $\frac{1}{2}$			
(2) 4-H Club agents.....						} 467
(3) Agricultural agents.....	494 $\frac{3}{4}$	127 $\frac{3}{4}$	41	18	121	
(4) Specialists.....	81	43	29 $\frac{1}{2}$	2	2	
468. Number of communities in which work was conducted.....	77	17	72	11	50	
469. Number of voluntary local leaders or committeemen assisting.....	28	31	23	22	28	469
470. Days of assistance rendered by such leaders or committeemen.....	33	125	50	82	57	470
471. Number of paid local leaders or committeemen assisting.....	72	3			6	471
472. Days of assistance rendered by paid local leaders.....	1487	14			18	472
473. Number of meetings held.....	129	62	17	7	27	473
474. Number of news stories published.....	148	4	4	2	10	474
475. Number of different circular letters issued.....	148	14	1	2	18	475
476. Number of farm or home visits made.....	765	249	693	88	83	476
477. Number of office calls received.....	3969	278	446	60	976	477
478. Number of farms or homes directly assisted by extension agents to carry out the program of the agency.....	1985	443	299	377	265	478

<sup>1</sup> Farm Credit Administration not included since provision is made for reporting work on farm and home financing in column (d), page 16.

Supplemental Report

WORK IN COOPERATION WITH OTHER FEDERAL AGENCIES<sup>1</sup>

The purpose of this supplemental report is to bring together in one place all the work done in relation to the programs of these agencies, regardless of duplication. Include all related work reported under regular project headings on preceding pages, and in addition all other assistance rendered such agencies.

ITEM	Agricultural Conservation and Domestic Allotment (A. A. A.)	Soil Conservation Service	Rural Rehabilitation and Resettlement	Rural Electrification	Tennessee Valley Authority	
	(a)	(b)	(c)	(d)	(e)	
467. Days devoted to line of work by:						
(1) Home demonstration agents.....			272 $\frac{1}{4}$			} 467
(2) 4-H Club agents.....						
(3) Agricultural agents.....	494 $\frac{3}{4}$	127 $\frac{3}{4}$	41	18	121	
(4) Specialists.....	81	43	29 $\frac{1}{2}$	2	2	
468. Number of communities in which work was conducted.....	77	17	72	11	50	468
469. Number of voluntary local leaders or committeemen assisting.....	28	31	23	22	28	469
470. Days of assistance rendered by such leaders or committeemen.....	33	125	50	82	57	470
471. Number of paid local leaders or committeemen assisting.....	72	3			6	471
472. Days of assistance rendered by paid local leaders.....	1487	14			18	472
473. Number of meetings held.....	129	62	17	7	27	473
474. Number of news stories published.....	148	4	4	2	10	474
475. Number of different circular letters issued.....	148	14	1	2	18	475
476. Number of farm or home visits made.....	765	249	693	88	83	476
477. Number of office calls received.....	3969	278	446	60	976	477
478. Number of farms or homes directly assisted by extension agents to carry out the program of the agency.....	1985	443	299	377	265	478
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<sup>1</sup> Farm Credit Administration not included since provision is made for reporting work on farm and home financing in column (d), page 16. 8-8618

Supplemental Report

WORK IN COOPERATION WITH OTHER FEDERAL AGENCIES—Continued

The purpose of this supplemental report is to bring together in one place all the work done in relation to the programs of these agencies, regardless of duplication. Include all related work reported under regular project headings on preceding pages, and in addition all other assistance rendered such agencies.

ITEM	Works Progress Administration (f)	National Youth Administration (g)	Social Security, Public Health, Children's Bureau (h)	Other (including relief) (i)	(j)	
467. Days devoted to line of work by:						
(1) Home demonstration agents.....		3	4½			} 467
(2) 4-H Club agents.....						
(3) Agricultural agents.....	3			24	43½	
(4) Specialists.....				4½	2	
468. Number of communities in which work was conducted.....	30	8	19	25	39	468
469. Number of voluntary local leaders or committeemen assisting.....	8	23	12(2)		(16)	469
470. Days of assistance rendered by such leaders or committeemen.....	8	48	2			470
471. Number of paid local leaders or committeemen assisting.....	5			2		471
472. Days of assistance rendered by paid local leaders.....				15		472
473. Number of meetings held.....	1		(10)8	2	8	473
474. Number of news stories published.....			2	10	2	474
475. Number of different circular letters issued.....	1		1	4	5	475
476. Number of farm or home visits made.....	9	17	29	32	19	476
477. Number of office calls received.....	64	13	88	201	65	477
478. Number of farms or homes directly assisted by extension agents to carry out the program of the agency.....	130	15	32	118	7	478

## Supplemental Report

## AGRICULTURAL CONSERVATION AND SOIL CONSERVATION—Continued

The purpose of this supplemental report is to bring together in one place all the work done in relation to the programs of these agencies, regardless of duplication. Include all related work reported under regular project headings on preceding pages, and in addition all other assistance rendered such agencies.

ACTIVITIES	Number of farms	Number of units	Total value of service or savings	
	(a)	(b)	(c)	
479. Farms in legal soil-conservation districts or in county soil-conservation associations.....	1927	376,942 acres.	x x x x	479
480. Tests for soil acidity.....		acres.	\$.....	480
481. Applying lime materials.....	2	85 tons.		481
482. Tests for plant-food deficiencies.....		acres.		482
483. Applying recommended fertilizers.....		tons.		483
484. Proper land use—based on soil types (use of soil-survey maps).....		acres.		484
485. Using recommended crop rotations.....	400	1,000 acres.		485
486. Plowing under green manure.....	13	300 acres.	480.00	486
487. Controlling soil blowing.....	6	70 acres.		487
488. Strip cropping.....		acres.		488
489. Using cover crops.....		acres.		489
490. Approved summer-fallow.....	31	1,685 acres.	400.00	490
491. Constructing terraces.....		acres.		491
492. Controlling gullies.....	58	5,500 acres.	4,500.00	492
493. Growing crops on contour.....		acres.		493
494. Pasture and range improvement by contouring.....		acres.		494
495. Grassing waterways.....		acres.		495
496. Depth of moisture tests.....		acres.		496
497. Floodwater control for crop production.....	175	5,000 acres.		497
498. Weed control:				} 498
(1) By cultural practices.....	39	754 acres.	800	
(2) By chemicals.....	34	270 acres.	200	

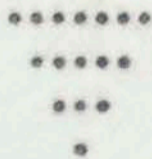
PUBLICATIONS

WILDLIFE CONSERVATION

HUMAN ECONOMICS

AGRICULTURAL ECONOMICS  
MARKETING

UNIVERSITY OF NEVADA  
AGRICULTURAL EXTENSION DIVISION  
UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING



ANNUAL REPORT OF AGRICULTURAL EXTENSION NEWS SERVICE

for

1 9 3 8

by

A. L. Higginbotham, Extension Editor

REPORT OF THE EXTENSION EDITOR  
AGRICULTURAL EXTENSION DIVISION  
UNIVERSITY OF NEVADA

For the Year 1937

by

A. L. Higginbotham

Like most recent years, 1937 for the University of Nevada agricultural extension news service was marked by the multiplicity of emergency activities which sprang up without much warning and demanded immediate attention, which they get. The result, as would be expected, was an effective use of this type of agricultural education, since news to be of value must be taken on the rising tide, but without the careful organization and allotment of time which the extension editor would like to see operative in this field.

There is no solution for this problem so long as important things will come up unexpectedly, and news, by its very nature, bears these characteristics.

Stress is Spotty

As a result of this condition, as usual the work of the extension news service during the year is spotty. The bulletin program, important development of which began a few years ago, went ahead in good shape with a normal group of carefully prepared and presented publications issued. The news service to newspapers and magazines, too, reached its almost normal proportions during the year and served effectively to keep farmer and farm homemaker informed of important news in the field of agriculture. The radio service, however, received much less time and attention than it deserved, because the more easily available material for presentation over the air has been largely exhausted and because neither the specialists nor the extension editor could spare time from more pressing duties to dig it up and prepare it for broadcasting. The county agent service, likewise, was neglected, but the efforts of previous years still bore abundant fruit during 1937.

All in all, despite the hop, skip, and jump nature of attention to the various phases of the work, 1937 is regarded by the extension editor to be one of substantial accomplishment, ranking with the best years in this work in the history of the extension service.

History is Outlined

In 1937 the news service was conducted on a part-time basis by A. L. Higginbotham, Professor of Journalism in the University of Nevada, who serves as Extension Editor. During the University year most of his time is devoted to resident teaching, but during the fifteen-week summer recess, with the exception of a month's vacation, he devoted his entire time to extension editorial duties.

Thus the news service to newspapers and the radio service, which requires regular attention, is maintained the year around.

The news service of the University of Nevada agricultural extension service was inaugurated by A. L. Higginbotham in 1927 on a very small scale, and during the years since has been developed to its present status, which, in general, is ample to carry the load of news and editorial work during normal years.

THE NEWS SERVICE

" Cheapest extension method, in terms of practices adopted, is the service of news stories to the editors of Nevada. It naturally follows, therefore, that it should be the backbone of the activities of the extension editor, and such is the case.

" In recent years, however, duties incident to visual education have multiplied rapidly, and have now reached the stage at which they are encroaching upon the news service, for only so much time is available for the whole job.

" Every effort should be made to see that the main job does not become subordinated to other activities, valuable in themselves but not the chief function of the service.

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And in 1937, this neglect of the news service itself, which has marked previous years, was largely corrected until the year's output is fairly representative of what is desirable for a normal year.

#### Production Kept Down

During the year, 55,925 words were written by the extension editor in news stories for the regular service, which goes to Nevada newspapers, journals in adjacent states, agricultural magazines, the news and feature syndicates, and to many other publications and persons, and is, consequently the extension editor's main job. This is a considerable increase over the 44,704 words of last year and is somewhere near the total wordage that the service might well carry year in and year out.

In the number of stories, too, the gain is great over last year. All told, 138 stories were written and released, which is 45 greater than in 1936. The normal for the service, however, is about three a week or 150 during the year.

#### Seventy Thousand Words in News Stories

Including the special stories, the extension editor's wordage in news stories of all kinds for the year is nearly 69,000, which is approximately normal. This is about a medium-size novel in length.

Of the state-wide stories, nearly one-fourth, in wordage terms, dealt solely with the activities of the agricultural adjustment administration in connection with its programs in the state. This involved not only the writing of this copy but the studying of the programs so that the extension editor was able to explain them to others. Because of this situation, probably one-third or more of the time the editor spent on the state-wide news service was devoted to the agricultural adjustment administration stories.

Greatest number of stories, however, dealt with matters of economic interest to the farmers of the state but not connected directly with the adjustment administration's program. This is natural in a time when the ranchers

and farmers of Nevada are struggling to come back from the economic depression as well as the results of the recent droughts. All told, nearly one-half of the words written was in this field.

Animal husbandry and 4-H club work accounted for the next largest groups of stories.

Distribution of these stories as to subject varies from year to year according to conditions, with the economic stories, animal husbandry, and club work usually in the lead.

#### Special Stories Written

Since approximately the same amount of effort is required to write a story for the papers of the state as for one paper or only a few, the state-wide story should be and is stressed.

During 1937 fourteen of these stories were written for a total of 13,000 words, a volume slightly under that for the previous year.

Of these words, nearly all were written by the extension editor in covering for the two Reno papers the activities of the Nevada Junior Farm Bureau camp for Nevada 4-H club boys and girls when it was in session at Lake Tahoe. In addition to the stories, both papers carried elaborate layouts of pictures of the campers and camp activities, which were taken by a commercial photographer under the direction of the extension editor. To cover this event, it was necessary for the editor to make the trip to Tahoe from Reno and return every day during the week the camp was in session.

#### Newspapers in Good Condition

The pick-up in the condition of Nevada newspapers begun in 1935 continued through 1937, with the result that it could almost be said that most of the papers of the state had returned to normal.

Both local and national advertising continued to gain, while circulation, never far off, picked up neatly, with the result that the editorial sections of most of the papers appeared to have room for as many agricultural extension news stories and as good a play as during previous prosperous years.

### Attitude Continues Cordial

The attitude of the state's papers toward the news service continued to be cordial, and this was reflected in the fact that probably a higher percentage of extension service news stories was published than in any previous year, and a better play was given them.

The state's population showed about a 10 percent gain, and this helped the papers to return to normal.

No new papers were established in the state during 1937, but all of those published in 1936 continued publication, and the press of the state as a whole continued to improve its service to the people of Nevada.

### Personal Contacts Maintained

Again the extension editor's contacts with the newspapermen of the state continued to be cordial.

As usual, the annual meeting of the Nevada State Press Association was held on the University of Nevada campus, as the guest of The Course in Journalism at the University of Nevada, of which the extension editor, in his capacity as Professor of Journalism, is in charge.

### Editors Visited

Visits were made to many of the editors living in the western part of the state during the year and it is probably true that the extension editor talked with at least one person from the staff of nearly every paper in the state during 1937.

All of this year's graduates of the University of Nevada in Journalism went into this work in Nevada, thus increasing the numbers of the editor's former students who handle extension news stories for their papers. Of this year's Journalism class of five, a total of four joined the staff of papers or news services in the state. All told, twenty-five Nevada Journalism graduates are on Nevada papers, many as executives, owners, or part owners. These personal relationships are a vital factor in the success of the news service.

Nevada Papers Read

One of the most important parts of the extension editor's work in connection with the news service has been the regular reading of practically every newspaper published in this state. All but a few of the Nevada newspapers are sent direct to the extension editor as a gracious compliment in return for the agricultural news stories. From one-sixth to one-fifth of the total time of the extension editor is spent reading and scanning these papers in an effort to keep him informed as to:

- (1) The use of Nevada agricultural extension service copy
- (2) News stories originating with the various extension agents
- (3) Agricultural news stories originating with the staff of the paper itself
- (4) Editorial comment concerning Nevada's agriculture
- (5) Changes in journalistic technique and the personnel of the various papers
- (6) Other matters involving a sound conduct of an agricultural news service in this state.

Particularly in a year of economic depression in which agriculture is deeply involved, the reading of these papers has been taking more and more of the editor's time. It is felt, however, that this activity, together with a careful planning of releases, is responsible to a great degree for the success of the service.

Cooperate in Crop Reports

Again during 1937, the news service cooperated with the Salt Lake City office of the Bureau of Agricultural Economics of the United States Department of Agriculture in the dissemination of crop and livestock estimates and production figures to the farmers of the state. With the current stress on economic information, the Nevada news service undertook this service several years ago. At that time few of the newspapers of Nevada used any information of this sort; now practically all of them carry the news as sent to them in the Nevada extension news service.

This year, however, pressure of emergency activities, curtailed this economic service somewhat. It is, however, a

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regular and important part of the service in getting outlook and other economic information about Nevada's agricultural crops to her farmers.

#### Advance Copies Used

Special advance copies of reports on crops and agriculture in this state are mailed to the Nevada extension office several days before their general release. They are then written into news story form and sent to the papers of the state. From the extension service point of view it is felt that getting such information to farmers is vital if they are to make proper plans for crop production.

Frank Andrews and Alton Larson of the Bureau office conferred with the extension editor personally about the service during the year and an increased facility of operation has resulted from these visits.

The value of sending these reports to newspapers in news story form is illustrated by the observation of Mr. Andrews, who says that "The fact that these reports are re-issued from your office under a Reno date line is in itself a considerable advantage. For instance, the Salt Lake Tribune will publish one of your reissues and would not publish the original report from this office. This is perfectly logical."

The pooling of interest of two federal agencies is, the editor believes, a move in the right direction, since without such a service the crop and livestock estimates would not reach as many people.

#### Other Divisions Aided

Cooperative arrangements were continued during the year with two other divisions of the department of agriculture in Nevada.

Through contact with the Ogden office of the forest service, plans were made for the national forest supervisors in Nevada to furnish information to the extension editor which would be used for state-wide stories when newsworthy, and a beginning was made in this work. A similar arrangement was made during 1937 with the California office of the forest service, since some national forest land in Nevada is under its jurisdiction. A start looking toward a similar set-up with the Nevada office of the biological survey was made during the year.

*copy*

For some years occasional stories have been written about the work of other federal departments in or related to agriculture in the state, but no regular arrangements such as these have been made. It is a step forwards in cooperation.

During 1937 many Nevada newspapers made editorial comment based upon news stories issued by the extension editor. In some cases, the stories were run practically unchanged as editorials. Since this is a recognition of the value of the news service to the papers, it is always welcome news to the ears of the extension staff.

### Pictures Are Stressed

With pictures becoming increasingly important in newspapers, more stress was put during the year upon news photographs, with the result that nine mats of news pictures were sent to the newspapers of the state.

This is a step in the right direction, but it should be more highly developed in the future. Assistant Director Thomas Buckman gave great impetus to this development during the year in teaching himself the technique of taking excellent news photographs and in seeing that all agents are equipped with suitable cameras and are being taught how to take news pictures.

This effort will be further developed in the years ahead, with the idea that to be continually acceptable the news of Nevada's agriculture must be in the form in which editors would most like to have it----text illustrated with pictures.

At the 1937 Nevada Junior Farm Bureau camp at Lake Tahoe, the pictures this year, under arrangement of the Extension editor, were taken by a Nevada commercial photographer. As would be obvious, these photographs were better than those taken in previous years by the extension editor or by other members of the extension staff. Freed from the actual operating of the camera, the extension editor was able to pose the subjects, as well as identify them and find from them bits of news to make the pictures interesting.

### Club Camp Pictures Good

As might be expected, the Reno papers appreciated these splendid pictures, and gave them good play in large layouts which made the story of the camp vivid when taken in con-

nection with the stories all week.

This was possible not only on account of the excellence in news value and technical quality of the pictures, but because the Reno papers are now equipped to use more cuts. The Nevada State Journal installed its own photo-engraving plant during the year, while the Reno Evening Gazette uses extensively the only commercial plant in the state, which is well equipped and operated.

#### U. S. D. A. Photographs Used.

Photographs taken in 1935 by the federal office of extension work in Nevada to show the agricultural life of the state were widely used by the extension editor and others during 1937.

During the year, The Nevada State Journal put out a special edition of Nevada's resources. A considerable section was devoted to the state's agriculture, in which the extension editor helped, and all of the photographs for which he furnished.

During the year, also, the bimonthly magazine Nevada Parks and Highways devoted most of one of its editions to the livestock industry of the state. Much of the text material and the majority of the photographs was furnished by the extension editor.

The pictures on file in the extension editor's office, many of which have been taken in recent years for publication purposes, were also used by the Pacific Rural Press, the house organ of the Safeway chain stores, The Extension Service Review and many other publications and news syndicates.

#### THE BULLETIN SERVICE

The bulletin program of the University of Nevada agricultural extension service, stress on which began in 1936, continued to be developed during 1937.

In this year, four substantial bulletins were brought from the presses in the attempt to meet more fully the needs of Nevada farmers, farm-homemakers, and Four-Aitch club boys and girls for accurately and appealingly presented printed information in fields in which they are especially interested.

All told, these publications comprised nearly 150,000 words, in nearly 300 pages of printed matter, and contained 57 cuts of photographs or drawings.

### Two for Four-Aitchers

Two of the bulletins are designed for the study use of Four-Aitch youngsters in the state, thus continuing the program along this line inaugurated several years ago. Both the other publications are for the use of livestock men, filling a long felt want to contribute more to the needs of this dominant group in Nevada's agriculture.

First of the bulletins, The Nevada 4-H Club Baby Beef Book, is from the pen of Joseph W. Wilson, Elko county extension agent, and tells how to select, feed, groom, and show baby beef calves in competition. Because such work has played an important part in Nevada 4-H work during recent years, this bulletin will fill a void long recognized by the agricultural extension service. It runs to 69 pages in the regular bulletin size, contains 24 illustrations, some of them drawings, and contains about 35,000 words. The edition was 1000 copies.

The other 4-H club publication, Nevada 4-H Club Forestry Book, was written by Wilbur Stodieck, Douglas and Ormsby county agent, and is designed for the use of forestry clubs, which now exist in a few parts of the state and the promotion of which is considered desirable. The bulletin contains 26 pages, runs to 13,000 words, and is illustrated with several cuts of photographs.

### Motivated Educationally

Both these club bulletins, but especially the one concerning the showing of baby beef, are motivated educationally in a way which will make them especially useful in teaching and prepared so that the Four-Aitcher can carry on his project under a local leader without direct supervision by the extension agent. An attempt is being made to carry out this policy with all future Four-Aitch bulletins.

Biggest bulletin of the year was Setting Up Taylor Grazing Districts in Nevada, designed further to familiarize the stockmen of the state with the biggest change in their operations in recent years which came through the establishment of Taylor grazing districts on the public domain.

### Taylor Bulletin Popular

This publication, which ran to 144 pages and 72,000 words, is probably the most extensive study of the operations of this new federal act and the way it affects livestock operators



made in any state. It was extensively illustrated with 17 photographs, charts, maps, and so forth. Issued in an edition of 5000 copies, it has been requested from practically all parts of the nation. Thomas E. Buckman, assistant director for agriculture, is its author.

Another bulletin put out during the year for the benefit of ranchmen in the state was Nevada Low-Cost Dehorning Chute, in which its author, Paul Maloney, district extension agent for Humboldt and Lander counties, sets forth how to construct cheaply a new and very effective dehorning chute he designed with the assistance of ranchers in his territory.

Replete with photographs and maps showing how to build the chute, the bulletin issue of a thousand copies was practically exhausted within a few months after its issuance, and, as the year closes, a new edition may be necessary. It contained 26 pages, eight illustrations, and 13,000 words.

#### Format and Design Appealing

Probably in no year of the University of Nevada's extension service have a group of bulletins been put out in more appealing format and design. If extension publications are to compete with other reading matter, especially in magazine form, they must utilize type, picture, design, and subject matter to put them on the same basis of appeal. This the extension editor has tried to do, and in large measure has succeeded, in the 1936-37 publications. In the future, even more advancement along this line can be accomplished. During the year an arrangement was made by which a new and better type face will be available for use in future publications printed at the Nevada State Printing office, which should further improve the attractiveness to the eye of extension bulletins.

The extension editor's duties in connection with these bulletins consisted of advising with the author, in helping with the plans for the publication, in editing the copy and laying out the book, selecting the illustrations and seeing them through the engraving process, in reading proof, and in general seeing the publication through the printing process.

#### Monthly Economic Sheet Dropped

In the year 1935-36, a monthly, and later bi-monthly publication of news about the economic phases of farming and

*reprints*

ranching in Nevada was begun on a co-operative basis with the University of Nevada agricultural experiment station in an effort to further inform the people of Nevada along economic lines. Called Economic Talks with Nevada Farmers, this publication contained chiefly outlook and farm management material, and was mailed by the extension office to most of the farmers in the state. It was a long step forward in the spreading of data upon which farmers could base sound judgment in making decisions about farming operation.

In the present report year, 1936-37, however, the experiment station decided that it could no longer afford its part of the cost of the publication, and, after one issue in December 1936, it was necessary to abandon Economic Talks. While undoubtedly the magazine had much value, it took an enormous amount of time and was not planned efficiently. Moreover, it was discovered that the news service could get economic information, as it had all along, to the farmers quicker, more efficiently, and more effectively through the papers of the state than through this publication. That was done the remainder of the year, with the best results that have ever been obtained in Nevada. In view of this, the abandonment of the publication, because of lack of funds, may have been little or no loss in effectiveness.

#### THE RADIO SERVICE

Although the radio service was not stressed as much during 1937, on account of pressure of other activities, as in previous years, a survey of the year's work shows a strong program and several worth while accomplishments which will not and cannot mark every year.

There are only two primary outlets for radio work in agriculture from Nevada---Radio Station KOH, Reno, and the Western Farm and Home Hour. Both of these were co-operated with during 1937 to a degree greater than in any other year except 1936.

#### Farmers Want Prices

Chief radio accomplishment of the extension editor during the year, and one on which he worked long and hard and is pleased with, was the arrangement for a new agricultural program daily over Radio Station KOH, Reno, Nevada's only station.

For years, Nevada's livestock men and other farmers, especially in the western part of the state, have complained

that they could not take advantage of price changes in agricultural commodities because they could not keep currently informed on them.

Hearing of this, the extension editor took steps to remedy it. He conceived the idea that if such information could be broadcast over KOH daily, it would reach the farmers far in advance of any other feasible method. He took the matter up with the management of KOH and received an enthusiastic welcome, provided that the service cost KOH nothing.

#### A Program Without Cost

The problem then resolved itself into how to get the service for KOH without paying for it. First he tried to get the United States bureau of agricultural economics people in Washington to arrange it, but found their lack of money made it impossible. He then took the problem up with the San Francisco office of the bureau and found that the market reports could be furnished by mail but not by wire as it would have to be if it were to be truly satisfactory. Finally, a plan was worked out by which livestock prices alone -- and these are by far the most important -- would be furnished KOH by the San Francisco office by telegraph, with the South San Francisco stockyards paying the telegraph tolls, for a while at least, and with no advertising required.

With this plan in mind, the extension editor then took up the matter with the KOH officials, who had changed in the meantime, to find that the full United Press wire news service on markets was then available to KOH. But, upon checking, it was discovered that this service is very meager and would not give Nevada farmers the detailed Nevada information they needed.

#### New Program Developed

Finally there was worked out a plan which gives Nevada farmers a fifteen-minute program of their own. Going on the air at 1:15 each day, it includes the Farm Flashes, the San Francisco livestock report which the extension editor arranged for through the bureau of agricultural economics and the stock yards, and an assortment of United States market reports, chiefly very brief, from Chicago, Denver, San Francisco, and Los Angeles, dealing with the daily sales prices of various agricultural commodities.

Right now the farmers of the state are getting the best combined agricultural program they have ever had. Moreover, this arrangement is one which almost runs itself, re-

quiring no daily attention from the extension editor except the handling of the Farm Flashes. Radio station officials and the farmers themselves are much pleased.

#### Western Farm and Home Hour

Major Nevada talks over the Western Farm and Home Hour during the year were three.

On March 18, the story of George Ogilvie, Elko county youngster, who won the Keep Growing prize health booklet contest, was broadcast in a talk written by Miss Josephine Hemphill of the Washington office of the radio service.

On September 30, a similar talk of the work of Keep Growing in Nevada, also written by Miss Hemphill, was broadcast.

Information for both of these presentations, which were prepared in Miss Hemphill's inimitable radio style, was furnished her by the extension editor and Mrs. Mary Stilwell Buol.

During the year, also, was written by the extension editor and put on the air over the Western Farm and Home Hour hookup a talk of the observations by Dr. J. E. Church, meteorologist of the agricultural experiment station, while in Europe of the use by farmers of water there.

#### Use Nevada Material

Information furnished to him by the extension editor enabled R. L. Burgess, regional contact man of the Agricultural Adjustment Administration in San Francisco, to put on part of two talks about Nevada during the year in his special capacity with the Western Farm and Home Hour.

One of these came on June 15 and dealt with the Nevada work-sheet sign-up of the AAA, while the other was put on the air July 27 and concerned the comments of L. E. Cline on turkey marketing.

Under the heading of Farm Science and Business News, two items from the University of Nevada also went on the air. In January, the talk dealt with trends in turkey styles, based on information gathered by Mr. Cline and furnished for broad-

cast by the extension editor, while the other, March 1, dealt with the planting of forest trees for shelterbelt, windbreak, and woodlot purposes.

Two talks early in the year dealing with the prospects for the runoff of water for irrigation from the snow storage in the mountains gave considerable information about Nevada conditions, furnished through Dr. Church, whose special field is snow surveying. One of these broadcasts was on February 17, the other on April 14.

During the week of June 27, the Western Farm and Home Hour made an announcement, written by the extension editor, of the Reno Rodeo and its livestock industry aspects.

#### Nevada on National Hour

Without especially expecting this honor, since the National Farm and Home hour did not at that time extend to the West, Nevada was made the subject of an extended program written by Miss Hemphill on March 10. It told, as did the Western Farm and Home Hour broadcast along the same lines, of the work of George Ogilvie in Keep Growing nutrition work.

Although not strictly extension work, three broadcasts over the Western Farm and Home Hour during the year by representatives of the Soil Conservation service dealt with Nevada and brought to the farmers of the state new and vital information about soil conservation.

All were given in April of 1937. The first dealt with Lincoln county's agricultural section, the second with the Virgin valley of Clark county, and the third with the Crystal Springs demonstration area of Lincoln county.

These presentations were in dialogue form, written by Charles D. Jarrett and Albert F. Sander of the Soil Conservation service, and presented by Carl Gragg and Jarrett, together with the NBC announcer.

#### Farm Flashes Edited

Farm Flashes, prepared by the radio service of the United States Department of Agriculture, were broadcast throughout the year, every day but Sunday, over Radio Station KOH, Reno.

Again during 1937, all of these talks cleared through the extension editor and were edited by him. Talks not suited to this territory were rejected, local touches, where possible, were included, and the Farm Flashes, day in and day out, were adapted by the extension editor to local conditions and interests. With six of these talks handled each week, the extension editor was responsible for the editing during the year of more than three hundred Farm Flashes, which occupied a good portion of the time devoted not only to radio information but to extension work. Since each talk averages about a thousand words, during the year approximately three-hundred thousand words, equivalent of four average length novels, was handled by the extension editor.

Through these talks the production control programs of the federal agricultural adjustment administration were made more understandable to Nevada farmers and farm homemakers. In addition, many other matters connected with combatting the depression through planning were made available to the rural people of the state, as well as much data about farming and homemaking in general.

#### Radio Station is Enthusiastic

Station KOH, which was rather dubious about using the Farm Flashes when they were first presented by the extension editor, is now enthusiastic about them, not only as concerns the subject, but as concerns the splendid way in which they are written.

The management of Radio Station KOH changed during the year, and, to test out the pulling power of the Farm Flashes, they were taken off the air without notice, even to the extension editor. So many objections resulted, that they were put back two weeks later in connection with the new Farm Flash fifteen-minute program, which included agricultural commodity market news.

#### Survey Shows Many Radios

Since inquiries are often made as to the value of radio programs and as to the area which they cover, a survey was made as to the number of radios on Elko County ranches.

The survey discloses that more than 95 percent of the ranch homes are supplied with radios in working condition. The reception was found to be better in the country than in the rural towns. Station KSL was available throughout the county at any time of the day or evening. Some of the better radios reported that they could get San Francisco and Los Angeles during the day.

### THE COUNTY AGENT SERVICE

With fewer emergency activities to handle during this report year, the Nevada county and district agents were able to devote more time to the news story as an agency of extension work, with the result that annual production in this field, which dropped severely in 1935 and 1936, returned to somewhat normal proportions.

In fact, in no year, with two exceptions, since this type of work has been promoted by the extension editor, has the number of news stories written or originated by the agents reach the proportions it did in 1937.

#### Average Production Jumps

During the year, the average production of each agent in the service was 69.8 stories, which is exceeded only by the year 1932, at 76.3 stories, and 1933, at 73 stories, in the last eleven years. And this year's production, in addition, is two-fifths greater than that of 1936.

That the agents of the Nevada agricultural extension service recognize that this method of extension work is the very cheapest, both in cost and in time and energy, is obvious from a study of how this production has increased over the years, rising from an average per agent of 31.5 in 1927 to a high of 76.3 in 1932, a figure not appreciably above that for 1937, which roughly, may be regarded as somewhat near normal.

Despite the fact that stories of home economics activities have less news value than those of agricultural matters, the home demonstration agents have led the men in originating news stories. This for the first time in Nevada this is not true, the sixteen full time and some part time men having produced 859 stories during the year to the five women's 294, an average considerably in favor of the men.

#### Men Beat Women

Notwithstanding this decreased production by the women agents, the annual total of the service for the year showed an increase, and again, except for 1932 and 1933, is the highest in recent years, reaching a figure of 1153.

But the most startling conclusion to be drawn from the figures is that certain agents evidently realize the possibilities of news dissemination much better than others, regardless of the type of newspaper available in their territories. For the variation among agents is wide.

Highest production of any agent during the year was achieved by a man with 184. Several others, both men and women, were on his heels. Lowest production was 4 stories from a woman agent who was not full time the entire year, but she was only slightly above a man agent in a territory with strong newspapers, who produced but 7 stories during 1937. (These figures are tabulated in the exhibit section of this report.)

#### MISCELLANEOUS

While the news service, the radio service, the bulletin service, and the county agent service are the extension editor's main responsibilities, there is another on which only a very general report can be given. That is the position of one of the persons in the service who has had extensive experience in a variety of things closely related to many of the other activities in the extension service. And rarely a day goes by during which the extension editor is not called upon for an expression of opinion, for information, or for help in connection with the public presentation of information or visual education.

#### Activities Varied

In this capacity, during 1937, the editor has edited manuscripts, helped write addresses, judged contests, given help in printing and handled some of it himself, and in many other ways lent a hand in connection with activities which are not his main job. There is no adequate way in which to report such work, although it has consumed a great amount of time and is an important part of his job.

Among the miscellaneous activities, one which has taken considerable time is that of handling the details and the news of the Nevada tree planting project.

Begun several years ago, the program has resulted in the planting of nearly fifty thousand trees on the farms and ranches of the state for windbreak, woodlot, and shelterbelt purposes.

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Number Planted Rise

Starting with 3,770 trees planted in 1933, the number set out rose year by year until 1936 when it reached a peak of 15,885. This large figure was accounted for by the fact that one man put out ten thousand. In 1937, the number dropped to 9,994, but if the large 1936 order is regarded as abnormal, it will be seen that the number of trees planted each year, including 1937, has shown an increase. One of the large reasons for this has been the number of news stories on this project issued by the extension editor; the number rose in 1937 to 8.

..... NEWS SERVICE EXHIBITS .....

- (1) 1937 Nevada Agricultural Extension Service Bulletins.
- (2) Tables Showing Number of Stories Written by Men and Women Agents, 1927 - 1937.
- (3) Table Showing Classification of State-wide Stories as to Project.
- (4) Representative State-wide Stories of 1937.
- (5) Economic Talks with Nevada Farmers.

NUMBER OF NEWS STORIES WRITTEN BY MEN AND WOMEN AGENTS

1927 - - - 1937

\*\*\*\*\*

*all data from  
news story*

<u>DATE</u>	<u>AGENTS</u>	<u>TOTAL AGENTS</u>	<u>NO. NEWS STORIES</u>	<u>TOTAL NEWS STORIES</u>	<u>AVERAGE NO. STORIES PER AGENT</u>
1927	8 men 3 women	11	308 39	347	31.5
1928	8 men 3 women	11	384 79	463	42.0
1929	11 men 5 women	16	309 351	660	41.2
1930	11 men 5 women	16	556 250	806	50.3
1931	12 men 5 women	17	633 492	1125	66.1
1932	12 men 5 women	17	763 537	1300	76.3
1933	12 men 5 women	17	707 535	1242	73.0
1935	14 men 4 women	18	702 * 336 *	1038 *	57.6 *
1936	13 men 5 women	18	556 557	913	50.7
1937	11 men 5 women	16½	842 294	1153	69.8

\* Figures for eleven months only (December 1934 - October 1935 inclusive)

Adjusted to twelve month basis for comparison.

NUMBER OF NEWS STORIES PUBLISHED BY EACH AGENT

1931 - 1932 - 1933 - 1935 - 1936 - 1937

	<u>1931</u>	<u>1932</u>	<u>1933</u>	<u>*1935</u>	<u>1936</u>	<u>1937</u>
H. E. Boerlin	27	20	28	60	28	142
Royal D. Crook	31	66	29	51	80	80
Louie A. Gardella	0	0	0	0	7	18
Paul L. Maloney	32	70	55	40	26	37
Mark W. Menke	49	113	70	59	101	116
D. H. Propps	93	135	113			
E. B. Recanzone				38	37	52
A. J. Reed	186	99	110	59	120	184
E. C. Reed	52	49	108	78	31	
Otto R. Schulz	45	63	47	24	10	
Wilbur H. Stodieck	38	56	58	44	39	73
C. R. Townsend	23	55	28	163	72	92
Joseph W. Wilson	15	24	54	48	3	41
J. H. Wittwer	42	13	7	0	2	7
Assistants ( $\frac{1}{2}$ full time)						17
<b>Total Men Agents</b>	<b>633</b>	<b>763</b>	<b>707</b>	<b>644</b>	<b>556</b>	<b>859</b>
Margaret Brenner	51	72	64			
Florence Davis						4
Hellen M. Gillette	30	40	54	73	64	20
Lena Hauke	190	242	201	150	120	78
M. Gertrude Hayes	140	169	184	65	94	127
Grace Schmidlein	21	14	12			
Helen S. Tremewan				39	71	65
Edith Warner					8	
<b>Total Women Agents</b>	<b>492</b>	<b>537</b>	<b>535</b>	<b>307</b>	<b>357</b>	<b>294</b>
<b>Total All Agents</b>	<b>1125</b>	<b>1300</b>	<b>1242</b>	<b>951</b>	<b>913</b>	<b>1153</b>

\* 11 Months only - December 1934 - October 1935

CLASSIFICATION OF STATE-WIDE NEWS STORIES  
AS TO PROJECT

November 1, 1936 to October 31, 1937

PROJECT		NUMBER STORIES	NUMBER WORDS
I	<u>ADMINISTRATION</u>	<u>3</u>	<u>1,100</u>
II	<u>SUPERVISION</u>		
III	<u>DAIRYING</u>		
IV	<u>POULTRY</u>	<u>2</u>	<u>1,100</u>
	E-1 Feeding		
V	<u>AGRONOMY</u>		
VI	<u>AGRICULTURAL ECONOMICS</u>	<u>84</u>	<u>33,975</u>
	A-5 Livestock	6	2,550
	A-7 Turkeys	1	500
	A-8 Wool	1	250
	A-16 Use of current market information	28	10,325
	B-1 Farm loans	2	1,000
	B-3 Feed and livestock loans	1	250
	C-1 Agricultural outlook	17	6,200
	G Land utilization	1	600
	H Economic surveys	1	550
	K-1 Agricultural adjustment	26	10,700
VII	<u>ANIMAL HUSBANDRY</u>	<u>11</u>	<u>4,150</u>
	A-2 Range management	3	1,050
	A-7 Disease control	2	450
	B Sheep	1	400
	C-2 Disease control	1	550
	H Relationship of the public domain to the range industry	1	450
	H-3 Taylor Grazing Act	3	750
VIII	<u>CLUB WORK</u>	<u>12</u>	<u>4,700</u>
	A Agricultural	4	1,800
	A-1 Beef cattle	6	2,000
	A-4 Swine	2	900
IX	<u>COMMUNITY ACTIVITIES</u>	<u>4</u>	<u>1,700</u>
	A Farm Bureau cooperation	2	1,050
	B Recreation	1	400
	L Relief of destitution	1	250

CLASSIFICATION OF STATE-WIDE NEWS STORIES (CONT'D)  
AS TO PROJECT

November 1, 1936 to October 31, 1937

PROJECT	NUMBER STORIES	NUMBER WORDS
X <u>HORTICULTURE</u>	<u>3</u>	<u>1,500</u>
C     Control of diseases and insect pests	1	500
D     Beautification of homes and public grounds	1	400
XI <u>CONTROL OF RODENTS AND OTHER PESTS</u>	<u>1</u>	<u>500</u>
XII <u>RURAL AGRICULTURAL ENGINEERING</u>	<u>1</u>	<u>450</u>
D     Irrigation	1	450
XIII <u>SOILS</u>	<u>1</u>	<u>400</u>
E-1   Soil Conservation (Erosion Control)	1	400
XIV <u>PUBLICATIONS</u>	<u>1</u>	<u>300</u>
B     Bulletins	1	300
XV <u>NUTRITION</u>	<u>4</u>	<u>1,800</u>
A     Keep Growing	4	1,800
XVI <u>GOOD GROWTH AND DEVELOPMENT</u>		
XVII <u>FORESTRY</u>	<u>8</u>	<u>2,850</u>
B     Windbreaks	1	400
C     Distribution of trees	5	1,900
General forestry	2	550
TOTAL.....		55,925
	138	

AGRICULTURAL PRICE INDEX  
FOR STATE GAINS 2 POINTS

PRICES OF NEVADA AGRICULTURAL PRODUCTS AS A WHOLE INCREASED TWO POINTS IN THE MONTH WHICH ENDED DECEMBER 15 OVER THE FIGURES OF A MONTH PREVIOUS, ACCORDING TO THE FARM PRICE INDEX OF THE UNIVERSITY OF NEVADA AGRICULTURAL EXPERIMENT STATION.

REFLECTING IN PART THE NORMAL SEASONAL RISE OF PRICES OF FARM AND RANGE IN THIS STATE, THE BOOST IN THE INDEX IS CAUSED PARTLY ALSO BY A JUMP OF 4 CENTS IN THE PRICE OF WOOL, CRUZ VENSTROM OF THE STATION'S DEPARTMENT OF FARM DEVELOPMENT, SAID THIS WEEK.

WITH THE AVERAGE OF PRICES RECEIVED BY NEVADA FARMERS AND RANCHERS DURING 1910 THROUGH 1914 AS A BASE OF 100, THE NEVADA FARM PRICE INDEX NOW STANDS AT 119, OR 3 POINTS ABOVE THE FIGURE FOR THE SAME DATE A YEAR AGO. THE PEAK IN NEVADA AGRICULTURAL PRICES WAS REACHED IN 1919, FOR WHICH THE INDEX WAS 204. THE 1935 INDEX STOOD AT 107.

THE DEEF CATTLE INDEX MADE NO CHANGE DURING THE MONTH, STANDING AT 102, BUT THE LAMBS-WOOL-SHEEP FIGURE JUMPED FROM AN INDEX NUMBER OF 140 ON NOVEMBER 15 TO 149 ON DECEMBER 15, WITH THE RESULT THAT THE PRICE INDEX FOR ALL RANGE LIVESTOCK IN THE STATE STOOD ON DECEMBER 15 AT 124 IN COMPARISON WITH 120 A MONTH EARLIER, LARGELY DUE TO THE WOOL PRICE INCREASE.

(MORE)

WITH THE SEASON'S SUPPLIES OF FARM PRODUCTS WELL KNOWN AND MEASURED IN PRESENT PRICES, EXCEPT FOR NORMAL SEASONAL CHANGES, THE FARM PRICE LEVEL SHOULD REMAIN FAIRLY STABLE UNTIL FACTORS OF THE 1937 CROP SEASON DEVELOP, VENSTROM SAID.

BEEF CATTLE SOLD ON THE RANCHES OF THE STATE FOR AN AVERAGE A HUNDREDWEIGHT OF 36 ON DECEMBER 15, AND LAMBS BROUGHT \$7.30. WOOL SOLD FOR 30 CENTS A POUND.

AMONG THE GENERAL FARM PRODUCTS, BUTTERFAT AVERAGED 35 CENTS A POUND, HOGS, \$9.50 A HUNDRED, EGGS 33 CENTS A DOZEN, CHICKENS 16 CENTS A POUND, AND CALVES \$7.90 A HUNDREDWEIGHT

IN THE FIELD CROP DIVISION OF THE STATE'S AGRICULTURE, ALFALFA HAY BROUGHT \$8 A TON, POTATOES 37 A TON, WHEAT \$34 A TON, AND BARLEY 32 A T N.

THE PRICE INDEXES ARE BASED ON THE PRICE REPORTS RECEIVED MONTHLY FROM THE CROP REPORTING BOARD OF THE U. S. BUREAU OF AGRICULTURAL ECONOMICS.

AGRICULTURAL NEWS SERVICE

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NOTE TO EDITOR//..BECAUSE OF THE URGENCY OF THIS STORY, IT IS BEING SENT SIMULTANEOUSLY TO THE NEVADA PAPERS RECEIVING IT....A.L.H.

1937 SOIL ACT PROGRAM  
FOR NEVADA IS ANNOUNCED

FOLLOWING THE GENERAL LINES OF LAST YEAR BUT EMPHASIZING SOIL BUILDING, THE NEVADA SOIL CONSERVATION AND RANGE BUILDING PROGRAM FOR 1937 WAS ANNOUNCED THIS WEEK BY CECIL W. CREEL, DIRECTOR OF THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE.

SLIGHTLY HIGHER RATES AND SEVERAL NEW PRACTICES ARE INCLUDED IN THE NEW PROGRAM, WHICH HAS JUST RECEIVED THE APPROVAL OF SECRETARY OF AGRICULTURE HENRY WALLACE.

WORKED OUT BY AGRICULTURAL ADJUSTMENT ADMINISTRATION OFFICIALS IN WASHINGTON, THE PROGRAM IS BASED ON SUGGESTIONS MADE BY NEVADA FARMERS AND RANCHERS AS TO WAYS IN WHICH THE PLAN BE ADAPTED TO CONDITIONS IN THIS STATE.

GEORGE OGILVIE, RANCHER OF LEE, ELKO COUNTY, AND THOMAS BUCKMAN, ASSISTANT DIRECTOR OF THE UNIVERSITY OF NEVADA, AGRICULTURAL EXTENSION SERVICE, AND EDWARD C. REED, STATE EXECUTIVE SECRETARY FOR THE SOIL CONSERVATION PROGRAM IN NEVADA, SAT IN ON THE CONFERENCES AT WHICH NEVADA'S PROGRAM WAS WORKED OUT.

THE 1937 PROGRAM EMPHASIZES THE SOIL-BUILDING PART OF THE PROGRAM MORE THAN DID THE 1936 PROGRAM, REED SAID, BY MAKING MORE LIBERAL PROVISIONS FOR ESTABLISHING THE SOIL-BUILDING ALLOWANCE FOR EACH FARM. THE AMOUNT WHICH ANY FARMER CAN EARN BY THESE SOIL-BUILDING PRACTICES DEPENDS UPON THE AMOUNT OF PRACTICES PERFORMED

(MORE)

FROM-UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE, RENO, NEV.  
COOPERATIVE AGRICULTURAL EXTENSION WORK, ACTS OF MAY & JUNE, 1914  
CECIL W. CREEL, DIRECTOR / . . . . A. L. HIGGINBOTHAM, EDITOR



AND THE RATE FOR EACH. IN NO CASE, CAN THE TOTAL AMOUNT EARNED FOR SOIL-BUILDING PRACTICES BE LARGER THAN THE SOIL-BUILDING ALLOWANCE FOR THE FARM. THESE PAYMENTS ARE IN ADDITION TO THE PAYMENTS FOR DIVERSION WHICH FARMERS MAY EARN.

IN GENERAL, FARMERS MAY EARN PAYMENTS FOR THE PLANTING OF LEGUMES AND GRASSES, AND FOR SUCH PRACTICES AS RESTORATION OF CROPLAND TO NATIVE GRASSES, PLANTING OF FOREST TREES, NOXIOUS WEED CONTROL, APPROVED SUMMER FALLOW, PLOWING UNDER OF GREEN MANURE CROPS, AND RESEEDING OF NATIVE PERENNIAL GRASSES ON NON-CROP PASTURE LAND.

AN IMPORTANT PROVISION, REED SAID, IS THAT NO PRACTICES SHALL BE ELIGIBLE FOR PAYMENT UNLESS THEY ARE SUCH AS ARE DETERMINED BY THE STATE AGRICULTURAL CONSERVATION COMMITTEE TO BE GOOD FARMING PRACTICE FOR THE LOCALITY.

THE RANGE PRACTICES FOR WHICH STOCKMEN MAY EARN PAYMENTS INCLUDE DEVELOPMENT OF SPRINGS AND SEEPS, THE DIGGING OF EARTHEN PITS TO CATCH RUNOFF, AND RESERVOIRS, DIGGING OR DRILLING WELLS, RANGE FENCING, RESEEDING, RODENT CONTROL, AND DEFERRED GRAZING.

THE CONDITIONS FOR PAYMENTS REGARDING LEGUMES AND GRASSES INCLUDE THE GENERAL REQUIREMENT THAT GOOD SEED OF AN ADAPTED VARIETY MUST BE USED AND THAT IT MUST BE SEEDED ON CROPLAND IN 1937. TWO RATES OF PAYMENT ARE ESTABLISHED, WITH THE HIGHER RATE BEING PAID WHEN A GOOD STAND OF THE SOIL-CONSERVING CROP IS SECURED. GRASSES AND LEGUMES MAY BE SEEDED ALONE OR WITH A NURSE CROP. IF THERE IS A GOOD STAND OF THE SOIL-CONSERVING CROP ESTABLISHED THE HIGHER RATE WILL BE PAID ONLY IF THE NURSE CROP IS NOT HARVESTED AS GRAIN OR HAY. IF THE NURSE CROP IS HARVESTED FOR GRAIN OR HAY, THE LOWER RATE WILL BE PAID. IF THERE IS NOT A GOOD STAND ESTABLISHED, THE PAYMENT WILL BE AT THE LOWER RATE, WHETHER OR NOT THE NURSE CROP IS HARVESTED.

(MORE)

PERENNIAL LEGUMES: \$4 AN ACRE FOR SEEDING AND OBTAINING A GOOD STAND OF PERENNIAL LEGUMES INCLUDING ALFALFA, WHITE CLOVER, AND OTHERS AS MAY BE APPROVED, IF NO NURSE CROP IS HARVESTED AS GRAIN OR HAY; OTHERWISE, \$2.50 AN ACRE FOR SEEDING.

BIENNIAL LEGUMES (EXCEPT SWEET CLOVER): \$3 AN ACRE FOR SEEDING AND OBTAINING A GOOD STAND OF A BIENNIAL LEGUME SUCH AS RED CLOVER, ALSIKE CLOVER, MAMMOTH CLOVER, AND OTHERS WHICH MAY BE APPROVED, IF NO NURSE CROP IS HARVESTED AS GRAIN OR HAY; OTHERWISE, \$2 AN ACRE FOR SEEDING.

PERENNIAL GRASSES: \$3.50 AN ACRE FOR SEEDING AND OBTAINING A GOOD STAND OF APPROVED PERENNIAL GRASSES INCLUDING BLUEGRASS, ORCHARD, BROME AND OTHERS, IF NO NURSE CROP IS HARVESTED AS GRAIN OR HAY; OTHERWISE, \$2 AN ACRE FOR SEEDING.

GRASS MIXTURES: \$3.50 AN ACRE FOR SEEDING AND OBTAINING A GOOD STAND OF MIXTURES OF PERENNIAL AND BIENNIAL LEGUMES AND GRASSES IF NO NURSE CROP IS HARVEST AS GRAIN OR HAY; OTHERWISE, \$2 AN ACRE FOR SEEDING.

SWEET CLOVER: \$2 AN ACRE FOR SEEDING AND OBTAINING A GOOD STAND OF SWEET CLOVERS AND SUCH OTHER ANNUAL LEGUMES AS MAY BE APPROVED, IF NO NURSE CROP IS HARVESTED AS GRAIN OR HAY; OTHERWISE, \$1 AN ACRE FOR SEEDING.

RATES FOR SOIL-BUILDING PRACTICES

DETAILED SPECIFICATIONS HAVE BEEN DEVELOPED FOR MOST OF THE FOLLOWING SOIL-BUILDING PRACTICES. FULL EXPLANATION OF THESE SPECIFICATIONS, WILL BE AVAILABLE FROM COUNTY AGENTS IN THE NEAR FUTURE.

PERENNIAL NOXIOUS WEED CONTROL: \$5 AN ACRE FOR PERIODIC CULTIVATION AND \$10 AN ACRE FOR CHEMICAL TREATMENT OF PERENNIAL NOXIOUS WEEDS ON PROJECTS APPROVED IN ADVANCE BY THE COUNTY COMMITTEE, OF SUCH WEEDS AS RUSSIAN KNAPWEED, WHITE TOP, LEAFY SPURGE,

(MORE)

CANADA THISTLE, PUNCTURE VINE, AND MORNING GLORY.

PLANTING FOREST TREES: \$10 AN ACRE FOR PLANTING FOR WOOD-  
LOT PURPOSES AT LEAST 400 TREES PER ACRE.

APPROVED SUMMER FALLOW: 50 CENTS AN ACRE FOR APPROVED  
SUMMER FALLOW ON IRRIGATED CROPLAND WHICH LEAVES A ROUGH, CLODDY  
SURFACE.

GREEN MANURE: \$2 AN ACRE FOR GROWING AND PLOWING UNDER  
ANNUAL LEGUMES, INCLUDING ALFALFA, AND CLOVERS AFTER AT LEAST TWO  
MONTHS' GROWTH; \$1 AN ACRE FOR FULL GROWTH OF ALFALFA WORKED INTO  
THE SOIL IN 1937 IN ORCHARDS ONLY; \$1 AN ACRE FOR SMALL GRAINS  
PLOWED UNDER DURING OR PRIOR TO THE BLOOMING STAGE IN ORCHARDS OR  
IN CONNECTION WITH THE GROWING OF VEGETABLES.

RESEEDING NON-CROP PASTURE LAND: 20 CENTS PER POUND OF  
NATIVE PERENNIAL GRASS SEED SOWN, UP TO \$2 AN ACRE.

RESTORATION OF LAND TO NATIVE GRASSES: 25 CENTS AN ACRE  
FOR RESTORATION OF NON-IRRIGATED CROPLAND TO NATIVE VEGETATION BY  
NATURAL RESEEDING.

TERRACING: 40 CENTS PER 100 FEET OF TERRACING, ON PRO-  
JECTS APPROVED IN ADVANCE BY THE COUNTY COMMITTEE.

RANGE-BUILDING PAYMENT RATES

A CONDITION OF PAYMENT FOR RANGE-BUILDING PRACTICES IS  
THAT THEY BE APPROVED IN ADVANCE BY THE COUNTY COMMITTEE AND THAT  
THEY BE PERFORMED ACCORDING TO APPROVED SPECIFICATIONS. STOCKMEN  
MAY OBTAIN THESE DETAILED SPECIFICATIONS FROM COUNTY COMMITTEES  
WHEN SUBMITTING PROJECTS. THE FOLLOWING ARE PRACTICES APPROVED FOR  
NEVADA:

DEVELOPMENT OF SPRINGS AND SEEPS: \$50 PER SPRING OR SEEP,

CONSTRUCTION OF EARTHEN PITS OR RESERVOIRS: 15 CENTS PER  
CUBIC YARD OF FILL OR EXCAVATION.

(MORE)

DIGGING OR DRILLING WELLS: \$1 PER LINEAR FOOT.

RANGE FENCING: 30 CENTS A ROD.

RESEEDING: 20 CENTS PER POUND OF SEED SOWN IN RESEEDING DEPLETED RANGE LAND WITH GOOD SEEDS OF ADAPTED VARIETIES OF PERENNIAL GRASSES.

RODENT CONTROL: 15 CENTS AN ACRE FOR CONTROL OF POCKET GOPHERS; 6 CENTS AN ACRE FOR CONTROL OF GROUND SQUIRRELS.

DEFERRED GRAZING TO RESTORE NATIVE VEGETATION: 35 CENTS PER ANIMAL UNIT FOR EACH FULL MONTH OF DEFERRED GRAZING FOR THE PURPOSE OF RESTORING NATIVE VEGETATION, AND PROVIDED THE OPERATOR DOES NOT PERMIT HIS REMAINING RANGELAND TO BE OVERGRAZED.

THE RANGE-BUILDING PAYMENTS WHICH EACH STOCKMAN MAY EARN WILL DEPEND UPON THE RANGE-BUILDING ALLOWANCE FOR THE RANCH WHICH IS DETERMINED AT THE RATE OF \$1.50 PER ANIMAL UNIT FOR THE GRAZING CAPACITY OF THE RANGE LAND ON THE RANCH. (AN ANIMAL UNIT IS ONE HORSE, OR ONE COW, OR FIVE SHEEP OR FIVE GOATS.)

NEVADA FARM WINDBREAKS  
HELP WITH HOME HEATING

NEVADA FARMERS WHO HAVE HAD DIFFICULTY IN KEEPING WARM DURING THE RECENT SUB-ZERO WEATHER MIGHT WELL LOOK TO A WINDBREAK OF TREES TO HELP IN THE SOLUTION OF THEIR HOUSE-HEATING PROBLEMS, IN THE LIGHT OF STUDIES MADE IN UTAH.

WHEN STRONG WINDS REACH A VELOCITY OF 20 MILES AN HOUR OR MORE, THE HEATING REQUIREMENTS OF THE FARM HOME MAY BE DOUBLE AS GREAT AS IN A HOUSE PROTECTED BY TREE SHELTER BELTS, ACCORDING TO J. WHITNEY FLOYD, EXTENSION FORESTER OF UTAH STATE AGRICULTURAL COLLEGE, THROUGH WHICH FOREST TREES HAVE BEEN MADE AVAILABLE BY THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE TO NEVADA RANCHERS IN RECENT YEARS.

TESTS BEING CARRIED ON AT THE UTAH COLLEGE SHOW THAT TEMPERATURES ARE 2 TO 6 DEGREES HIGHER IN THE LEE OF A SHELTER BELT THAN THEY ARE ON THE WINDWARD SIDE.

THIS INDICATES, FLOYD SAYS, THAT IN UNPROTECTED AREAS THE HEATING NEEDS OF A HOME WILL INCREASE AS THE WIND VELOCITY RISES.

THE MAJORITY OF HOMES IN NEVADA ARE UNPROTECTED FROM THE COLD WINTER BLASTS AND, FLOYD BELIEVES, MORE TREES SHOULD BE PLANTED, NOT ONLY AS A SAVING IN FUEL FOR THE HOME BUT IN SAVING STOCK FEED BY PROTECTING FEEDING GROUNDS AND LIVESTOCK HOUSING BUILDINGS, AS WELL AS ADDING GREATER COMFORT TO THE FARM YARD DURING THE WINTER MONTHS.

THE COMPACTNESS OF EVERGREEN TREES THROUGHOUT THE YEAR MAKES THEM PARTICULARLY VALUABLE AS WINDBREAK TREES, THE UTAH MAN SAYS, BUT IT HAS BEEN FOUND ADVISABLE TO PLANT SHELTER BELTS WITH A  
(MORE)

MIXTURE OF HARDWOODS AND EVERGREENS. THE HARDWOOD ACTS AS A NURSERY CROP AND MAKES PROPAGATION OF THE EVERGREEN TREES MUCH MORE SUCCESSFUL.

YOUNG FOREST TREES FOR WINDBREAK PLANTING ARE BEING PROPAGATED AND DISTRIBUTED EACH YEAR FROM THE FORESTRY NURSERY AT THE UTAH COLLEGE. OVER 150,000/<sup>YOUNG</sup>TREES ARE BEING CARED FOR AT THE NURSERY THIS YEAR.

THESE SMALL FOREST TREES WILL BE AVAILABLE AGAIN THIS YEAR TO NEVADA RANCHERS THROUGH THE NEVADA EXTENSION SERVICE. DETAILS OF THE METHOD OF DISTRIBUTION WILL SOON BE READY FOR THE FARMERS OF THE STATE.

FARMERS ARE APPLYING  
FOR U.S. CROP LOANS

EMERGENCY CROP AND FEED LOANS FOR 1937 ARE NOW AVAILABLE FOR NEVADA FARMERS THROUGH THE FARM CREDIT ADMINISTRATION, ALFRED THIES, FIELD SUPERVISOR FOR MOST OF NEVADA AND FOR NORTHEASTERN CALIFORNIA, ANNOUNCED THIS WEEK.

APPLICATIONS, THIES SAID, ARE BEING MADE BY FARMERS AND RANCHERS WHO DESIRE LOANS, THROUGH THE AGRICULTURAL EXTENSION AGENTS IN THEIR COUNTIES OR NEAREST TO THEM.

LOANS WILL BE MADE ONLY TO FARMERS WHO CANNOT OBTAIN CREDIT FROM ANY OTHER SOURCE, HE EXPLAINED, AS PROVIDED BY REGULATIONS ISSUED BY THE GOVERNOR OF THE FARM CREDIT ADMINISTRATION.

MONEY LOANED WILL BE LIMITED TO THE FARMER'S IMMEDIATE AND ACTUAL CASH NEEDS FOR GROWING HIS 1937 CROPS OR FOR THE PURCHASE OF FEED FOR LIVESTOCK, AND IN NO INSTANCE MAY EXCEED \$400.

FARMERS ARE NOT ELIGIBLE FOR THESE LOANS IF THEY CAN BORROW FROM AN INDIVIDUAL, PRODUCTION CREDIT ASSOCIATION, BANK, OR OTHER CONCERN, ACCORDING TO THIES.

EMERGENCY CROP AND FEED LOANS WILL NOT BE MADE BY THE FARM CREDIT ADMINISTRATION TO STANDARD REHABILITATION CLIENTS OF THE RESETTLEMENT ADMINISTRATION WHOSE CURRENT NEEDS ARE PROVIDED FOR BY RESETTLEMENT.

AS IN THE PAST, THE FIELD SUPERVISOR ANNOUNCED, THE SECURITY FOR THESE LOANS WILL CONSIST OF A FIRST LIEN ON THE CROP FINANCED, IF THE LOAN IS FOR THE PRODUCTION OF CROPS, AND, IF FOR THE PURCHASE OF  
(MORE)

FEED FOR LIVESTOCK, THEN A FIRST LIEN ON THE LIVESTOCK TO BE FED.

LANDLORDS, OR OTHERS HAVING AN INTEREST IN THE CROPS OR THE LIVESTOCK TO BE FED, WILL BE REQUIRED TO WAIVE THEIR CLAIMS IN FAVOR OF THE LIEN TO THE GOVERNOR OF THE FARM CREDIT ADMINISTRATION UNTIL THE LOAN IS REPAYED.

TO SPEED THE MOVEMENT OF APPLICATION, THIS HAS ASKED FARMERS WHO ARE IN NEED OF EMERGENCY CROP LOANS TO BRING TAX NOTICE SHOWING DESCRIPTION OF THE LAND ON WHICH CROPS ARE TO BE GROWN.



NEVADA SPUD PRICE OUTLOOK  
IS FAVORABLE, CLINE SAYS

THE PRICE OUTLOOK FOR THE POTATOES REMAINING ON NEVADA FARMS IS CONSIDERED FAVORABLE BY L. E. CLINE OF THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE.

THE SMALLER CROP IN 1936, COUPLED WITH THE GENERAL INCREASE IN COMMODITY PRICES AND IN CONSUMER BUYING POWER, ARE THE CAUSES FOR THE FAVORABLE OUTLOOK, CLINE SAYS.

"THE ESTIMATE OF POTATOES ON HAND JANUARY 1 FOR THE UNITED STATES IS 75,000,000 BUSHEL, AS COMPARED WITH 93,000,000 BUSHEL AT THIS TIME LAST YEAR," HE SAYS.

IN ADDITION TO THE SMALLER SUPPLY ON HAND, SUPPLIES GOING TO MARKET HAVE BEEN REDUCED BECAUSE THE SEVERE WINTER WEATHER IN THE LATE PRODUCTIVE SECTIONS HAS INTERFERED WITH LOADING AND SHIPPING OPERATIONS.

THE NATIONAL ESTIMATE FOR ALL POTATOES PRODUCED IN 1936 WAS 322,000,000 BUSHEL, AS COMPARED WITH 368,000,000 BUSHEL PRODUCED IN 1935.

AN INCREASE IN PRODUCTION IN 1937 APPEARS TO BE INEVITABLE, CLINE STATES.

"IT IS VERY NATURAL, WITH THESE FAVORABLE PRICES FOR THE 1936 CROP, THAT PREDICTIONS FOR THE 1937 CROP SHOULD BE FOR INCREASES IN PRODUCTION IN 1937," HE SAYS.

"THE PRESENT GOVERNMENT ESTIMATE FOR 1937 POTATO PRODUCT-

(MORE)

ION AT AVERAGE YIELDS IS 370,000,000 BUSHELS AS COMPARED WITH 322,000,000 BUSHELS IN 1936. THE 1937 SOIL CONSERVATION PROGRAM IS EXPECTED TO HOLD DOWN INCREASES IN POTATO ACREAGE TO SOME EXTENT, BUT EVEN SO, CONSIDERABLE INCREASE IS ANTICIPATED, TOGETHER WITH SOMEWHAT LOWER PRICES FOR 1937 THAN PREVAILED FOR THE 1936 CROP."

BEAVER ARE ADVOCATED  
FOR NEVADA'S STREAMS

PLANTING OF BEAVER IN THE STREAMS OF NEVADA AND AFFORDING THEM FULL PROTECTION WAS ADVOCATED THIS WEEK BY GEORGE C. LARSON, SUPERVISOR OF THE NEVADA NATIONAL FOREST, AS A MEANS OF BENEFITTING THE RANCHERS AND SPORTSMEN OF THE STATE.

BEAVER, WHICH ARE NOW SCARCE IN NEVADA, ARE FAR MORE BENEFICIAL IN THE MOUNTAIN STREAMS, LARSON SAYS, THAN IS GENERALLY KNOWN. WATERSHED AND EROSION CONTROL AND THE IMPROVEMENT OF FISHING WERE NAMED BY HIM AS AMONG THE ADVANTAGES WHICH WOULD RESULT FROM PLANTING THE RODENTS.

"HALF OF OUR FARMS AND RANCHES DEPEND UPON SMALL STREAMS ORIGINATING IN THE MOUNTAINS FOR IRRIGATING WATER," HE EXPLAINS, "AND USUALLY THESE STREAMS HAVE BEEN SO BADLY WASHED BY FLOODS THAT GRAVEL AND SILT IS CONSTANTLY BROUGHT DOWN IN SUCH QUANTITIES AS TO FILL DITCHES AND CANALS AND COVER VALUABLE FARM LANDS.

"THIS IS PREVENTED IN A LARGE DEGREE WHERE BEAVER HAVE MADE THEIR DAMS ALONG THE STREAMS, SLOWING DOWN THE FLOW AND DEPOSITING GRAVEL AND DEBRIS BEFORE IT REACHES IRRIGATION CANALS.

"DURING PERIODS OF HIGH RUNOFF, WATER IS STORED IN THE BEAVER PONDS, WHICH, IN SOME PARTS OF THE WEST, IS THEN DRAWN OFF LATER WHEN NEEDED BY BREAKING THE DAM."

IN THE GUNNISON FOREST IN COLORADO IN 1924 THIS WAS DONE WHEN WATER RAN LOW, LARSON SAID, WITH THE RESULT THAT THE BEAVER-STORED WATER PRACTICALLY SAVED THE FRUIT CROP OF EVERY ORCHARD DE-

(MORE)

NOTE TO EDITOR ..... BECAUSE OF THE URGENCY OF THE NEWS IN THIS STORY, IT IS BEING SENT SIMULTANEOUSLY TO THOSE NEVADA PAPERS RECEIVING IT.....A.L.H.

NEVADA FOUR-AITCHERS WIN HONORS AT LIVESTOCK SHOW

NEVADA BRED BABY BEEF AND HOGS, RAISED AND EXHIBITED BY 4-H CLUB BOYS AND GIRLS FROM THIS STATE, CAPTURED MANY OF THE HIGHEST PRIZES AT THE INTERSTATE JUNIOR LIVESTOCK AND BABY BEEF SHOW IN SOUTH SAN FRANCISCO, WHICH CLOSED THURSDAY.

COMPETING AGAINST FOUR-AITCHERS FROM UTAH, CALIFORNIA, IDAHO, AND OREGON, THE YOUNG NEVADANS FROM THE STATE'S FARMS AND RANCHES PLACED IN EVERY CLASS BUT ONE IN WHICH THEY HAD EXHIBITS AND WON THE HIGHEST HONORS IN SEVERAL.

PREMIER HONOR TAKEN BY THE NEVADA ANIMALS AND THEIR EXHIBITORS, ACCORDING TO WORD RECEIVED BY THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE, WHICH SPONSORS THE 4-H WORK, PROBABLY IS SECOND PLACE IN THE CONTEST FOR THE BEST HERD OF FIVE STEERS, WHICH WENT TO THE FOUR-AITCHERS AND THEIR EXHIBITS FROM HUMBOLDT COUNTY.

ONE OF THE THREE SCHOLARSHIP AWARDS OPEN TO THE 4-H EXHIBITORS, THAT DONATED BY THE SAN FRANCISCO CHAMBER OF COMMERCE FOR 4-H CLUB MEMBERS EXHIBITING HOGS WAS WON BY HARLAN FRICKE OF THE CARSON VALLEY FOUR-AITCH GROUP. THE SCHOLARSHIP PROVIDES \$100 FOR USE AT THE UNIVERSITY OF CALIFORNIA OR THE CALIFORNIA STATE POLYTECHNIC SCHOOL AT SAN LUIS OBISPO.

(MORE)

GROUP, WITH GRACE WHITE, ALSO OF CARSON VALLEY, THIRD. IN THE CLASS FOR A PEN OF THREE BARROWS, YOUNG GODECKE TOOK THE BLUE RIBBON.

AMONG THE POLAND CHINA EXHIBITS, MARVIN SETTLEMAYER, ALSO OF DOUGLAS COUNTY, RANKED SIXTH, WHILE HIS PEN OF THREE BARROWS TOOK FOURTH IN THE CLASS FOR THOSE ANIMALS.

YOUNG FRICKE'S SCHOLARSHIP WAS WON, IN PART AT LEAST, BY HIS SHOWING IN THE DUROC JERSEY FAT HOG COMPETITION AMONG FOUR-AITCHERS. THERE HE TOOK FIRST AND FOURTH IN THE BARROW DIVISION, AND FIRST IN THE DIVISION FOR A PEN OF THREE BARROWS.

IN THE COMPETITION FOR HONORS FOR 4-H RAISED BRED OR CROSS GRADE HOGS, GRACE WHITE OF THE CARSON VALLEY TOOK FOURTH PLACE.

STIFFER COMPETITION THAN EVER BEFORE FACED THE YOUNG NEVADANS AT THE COAST SHOW IN SOUTH SAN FRANCISCO, AND THE PRIZES THEY TOOK WERE WON ONLY AFTER CLOSE BATTLES.

ORCHARDISTS IN NEVADA  
PREPARE FOR SPRAYING

WHEN, HOW, AND WHAT KIND OF SPRAY TO USE ARE THE MOST IMPORTANT FACTORS IN CONTROLLING INSECT PESTS WHICH ATTACK FRUIT TREES IN NEVADA, SAYS MARK W. MENKE, OF THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE, CONCERNING THE FIGHT NOW BEING WAGED BY NEVADA ORCHARDISTS AGAINST THE PARASITES.

IF NEVADANS ARE TO CONTINUE TO GROW FRUITS SUCCESSFULLY, SUCH INSECT PESTS MUST BE COMBATED, THE EXTENSION AGENT STATES. ONE APPLYING THE SPRAY MUST KNOW THE KIND OF PEST AND MUST USE THE SPRAY AT JUST THE RIGHT TIME, HE INDICATES, ADDING THAT A DIFFERENCE OF EVEN A FEW DAYS MAY MEAN SUCCESS OR FAILURE.

BEFORE ANY GROWTH STARTS IN THE SPRING, THE DORMANT SPRAY, WHICH IS A CONCENTRATED MATERIAL USED FOR KILLING SCALES AND WINTER INSECT EGGS, IS USED, SAYS MENKE, WHO EXPLAINS THAT AS THE SCALES AND EGGS ARE VERY RESISTANT AND REQUIRE A STRONG SPRAY, IT CANNOT BE USED AFTER GROWTH STARTS.

JUST AFTER THE BUDS BEGIN TO SWELL AND WHEN THE GREEN LEAF TIPS APPEAR AS TINY SQUIRREL EARS IS THE TIME FOR THE DELAYED DORMANT SPRAY. BECAUSE EGGS HAVE STARTED TO HATCH AND ARE MORE EASILY KILLED AT THIS TIME, THE SPRAY IS MORE EFFECTIVE AGAINST RED MITES AND SPIDERS, APHIDS LEAF ROLLERS AND SIMILAR INSECTS, ACCORDING TO MENKE WHO SUGGESTS THE USE OF CONCENTRATED LIME-SULPHUR, ONE TO EIGHT OR 2 PERCENT TO 4 PERCENT OIL EMULSION.

"IF FUNGUS DISEASES ARE PRESENT," HE STATES, "THE LIME-SULPHUR IS BEST; IF INSECT EGGS ARE TO BE DESTROYED, THE OIL EMULSION IS (MORE)

MORE EFFICIENT. LEAD ARSENATE AND NICOTINE SULPHATE MAY BE ADDED TO THE DELAYED DORMANT SPRAY TO CONTROL CHEWING INSECTS AND APHIDS IF NECESSARY.<sup>m</sup>

THE PINK OR CLUSTER BUD SPRAY IS APPLIED WHEN THE COLOR APPEARS IN THE FLOWER BUDS BEFORE THEY OPEN, THE AGENT SAYS. LIME-SULPHUR, ONE TO 40, IS USED, WHILE NICOTINE SULPHATE OR POWERED ARSENIC MAY BE ADDED TO THIS SPRAY TO CONTROL CHEWING AND SUCKING INSECTS AS NEEDED. THE STANDARD AMOUNT IS  $\frac{1}{2}$  POUNDS ARSENIC AND ONE HALF PINT 40 PERCENT NICOTINE SULPHATE PER 50 GALLONS OF SPRAY, HE STATES.

ACCORDING TO MENKE, THE MOST SERIOUS PEST OF APPLES IN NEVADA IS THE CODLIN-MOTH LARVA OR APPLE WORM, WHICH IS KILLED BY LEAD ARSENATE APPLIED JUST AFTER THE FLOWER PETALS FALL OR WHEN ABOUT THREE-QUARTERS OF THEM HAVE FALLEN. THE POISON MUST BE SPRAYED INTO THE CALYX OF THE FRUIT BEFORE IT CLOSES, ABOUT A WEEK AFTER BLOOMING, AS THE MOTH WORM ENTERS THROUGH THIS BLOSSOM END AND IS KILLED IF THE POISON IS PRESENT. IF THE SPRAY IS APPLIED WHEN THE FLOWERS ARE IN FULL BLOSSOM, THE POISON WILL BE DEPOSITED ON THE PETALS WHERE IT IS USELESS AND MAY POISON HONEY BEES.

THE SECOND BROOD CODLIN-MOTH APPEARS IN THREE TO FIVE WEEKS AFTER THE PETALS FALL, AND A SECOND SPRAY SHOULD BE APPLIED AT THAT TIME, MENKE SAYS.

BOOKLETS GIVING FULL DIRECTIONS AS TO THE COMBATTING OF THIS ENEMY OF PRODUCTIVE ORCHARDS ARE AVAILABLE WITHOUT CHARGE THROUGH THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION AGENTS IN THE VARIOUS COUNTIES.

TURKEY CONSUMPTION  
MAKES BIG INCREASE

NEVADANS, ALONG WITH THE PEOPLE OF THE UNITED STATES AS A WHOLE, ARE NOW EATING MORE TURKEY THAN AT ANY OTHER TIME IN THEIR LIVES.

AND, ACCORDING TO L. E. CLINE OF THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE, THEY ARE RAPIDLY EATING UP THE UNPRECEDENTED SUPPLY OF THE BIRDS WHICH REMAINED AFTER THE HOLIDAY MARKETS OF LAST WINTER.

IN THE FIRST THREE AND A HALF MONTHS OF THIS YEAR, HE SAID THIS WEEK, THE AMERICAN PEOPLE REDUCED TURKEY STORAGE BY ABOUT TEN MILLION POUNDS, WHILE THE FIGURE FOR THE SAME PERIOD OF LAST YEAR WAS BUT THREE MILLION POUNDS IN WHAT WAS CONSIDERED A STRONG MARKET.

THIS GREAT INCREASE IN THE NUMBER OF BIRDS TAKEN OUT OF COLD STORAGE THIS YEAR CAME, CLINE POINTED OUT, IN THE FACE OF CONSTANTLY RISING PRICES. FROM FEBRUARY 1 TO APRIL 1, WHOLESALE PRICES JUMPED UP 2 CENTS A POUND IN NEW YORK AND 1 1-2 CENTS A POUND IN SAN FRANCISCO.

ALL THIS, THE EXTENSION MAN SAYS, IMPROVES THE OUTLOOK FOR THE TURKEY GROWER FOR THE COMING SEASON AS WELL AS SHOWING THAT, WHILE THE BIRD STILL GRACES THE HOLIDAY TABLE AS THE TRADITIONAL ENTREE, IT IS BECOMING MORE AND MORE THE EVERY DAY FARE OF AMERICAN FAMILIES.

"IN ADDITION TO THE CONSUMPTION OF THE LARGE CURRENT SUPPLIES OF FRESH YOUNG TURKEYS AND AN UNUSUAL NUMBER OF BREEDER HENS TURKEYS, THE NATIONAL COLD STORAGE HOLDINGS OF DRESSED TURKEYS, WHICH  
(MORE)



FEBRUARY 1 WAS THE LARGEST ON RECORD, HAS BEEN REDUCED AT A RATE THAT HAS ALSO SET A NEW RECORD." CLINE STATED.

"THE VERY RAPID DEPLETION OF TURKEY STORAGE HOLDINGS THIS YEAR UNDER A MORE ENERGETIC AND BETTER ORGANIZED MARKETING PROGRAM IS DEMONSTRATING TO THE TURKEY INDUSTRY THAT THIS CHOICEST OF MEAT PRODUCTS HAS PROBABLY NEVER BEEN OVERPRODUCED, BUT HAS ALWAYS BEEN UNDER SOLD."

IT IS CLINE'S BELIEF THAT THE POTENTIAL MARKET FOR QUALITY TURKEYS, AS IT IS BEING REVEALED BY THE PRESENT RATE OF CONSUMPTION, IS FAR IN EXCESS OF ANY IMMEDIATE PROSPECTS OF SUPPLY, IF IMPROVEMENTS IN MARKETING CONTINUE AND GREATER CONTROL OF SUPPLIES IS KEPT IN THE HANDS OF THE PRODUCERS UP TO THE RETAIL MARKETING PERIOD.

ACCORDING TO THE LATEST COMMERCIAL TURKEY HATCHERY REPORTS, THE PRESENT YEAR'S TURKEY CROP IS DUE FOR A BIG REDUCTION AS COMPARED TO LAST YEAR.

"IF THIS PROVES TO BE TRUE, THEN THE 1937 PRODUCER WILL HAVE THE ADVANTAGE OF A GREATLY REDUCED SUPPLY AND AN EXPANDED MARKET WHICH SHOULD PLACE HIM IN A VERY FAVORABLE POSITION," CLINE SAID.

LATE COMMERCIAL TURKEY HATCHERY REPORTS SHOW THAT 23.6 PERCENT FEWER POULTS WERE HATCHED IN MARCH THIS YEAR THAN IN MARCH LAST YEAR, AND THAT BOOKINGS ON APRIL 1 FOR APRIL AND LATER DELIVERIES WERE 52.6 PERCENT LESS THAN FOR THE SAME PERIOD LAST YEAR.

"THESE REPORTS TO DATE INDICATE VERY DEFINITELY," HE SAID, "THAT THE 1937 TURKEY CROP WILL BE SMALLER AND LATER THAN LAST YEAR. THE TIME IS FAST PASSING WHEN SUCH INDICATED REDUCTIONS CAN BE CHANGED GREATLY, ALTHOUGH IT IS ANTICIPATED HATCHINGS WILL CONTINUE LATER THIS YEAR THAN USUAL, DUE TO THE IMPROVING OUTLOOK."

RANGE FORAGE OUTLOOK  
REPORTED TO BE GOOD

PROSPECTS FOR GOOD FORAGE ON NEVADA LIVESTOCK RANGES IN THE EARLY SUMMER WERE SEEN ON MAY 1 BY THE STATISTICIANS OF THE U. S. BUREAU OF AGRICULTURAL ECONOMICS.

ON THAT DATE, THEY SAY, RANGES WERE WELL SATURATED WITH MOISTURE, ALTHOUGH FEED WAS REPORTED TO BE LATE IN DEVELOPING ON ACCOUNT OF THE COLD WEATHER IN MARCH AND APRIL.

THE CONDITION OF THE RANGES OF THE STATE ON MAY 1 WAS SUBSTANTIALLY THE SAME AS A MONTH PREVIOUS, FRANK ANDREWS, CHIEF STATISTICIAN OF THE SALT LAKE OFFICE OF THE BUREAU, HAS REPORTED TO THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE.

THE CONDITION OF CATTLE AND CALVES ON THE RANGE, HOWEVER, DROPPED DURING APRIL TO TWO POINTS BELOW THAT ON THE FIRST OF THE MONTH.

"CATTLE GENERALLY ARE IN GOOD CONDITION," ANDREWS SAID ON MAY 1, "SINCE MANY OF THEM HAVE BEEN ON FEED AND HAVE RECEIVED GOOD CARE DURING THE PAST WINTER."

A FAIR CALF CROP WAS EXPECTED.

THE CONDITION OF SHEEP AND LAMBS LIKEWISE DROPPED DURING THE MONTH OF APRIL ACCORDING TO THE REPORT, AND THEY ARE IN POORER SHAPE THAN A YEAR AGO AND THAN THE 1927-36 TEN YEAR AVERAGE FOR MAY 1.

"PRACTICALLY ALL SHEEP HAVE BEEN MOVED FROM THE DESERT," ANDREWS STATED ON MAY 1. "SOME LOSSES HAVE RESULTED FROM COLD WEATHER, PARTICULARLY AMONG FLOCKS WHERE EARLY LAMBING HAS BEEN IN PROGRESS.

(MORE)

WOOL IS GENERALLY REPORTED FREE FROM DIRT AND IN GOOD CONDITION."

CONDITIONS, WHICH VARY SOMEWHAT IN THE DIFFERENT PARTS OF THE STATE, WERE REPORTED ON MAY 1 TO BE AS FOLLOWS:

"NORTHWEST - PROSPECTS ARE GOOD TO EXCELLENT FOR SUMMER RANGES. THERE IS PLENTY OF WATER ON ALL RANGES. SOME LOSS HAS DEVELOPED BOTH WITH SHEEP AND CATTLE AS A RESULT OF THE COLD LATE SPRING, A NORMAL CALF CROP IS EXPECTED.

"NORTHEAST - RANGES ARE BEGINNING TO DEVELOP GOOD GROWTH OF FEED. THERE HAS BEEN A GOOD SUPPLY OF WINTER PRECIPITATION, ALTHOUGH THE DRY WINDS OF MARCH AND APRIL HAVE TENDED TO DRY MUCH OF IT UP. CATTLE ARE IN FAIR TO GOOD CONDITION. THERE IS A DESIRE TO RE-STOCK ON CATTLE BUT HIGH PRICES MAKE THIS DIFFICULT. SHEEP AND LAMBS ARE MOSTLY IN GOOD CONDITION.

"SOUTHERN - THE PROSPECTS ARE GOOD FOR FEED ON THE SUMMER RANGES. FEED HAS THUS FAR BEEN RETARDED AS A RESULT OF THE LATE SPRING. SOME CATTLE ARE THIN AND THE CALF CROP WILL PROBABLY BE FROM FAIR TO GOOD. BREEDING SHEEP ARE IN FAIR CONDITION. MOST SHEARING HAS BEEN COMPLETED."

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A G R I C U L T U R A L N E W S S E R V I C E

RELEASE UPON RECEIPT - 1937-#55-5-28-B&AB-300-EXCLUSIVE IN YOUR CITY

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MEAT POULTRY OUTLOOK  
FOR NEVADA IS BETTER

THE NEVADA MEAT POULTRY SITUATION HAS IMPROVED DECIDEDLY IN THE LAST MONTH, ALTHOUGH IT STILL IS NOT EXTREMELY ENCOURAGING TO PRODUCERS OF MEAT CHICKENS IN THE STATE.

PRICES FOR YOUNG CHICKENS, HOWEVER, HAVE STRENGTHENED AND THE OUTLOOK INDICATES PROBABLE HIGHER MEAT POULTRY PRICES LATER IN THE SEASON AND THE FIRST OF NEXT YEAR, L. E. CLINE OF THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE, SAID THIS WEEK.

SINCE THE FIRST OF MAY, LEGHORN BROILERS HAVE PICKED UP IN PRICE ABOUT 4 1-2 CENTS A POUND, HE STATED, WHILE LEGHORN FRYERS ARE SELLING FOR ABOUT 6 CENTS A POUND MORE. COLORED CHICKENS HAVE NOT MADE QUITE SO FAST A GAIN. CLINE ATTRIBUTES THE STRENGTHENING OF THE MARKET FOR YOUNG LEGHORN CHICKENS TO THE REDUCTION IN THE COMMERCIAL HATCHERY OUTPUT.

WHILE PRICES FOR YOUNG CHICKENS, BOTH LEGHORN AND COLORED, HAVE BEEN INCREASING, PRICES FOR BOTH LEGHORN AND COLORED HENS ARE 3 TO 4 CENTS LOWER THAN A MONTH AGO.

LARGE STORAGE HOLDINGS AND LIQUIDATION OF POULTRY LAYING FLOCKS BECAUSE OF HIGH FEED COST AND LOW EGG PRICES ARE THE CAUSES OF THIS PRICE DROP, CLINE BELIEVES.

STORAGE HOLDINGS OF MEAT CHICKENS IN THE COUNTRY AT LARGE AT THIS TIME REMAINS AT THE HIGH POINT WHICH PREVAILED EARLY IN THE YEAR, BEING APPROXIMATELY 96 PERCENT ABOVE LAST YEAR AND ABOUT 86 PERCENT ABOVE THE AVERAGE FOR THE LAST FIVE YEARS. (MORE)

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FROM-UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE, RENO, NEV.  
COOPERATIVE AGRICULTURAL EXTENSION WORK, ACTS OF MAY & JUNE 1914  
CECIL W. CREEL, DIRECTOR . . . . . A. L. HIGGINBOTHAM, EDITOR.

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ANOTHER FACTOR POINTED OUT BY CLINE AS HAVING A DEPRESSING EFFECT ON THE INDUSTRY IS THE HIGH COST OF FEED. BUT THIS HAS A BRIGHT SIDE, TOO, HE SAYS, FOR THE NEVADA POULTRYMAN WHO CAN REMAIN IN BUSINESS TO TAKE ADVANTAGE OF THE BETTER FUTURE MARKET WHEN IT COMES. THE MARKED REDUCTION OF CHICKS HATCHED THIS SPRING, HE SAYS, INDICATES PROBABLE HIGHER PRICES LATER IN THE SEASON AND THE FIRST PART OF THE YEAR.

AGRICULTURAL NEWS SERVICE

RELEASE UPON RECEIPT - 1937-#63-6-14-B&AB-400-EXCLUSIVE IN YOUR CITY

RANGE ALLOWANCE CHANGE  
ADDS MOUNTAIN MEADOWS

MOUNTAIN MEADOWS WILL NOW BE COUNTED IN COMPUTING THE RANGE BUILDING ALLOWANCE UNDER THE AGRICULTURAL ADJUSTMENT ADMINISTRATION'S RANGE CONSERVATION PROGRAM IN NEVADA, CECIL W. CREEL, DIRECTOR OF THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE, ANNOUNCED THIS WEEK.

WHERE HAY IS FED BY RANCHERS OF THE STATE FROM MOUNTAIN MEADOWS ON THE RANCHING UNIT TO LIVESTOCK OWNED BY THEM, ALLOWANCE AT THE RATE OF 40 CENTS AN ACRE WILL BE MADE, CREEL SAID.

THIS ADDITIONAL SUM WILL BE ADDED TO THE RANGE BUILDING ALLOWANCE ESTABLISHED FOR THE RANCH ON THE BASIS OF GRAZING CAPACITY.

FOR EXAMPLE, CREEL SAID, THE OWNER OF A RANCHING UNIT COMPRISING 1000 ACRES, OF WHICH 900 ACRES IS GRAZING LAND AND 100 ACRES IS MOUNTAIN MEADOW ON WHICH HAY IS NORMALLY CUT, WILL HAVE A RANGE BUILDING ALLOWANCE ABOUT AS FOLLOWS:

THE GRAZING CAPACITY OF THE 900 ACRES OF GRAZING LAND WILL BE DETERMINED BY RANGE EXAMINERS, AS HERETOFORE, WHICH MAY BE 18 ANIMAL UNITS AT \$1.50 OR \$27.

THE ACREAGE OF MOUNTAIN MEADOW WILL BE DETERMINED AND MULTIPLIED BY 40¢ AN ACRE, AND, IN THIS CASE, 40¢ x 100, OR \$40.

THE SUM OF THE TWO IS EQUAL TO \$67 AND IS THE NEW RANGE BUILDING ALLOWANCE PERMITTED BY THIS NEW REGULATION.

THE CARRYING CAPACITY OF THE AFTERMATH OF THESE MOUNTAIN MEADOWS WILL NOT BE DETERMINED, INASMUCH AS THEY ARE INCLUDED AT THE

(MORE)

FROM UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE, RENO, NEV.  
COOPERATIVE AGRICULTURAL EXTENSION WORK, ACTS OF MAY & JUNE 1914  
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RATE OF 40¢ PER ACRE.

"THE INCLUSION OF THE MOUNTAIN MEADOW PROVISIONS IN THE 1937 PROGRAM WILL MAKE IT POSSIBLE FOR RANCHERS WHO HAVE A RELATIVELY LARGE PROPORTION OF THEIR RANCHES IN GRAZING LAND TO COOPERATE, WHERE OTHERWISE THEY COULD NOT DO SO, ON ACCOUNT OF SMALL RANGE BUILDING ALLOWANCES AND WILL APPLY ONLY IN SPECIFIC COUNTIES YET TO BE DESIGNATED," CREEL SAID.

THE NEW RANGE BUILDING PRACTICES, BOTH CONCERNING MOUNTAIN MEADOWS, ALSO HAVE BEEN APPROVED FOR THE STATE, THE DIRECTOR STATED.

FIRST NEW PRACTICE IS THE RESEEDING OF MOUNTAIN MEADOWS TO APPROVED VARIETIES OF GRASS SEED AT THE RATE OF 20 CENTS PER POUND OF SEED SOWN, UP TO \$2 AN ACRE.

SECOND NEW PRACTICE IS THE CONSTRUCTION OF EARTHEN DAMS FOR EROSION CONTROL ON MOUNTAIN MEADOWS, WITH PAYMENT AT THE RATE OF 15 CENTS PER CUBIC YARD OF FILL, WITH PAYMENT FOR EACH DAM LIMITED TO \$50.

RANCHERS MAY ALSO NOW USE RAIL AND POLE FENCES IN ADDITION TO WIRE FENCES AS A PRACTICE IN THE RANGE PROGRAM. THE RATE OF PAYMENT FOR THIS PRACTICE IS 30 CENTS A ROD.

CHILDREN GET 'IN SHAPE'  
DURING SUMMER VACATION

WITH "KEEP GROWING" BOYS AND GIRLS FROM NEVADA'S RURAL SCHOOLS UTILIZING THE SUMMER VACATION MONTHS TO KEEP AND PUT THEMSELVES IN GOOD PHYSICAL CONDITION FOR THE NEXT SCHOOL YEAR, MANY OTHER FARM YOUNGSTERS ARE FOLLOWING THE SAME PRACTICES.

THE SUMMER VACATION PERIOD IS DESIGNED FOR PHYSICAL AND MENTAL REST AND CHANGE TO BUILD UP A SURPLUS OF GOOD HEALTH TO CARRY THE BOY AND GIRL THROUGH ANOTHER WINTER OF SCHOOL WORK, ACCORDING TO MRS. MARY STILWELL BUOL, ASSISTANT DIRECTOR FOR HOME ECONOMICS, AND NUTRITION SPECIALIST OF THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE.

SOMETIMES, SHE SAYS, CHILDREN, FREED FROM THE REGULARITY WHICH SCHOOL PROVIDES, FALL INTO HABITS WHICH DEFEAT THE CONSTRUCTIVE PURPOSE OF THE VACATION.

BIGGEST DANGERS OF THE VACATION PERIOD TO A YOUNGSTER'S HEALTH, SHE SAYS, ARE TOO MANY NIGHT PARTIES, TOO LITTLE SLEEP, IRREGULAR MEALS, TOO MANY SWEETS, AND TOO MUCH VIOLENT EXERCISE, EITHER AS WORK OR AS PLAY.

TO GET THE MOST FROM THEIR VACATION PERIOD IN TERMS OF HEALTH, THE NEVADA RURAL CHILD CAN WELL FOLLOW A FEW SIMPLE HEALTH PRINCIPLES.

"LIVE HEALTHY, HAPPY OUT-OF-DOOR LIVES WITH THE LARGEST POSSIBLE AMOUNT OF SUNSHINE AND FRESH AIR," MRS. BUOL SUGGESTS.

"PAY SPECIAL ATTENTION TO EATING THREE REGULAR MEALS A DAY  
(MORE)



OF SIMPLE, WHOLESOME FOOD, ESPECIALLY FRUIT, VEGETABLES, AND MILK.

"BE SURE OF AT LEAST TEN HOURS OF SLEEP SIX NIGHTS A WEEK."

LACK OF SLEEP, CAUSED BY TOO MANY PARTIES, PICNICS, AND OTHER SIMILAR DIVERSIONS, IS THE BIGGEST DANGER, SHE STATES, TO PHYSICAL GROWTH IN CHILDREN DURING THE VACATION PERIOD.

MODIFICATION OF THE CHILD'S MORNING RISING SCHEDULE OFTEN OCCURS DURING THE SUMMER VACATION, AND MRS. BUOL BELIEVES THIS IS A GOOD THING, IF IT DOES NOT INTERFERE WITH A SUBSTANTIAL, WHOLESOME BREAKFAST. THE SUMMER VACATION BREAKFAST, SHE SAYS, SHOULD BE AT LEAST AS LARGE AND HEARTY AS THE WINTER BREAKFAST BECAUSE MEALS THAT ARE TOO LIGHT TO PROVIDE ENERGY FOR THE INCREASED PHYSICAL ACTIVITIES OF FARM WORK, SWIMMING, ETC., IS ANOTHER DECIDED DANGER.

"FOR THE UNDERWEIGHT BOY OR GIRL," MRS. BUOL STATES, "THE SUMMER VACATION IS AN OPPORTUNITY TO GAIN WEIGHT AND BUILD UP POSITIVE GOOD HEALTH FOR THE COMING YEAR."

"TO GAIN STEADILY EVERY WEEK DURING VACATION SHOULD BE THE FIRST DUTY OF ALL UNDERWEIGHT CHILDREN, AND NEITHER WORK, PLAY, PARTIES, OR ANYTHING ELSE SHOULD BE ALLOWED TO INTERFERE."

"SERIOUSLY UNDERWEIGHT CHILDREN SHOULD WATCH CAREFULLY TO SEE THAT THEIR STRENGTH IS NOT OVER-TAXED BY TOO MUCH WORK OR VIOLENT EXERCISE, SUCH AS SWIMMING, ATHLETICS, EVENING PARTIES, ETC. THEY NEED MUCH EXTRA SLEEP, A LONG AFTERNOON NAP, THREE REGULAR MEALS AND EXTRA FOOD BETWEEN MEALS, SUCH AS MILK OR A SANDWICH - BUT NO SWEETS BETWEEN MEALS."

NEVADA LIVESTOCK TEAM  
WILL COMPETE IN OREGON

NEVADA'S CHAMPION 4-H CLUB SENIOR LIVESTOCK JUDGES, THREE BOYS FROM LYON COUNTY WHO KNOW THEIR CATTLE, SHEEP, AND HOGS, WILL TRY FOR ALL WESTERN HONORS NEXT WEEK (OCTOBER 4-9) WHEN THEY MEET SIMILAR AGGREGATIONS FROM OTHER STATES AT THE PACIFIC INTERNATIONAL LIVESTOCK SHOW AT PORTLAND.

REPRESENTING NEVADA BY RIGHT OF HAVING DEFEATED CHAMPIONSHIP TEAMS FROM OTHER COUNTIES OF THE STATE AT THE NEVADA JUNIOR FARM BUREAU CAMP AT LAKE TAHOE LAST SUMMER, THE BOYS ARE HOPEFUL OF MAKING A STRONG SHOWING IN THE STIFF CONTESTS IN OREGON.

PLACING OF TWO CLASSES EACH OF HOGS, SHEEP, DAIRY CATTLE, AND BEEF CATTLE WILL FACE THE BOYS IN THE COMPETITIONS IN THE NORTHWEST, AND THEY WILL BE REQUIRED TO GIVE THEIR REASONS FOR THE JUDGMENT.

TEAMS FROM NEVADA HAVE MADE A GOOD RECORD AT PREVIOUS SHOWS, WELL REPRESENTING THE LIVESTOCK INTERESTS OF THE STATE, THOMAS BUCKMAN, ASSISTANT DIRECTOR OF THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE, SAID THIS WEEK.

UPHOLDING THE HONORS OF THE STATE WILL BE DUANE SMITH OF SMITH VALLEY, WARREN HENRICHS OF MASON VALLEY, AND KENNETH STROSNIDER OF MASON VALLEY. ALL ARE 15 YEARS OF AGE AND LIVE ON RANCHES WHERE THE RAISING OF LIVESTOCK IS <sup>AN</sup> IMPORTANT ACTIVITY.

YOUNG SMITH IS COMPLETING HIS SIXTH YEAR IN 4-H CLUB  
(MORE)

WORK, IN WHICH HE HAS CARRIED PROJECTS IN PIG, DAIRY CALF, RABBIT, AND BABY BEEF RAISING.

NOT ONLY DUANE, BUT PRACTICALLY ALL THE REST OF THE FAMILY IS IN FOUR-AITCH CLUB WORK, TOO. TWO OLDER BROTHERS HAVE BEEN CARRYING PROJECTS FOR FOUR YEARS, HIS YOUNGER SISTER THIS YEAR WAS ADJUDGED ONE OF THE HEALTHIEST 4-H GIRLS IN THE STATE, AND HIS YOUNGER BROTHER WILL ENTER CLUB WORK NEXT YEAR. HIS PARENTS ARE MR. AND MRS. CHESTER SMITH OF SIMPSON.

WARREN HENRICHS, GRANDSON OF MR. AND MRS. PETER HENRICHS IS AN "OLD HAND" AT LIVESTOCK RAISING. NOT ONLY HAS HE HAD A BABY BEEF PROJECT IN 4-H CLUB WORK FOR FOUR YEARS, BUT CATTLE HE HAS RAISED HAVE PLACED IN THE INTERSTATE JUNIOR LIVESTOCK SHOW IN SOUTH SAN FRANCISCO. ON THE RANCH HE HELPS WITH THE LIVESTOCK WORK, BEING ESPECIALLY GOOD AT RIDING AND ROPING.

YOUNG STROSNIDER HAS LIVED ON A CATTLE RANCH, THAT OF HIS PARENTS MR. AND MRS. FRED STROSNIDER, ALL HIS LIFE, AND HAS THE LIVESTOCK BUSINESS IN HIS BLOOD. ALTHOUGH THIS IS HIS FIRST YEAR IN 4-H CLUB WORK, HE HAS SHOWN ABILITY AS A BABY BEEF RAISER AND A JUDGE OF LIVESTOCK.

COACH OF THE BOYS IS EDWARD RECANZONE, LYON COUNTY AGRICULTURAL EXTENSION AGENT, WHO WILL BE WITH THEM IN THE JUDGING AT THE OREGON CITY.

CATTLE GRADING SCHOOLS  
PLANNED FOR THE STATE

THE FIRST OF A SERIES OF CATTLE GRADING DEMONSTRATIONS FOR THE RANCHERS AND FARMERS OF THE STATE WAS HELD RECENTLY ON THE JONES RANCH NEAR RENO.

NEXT FALL IT IS EXPECTED THAT SIMILAR SCHOOLS IN PICKING OUT THE FINE POINTS OF BEEF ANIMALS WILL BE HELD IN CHURCHILL, CLARK, DOUGLAS, ELKO, HUMBOLDT, LINCOLN, LYON, WASHOE, AND WHITE PINE COUNTIES, AND POSSIBLY OTHERS.

SPONSORED BY THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE, THE DEMONSTRATION WAS CARRIED ON BY J. K. WALLACE OF WASHINGTON, D. C., SENIOR MARKETING SPECIALIST OF THE UNITED STATES DEPARTMENT OF AGRICULTURE. USING CATTLE FROM THE RANCH OF J. F. KLEPPE AND SONS, HE SHOWED HOW TO SELECT SMALL LOTS OF THE VARIOUS GRADES OF STEERS.

IN THE DEMONSTRATION THE FEDERAL SPECIALIST USED FOUR LOTS OF WASHOE COUNTY STEERS.

THE FIRST LOT SHOWED THE EXCELLENT, BLOCKY, WHITE-FACE, FLESHY FEEDER TYPE. THE SECOND GROUP CONTAINED CATTLE MORE UPSTANDING SHOWING LESS ABILITY TO FEED OUT ECONOMICALLY. THE THIRD GROUP OF THE STEERS, SHOWN IN THE ACCOMPANYING PHOTOGRAPH, WERE FAIR FEEDERS BUT WITH HORNS, WHICH MEAN A LOWER GRADE BECAUSE OF A LOSS IN MOVING AND HANDLING THE ANIMALS. FOURTH LOT POINTED OUT CONTAINED THE CULLS.

IN CONNECTION WITH THE DEMONSTRATION, WALLACE STRESSED (MORE)

THE NEED FOR THE GRADING OF LIVESTOCK FOR SALE AND THE IMPORTANCE OF FEEDING ONLY FIRST CLASS STEERS. HE ALSO DISCUSSED GENERAL MARKETING PROBLEMS AND TRENDS IN LIVESTOCK PRICES AND QUALITY.

THE DEMONSTRATION WAS MADE A FIELD DAY BY THE LIVESTOCK MEN, WITH LIGHT REFRESHMENTS PROVIDED BY THE WASHOE COUNTY FARM BUREAU AND A POLO GAME AS DIVERSIONS.

ELWOOD BOERLIN, WASHOE COUNTY AGRICULTURAL EXTENSION AGENT, ARRANGED THE DEMONSTRATION.

# ECONOMIC TALKS

## with NEVADA FARMERS

Vol. II — Number I.

RENO, NEVADA

December, 1936

UNIVERSITY OF NEVADA  
AGRICULTURAL EXPERIMENT STATION  
Department of Farm Development  
and  
AGRICULTURAL EXTENSION SERVICE



### General Outlook.

#### *Domestic*

The farmers and ranchers in Nevada experienced a generally prosperous year in 1936. The drouth which covered a large part of the agricultural section of the United States reacted to increase the prices of farm crops, but the price of livestock was held down by earlier marketings than usual. The final result, however, will be a reduction in the number of livestock marketings. This will react favorably on livestock prices, probably soon after the first of the year.

The purchasing power of consumers has been on the upgrade during the past three years and is expected to continue to increase during the coming year. The national income paid out has advanced from nearly 45 billion in 1933 to about 60 billion dollars in 1936. A further increase of approximately 10 percent is expected in 1937. Greater purchasing power will result in greater demand for agricultural products.

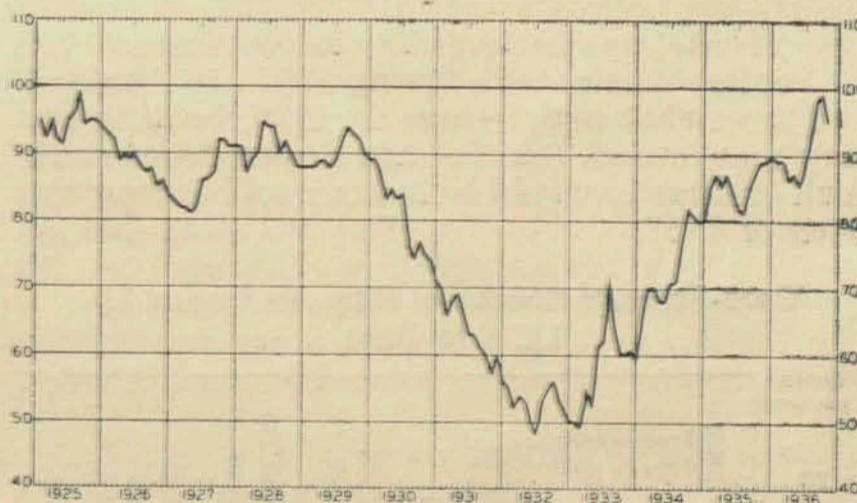
#### *Foreign*

Improvement in industrial activity has continued to take place in most foreign countries. With the chief nations of the world now on an equal footing in regard to currency valuation it is probable that there will be improvement in trade and industry, provided normal trade conditions are not interfered with by war.

The severe trade restrictions put into effect at the beginning of the depression have been reduced somewhat and there are indications that there will be still further relief in 1937.

An increase in export market outlets for American agricultural and industrial products is quite necessary if full use of the resources of these industries is to be regained. If the reciprocal trade agreements can be extended and put into effect with most of the larger European industrial countries, there should be a marked stimulation in foreign demand for American agricultural products and less need to curtail production in the

#### United States in years of normal production.



Ratio of Prices Received to Prices Paid by Farmers

During the depression, the prices of industrial products remained high relative to the prices farmers received for their products, as indicated by the low ratio shown on the chart in 1932 and 1933. Since 1933, the percentage ratio has been rising and at the present time has nearly reached parity. Farming is fairly prosperous whenever the price ratio rises above 90 percent.

#### *Prices*

Since 1933 there has been a gradual rise in the price level of industrial commodities accompanied by a more rapid rise in the prices of agricultural commodities. The prices of agricultural products have very nearly reached the long sought position of parity with the prices of industrial goods.

The great drouths of 1934 and 1936 have been responsible for some of the advance in prices of agricultural products, but other factors were at work which assisted in increasing prices. Without the drouth, prices would have made a more gradual increase.

The drouths have not helped in bringing about agricultural prosperity in the nation as a whole, for it is certain that losses of income in the drouth-stricken sections have exceeded the increases in income in the rest of the nation. Sec-

tions not hit by the drouths have, of course, prospered because of them.

If, in 1937, there is no reduction of crops by drouth and a normal harvest is obtained, it is probable there will be some decline in prices during the latter part of the year.

*Credit*

The supply of credit for good agricultural loans in 1937 will continue to be plentiful at low interest rates, except to ranches utilizing the public ranges. In the drouth-stricken states, there will be a greatly increased demand for credit.

—F. B. Headley.

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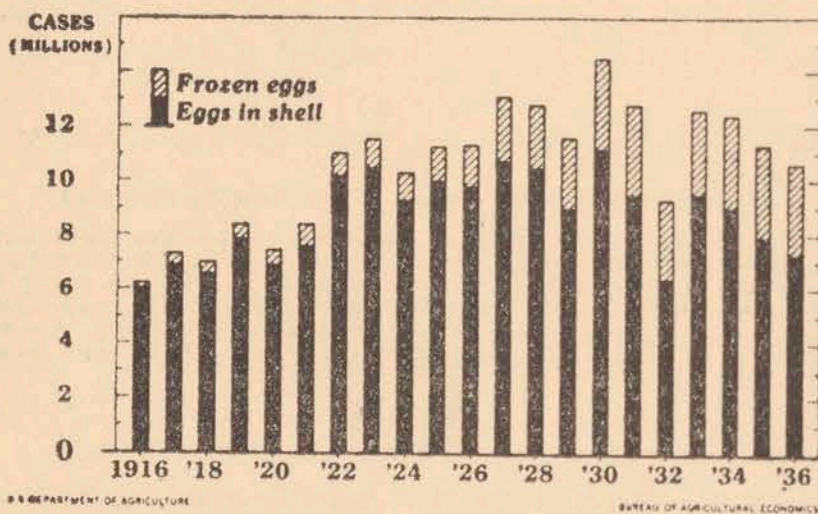
**Poultry and Egg Outlook**

Larger numbers of chicks were hatched in 1936 than for several years, but due to drought in the large, grain producing states, a greater number of this year's chickens than usual will be marketed, thereby increasing the cold storage holdings and decreasing the number of pullets that would have been added to laying stock and bringing the number as of January 1, 1936, down to only slightly above the 1935 level.

*Marketings Expected to be Smaller*

Poultry marketings during 1937 are expected to be somewhat under those in 1936, because the heavy marketings this fall are drawn from stock which ordinarily would have been sold during the spring of 1937.

**Cold-Storage Stocks of Eggs on August 1, 1916 to Date**



Cold-storage holdings of eggs, particularly shell eggs, have been declining since 1930. The decrease in holdings of shell eggs, however, have been partly offset by increased storing of frozen eggs. This downward trend in total cold-storage holding may be partly due to increased commercial egg production but it also reflects lower consumer demand and declining total production.

The number of chicks hatched in 1937 is expected to be somewhat less than in 1936 because feed is higher and egg prices have been from a cent and a half to two cents lower than in 1935.

The increased price of feeds this fall will probably tend to reduce the amount and quality of feeds fed to laying hens, hence, somewhat lower production is expected this fall and winter with increases during the summer and fall.

*Feed Prices Forecast*

Feed prices will be high during the winter and spring, but winter wheat plantings this fall are high and germination good, indicating better

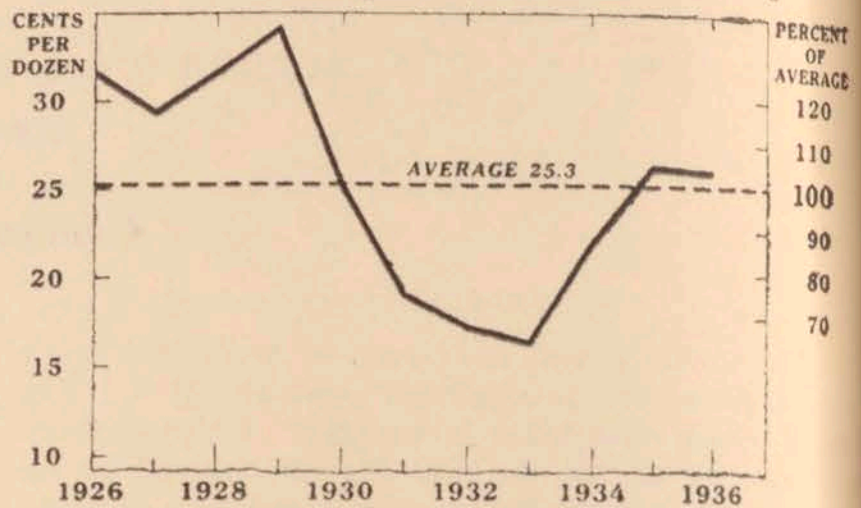
than normal prospects for 1937 wheat. If other feeds are produced normally, feed prices will be lower in late summer and fall.

With slightly more laying hens this fall than in the fall of 1935, and somewhat lower production, there will be about the same total marketings of eggs as in the fall of 1935.

Prices of eggs are expected to follow the usual seasonal increase this fall, and, perhaps, will average a little higher during the spring, but will probably be lower in the fall of 1937 than they were this fall.

—V. E. Scott.

**Prices Received by Farmers for Eggs on Sept. 15, 1926-36**



EGG PRICES FOLLOW THE TREND OF SUPPLIES AND CONSUMER INCOMES. IN 1936 THE EFFECT OF HEAVIER RECEIPTS OFFSET THE INCREASE IN INCOME.

**Wool Outlook**

The production of shorn wool in 1936 was slightly smaller than in 1935, and the total supplies of wool on hand in this country at the end of September were about the same as a year earlier when they were the smallest for seven years. Supplies of wool in foreign countries also are below average.

Domestic mill consumption in the first eight months of 1936 was smaller than a year earlier, but it was larger than for other recent years. Mill consumption in most other important wool consuming countries has been relatively large in 1936.

It seems probable that stocks of wool in this country and in foreign countries will be much below average at the beginning of the domestic wool marketing year, April 1, 1937. In view of prospective further increase in consumers' incomes, consumption will probably increase in 1937 and manufacturers are anticipating this demand by increased orders.

*Stronger Consumer Demand Seen*

The level of domestic wool prices in 1937 will be supported during the first half of the season by small supplies. Consumer demand is expected to be somewhat stronger than in 1936, but mill demand may not be so strong as in 1935 and 1936 because stocks are now relatively high, hence prices may not be higher than in 1936.

The present domestic price of wool is the same as foreign wool plus duty and conversion costs, hence further increases in domestic prices will depend on foreign prices. Fortunately foreign wool markets are showing considerable strength.

—V. E. Scott.

## Turkey Outlook

The results of the marketings and the final prices of the 1936 turkey crop will have a very important influence on the size of the 1937 crop. Up to date, the number of turkeys going to market for the Thanksgiving season will, no doubt, be the largest on record, since half the nation's turkey crop was reported as being ready for the Thanksgiving turkey market. This was especially unfortunate in view of the shipping strike, which interfered with exports, provisioning boats, and normal cold storage operations.

Thanksgiving prices were expected to be approximately in line with those of last year. The increased size of the 1936 crop was expected to be offset by increased buying power. The combination of unfavorable circumstances, however, resulted in a price of six to seven cents less throughout the country than prevailed last year.

### Larger Consumption Possible

The one redeeming feature that is expected to result from these low prices is the possibility of increased consumption, which should account for much of the increased production, which otherwise would go into cold storage and complicate next year's marketings.

The Christmas marketings are expected to be heavy, due partly to the withholding of many of the earlier birds on account of low prevailing prices. If the labor situation is still unsettled, Christmas turkey marketing will be interfered with to a serious extent, because it is the custom to freeze surplus Christmas turkey to hold for cold storage purposes. Cold storage warehouses and boats are very much needed during the Christmas marketing season.

### Heavier Storage Likely

Cold storage holdings for January 1, and later until all the turkeys are marketed, will probably be heavier than last year because of accumulations from Thanksgiving and Christmas marketings and because of the large percentage of late turkeys produced.

The low prices for the 1936 turkey crop and the anticipated increased cold storage holdings will, no doubt, result in a smaller 1937 turkey crop. Much of this decrease might be expected to take place in the large commercial flocks that have been largely financed by feed companies and financing agencies during the past year.

A very common agricultural experience of large crops and low prices followed by smaller crops and better prices is very likely to be repeated next year with the turkey industry. All indications are that the 1937 turkey grower will have fewer competitors for his market. If, in addition, he can look forward to a normal feed crop with lower prices, his outlook will be reasonably bright.

—L. E. Cline.

## Smaller Turkeys More in Demand

The 1936 Thanksgiving turkey marketing operations demonstrated very definitely that extra large turkeys are not in favor with the housewife. The lack of demand for large turkeys during the holiday season, when a big percent of the turkeys are used for family consumption, has been increased for the past several years.

When this situation first arose, turkey growers in general and many marketing agencies were inclined to minimize the situation, feeling that the previous demand for big turkeys would finally come back for the holiday trade, but each year demonstrated the increasing demand for small turkeys during the holidays.

Turkey growers who have been in business several years can remember when tom turkeys weighing less than 16 pounds were considered as second grade and hen turkeys weighing less than 12 pounds were not looked upon with favor.

### Preference Grows.

The first change resulted in more distinction in prices being made between light and heavy turkeys or between hens and toms during the holiday season. During the last two or three years, however, the preference for small turkeys has increased rapidly, until this past Thanksgiving season witnessed a premium of 1 cent per pound for light toms of 18 pounds and under over heavier toms and the premium of 2 cents per pound for hen turkeys over heavy tom turkeys.

There is no doubt but that our Thanksgiving turkey shipments would have been cleared at a better price if a greater percent had been lighter toms or hens.

There is a definite movement for breeding smaller type, early maturing turkeys, but the movement seems to be two or three years behind schedule.

\* \* \* \*

### U. S. Stocks of Cold Storage Turkeys on Hand

	1934	1935	1936	5 yr. av.
	1,000	1,000	1,000	1,000
	pounds	pounds	pounds	pounds
Feb.	19,941	23,516	20,548	16,295
Mar.	19,177	22,973	19,101	16,061
Apr.	14,499	19,486	17,736	12,977
May	11,154	16,143	13,907	10,178
June		14,258	12,357	8,757
July	8,385	13,851	12,603	7,974
Aug.	6,648	11,655	9,978	6,555
Sept.	4,767	9,006		4,193
Oct.	3,041	6,549	5,593	3,663
Nov.	1,763	3,654	4,119	2,070
Dec.	9,572	9,093		

The above table shows very clearly the rapid increase in cold storage operations in turkeys during the last three years. It may be seen also from the table that the turkey industry must depend considerably on the year round sale of turkeys in order to dispose of the crop.

All-year marketing of turkeys are more important each successive year.



## Indexes of Farm Prices in Nevada, by Groups

		Range Livestock			General Farm			All Range and Farm Products	
		Beef Cattle	Lambs Wool Sheep	All Range Livestock	Livestock and Livestock Products	Alfalfa Potatoes Wheat Barley	All General Farm	Nevada	U. S.
Ave.	1910-1914	100	100	100	100	100	100	100	100
Ave.	1922-1928	115	201	156	127	144	133	147	144
	1929	161	191	175	139	147	142	162	146
	1930	133	128	130	116	153	129	130	126
	1931	91	87	89	86	106	93	90	87
	1932	74	65	70	65	89	73	71	65
	1933	63	89	75	61	72	65	71	70
	1934	65	116	90	69	86	78	85	90
	1935	112	116	114	96	98	96	107	108
	1935								
	Oct.	107	127	117	100	89	96	108	109
	Nov.	100	139	119	102	87	97	110	108
	Dec.	109	143	125	108	92	102	116	110
	1936								
	Jan.	95	141	117	102	94	100	110	109
	Feb.	95	143	118	98	96	97	110	109
	Mar.	102	152	126	98	90	95	114	104
	Apr.	112	152	131	100	99	100	119	105
	May	110	149	129	93	103	97	116	103
	June	102	151	125	94	112	100	116	107
	July	95	147	120	102	122	109	116	115
	Aug.	95	140	116	104	119	109	114	124
	Sept.	99	139	118	108	110	109	114	124
	Oct.	92*	135*	112*	107*	116*	110*	112*	121
	Nov.	102*	140*	120*	106*	120*	111*	117*	120

\*Preliminary.

1 Constructed by the Department of Farm Development, Nevada Agricultural Experiment Station. See "Economic Talks", Vol. I,

No. VI, for a brief description and discussion.

2 Butterfat, hogs, eggs, chickens, calves, and 10 percent beef cattle.

### Price Index of Nevada Products.

Prices of farm products in Nevada as shown in the table above, were generally higher in November than in October although there was a drop of 1 point in the average for the United States as a whole.

There was an increase of 8 points in the Nevada price of all range livestock and of 1 point on general farm products. On all Nevada

agricultural products combined, there was an increase of 5 points.

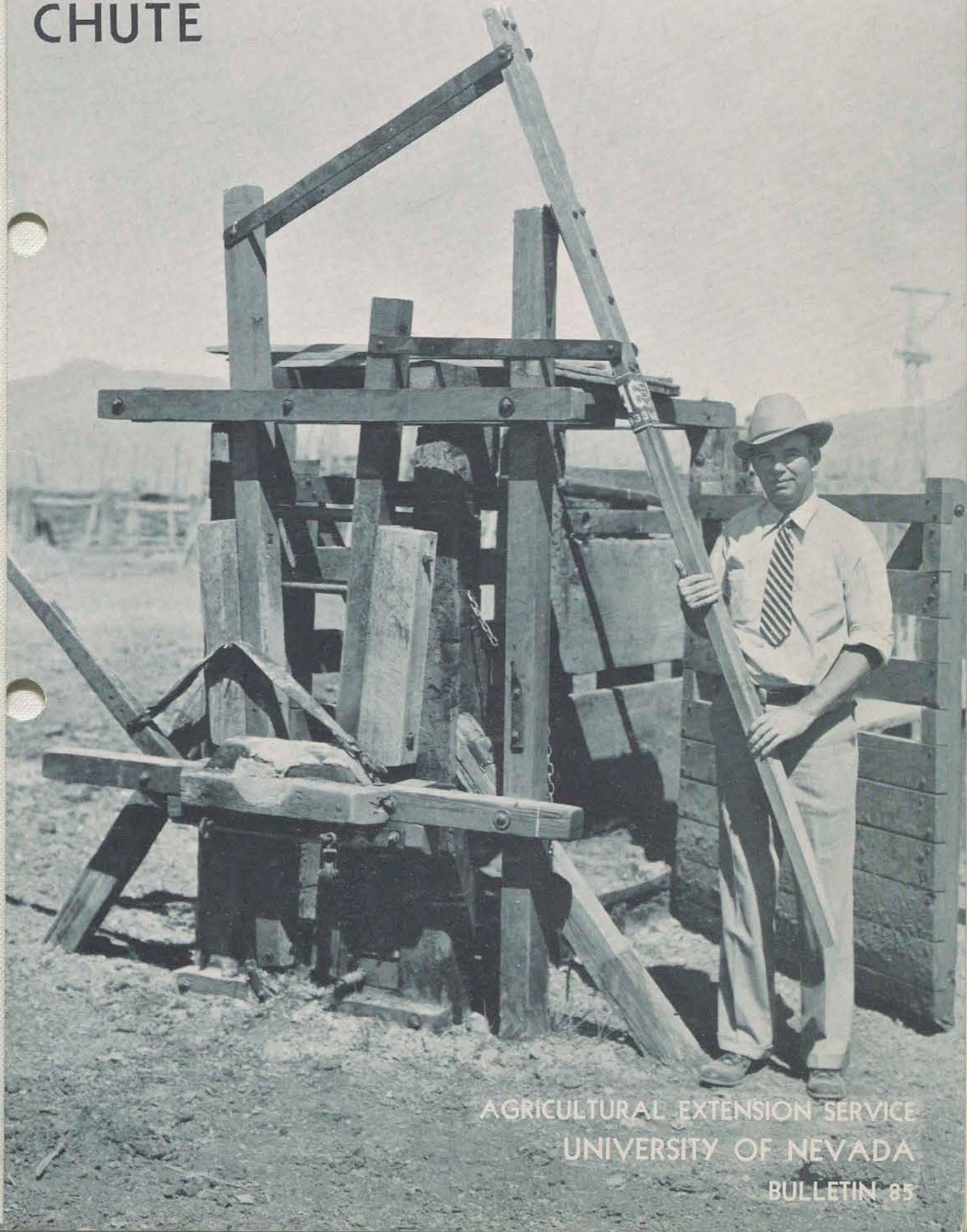
The products on which prices increased between October 15 and November 15 were beef cattle, wool, eggs, alfalfa hay, potatoes, wheat, and barley. Prices declined on butterfat, hogs, chickens and calves. There was no change in the price of lambs and sheep.

Cooperative Extension work in Agriculture and Home Economics, University of Nevada Extension Division and United States Department of Agriculture cooperating. Distributed in furtherance of the Acts of Con-

gress of May 8 and June 30, 1914. Cecil W. Creel, Director University of Nevada Agricultural Extension Division, Reno, Nevada.

No. 1

# NEVADA LOW-COST DEHORNING CHUTE



AGRICULTURAL EXTENSION SERVICE  
UNIVERSITY OF NEVADA  
BULLETIN 85

No. 1

# NEVADA LOW-COST DEHORNING CHUTE



CULTURAL EXTENSION SERVICE  
UNIVERSITY OF NEVADA  
BULLETIN 85

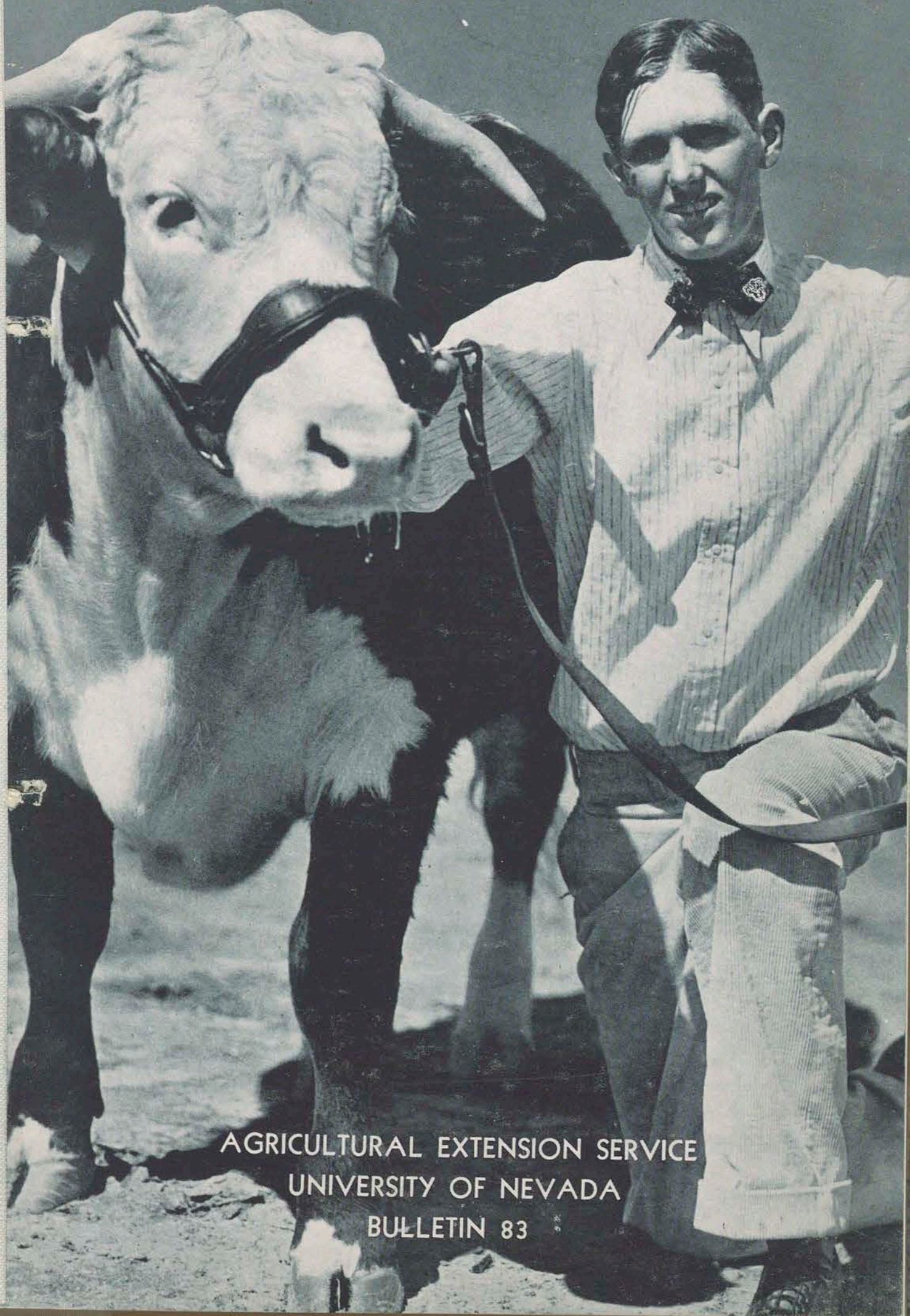
The cover picture  
is of Paul Maloney,  
Washoe County Extension  
Agent -



# Nevada 4-H Club Forestry Book

Agricultural Extension Service  
University of Nevada  
Bulletin 84

THE NEVADA JUNIOR 4-H CLUB  
BABY BEEF BOOK



AGRICULTURAL EXTENSION SERVICE  
UNIVERSITY OF NEVADA  
BULLETIN 83

UNIVERSITY of NEVADA  
AGRICULTURAL EXTENSION SERVICE

BULLETIN 77  
JUNE 30, 1937



SETTING UP  
TAYLOR GRAZING DISTRICTS  
IN NEVADA

SOIL CONSERVATION

## ANNUAL REPORT

### EXTENSION SOIL CONSERVATIONIST

JULY 1, 1937 to OCTOBER 31, 1937

In accordance with a memorandum of understanding formulated between the Agricultural Extension Service and the Soil Conservation Service an Extension Soil Conservationist was appointed on July 1, 1937. This memorandum of understanding provides for educational work through the State Extension Service in furtherance of Soil Conservation, on such areas and to such extent as may be mutually agreed upon by the State Director of Extension and the State Coordinator of the Soil Conservation Service; and, the encouragement of legally constituted Soil Conservation Associations or Districts so constituted by law to provide for general, effective, and permanent erosion control. It further provides through the office of the State Coordinator for furthering unity of purpose among state agencies in all development of plans, cooperative arrangements, soil conservation legislation, and policies of soil conservation, to the end that a coordinated Soil Conservation program for the state may be effected.

The Soil Conservation program, as formulated by the State Soil Conservation Advisory Committee and approved by the Soil Conservation Service, provides for project demonstration areas, ECW Camps, Soil Conservation Associations, or Districts, and general land use and Soil Conservation practices to be followed in the development of the work in the state. The object of this program is to bring about a realization of the seriousness of losses due to erosion and to demonstrate the various practical measures of erosion control and practices for conserving soil and moisture through proper land utilization.

The Soil Conservation Service in this state functions under the supervision of Harry E. Reddick, Regional Conservator of Region No. 10 which includes California and Nevada, with the Regional office located at Santa Paula. Mr. George Hardman is the State Coordinator for the state of Nevada with headquarters at the University of Nevada in Reno.

Two demonstration projects are located in Nevada; one in Lincoln County with headquarters at Caliente, and the other in Lyon County with headquarters at Yerington.

The Extension Soil Conservationist is located at Yerington with office space and stenographic assistance furnished by the Extension Service and the Lyon County Farm Bureau cooperating.



The duties of the Extension Soil Conservationist as outlined in the Plan of Work approved by the Extension Service and the Soil Conservation Service is as follows:

1. It shall be the duty of this specialist to coordinate the activities of the Soil Conservation Service and the Agricultural Extension Service in the educational phases of the State Soil Conservation program.

2. The State Soil Conservationist working through special agents or directly with County Agents will:

a. Assist county agents in

- (1) Conducting soil conservation demonstrations with individual farmers
- (2) Selecting soil conservation committees
- (3) Organizing soil conservation associations
- (4) Developing county or association soil conservation programs based on the State Soil Conservation Program

b. Prepare subject matter information for 4-H Club members and vocational classes.

c. Set up exhibits for use at state and county fairs and such occasions in cooperation with regional information office and state extension editor.

d. Conduct farm tours in cooperation with county agents for inspection of soil conservation demonstrations.

e. Address farmers' meetings and other groups on need for and appropriate measures of erosion control and practices for conserving soil and moisture.

f. Secure services of subject-matter specialists of the Extension Service, Soil Conservation Service and Experiment Station for assistance in the program as need arises.

g. Distribute information through method demonstration, the press, film strips, and radio, in cooperation with the regional information office and state extension editor.

3. The State Soil Conservationist, working through the County Extension Agents, the Soil Conservation Service, or directly with the parties concerned, will:

- a. Inform the state extension workers of the provisions of the State Soil Conservation Districts law.
- b. Conduct educational programs on provisions of the act in areas selected by the State Soil Conservation Committee in which the first educational work should be started.
- c. Assist the State Soil Conservation Committee in determining the need, economic advisability, and the correct size for administrative purposes of proposed districts; assist in preparing boundaries and legal descriptions of districts, selection of supervisors, and otherwise assist in organizing districts.
- d. Cooperate with the State Coordinator and the district supervisors in formulating plans of operations for legally organized districts.
- e. Assist in informing the people of the districts of the plans formulated for the district.

Definite goal for the year July 1, 1937 to June 30, 1938

1. Work in connection with the Caliente and Smith Valley established project demonstration areas.
2. Work in cooperation with Bunkerville and Panaca ECW camp areas.
3. Work in cooperation with soil conservation associations outside of project demonstration and ECW camp areas.
4. Work in connection with county committees of soil conservation associations.
5. Work in connection with 4-H Clubs in all counties.
6. General demonstrations, meetings, vocation classes, farmers' tours, exhibits, newspaper and radio publicity, circulars, and bulletins in cooperation with proper officials of the Extension Service and Soil Conservation Service.
7. Work in connection with the organization of districts under the State Soil Conservation Districts Law in areas selected by the State Advisory Committee.

During the period covered by this report, the efforts of the conservationist were devoted principally to the following:

- (1) Study of the Nevada Soil Conservation Districts Law, outlining the necessary procedure for organizing districts, and the preparation of various forms and instructions.
- (2) Educational meetings with County Agents and Farm Bureaus in explaining the act, and assisting in the organization of districts.
- (3) Cooperating in program planning with County Agents and Soil Conservation technicians on the established projects in Lyon and Lincoln Counties.
- (4) Discussing with various other agencies programs where cooperation may be developed.

The Nevada Soil Conservation Districts Law approved March 30, 1937, is similar to the standard act prepared by representatives of the Department of Agriculture and enacted into law by twenty-two states.

This law permits farmers to organize and form Soil Conservation Districts as governmental subdivisions of the state. The districts can cooperate with other governmental agencies, determine land use regulations to conserve soil and water resources, and control erosion on farm and range lands.

To assist in organizing districts, and to coordinate the activities of the various districts, the act creates a state committee. Serving on this committee are: S. B. Doten, of the University of Nevada Agricultural Experiment Station, Chairman; Cecil W. Creel, Nevada Extension Director, Vice President; Mrs. Florence Bovett, Secretary of the Nevada State Farm Bureau, Secretary; and George Hardman, State Coordinator of the Soil Conservation Service.

In organizing districts, any ten occupiers of land may petition the state committee for the establishment of a Soil Conservation District by outlining temporary boundaries and stating the purposes for which the district is to be organized. After examining the petition, the State Board arranges for hearings and an election of all land owners within the proposed district to approve or reject by majority vote the creation of a soil conservation district.

If a majority of land occupiers vote against the creation of a district, the state committee refuses the petition and no further action is taken.

If a favorable vote is cast and the state committee determines the operation of the district to be practicable and feasible, the committee then proceeds with the appointment of two supervisors to complete the organization of the district. The supervisors appointed then apply to the Secretary of State for a certificate of organization.

Nominating petitions are then received by the State Committee for candidates as supervisors of the district; after which an election is held with the three candidates receiving the highest number of votes cast by occupiers of land within the district, being elected. These three elected supervisors with the two appointed by the State Committee constitute the five supervisors who act as the governing body of the district.

The supervisors may promulgate land use practices or ordinances, according to local conditions, which can be put into effect, only with the approval of the majority of the eligible voters. The authority for carrying out land use practices or ordinances is vested in the supervisors.

Districts may also enter into cooperative agreements with various agencies and individuals, conduct surveys, investigations and research, to promote demonstration projects in carrying out the purposes of this act.

Provisions are also made in the law for the creation of a Board of Adjustments to which individuals may appeal for variances from land use regulations where such regulations would create difficulties or hardships in the particular case.

In cooperation with George Hardman, State Coordinator, and the State Soil Conservation Committee, regulations and a plan of procedure have been formulated for use in the creation of Soil Conservation Districts in accordance with the law.

To expedite the organization of districts and add uniformity to procedure the following standard forms have been prepared.

1. Petition for creation of district
2. Notice of hearing
3. Procedure at hearing
4. Notice of referendum
5. Procedure for holding referendum
6. Appointments for registrars, clerks and inspectors
7. Instructions for registrars, clerks and inspectors
8. Registration cards
9. Registration books
10. Official ballot for referendum
11. Clerk and inspectors' certification of votes cast
12. Secretary's certification of canvass of votes
13. Publication of results
14. Appointments of supervisors
15. Supervisors application to State Committee for

- certification of district.
16. Statement of state committee to accompany application.
  17. Nominating petitions for supervisors
  18. Notice of election of supervisors
  19. Appointments for registrars, clerks and inspectors
  20. Instruction for registrars, clerks and inspectors
  21. Official ballots listing supervisors
  22. Certification of election votes by clerk and inspectors
  23. Secretary's certification of canvass of votes
  24. Publishing results - election.

A state wide meeting of County Extension Agents was attended in Elko County at which time an outline was given of the district law and the possibilities of its application in the various counties of the state. Individual discussions were also held with the various county agents present who were interested in determining the applicability of the law in their respective counties.

Through the cooperation of Mr. A. L. Higginbotham, Extension News Editor, a state wide news story was released explaining the provisions of the Nevada Soil Conservation District Law

Organization of districts started when farmers of Clark County petitioned the state committee for the organization of two districts; one to be known as the Moapa Soil Conservation District, and the other the Virgin Valley Soil Conservation District.

#### Moapa Soil Conservation District

The petition for the Moapa Soil Conservation District was received by the State Committee on August 11, 1937. The date of the hearing was set for September 8, 1937 with notices published on August 28, and September 4, 1937.

As the law provides no funds for organization purposes, the expense of advertising was paid for by the Clark County Farm Bureau.

Mr. George Hardman, State Coordinator, and the Extension Soil Conservationist, attended the hearing with the County Extension Agent. A representative group of farmers were present. They were interested in getting the district organized as soon as possible for the purpose of developing the valley by having the legal set up for maintaining and completing such projects as flood control, drainage and erosion prevention.

In order to keep the cost of organizing at a minimum, farmers present agreed to donate their services by acting on election committees and doing other work necessary to complete the organization of the district.

After receiving the report of the meeting, the State Committee on October 21, 1937, determined the need and set November 22, 1937, as the date for holding the referendum with notices published on November 12th and 19th.

The boundaries, as approved by the State Committee, includes an area of 460,800 acres, described as follows, Twp. 13, 14, 15, 16 and 17 South, Ranges 65, 66, 67 and 68 East M.D. B. and M.

#### Virgin Valley Soil Conservation District

The petition for the Virgin Valley Soil Conservation District was received by the State Committee on August 11, 1937. The date of hearing was set for September 9th, 1937, with notices published on August 28th and September 4th, 1937.

As the law provides no funds for organization purposes, the expense of advertising was paid for by the Clark County Farm Bureau.

Mr. George Hardman, State Coordinator, and the Extension Soil Conservationist, attended the hearing with the County Extension Agent. A representative group of farmers were present. They were interested in getting the district organized as soon as possible for the purpose of developing the valley by having the legal set up for maintaining and completing such projects as flood control, drainage and erosion prevention.

In order to keep the cost of organizing at a minimum, farmers present agreed to donate their services by acting on election committees and doing other work necessary to complete the organization of the district.

After receiving the report of the meeting, the State Committee on October 21, 1937, determined the need and set November 22, 1937, as the date for holding the referendum with notices published on November 12th and 19th.

The boundaries as approved by the State Committee includes an area of 207,360 acres, described as follows: Twp. 13, 14 and 15 South, Ranges 69, 70 and 71 East, M.D.B. & M.

#### Smith Valley Soil Conservation District

The State Committee deemed it advisable to get an organization perfected in Smith Valley, as it would be beneficial

to the Soil Conservation Service and the farmers in carrying out the demonstration project which is located in this valley.

The District Law has been explained to farmers in this area through Farm Bureau Center Meetings, which have been attended with the County Extension Agent. From the interest shown by farmers attending these meetings, a district should soon be petitioned for in this locality.

### S.C.S. Projects

#### Caliente

Mr. George Hardman, State Coordinator of the Soil Conservation Service, was accompanied on an inspection tour of S.C.S. projects in Lincoln and Clark Counties. Several days were devoted to the tour covering projects in Caliente, Panaca, Pahranaagat and Bunkerville areas. New projects for the E.C.W. Camp at Caliente were also viewed and discussed with the project manager.

One of the major demonstrations in this area consisted of Soil Erosion and Flood Control by construction of numerous dams throughout the water shed area. Various types of dams have been used and it will be of great interest to watch the results of each type. In recent storms, the dams have been effective in holding the water and preventing floods and severe erosion.

Grazing demonstration areas have also been fenced, and grazing prohibited until vegetation increases. The tests are being made to show the results of both natural and artificial re-seeding of various grasses. Various methods of water development also play an important part in the demonstrations. While these projects have only been in operation a short period of time, indications point to very favorable results being secured.

#### Smith Valley

Considerable time was devoted in discussing with project and regional technicians various phases of possible demonstration programs that could be conducted under the Smith Valley S.C.S. project. Tours were taken over the area with the project representatives at which time various projects were pointed out and the merits of each discussed. Individual conferences were also held with members of the project staff and regional technicians on various programs for the area, and it is hoped that with the completion of temporary surveys and maps that a well balanced and coordinated program will be developed on this project.

#### Tours

A tour under the supervision of Mr. McQueen, Forest

Supervisor, through the National Forest in Elko County, was attended with county agents and forest officials. This tour was most interesting and educational as it is probably one of the best grazing areas in the state. It provides a wonderful demonstration, as we were told that some twenty years ago the range was over grazed to the point where vegetation was practically gone. Since that time, under controlled grazing, the range has come back until it now has a covering of grasses, flowers, and browse which makes it a natural paradise for livestock during the summer months. Everyone taking the tour was very much impressed with the splendid condition of the range and also the stock that was seen grazing thereon.

Demonstrations are being conducted where various areas are grazed by different classes of livestock which proves that the best range management will probably call for a rotation of grazing between cattle and sheep during different years.

Through the efforts of Mr. Buckman, Assistant Director of the Nevada Extension Service, the opportunity was afforded to attend the range demonstration at the U. S. Forest Service Inter-Mountain Range Experiment Station in Utah. Two days were devoted to viewing experimental plots showing the effects of various types of grazing and the methods which can be employed in rebuilding depleted ranges. It was interesting to note that ranges can be restored by proper grazing as well as complete enclosure which makes it possible for stock men to rebuild the ranges by proper useage. Many of the methods that are being developed at this station are applicable to the desert range areas of Nevada.

The Squaw Butte Range Livestock Experiment Station progress inspection was also attended. On this area another practical demonstration similar to the Desert Station is being carried on. This station, however, is more of a summer range area and a considerable larger amount of forage is the grass type. Various fields are plotted off in this area which are used in rotation grazing and also demonstrates the restoring of ranges by proper grazing. An interesting feature of this demonstration was the fact that a greater carrying capacity can be obtained over an area by rotation grazing; this being accomplished mainly by holding the stock in smaller areas which forces them to eat both the browse and young grass, or the spinach with the ice cream as it was put. By this method, grass in the other plots is given a better chance for additional growth which naturally increases the total carrying capacity. As these demonstration areas are continued there will undoubtedly be a vast amount of material developed that will be of great benefit in better grazing of the western grazing lands.

Two trips through the pine nut range area were taken with the thought in mind of establishing a range improvement program



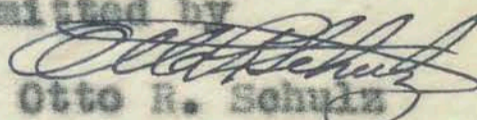
in that area. Mr. Miller, local Range Examiner; Mr. George Hardman, State Coordinator of the Soil Conservation Service; and Mr. Charles Fleming, of the Nevada Experiment Station, were taken over the area on the first tour; and Mr. Thomas Buckman, Assistant Director of the Nevada Extension Service; and Mr. Reed Bailey, of the U. S. Forest Service at Ogden, Utah, on the second tour. The purpose of these tours was to get their opinions on the possibility of developing a grazing demonstration on the area. This area has been heavily grazed and erosion is taking place to a considerable extent. All were in favor of developing a program of range improvements and controlled grazing on the area to restore its carrying capacity and prevent further erosion.

#### Cooperation with other Agencies

Officials of the following organizations and governmental agencies have been contacted in an endeavor to secure their cooperation on various projects that may be formulated: Nevada State and County Farm Bureaus, U. S. Division of Grazing, U. S. Forest Service, U. S. Indian Service, Nevada Experiment Station, Walker River Irrigation District and State 4-H Clubs. It is gratifying to say that all have promised their full support and assistance.

During the period covered in this report, one hundred thirty-six leaders have been contacted; twenty-three result demonstrations were attended; seven Farm Bureau meetings were attended; one 4-H Club meeting with two hundred seventy-three in attendance; three meetings at result demonstrations with an attendance of three hundred fifty; and fifteen other meetings were attended with six hundred thirty-one present.

Respectfully submitted by

  
Otto R. Schulz

UNIVERSITY OF NEVADA

Agricultural Extension Division

Cecil W. Creel

Director

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Annual Report of Agricultural Extension Work

(Project 2A)

for

1 9 3 7

Thomas E. Buckman  
Assistant Director

AGRICULTURAL EXTENSION WORK

Annual Report

of

Thomas E. Buckman, Assistant Director for Agriculture

1 9 3 7

INTRODUCTION

The statistical summary of the county agents' reports gives in detail the accomplishments in agricultural extension work for 1937. Following is a brief narrative report which shows the field and scope of activities in agriculture for the past year, as well as the methods used by the supervisor in meeting problems that necessarily come up. The extension agents' reports are cited where outstanding pieces of work have been done.

The duties of the Assistant Director for Agriculture in Nevada are:

1. Supervision of agricultural extension agents' and specialists activities are divided as follows:

(a) Adult work.

(b) 4-H Club work.

This involves responsibility for:

(a) Field activities.

(b) Methods of procedure.

(c) Results secured.

2. To arrange for competent subject matter from the U. S. Department of Agriculture, the Nevada Experiment Station, adjoining State Experiment Stations, Soil Erosion Demonstrations, Regional Experiment Stations and other sources.

3. To see that project plans are written for all major pieces of work, approve same, and see that such projects are filed in the state and county offices.
4. To assist in developing and maintaining an efficient program of work in each county.
5. To assist in maintaining relationship with the county farm bureaus and other agricultural organizations.

ORGANIZATION OF  
EXTENSION WORK  
IN THE COUNTIES

The present extension organization dates back to 1919 and 1921 when the legislature provided for the organization of county farm bureaus to cooperate with the extension service. Under this arrangement, county agents were placed in the field in the most important agricultural counties. Under this plan of organization the county agent staff consisted of five county agents and three district agents. Capper-Ketcham funds added three more county agents and Bankhead-Jones appropriations added two more, giving us a total of thirteen agents. County lines were disregarded in making appointments, only four of our agents now having county appointments. Agents who work in more than one county are called District Extension Agents on account of the fact that they work in more than one county.

During the year 1937 full-time extension agents numbered eleven, two agents being on leave.

County programs have been developed in the twelve different counties as in previous years. In most of the counties the projects are county-wide. This is particularly true in the strictly livestock counties. For this reason more attention is usually

given to the county programs than to community programs. However, local problems are worked out through community center meetings. We have 118 communities in the twelve counties where agricultural extension work should be conducted. During 1937 extension and Triple A programs were cooperatively worked out with people concerned in all of these communities.

It is customary in each county and community where extension work is conducted for the farm bureau, or other local committees selected by extension agents, to work together cooperatively for the promotion of the projects adopted. The extension agents consulting with local people develop the extension program for the coming year, month by month. This is developed in such form that definite goals can be set and checked up with actual accomplishments at the end of the year. It is customary to adopt the county program for the year at the annual county farm bureau meeting.

#### SUPERVISORY PROGRAM

The supervisory plan for the year outlined in our 1937 plan of work was carried out so far as it was possible. A goal of two visits to each county was set for the purpose of supervision and assistance in planning and carrying out county programs. On such visits office organization, program analysis, finances, 4-H Club work, and reports were checked over.

HOW SUPERVISOR'S  
TIME WAS DIV-  
IDED

The Assistant Director's time was fairly well divided among the following subjects:

1. Supervision.
2. 4-H Club Work.
3. Farm Bureau Cooperation.
4. Agricultural Conservation Program.
5. Preparation of Subject Matter-  
Taylor Grazing Bulletin No. 77

4-H CLUB WORK

The Assistant Director for Agriculture is responsible for the Agricultural 4-H Club work that is carried on in this State. This responsibility involves preparation of subject matter and material for use in the field by county agents and local 4-H Club leaders.

SUBJECT  
MATTER  
ASSISTANCE

A close contact was maintained with the Specialists and representatives of the Office of Cooperative Extension Work. The following extension workers and government representatives visited the State and rendered valuable assistance.

<u>Name</u>	<u>Title</u>
W. A. Lloyd	In Charge of Western States
Madge Reese	4-H Club Work
H. E. Schwartz	Western Region, AAA
W. Guilford	F.C.A. of Berkeley
Lester R. Brooks	Division of Grazing
C. J. Olsen	Asst. Regional Forester, Ogden
George Stewart	Intermountain Forest Experiment Station, Ogden

<u>Name</u>	<u>Title</u>
Reed W. Bailey	Director, Intermountain Forest & Range Experiment Station, Ogden
John Brewster	U. S. Department of Agriculture
Willard D. Ellis	General Agent, F.C.A. of Berkeley, Oakland, Calif.
Fred Cronemiller	Forest Service, San Francisco, Calif.
DeWitt Nelson	Forest Supervisor Nevada City, Calif.
Neil Johnson	Bureau of Agricultural Economics, Washington
Marion Clawson	Bureau of Agricultural Economics, Washington
Dean Phinney	Forest Service Washington, D. C.
Walt. Dutton	Chief of Grazing, Forest Service
W. A. Richie	F.C.A. Washington, D.C.
C. E. Favre	Forest Service, Washing- ton, D. C.
Carroll Wright	F.C.A. Washington, D. C.
E. O. Pollock	Extension Hay Specialist
J. K. Wallace	Livestock Marketing and Grading Specialist Washington, D. C.
George Hudson	F.C.A. Washington, D. C.

Phil Campbell	Soil Conservation Service Washington, D. C.
Curtis Mumford	Extension Service Washington, D. C.
Roy Jones	Extension Service Washington, D. C.
M. M. Thayer	Extension Service Washington, D. C.

Charles Fleming, Chester Brennen, F. H. Headley, Dr. Lyman Vawter and Cruz Venstrom of the Nevada Experiment Station rendered valuable assistance at various times during the year. George Holman of the United States Biological Survey, Alex McQueen, Forest Supervisor, Elko, George Hardman, State Coordinator, Soil Conservation Service, also rendered valuable assistance.

Miss Gertrude Warren's and Miss Madge Reese's continued contributions to our 4-H Club subject matter file were greatly appreciated.

PROJECT ACTIVITIES AND RESULTS ACHIEVED

1. Factors Determine Program.

The economic and agricultural needs of the various counties are the factors considered in determining county programs of work. Soil and climatic conditions naturally are considered, as well as the ability and willingness of local leaders to assume responsibility for programs developed. The best extension work in Nevada is carried on where the local people participate in the organization of the county farm bureaus, the

COUNTY  
PROGRAM  
OF WORK



official Extension organization. The county farm bureaus were established in 1919 as the official Extension organization and they have established a record of achievement and service to the agriculture of the State.

The county organizations are headed by a Board of five or more Directors representing the organized farm centers and home departments. The county organization is maintained through the farm centers. It is from the officers of the centers that the leaders are secured for the county organization. County agents naturally turn to the officers of the farm bureau organization for advice and council regarding the educational program that is carried in the county. Naturally the farm bureau leaders are a big factor in determining the type and extent of the Extension program carried on in Nevada counties. The strength of the Extension work is usually shown by the strength of the farm bureau organization; if the membership in the county farm bureau is good, the Extension program is usually good.

This year 1067 Nevada farmers out of 3696 belong to the twelve Nevada county farm bureaus. This itself is an indication of the effectiveness of the Agricultural Extension Program in Nevada.

Nevada farmers usually join the Farm Bureau - 1st, because it provides the Extension work; and 2nd, to participate in a general farm organization that acts on economic questions.

2. Methods used in -  
(a) Development of projects.

During the past four years the Agricultural Conservation Program has taken the time county agents devoted to educational projects. In Nevada no full-time county secretaries are employed and the county agents have had to assume administrative duties, leaving little time for the educational phases of the Agricultural Conservation Program, as well as making inroads into the regular educational program of the Agricultural Extension Service.

4-H Club work, however, is one phase of the regular Extension program that has not been neglected in favor of action programs. The Nevada county agents have found time to carry on the 4-H program the same as before the Agricultural Adjustment Administration.

Generally speaking, in developing new projects, Nevada county agents secure ideas for new projects at farm centers and county farm bureau meetings. Committees are often appointed at farm bureau meetings to work up plans for a project. This appears to be a satisfactory way to develop projects for it gives the local leaders a definite job to do and maintains the farm bureau as a program planning agency in this day when the agricultural field has so many planning agencies.

effectively, except in the adjustment, conservation, Paul L. Maloney, District Extension Agent of Humboldt County, in a concise manner gives his method for developing projects as follows: "The first step is to carry out the emergency program. Where leaders have been developed, such as "Community programs are worked out by holding special meetings and discussing outlook reports. Old programs of work are gone over and where it is thought advisable some of the same projects are taken to be finished. Suggestions are received and when thought feasible are put into project form and are gone over by the Board of Directors and the county agent. Project leaders are then appointed; it is the general rule for the directors to be responsible for projects they select or to which they are appointed".

J. H. Wittwer, County Extension Agent of Clark County, Nevada, reports the following methods used:

"Personal conferences with specialists, leaders, successful farmers, business men. It is felt that by following principles cited above, a large number of farmers in Churchill County are being reached. "Conferences with program of work committees, selected through community center and County Director organizations. "Reconnaissance followed by detailed studies and surveys, preliminary field tests, adoption of recommendations by committees through community center and county organizations.

County reports that he has used the following for development

"Cooperating with commodity organizations and legally established units such as irrigation boards and town boards.

"Project leader development in Farm Bureau starts in (d) Development of Project Leaders. This work gradually leads to election to an office in the community.

Mr. Royal D. Crook, District Extension Agent of Churchill County reports that he has used the following method in developing project leaders in his county. "In this county project leaders have not recently been used

effectively, except in the adjustment, conservation, marketing and Farm Bureau programs. These activities, of course, require more active participation than all others combined. Comparatively little time has been devoted to purely educational activities, because of the large amount of time necessary to carry out the emergency program. Where leaders have been used, such as in the adjustment and conservation programs, they have been encouraged to use their own initiative with only information being supplied through the service. Matters which have required judgment have been given almost entirely to the leaders and committeemen. Extension agents must take the initiative in many cases, and their judgment is relied upon frequently, yet, insofar as it is practical, the leaders have been left to make their own decisions. Development of leadership can only be accomplished through the independent exercise of judgment and authority. All leaders need sufficient background to temper judgment. Background information must be supplied through reading and through contact with others. Responsibility has been distributed as widely as possible to give the largest possible amount of leadership training.

"No farm leaders of outstanding ability have been developed here recently, but it is felt that by following principles cited above, a large number of farmers in Churchill County have received some training in leadership, particularly in public. It is hoped that the newly organized discussion group may be a strong influence in the development of leaders for other types of projects".

Mr. H. E. Boerlin, County Extension Agent of Washoe

County reports that he has used the following for development of project leaders:

"Project leader development in Farm Bureau starts in the community by committee appointment. This work gradually leads to election to an office in the community center organization and thus is developed leadership and project leaders in Farm Bureau. It is felt that an officer of the community center should be well grounded in Farm Bureau work in order to carry out the policies properly. Considerable time is spent each year in assisting these leaders in the proper conduct of their office and in reporting the progress of their work at meetings. Project

leaders in the Soil Conservation project were elected and the progress on this work is more or less routine. Reports of the leaders are asked for occasionally at farm center meetings so that the community may know what progress is being made on the work".

The dairy program in Nevada has been neglected since the time funds were not available for the employment of a dairy specialist. Some cow testing work is carried on by the county agents with individuals who were interested and quite a bit of work has been done in placing purebred dairy sires; but generally speaking, the dairy program needs strengthening. We do not anticipate any better results will be secured until a part time or full time dairy specialist can be employed by the Extension Service to further dairy production in the Western Nevada counties where dairies are most prevalent, in the State.

Quite a bit of work was engaged in in an effort to control Bang's disease. County agents cooperated with the veterinarians in presenting this program to the dairy men.

(b) Cow Testing. Mr. W. H. Stodieck, District Extension Agent in Douglas County reports the following:

"The cow testing work started in 1936 was carried on in 1937 under the same plan until all six herds started on test in 1936 had completed one year records. One new herd was started in December, 1936, and a complete summary of all the work on a year basis will be made as soon as the December record on this herd can be secured. Five of the herds on

completions of tests for the year have quit testing until a cow testing association can be set-up. Four of the five are already signed as members of a cow testing association under the United States Department of Agriculture's dairy herd improvement plan. To date there are ten signers of the agreement and two more farmers known who will test. This group of twelve will be the nucleus for the Douglas County Dairy Herd Improvement Association and as signed over 350 cows to be put on test as soon as all arrangements can be made.

"It is obvious to all who are acquainted with the dairying in this county that all of the cow testing records are above the average herd record for the county. The average production per cow in the county is about 230# per cow. It is apparent that the above records are for six of the better dairy herds in the county.

"The following brief summary will show results of the year work to date:

Total cows tested 1 year:	159
Number of herds:	6.
Average butterfat production by herds on year basis:	
No. 1:	335.94# butterfat.
No. 2:	279.77# butterfat.
No. 3:	280.61# butterfat.
No. 4:	346.76# butterfat.
No. 5:	329.64# butterfat.
No. 6:	297.79# butterfat.

"The record expected on completion of the seventh herd will be equal to or better than the highest shown above. However, it is obvious to all who are acquainted with the dairying in the county that all of the above records are above the average herd record for the county.

"The above figures also present a fallacy, in that a one year record made on the system of testing followed did not count against the herds the days in the dry periods or late lactation periods during the early part of the testing period, but took into consideration only the days in the lactation period from the date of freshening. This is true of all but one of the above herds.

"Interest in cow testing and dairy herd improvement

work is growing steadily in spite of many obstacles, and with more interest being taken by the local creamery and support of the vocational agriculture teacher and future farmer work; dairy herd improvement is taking a step forward. The formation of the long discussed cow testing association which is now practically complete will insure the continuation of dairy improvement. This association may be small, but if it starts with 350 cows will represent nearly 20% of the dairy cows in the county. Lots of the credit for the work done on this project should go to A. Cecil Stodieck, director of the Dairy Department of the farm bureau, who tested the milk samples from all the seven herds concerned, and who is actively pushing the formation of a local cow testing association, putting in considerable time and money. He has become an active local leader and is getting results."

(d) Feeding.

Agent

A. J. Reed, County Extension/of Pershing County reports

the following regarding the use of feeding:

"The use of bone meal was recommended to several farmers, but at this writing I can think of no one who actually began feeding bone meal during the year. This does not mean that some farmers have not fed it during the year; it does mean, however, that we have not checked back to make sure of those feeding it. Those who have fed bone meal are satisfied that cattle eat it and apparently need it to supplement our home grown feeds. This project will be continued during 1938."

Paul L. Maloney, District Extension Agent from Humboldt

County, reports the following:

"While there are two commercial, retail dairies in Winnemucca, they do not supply enough fresh milk for local consumption, making it necessary to ship milk a distance of 75 miles from an adjoining county. This method of supplying residents of Winnemucca with fresh milk is not entirely satisfactory during the summer months.

"Nine different dairymen have undertaken to produce milk for Winnemucca during the past 10 years and seven of them have gone broke, and the two remaining are trying

to sell their herds at this time.

"It is the opinion of the agent that all nine have made the same mistake, that of trying to dairy under the handicap of shipping hay 160 miles by truck. With the price of hay from \$8.00 to \$12.00 in the stack, 160 miles from the cows, it is almost impossible to produce milk and make it pay.

"Each dairyman coming into the district has been warned by the agent of the mistakes made by those who have not made the business a success and encouraged to produce his own feed as the first requirement to making the business pay a profit, however, none have ever done so.

"Under the 1937 Soil Conservation program one of the remaining local dairymen has undertaken to plant alfalfa to feed his dairy cows. If this program is completed in 1938 and sufficient alfalfa raised to feed all of his cows there is every indication that dairying can be made to pay a profit in this district.

"By raising their own feed, sufficient young stock can be kept for replacements, and the dry stock given at least six weeks rest between the lactation and dry period given to all cows. Hay can be produced for not to exceed \$5.00 per ton, whereas, it will cost at least \$12.00 and as high as \$20.00 per ton when shipped from distant points."

W. H. Stodieck, District Extension Agent of Douglas County

reports:

(e) Purebred Sires.

"Six new purebred Holstein dairy sires were put in service in 1937 with three of these on farms that had not had purebred Holstein sires before. In addition several purebred bulls were traded. Purebred and good grade calves were also sold by local dairymen to other local farmers. Some of these grade calves have better records behind their breeding than most of the purebred calves available.

"The publicity and discussion at meetings on this project has also forced the issue of using calves from cows of known production and the result is less trading in grade or scrub bulls of any description in the Holstein dairy herds. Little change was noted in the use of better dairy sires in the group of farmers milking shorthorn cows."



## (f) Dairy Sanitation.

Mr. W. H. Stodieck from Douglas County reported the following: "This project chosen as a sideline to a general dairy improvement program, was given attention only as a part of the general dairy program. It was discussed at one Dairy Department meeting and plans for better dairy houses were secured by the County Agent and distributed to three farmers. One news article was written. However, the progress made shows not much more than preliminary ground work. The local creamery is interested and the manager reports asking some farmers to clean up their premises. The Dairy Department director has also made it a point to talk with farmers in general on the subject. The Crescent Creamery in Reno, reports that Douglas County dairymen are far ahead of those in neighboring counties."

## 4. In Poultry.

## (c) Diseases.

## (1) Chickens.

County Agents have continued to give advice to poultry men regarding poultry diseases during 1937.

H. E. Boerlin, County Agent in Washoe county assisted four poultrymen in vaccinating their flocks, which totaled 3351 pullets.

There is a noticeable increase in the number of poultrymen vaccinating this year.

## (d) Housing.

Mr. W. H. Stodieck reports the following: "Two new poultry houses were built, one after a discussion on the future of poultry production. Both these houses were built where they make a more complete agricultural unit. It is the contention of the County Agent that there are eighty farms in Douglas County which should maintain poultry flocks of 100 to 500 hens, and that of these eighty farms only about 1/3 are properly equipped or have adopted modern feeding methods to efficiently produce eggs. Fully half of these farms carry about the number of hens suited to the enterprises now carried on their farms."

5. In Agronomy.  
(b) Variety Tests.

Several year ago, acting as Agronomy Specialist, the assistant director interested Royal D. Crook, Extension Agent for Churchill County in carrying on winter wheat variety tests on the Newlands Project, inasmuch as the varieties grown in Churchill County did not appear to be giving the yields that should be secured. Mr. Crook in reporting on variety tests carried on in Churchill County during 1937, reports results of this test as follows: "

"A wheat variety test was carried on in 1936-1937 on the Harold Fitz farm. After removing the wheat in the fall of 1936, the stubble was burned and the land double disked. The Gold Coin, Utah Turkey Red and 54a-40 were obtained from the Utah State Agricultural College, and the local Turkey Red, Tenmark and Albit were obtained locally.

"The wheat was planted in dry soil on October 17, 1936. The drill used was ten feet wide, with twenty drills. Allowing three inches on each side of the drill, the width of the drill row for each variety was ten feet, six inches. Each variety was planted one drill width north and south across the field. The outside check on both north and south side of the field was not planted to the test varieties. The total length of the test rows was 1,105 feet. The total area of each plot was therefore .2664 acre. All samples of wheat were dusted with copper carbonate immediately before planting. The varieties were planted in the following order, from west to east: Local Turkey Red, Tenmark, Gold Coin, Utah Turkey Red, 54-a-40, Albit.

"The field was irrigated soon after the wheat was planted, and the wheat sprouted very soon. The field was irrigated from east to west, so that all varieties were irrigated exactly the same. The first variety was planted about 65 feet from the west side of the field. A surface drain drew the excess water from the test plot fairly well.

"The fall weather was so cool that little growth took place, although the rows could be followed before the snow fell. It was evident in the fall that there would be some volunteer wheat from the previous crop. Because of the cold and a comparatively wet winter, no irrigation was needed until late in the spring.

"The weeds became fairly thick before the wheat matured. On July 16th when the wheat was turning, a count was made of the number of stems in a five foot length to determine the extent of the stooling of the various varieties. The average of three counts was as follows: Local Turkey Red - 134; Tenmark - 124; Gold Coin - 66; Utah Turkey Red - 123; 54-a-40 - 125; Albit - 103.

"There was little evidence of winter killing, so it was assumed that for some reason the Gold Coin did not stool out as well as other varieties. Albit was somewhat lower than the other four varieties. At this time it was estimated that the yield of the local Turkey Red would be reduced by weeds by about 8% or more, and Tenmark by 2%.

"The grain was harvested by a combine. The field was cut around in the usual manner up to the first variety on the west side. Before starting on the first variety, the machine was stopped and allowed to discharge all the grain. A new sack was put on the elevator chute. There was a little difficulty for the tractor driver to see the one foot space between the varieties, so a man walked along just ahead of the end of the header. The tractor travelled rather slowly, consequently the thresher blew over a considerable quantity of grain. At the end of the row the tractor was again stopped and allowed to clean out. The machine travelled around the field in the regular way to the next test strip, when the same procedure was again followed. The sacks from each variety were all tagged with shipping tags fastened to the bags by hog rings. The grain, was allowed to lie in the field for eight days, when it was hauled into Fallon and weighed. One sample was recleaned and found to contain approximately 5% by weight of weed seed and chaff. An examination of the Gold Coin wheat indicated that between twenty and thirty percent was volunteer local Turkey Red. It was assumed that all varieties were mixed with about an equal amount. This mixture of varieties made the grain worthless as seed for future tests.

"In an attempt to determine the percentage which was being blown over in the machine because of the low speed of the outfit, a strip of Albit growing beside the test strip of Albit was cut and the wheat weighed. Allowing for the greater width cut by the 12-foot combine, it was calculated that approximately 20% was lost through the machine in the test plots."

"The comparatively low yield obtained in all varieties may be accounted for by (1) the second year of wheat on this field; (2) disking rather than plowing; (3) large amount of weeds; (4) loss of wheat by the combine. The results of the variety test are tabulated below:

<u>Variety</u>	<u>Yield Lbs.</u>	<u>Percent Highest Yield</u>	<u>Yield Per Acre Lbs.</u>	<u>Aver. No. of Stems 5'</u>	<u>% of High- est No. of Stems</u>
Local Turkey Red	293	75.7	1,100	134	100.0
Tenmark	351	90.7	1,317	124	92.7
Gold Coin	235	60.7	882	66	49.2
Utah Turkey Red	365	94.3	1,370	123	91.8
54-a-40	387	100.0	1,453	125	93.2
Albit	357	92.2	1,340	103	76.7

"Allowing 8% for the weeds in the local Turkey Red variety, the yield might have been 319 lbs. and with 2% weeds in the Tenmark, it might have yielded 358 lbs.

#### SUMMARY

1. The general plan of the experiment is excellent.
2. 54-a-40 gave the highest yield by 5% over Utah Turkey Red.
3. 54-a-40 seems to have more of a tendency to lodge than any of the other varieties, although it was not serious.
4. The Utah Turkey Red seems to yield better than local Turkey Red, although the greater growth of weeds in the local Turkey Red might account for some of the difference in yield.
5. For some reason Gold Coin did not stool as well as any of the other varieties, producing only about 52% as many stems as the average of the four highest stooing varieties. The yield of the grain was only slightly higher in proportion than the rate of stooing. In 1936 Gold Coin yielded only 63.5% as much as the highest yielding variety.
6. 54-a-40 in 1936 gave the next highest yield and in the test this year excelled all of the varieties.
7. Albit, a white soft club wheat, may be very desirable under some circumstances, as it is beardless and the grain is white.
8. From the results of this year's trial, it might be concluded that either 54-a-40, Utah Turkey Red, Albit or Tenmark are well adapted to production in the Stillwater area."

Mr. W. H. Stodieck, District Extension Agent of Douglas County makes the following statement:

"(b) Wheat Varieties.

"Early in the year 1937 the County Agent secured three sacks of California approved Poso wheat seed, from Robinson of California who was one of the growers to whom the California College of Agriculture distributed seed of this new club variety for increase. These three sacks of seed were given to A. and L. Settelmeyer, local farmers, for a field planting trial. The seed was planted in April on land broken from a stand of alfalfa and according to local system considered clean for the production of seed wheat. It was planted and irrigated the same as a field of Pacific Bluestem planted on the balance of the field not covered by the three sacks of seed. The Poso wheat headed nearly ten days earlier than the Bluestem and when it was at full height averaged nearly six inches shorter. It matured fully ten days earlier than the taller Bluestem. The difference in height of the two varieties on this land was much more pronounced than on soil of almost the same type when planted in red row tests. In the tests Poso was easily six inches taller and the Bluestem about four inches taller.

"The Poso wheat did not do so well in a river gravel strip in the upper portion of the field but in other sections did very well producing 93 sacks of wheat averaging 140# per sack on 6.13 acres, or a total yield of 13,020#. This is at the rate of 35.4 bushels per acre. Unfortunately the yield of the Bluestem on the adjacent field was not taken at threshing time and is still undetermined. However, the average yield of wheat for the county is 33-1/3 bushels per acre. Indicating that Poso will yield with the best varieties and is worthy of trial on other land. At least one other planting will be made in 1938.

"A single field of Ramona wheat was planted by one farmer as a further trial plot. This wheat has become badly mixed with other varieties and was again damaged by rust. Its yield was not as large as last year but it again made a yield of just under a ton per acre. To continue with this variety it will be necessary to get a new supply of seed. Its yield while satisfactory is very little better than federation so that there is little object in getting the new seed. Federation is now grown on a limited acreage only".

(3) Smut Control.

Mark W. Menke of Elko County, Extension Agent, Reports:

"Directions and plans for building a grain treating machine

properly was emphasized throughout the spring and summer. Seeding early is desirable and the question of how much frost an alfalfa seedling can stand is frequently raised. Some farmers believe that seedlings will not freeze in normal late winter or spring temperatures. Observations of seedlings growing wild on the ditch banks lead to this conclusion. There was no injury last spring to seedlings just emerging from the ground when the temperature went to 26° and even lower. Reports are occasionally heard that February and early March seedings have been successful.

"Planting alfalfa without a nurse crop has been tried with success. On the old Williamson ranch Perch Schaffer planted more than thirty acres of alfalfa in May with no nurse crop. The stand is nearly perfect, except in some very bad soil. Two crops of hay were cut, with a total yield of 1½ tons of hay to the acre. Other farmers have had similar success in following this method. On sandy soil a nurse crop is necessary to hold plants against the wind. Farmers were advised to sow the nurse crop very light and to give the alfalfa seedlings the best possible care, regardless of the condition of the nurse crop. Some early plantings yielded a fair crop of hay after the nurse crops were harvested.

"Late summer seeding of alfalfa has become quite popular during recent years. The Newlands Experiment Farm superintendent reports almost 100% success through this method. Their soil is sandy and none of the legume or grass seedlings are safe in the spring months because of winds. The seed is drilled into the stubble of wheat or barley without prior preparation of the seed bed. On heavier soils the surface must be broken to provide a seed bed. August 15 to September 15 has proved to be the most favorable period for the fall plantings. Although there are a few cases of winter killing of fall plantings of alfalfa, they have been on the whole more satisfactory than spring plantings. Usually the fall planted stands are more uniform than those planted in the spring. This method also allows the harvesting of a full crop of grain without injury to the alfalfa.

"The amount of seed planted to the acre varies from 12 to 20 pounds. There seems to be little difference in thickness of stands resulting from the heavier seedings.

"The first crop of alfalfa was very weedy again this year. At least three farmers pulled weeds by hand from their alfalfa fields, but these are rare exceptions. Cultivation by spring tooth harrow

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or disk in most cases was largely ineffective. The worst weeds are the tansy, mustard, bronco grass and fox tail. The first two are winter annuals and by spring they have developed root systems which prevent their being torn out by ordinary cultivation methods. Thick uniform stands of alfalfa are the only effective preventives against weeds.

"Early cutting of alfalfa to secure the most value from the crop was urged by E. O. Pollock, Extension Hay Specialist, from Washington, D. C. at a meeting of hay growers in May. This is especially important when hay is to be shipped out of the state. Because of the publicity on this matter, there was some interest in cutting hay early and several farmers tried it out. Beef cattle feeders are especially anxious to get the more mature hay for their cattle.

"There was some damage to alfalfa by alfalfa weevil and a few fields were dusted to control the pest. Cold weather following the treatment prevented a normal growth after the weevil were killed.

"In an effort to determine the moisture content of hay as it went into the stack, 12 samples of hay were taken by dividing cocks into quarters and putting one part into burlap bags. The samples were weighed on the spot and the weight recorded on a tag on the bag. The remaining hay was carefully examined to get the "feel" of it. The samples were weighed daily to note the rate of loss of moisture. The samples were taken on five farms at different times. Most of the samples were much drier than necessary, according to a statement contained in a U.S.D.A. bulletin that hay will keep with a moisture content of 24%. After the samples were thoroughly air dried, they were chopped in an alfalfa cutter and the remaining moisture determined.

"A summary of the tests follows on the next page:



	: Field Wt :	: Final Air Dry Wt. :	: % Loss :	: Calculated Oven Dry Wt. :	: % Water of Original Weight :
H. A. Pinger #1	: 5.4 :	: 5.4 :	: - :	: 4.914 :	: 9. :
H. A. Pinger #2	: 5.0 :	: 5.02 :	: - :	: 4.55 :	: 9. :
H. A. Pinger #3	: 4.7 :	: 4.7 :	: - :	: 4.3 :	: 9. :
H. A. Pinger #4	: 6.3 :	: 6.33 :	: - :	: 5.75 :	: 9. :
H. A. Pinger #5	: 6.8 :	: 6.75 :	: .07 :	: 6.16 :	: 9. :
H. A. Pinger #6	: 5.4 :	: 5.4 :	: - :	: 4.914 :	: 9. :
H. A. Pinger #7	: 5.85 :	: 5.7 :	: 2.5 :	: 5.2 :	: 11.0 :
R. C. Cushman	: 5.15 :	: 5.05 :	: 1.9 :	: 4.6 :	: 10.8 :
J. W. Johnson #1	: 6.6 :	: 5.5 :	: 16.6 :	: 5. :	: 24.1 :
J. W. Johnson #2	: 6.4 :	: 5.9 :	: 7.8 :	: 5.36 :	: 16.2 :
A. A. Towle	: 7.1 :	: 5.8 :	: 18.3 :	: 5.3 :	: 25.0 :
Geo. Miller (Green)	: 15.9 :	: 4.52 :	: 72. :	: :	: 74.0 :

"As soon as it became evident that many stands had been thinned out, preparations were made for plowing and it appears from casual observation that several thousands of acres of alfalfa will be plowed by spring. Farmers were encouraged to grow at least two crops of grain before trying to reseed alfalfa, and to follow a definite rotation in handling their land in the future, so that they would never have a very large proportion of their alfalfa more than seven or eight years old.

"A four point program has been widely recommended to increase alfalfa yields; (1) keepint new stands; (2) rotation with other crops including a cultivated crop if possible; (3) using barn yard manure at least once in the rotation; (4) controlling pests and diseases.

"The conservation program has increased interest in reseeding alfalfa stands and other improvement practices."

- (f) Alfalfa.
- (5) Production.

W. H. Spodleck of Douglas County, Extension Agent has the following to say:

"Observations were made from time to time during the year on various alfalfa fields to compare the different varieties of alfalfa

from the standpoint of growth, habits, suitability to soil, and yield, and to ask farmers for their observations on growing conditions on their farms.

"Comparison was made between Common alfalfa, Grimm alfalfa, and Cossack alfalfa. Since 1932 there has been a decided swing away from the planting of Common alfalfa seed although it is still the most popular variety. Stands of Common alfalfa killed out heavily in 1932 and various reasons were given, but probably the best reason is simply that seed that had been sold as Northern grown was not, and could not stand the weather. The farmers have swung away from planting that variety to Grimm and Cossack. During the last few years the Grimm lost considerably in favor and Cossack has taken its place. Observations so far indicate that this is a satisfactory replacement.

"Grimm alfalfa has been grown for a considerable period in the county and following years of winter killing of the Common variety, has gained in popularity. During the period of continuing dry years its growth was extended into subirrigated sections where very poor crops, if any, of alfalfa had been grown before. Its yield of hay was recognized by farmers as not quite equal to Common (probably Chilian) alfalfa, but the quality of the hay was much better and on some of the farms it did give a better yield. Reaching its peak of popularity in 1930 to 1933 Grimm alfalfa spread even to some of the higher and drier land.

"One section, known as the Dressler hill where hard pan is known to exist at depths varying from two feet to seven or eight feet, Grimm alfalfa has proven itself as a heavy yielding variety and due probably to the hard pan does not suffer but very little more than Common when water for irrigation is not available. However, in the deep soil on the east side of the valley Grimm requires more irrigation and when the water is short it is unable to tap the deep water supply and failed in some cases to even make a second and third cutting, where Common does make a fair cutting without irrigation. During the last few years with the advent of the alfalfa weevil Grimm has lost some of its apparent popularity and one definite reason is that in greening earlier than the Common alfalfa it seems to become the haven for adult alfalfa weevil. As a result weevil attacks in the Grimm fields adjacent to Common fields are heavier further reducing the yield. It is also apparent that in spite of the fact that it has never seriously winter killed that it will lose plants and the stand thin rapidly after about six years, although up to that time it maintains the heaviest stand. Observations in one field, would indicate that this is due to mixing of seeds by dealers, so that which was purchased for Grimm seed was not entirely Grimm seed.

"Cossack alfalfa is a new variety to the county, a few plantings being made in 1928, 1929, and 1930, but it continues to increase in acreage. Most of the stands planted as early as 1928 are still in good bearing condition and seem to reach their peak in production in about the third or fourth years. The hay is of good quality, carrying more leaves and finer stems than Common. The yield on most farms is equal to that of Common but slightly less in some areas. According to present indications this variety should continue to increase in popularity and acreage, although it has not been grown long enough to prove its ability to maintain a heavy stand.

"The old Common alfalfa has regained its place over plantings of Grimm on a few farms. Not all the farmers are yet willing to plant the higher priced seed of Cossack. There is also reason to believe that there are several other reasons for too rapid loss of stands, wilt may be present, dry years had their effect, and California Valley seed is not suitable.

"One field of Ladak (probably the most resistant variety to wilt) is reported in the valley and its growth was observed. It has made only a fair stand and cannot be compared on a fair basis.

"The best comparison of the three varieties--Cossack, Grimm and Common--may be observed on the Mack Land Cattle Company ranch immediately south of Minden, where one field is planted to Grimm, one to Cossack, and one to Common alfalfa. In the first four years the Cossack is by far the best. The common got off to a poor start but each year its production has increased until now it rivals that of the Cossack. The Grimm field has been more or less disappointing. This is not an absolutely fair test to Grimm alfalfa as the field in which it was planted is inclined to be gravelly and dry. To summarize briefly-- in spite of the disappointing growth of Grimm alfalfa in some areas in the county it still has a very definite place in the subirrigated fields where it will out-yield and out-last any other variety yet known, but it is a mistake to plant it in soil where other varieties will produce better.

"The Chilean strain of Common alfalfa, if grown from Northern grown seed, is fully able to stand the winter, and is still probably the most popular variety. Due to its yielding capacity it has a very definite place in the alfalfa growing in Douglas County.

"Cossack is promising and on some areas is proving a valuable variety and is earning its increased popularity. Further observations should be made on this variety to determine its ability to maintain a heavy yielding stand over a long period of years, water conditions being considered. It is apparent that the search for a

new variety to replace Common started after several years of drouth in which old stands of alfalfa went into the winter in a weakened condition and that Cossack had picked up its popularity by plantings made about the time water conditions improved.

- (g) Sweet Clover
- (2) Clover Crops

The following is an excerpt from the report of Mr. Paul L. Maloney, District Extension Agent from Humboldt County:

"Ranchers who practice grain growing and use the same fields year after year, have been encouraged to plant sweet clover under the Soil Conservation Program. Pasture the clover the first year and plow it under the second year as a green manure crop. Believing that this program will increase the grain harvested from such lands, the program will be continued in 1938".

- (h) Pastures
- (1) Introduction

County agents reported that more work had been done in the improvement of pastures in the past year. The work reported by Royal D. Crook, District Extension Agent of Churchill County, as follows, is typical of the work which has been done.

"Thirty-five people participated in a tour of pastures in June. The tour was planned to show first, that pastures are practical in this locality; second, that strawberry clover does well in soil with a high water table, which usually means high alkali content; third, that strawberry clover does well in good soil; fourth, that ladino clover probably does better on good soil than strawberry clover; fifth, that sweet clover provides a large amount of feed for a season or two; and sixth, that mixed grasses and clovers provide an almost ideal pasture for dairy cattle".

- (j) Potatoes
- (1) Seed Selection

M. E. Beerlin, County Extension Agent of Washoe County reports:

"In 1936 the agent tried to get certified seed potatoes in here in cooperative shipments for use by farmers of the county. Interest could not be aroused to get one carload. This year, however, numerous requests were had as to where certified seed could be obtained. One grower was assisted in getting a carload. Some good prices were received on the 1936 crop, but very low prices have prevailed so far on the 1937 crop."

(q) Onions.

County Extension Agent H. E. Boerlin of Washoe County reports:

"Onions are an important cash crop in Washoe County. About 125 acres were grown this year. Onions are a crop requiring special care. The agent took motion pictures of two onion harvesting machines in operation. These proved quite successful and were shown in all farm centers and in Churchill County. The machines were developed by Ernest Kleppe, the original Washoe County onion grower. They are capable of topping, grading and sacking 500 to 700 sacks per day".

- (r) Sugar Beets
- (l) Seed Production

County Extension Agent of Clark County, J. H. Wittwer makes the following statement:

"Sugar beet seed production in Clark County presents a "hectic career".

"It's first year in 1933 with 5 acres yielding 3,200 pounds per acre, likewise its second year 1934 with 35 acres yielding, 2,600 pounds per acre gave evidence of a potential industry with a very encouraging outlook. The expanded acres in 1935 met with some disappointments owing to, as was claimed, wild morning glory infestations. The 1936 acreages were undertaken with every acre carefully checked for wild morning glory. The increased acreage, however, called for greater speed in harvesting, and as a consequence, harvesting machinery was employed that, in addition to questionable adaptable acreages, resulted in heavy losses of seed in the field, and a higher percentage of waste in recleaning processes at the cleaning plant in St. George, Utah. Proposals for more liberal considerations regarding promiscuous use of commercial fertilizers, advance payments, and increased acreages were made by a growers' committee for consideration for the 1937 acreage. These proposals were followed by

promises to be complied with by the Sugar Company's agents.

"The 1937 production program was marked by the following items:

1. No marked increased acreage.
2. One well conducted variety seed and commercial fertilizer test plot under direction of the U. S. Bureau of Plant Industry, Sugar Beet Seed Investigations. This plot gave evidence of the fact that (1) Commercial fertilizer should be applied only following carefully developed practice on the different types of soils used; (2) That no "blanket" application of treating all acreages alike regardless of type should be expected; (3) whitefly resistant varieties can be grown to advantage in the Moapa Valley Area; (4) Moapa Area growers must give more attention to weed control - to prevent harbouring places for white fly or other injurious insect pests; (5) that additional information concerning commercial fertilizer use should be made available for the different types of soils of the Moapa Area.

Two test plots have been started in Washoe County this year. If the trials are successful these beets will winter over in the ground, grow out next spring and for seed for harvest in about July; the yield should be 1500 to 2000 pounds per acre. Also if these tests are successful it will mean a new cash crop for farmers in the Washoe County area.

W. H. Stodieck, District Extension Agent of Douglas and Ormsby Counties has the following to say:

"At various times in the last year Douglas County has been mentioned as an area in which it may be possible to produce sugar beet seed. Along this line, Thomas E. Buckman, Assistant Director for Extension, suggested that a planting be made in the fall of 1937 for seed in the spring of 1938 and he made preliminary arrangements with the West Coast Sugar Beet Seed Committee for trials.

Several farmers in Douglas County were asked to cooperate by preparing a plot of land in late July which would be seeded early in August. Several of these farmers with suitable land found it practically impossible in the height of the harvest season to prepare land and other farmers were substituted. Two farmers prepared land in two parts of the valley in entirely different soil. The seed was planted late in August. In one of these seed plots, the young sugar beets have made rapid progress and very satisfactory growth according to a report of the beet seed committee. This acre plot will be fertilized this fall and carried on for seed next spring and summer. The second plot germinated well but for some reason has failed to grow properly, probably due to allowing the beets to get too dry in September and then, after a late irrigation, subirrigation from underground water in October has kept them from growing. This field was also heavily infested with weeds and the trial was discontinued since it is supposed that the small plants would not survive the winter in a conditions to make a seed crop in 1938. The accepted plot is being grown by William C. White, who is intensely interested".

#### 6. Agricultural Economics

- (a) Marketing
- (5) Livestock
  - (a) Lambs

C. R. Townsend, District Extension Agent for White Pine County: "The agent cooperated with the Producers' Livestock Marketing Association of Salt Lake, Utah, in the marketing of fat and feeder lambs for growers throughout the county. The following tabulation shows the volume of work under this activity:

NAME	ADDRESS	NO. OF LAMBS	WEIGHT	PRICE	AMOUNT
Ayarbe Bros.	Ibapah, Utah	686	42,235	8.10	\$3421.03
Wade H. Parrish	Ibapah, Utah	817	51,085	8.10	4137.88
Arnaud Oillarburu	Ibapah, Utah	487	31,645	8.10	2563.25
Wayne Gonder	Baker, Nevada	99	6,630	8.10	537.03
Glen Bellander	Baker, Nevada	406	26,275	8.10	2128.27
P. W. Baker	Baker, Nevada	499	36,290	8.10	2939.49
Total		2994	194,160	8.10	\$15,726.95"

6. In Agricultural Economics  
(a) Marketing  
(5) Livestock

The following from the report of Paul L. Maloney, District Extension Agent of Lander-and Humboldt Counties is of special interest.

"One of the most effective and beneficial campaigns conducted in Humboldt county during the past few years has been done in marketing feeder livestock.

"The greatest and most lasting benefits have been in securing the cooperation of the ranchers in producing a feeder steer which will better meet the market demands, causing them to sell easier and at a higher price.

"While there are districts in the east and middle west where shorthorn cattle are still produced in large numbers to supply the demands on the Chicago market for heavy cattle, the packers on the coast of California demand lighter steers, with a somewhat lighter bone, and a bigger dressing percentage. Herefords meet these demands, while packers contend that short-horns get too large and rough for their trade in California.

"When cattle are scarce in numbers the shorthorn cattle will sell, but at a lower figure per hundred pounds as the buyer does not like to put the high dollar into a steer that would be hard to move should the market break, however, when the feeder buys the kind that the packers want, there will always be a place to go with them even when the market is being over-run with cattle.

"When the cattle are long on numbers and the price low, then the buyers pick just the ones they desire most, leaving the undesirable kind to be taken up at a lower figure.

"With the demands being made on the retailer for smaller cuts of beef from an animal, fattened at a shorter age, the packers have demanded that kind of an animal from the feeders and consequently from the producers.

"It has been a difficult campaign to get ranchers to change the breed of their cattle, they have been raising shorthorn cattle all of their lives, and it is almost impossible to "



to understand why a shorthorn is not just as good as a Hereford; and for all purposes, except to sell, they are, but cattle are grown by the producer to sell, he is in the business to make money, he is producing something that he must sell to some one else and consequently must meet the demands of the buyer.

"The campaign to change the breed of the cattle in Humboldt county was started in 1933 and at this time all of the growers with the exception of two have changed to Hereford bulls.

"Many of the yearling steers offered for sale this fall have been the first cross, with 90 per cent of them white face or bronko-faces, these bunches have all moved out to buyers, however, there are more than 1000 of the straight shorthorns left in the county unsold. Dozens of buyers have seen them but as long as the Herefords are available the shorthorns will not sell except at a low price, and the Herefords have brought a half cent more per pound than the shorthorns are being offered for.

"With the decreased demand for the type of cattle that was being offered for sale in Humboldt county, it has been necessary to make every effort possible to see that they are sold each year. Letters are sent to prospective buyers describing the class of stock available. A list of those ranches with cattle for sale is given to buyers who visit the district in order to make it easier for them to visit the different places, and saving them unnecessary trips to places where the stock might be sold.

"The agent refrains from talking price to either the seller or the purchaser; as serious damage might be done a producer if he is encouraged to hold his stock for a higher price than is being offered, as the price is an unstable factor and might slip two or three cents per pound in a few weeks. The buyer resents an outside man placing a price on some one else's stock, the producer also objects to having some one else place a price on his stock. Therefore, the safest and most satisfactory method to pursue in the marketing process is to encourage the stockman to produce an animal that the buyers demand, then get the buyer and seller together--if they cannot deal, then the agent has done his duty anyway.

"It is only in supplying unbiased information to both the seller and the buyer that the greatest amount of service can be rendered. For if the purchaser knows that the County Agent is trying to keep the price up for more than the market will stand, all of the buyers will stay away from the agent and as a result many of the stock may not sell when they are ready to be moved to market. However, if they know they can get a listing of the stock throughout the county without any mention of prices they will accept such a list and come back next year for another one.

"Both the buyer and the seller have come to know that the duties of the County Agent is purely educational as far as the marketing is concerned. However, the desire to render personal services at the ranch has caused the ranchers to depend more and more upon the agent. At marketing time the buyer and seller are not only gotten together by the agent but many times the buyer is in a hurry and cannot stay around for several days waiting for the stock to be delivered, the agent is given information relating to destination etc., and they are loaded and billed out by the agent.

"Checks are delivered to the seller after the stock are loaded, drafts are drawn by the agent on the seller for the amount of the stock. All of the details connected with the marketing of livestock is conducted by the agent."

- (a) Marketing
- (5) Livestock

H. E. Boerlin, County Extension Agent, Washoe County states:

"This project covers cooperative shipping, market information, listings of cattle and sheep feeder stock for sale, and assistance given buyers in locating the type of stock they wish to buy.

"During the past year three loads of cooperative shipments of cattle have been made to the San Francisco market. Those represented in the shipments were: A.A. Neilson, E. McIntosh, J. C. Wholey, W.E. Burke, A. Reed, S. J. Carano, Model Dairy and Bruce Albright. Cooperative shipments are made only on request of those wishing to sell stock at the time when the local market is unable to use them.

"The agent keeps the regular market news service readily available to those who wish it, as well as a special Tuesday morning letter giving the activities of the San Francisco market of Monday. In addition, telephone calls in two instances during the past year have saved stockmen from shipping to a crowded market, and by holding off for one week in each case has saved the producers a considerable sum."

- (a) Marketing
- (3) Dairy Products

H. E. Boerlin, Extension Agent from Washoe County reports:

"The dairy marketing situation has remained on an even keel during 1937 and has proved a successful year for both the producer and the distributor.

"Due to rising production costs the dairy distributors got together on a new price schedule during the year and have held conscientiously to it. The schedule raised the house delivery price of a quart of milk from ten cents to twelve cents, and a corresponding raise in larger or smaller quantities. The price boost was also passed on to the producers, raising their gallonage price from fourteen to eighteen cents.

"During the year there has been no milk war and very little price cutting.

"Both organizations held annual meetings during the year and elected officers. The agent assisted in getting the organization records in good standing in the office of the Secretary of State as no report has been made to that office for some years past.

- (a) Marketing
- (4) Eggs and Poultry

Mr. Boerlin, Agent of Washoe County further reports: "Cooperation was continued with the Nevada Poultry Association. The association

during the year made considerable improvement in it's plant, doubling the floor space with a new feed room addition. This additional space makes possible a better feed supply service to the poultrymen. The association now can conveniently handle all eggs and poultry grown in western Nevada and also supply all feed needs.

"The poultry association supplied poultry vaccine for those wishing to vaccinate for fowl pox this year."

#### (7) Turkeys

Herewith follows a report of the Churchill County turkey marketing activities as given by District Extension Agent, Royal D.

Crook:

"Marketing turkeys has been a major project in this county for many years. In addition to acting in an advisory capacity, the agent has for some time acted as manager of the packing operations, in order that the Extension office might keep in close touch with this important cooperative effort. The amount of business done by the local association is so small that the management cost might run too high if the members had to pay for it. Connections with the association offer many opportunities to do educational work along other lines, such as feeding, management and disease control. For these reasons the time spent in marketing is considered well spent, although it would probably be wise to gradually withdraw from active management.

"Some new developments took place during the season. The receiving dates were extended to include six full days. This allowed many growers to do most of their own picking. It also relieved a serious congestion in the packing shed. Printed head wraps were used for the first time. All undergrades had the head wraps removed and new plain white ones put on. The boxes furnished by the Northwestern Turkey Growers Association were smaller than they had been, 22x30x8 inches, and made so that no nails were necessary in making them up or fastening down the lids. Several shipments in less than car lots were made by truck to Reno and San Francisco. The Nevada Poultry Producers Association this year became a sales agent for the Northwestern Association for the Nevada territory under a special agreement. At least three carloads of turkeys were handled by the Reno agency. The local market was thus kept for the nearby producers and freight was saved. The association in this way widened the outlet for association turkeys, stabilized the local price and forced some who formerly peddled turkeys to sell through the association. The possibility of getting warm turkeys into cold storage within a few hours of the time they were packed helped to solve the problem of warm birds in warm weather.

"Prospective low prices made growers generally very sensitive to the way their turkeys were graded and the graders were no doubt somewhat influenced to lift up a little in their requirements to reach the higher grades. At any rate the grading was not quite as good as it might have been, in fact the Nevada Association for the first time lost its one-half cent premium. The lack of space in the packing shed handicapped the packing operations so that proper sizing and even boxing was scarcely possible. It is possible that the other turkey packers have advanced in their methods and the Fallon pack does not show up as well.

"At the suggestion of Mr. L. E. Cline, Nevada Extension Specialist, the graders and the president of the association made a trip to San Francisco to see the turkeys on the market. Observations made at the market lead to the conclusion that Association turkeys looked no better than many other turkey packs-- in fact there were some more carefully selected and packed. The condensation of moisture on the birds when exposed to the atmosphere on the coast makes obvious the reason why the turkeys must be clean, free from blood and dirt. Apparently bruises, scratches and other blemishes look progressively worse as time passes, which makes it obvious why it is important to handle turkeys carefully. A car of turkeys packed at Yerington was examined and found to be rather poorly graded and packed.

"After this trip there arose a desire on the part of Fallon growers to force more specific identification of turkeys shipped from the various localities. It is hoped that a community pride might be worked up to keep the standards high.

"The marketing activities of the Fallon Turkey Growers Association for the 1936-7 season are summarized in the following table:

Grade	SUMMARY POUNDS				
	Nov.	Dec.	Jan.	Feb.	Total
P.Y.T.	34,947	73,874	11,428	3,902	124,151
P.Y.H.	38,519	36,001	1,938	1,109	77,567
P.O.T.	858	70			928
P.O.H.	510	130	341		981
C.Y.T.	3,218	13,143	1,949	670	18,980
C.Y.H.	1,683	2,730	84	238	4,735
Com.	397	1,855	183	190	2,625
Totals	80,132	127,803	15,923	6,109	229,967

"With the Nevada Poultry Producers acting as agent for the association, there was no necessity for the local association to pack after the regular freezer pool for the turkeys could be shipped directly to Reno loose.

"During the early fall the Nevada Poultry Producers requested cooperation in trials in shipping live turkeys. A number of crates were built and the best birds available were sent to them. While several difficulties were encountered the trial was fairly successful. Inadequate killing facilities at Reno seems to be the most serious difficulty. The turkeys were not mature and there were plenty of pin feathers left even after scalding. There is, however, the possibility that this practice may be further developed next year.

"In cooperation with Mr. L. E. Cline, a test of the feasibility of marketing small turkeys was made. Fourteen turkeys, 7 hens and 7 toms, 81 days old, were obtained. They were confined in a pen 8 feet wide and 10 feet long, and fed a ration of laying mash mixed with corn meal and skim milk to make a 16% ration. The turkeys did not seem to be off feed at any time, even though they were moved from their own environment. During the 10 days, they gained an average of .77 pounds each, the hens gaining .70 pounds and toms .84 pounds, each. The total feed consumed was 36.5 pounds, dry weight, an average of 3.38 pounds of feed for each pound of gain. The toms averaged 4.9 pounds at the beginning and 5.8 pounds at the time they were shipped, while the hens weighed 4.4 pounds at the beginning and 4.9 pounds at the shipping time."

(15) Collective Bargaining.

A. J. Reed, County Extension Agent of Pershing County reports as follows:

"Collective bargaining was a very important and popular project this year. Farmers needed to make every saving possible, and still get good quality. Following is a statement of the business done by the Pershing Agricultural Association this year:

MARKETING:

20 tons of wheat for Lovelock Ranch @ \$32.50	\$650.00
20 tons of wheat for Rodgers Ranch @ \$35.00	700.00
5025# of turkeys	<u>941.23</u>
Total Marketing Returns	\$2291.23

COOPERATIVE PURCHASING:

30 tons of Little Club seed wheat	\$ 1200.00
20,000# of alfalfa seed @ 25¢	5000.00
1500 tons of hay purchased for sheepmen @ \$8.67	13000.00
2½ tons of turkey starting mash	146.50
4½ tons of turkey growing mash	212.50
45,000 grain bags @ 7½¢	3375.00
Twine for above bags	207.00
	<u>\$23,141.00</u>

TOTAL BUSINESS DONE:

Cooperative Marketing	\$ 2291.23
Cooperative Purchasing	<u>23141.00</u>
	\$25432.23

"This project is an important one, not only from the standpoint of money saved but from the standpoint of obtaining the quality and variety of seed that we want".

## (16) Use of current Market Information.

W. H. Stodieck, District Extension Agent, Douglas-Ormsby Counties, has the following to say:

"Most of the work on marketing during 1937 follows the same principle as that in the past, that of making available to the farmers all the information possible, as to marketing conditions, crop supplies, and interpret local factors as they are affected by outside markets.

"This work makes use of the outlooks and various crops and market reports issued by the government as well as keeping abreast of local sales. The marketing of livestock in late fall, winter, and spring has the greatest affect in Douglas County on the total income. It is at that time of the year that farmers are most interested in marketing. This year the County Agent was instrumental in having five farmers placed on the mailing list of the Daily Livestock Market Report from San Francisco. Most of the larger farmers have learned to interpret these reports and when given information on outlooks, storage holdings, etc., are able themselves to judge pretty well as to what to expect and most of them dealing as they are make few mistakes in selling their products. There is enough competition from small buyers even though the community is small so that any buyer cannot long buy below the market.

"The County Agent has found this information on marketing useful in calling to the attention of the farmers the value of quality products as there has been a definite trend during the last few years in making a distinction between quality products and prices paid. To illustrate, good quality well fattened Hereford steers sold at the same day at a premium of as much as two cents a pound more than poor quality fattened steers. When these factors are properly interpreted to farmers they themselves can see the value of improving the quality of their own stock. The County Agent has been forced by changing markets not to advise making actual sales whether or not the offered price is fair. The decision to sell is up to the farmer and all the County Agent can do is to supply the latest information available when and if he is asked for it.

"The last year's work on marketing of this type has been carried on in the selling of alfalfa hay, finding buyers for it and in keeping farmers informed when outside inquiries come through the Farm Bureau office. The same work was carried on for barley, and in locating markets for dairy cows and hogs".

The following is from the report of Paul L. Maloney, District Extension Agent for Humboldt and Lander Counties:

"Market information from the Bureau of Agricultural Economics has been used to try and keep the stockmen informed as to the national picture relating to their commodities. Information coming from the Bureau early in the fall indicated that livestock prices would not hold up and that feeders who paid the high prices would likely take a loss. This information was sent to the livestock producers with the hope that they could understand that their feeder steers would likely be sold on a declining market this fall. To take advantage of the situation would have been to sell as soon as the stock were ready and not hold them, hoping that the price would rise, those who followed that procedure made money. Those who were influenced to hold their cattle lost money by doing so."

#### ACTIVITIES AND ORGANIZATION OF MARKETING SPECIALIST.

The principal activities of Mr. Cline, Extension Agricultural Economist and Specialist, for the year to date, has been in connection with agricultural outlook for commodities produced in Nevada, cooperative marketing of Nevada farm products, and organization and re-organization of agricultural cooperative associations in the State.



The agricultural outlook work in the State has been given special attention by this office. The principal agricultural products produced in the state were given special treatment in the way of outlook situation reports at the first of the year and each month since that time current outlook reports and market situations have been prepared and published as news stories or as circular letters. A total of forty-seven stories and eleven circulars have been prepared in this connection covering the major farm commodities of the State.

The marketing of turkeys, poultry products, feeder cattle and sheep has been given its due amount of time and attention. The turkey marketing project was closed for the 1936 crop in March, and will be resumed on November 1st for the 1937 crop.

The poultry and egg marketing project has been continued throughout the year. This project is carried on in cooperation with the Nevada Poultry Producers Cooperative Association through which most of the Nevada poultry products are marketed.

An important activity of this office is the cooperative cattle and sheep marketing project, in which the State Extension Office, all of the county agents and Nevada State Farm Bureau cooperate with the livestock men of the state in marketing their feeder cattle and sheep. There has been a very general participation this year by the livestock men in this activity. Approximately 50,000 sheep and 40,000 cattle will have been listed in this cooperative

effort for the 1937 marketing season.

An important activity for this office this year has been the reorganization of three county Farm Bureau organizations and three cooperative marketing associations and the organization of three new cooperative marketing associations. The organization papers for these associations were prepared in this office.

Some time has been devoted to attending committee meetings and attending state and regional meetings in this connection.

(b) Credit

Considerable time was spent the past year by County Agents in assisting farmers in making applications for financing or refinancing themselves.

(1) Farm Loans

Mr. Paul L. Maloney of Humboldt and Lander Counties, District Extension Agent reports:

"Applications for loans from the Federal Land Bank have been filled out by the county agent and submitted to the Land Bank officials.

The following is from the report of E. B. Recanzone, County Extension Agent of Lyon County:

"The Federal Land Bank being an active loaning agency in this county and having many loans already in operation, as well as

several farms, it was deemed advisable that the Agent be prepared to assist farmers with regard to this association,

"Problems, which the Agent was to confront, were assisting tenants on Federal Land Bank properties in making application for purchase of that property; assisting farmers desiring refinancing in making application to the Federal Land Bank, as well as assisting in the working out of any problems which may confront the farmer in regard to his dealings with the Bank.

"Six farmers were assisted in making application to the Federal Land Bank for a total amount of seventy-five thousand one hundred dollars. These applications ranged from eleven hundred to thirty-five thousand dollars. Three of these applications were for the purpose of refinancing present indebtedness. One application for sixty-five hundred dollars was approved and closed; one of thirty-five thousand dollars received a committal of twenty-five thousand dollars and is still pending. Three applications were for the purchase of new property with one approved and two rejected. Two farmers were assisted in making arrangements for purchase of property from the Federal Land Bank which they were formerly leasing.

"In comparing these figures with those of a year ago, we find that fewer applications were made, and that amounts applied for were on the average smaller amounts than during the previous year. This would tend to indicate that the farmers are financially more secure and are satisfactorily working out their indebtedness without outside assistance. We find also that a larger proportion of the amount applied for was rejected than was rejected the previous year, tending to indicate that the more sound set-ups are now taken care of, whereas those remaining are more marginal units.

"One district within the county remains to be assisted through the Federal Land Bank. The Land Bank having closed this district to loans until such time that proper drainage is installed. Drainage canals are now being constructed and upon their completion, the Bank can render a great service to this community."

### (3) Feed and Livestock Loans

Paul L. Maloney, District Extension Agent for Humboldt and

Lander Counties reports:

"The Nevada Livestock Production Credit Corporation has been of great assistance in relieving the livestock men in the matter of loans on their livestock and budgets for operating expenses. Applications for several loans have been made through the County Agent's office as are the renewal notes and yearly budgets".

Mr. E. B. Recanzone, Lyon County Agent, makes the following statements which are of interest.

"Feed and Livestock Loans. With the number of Production Credit Association loans in the county and the possibility of others making application to this agency, it was deemed advisable that steps be taken to inform farmers of the association, and to assist them in making their applications.

"During the year, eleven farmers made application to the Nevada Livestock Production Credit Association through this office. The amount of their applications totaled thirteen thousand eight hundred and fifty dollars. Of the eleven applicants, four have been granted loans totaling eight thousand twenty-four dollars. Two applications are still pending; two applicants withdrew their applications before word was received as to their acceptance; and three were rejected.

"The Nevada Livestock Production Credit Association, has during the past year, rendered a real service to farmers in this territory needing financing on their chattels.

"During the year, the Nevada Livestock Production Credit Association called upon the Agent nine times to make inspection of cattle. With the Agent's cooperation in this line, the farmers were saved the inspection fee, in that the Agent's inspection report was accepted by the Production Credit Association.

(4) "Production Loans, Nine farmers were assisted in making application to the Emergency Crop and Feed Loan Office for a total of one thousand six hundred forty-five dollars. These loans were used for the purchase of wheat and potato seed and for harvesting of crops. One loan was a feed loan and was used for the purchase of turkey feed.

"Before these loans were passed on to the office for acceptance, a loan committee consisting of: J. E. Beaupert, Mr. J. G. McGowan and Mr. H. C. Hansen, approved the applications.

" Resettlement Administration. The Resettlement Administration is now taking up the majority of small loans. During the year, twenty farmers were assisted in making application and contacting the administration and were successful in borrowing seventeen thousand one hundred sixty dollars.

"This agency has in many cases given small operators with little or no security, a new lease on the outlook. Money from the Resettlement Administration has been used for payment of taxes, purchase of seed, farm implements, operating expenses, dairy cows, work horses and many other small items which many of the loaning agencies do not consider as security. In every instance these loans were treated with the utmost respect by the borrower and these loans are proving to be a great aid to the small operators.

"The Agent cooperated with the Resettlement Administration in discussing problems and recommend programs to be followed by their clients; also in referring applicants to the Supervisor, and giving assistance and advice in closing of loans which had been granted."

"The Agent met with the Advisory Board as an ex-officio member and assisted in the program with recommendations on farm plans".

(4) Production loans (includes seed loans)

Mr. Royal D. Crook of Churchill County made the following statement which is of interest:

"The demand for credit was more normal in character than it has been for some time. Some farmers were still seeking refinancing, but most of the farmers who talked over their problems with the agent were interested in purchasing new livestock, machinery or land.

"The operations of the Nevada Livestock Production Credit Association were developed quite satisfactorily in this county. In cooperation with the manager of the association, a typical dairy and farm loan was worked out, with the repayment plan including the proceeds from hay, veal, milk cows, hogs and poultry. The cream did not contribute to the repayments for seven months and the amount was only about one and one-half per cent of the loan per month. The repayment has not been kept up to schedule, but it is not far behind at the present time.

"Two loans were made to turkey growers without mortgages. The farmers were required to sign agreements not to mortgage any property without the prior consent of the association. Both signed assignments of proceeds from the sale of turkeys. The chief difficulty encountered by the borrowers was in buying grain directly from the farmers with the billof sale drafts required by the association. No one in the neighborhood who had grain to sell was free to do so without the consent of some mortgage holder and a total of 9 old mortgages were cleared up before clear title could be given to two

lots of grain. This is very annoying to both buyer and seller, although it is a very good procedure in the long run.

"The Rural Rehabilitation division has financed a comparatively large number of farmers in this country. Of the 618 farms counted in the census, more than 10% have loans through this organization. On the whole, the loans have done the farmers the good they were designed to do."

(d) Farm Management.

Farm Management Studies

The 1936 farm accounts were closed and 6 news bulletins written, based on the data derived from these accounts. Three of the news bulletins were prepared by the extension office and three by the Experiment Station office. Dairy and poultry efficiency studies were made from data derived from the accounts.

The average family income of .63 families, after deducting the cost of farm operations, was \$3010, varying in different income groups from \$651 to \$7614, and the average living expense of these same families was \$1659, varying in the different groups from \$781 to \$2763. The lowest income group had living expenses in excess of the family income.

Family privilege, including rent of the farm dwelling and farm produce, was 17.5 per cent of the average family income and 31 per cent of the average family expense. Food produced on the farm amounted to 48.4 per cent of the total food budget.

Fifty-six farm accounts were tabulated. They were divided into five groups, dairy, crop, general, livestock, and livestock-dairy. Cash income from these groups varied from \$3707 in the dairy group to \$8429 in the livestock group and expenses varied from \$2322 in the crop

group to \$5178 in the livestock group. The average return to capital and family labor was as follows: Dairy \$1770; general \$1778; crop \$1863; livestock-dairy \$2465; and livestock \$2822.

In 1937 we expect to complete 70 accounts. These accounts require a visit to each farm at the beginning of the year which serves for both closing and beginning inventories, and two other visits to each farm during the year.

#### DISCUSSION GROUPS:

Two conference meetings for state discussion leaders were attended by Mr. V. E. Scott, Extension Economist, one at Salt Lake City, and one in Chicago in August, 1937.

Discussion programs were given at farm center meetings in Lyon, Churchill and Douglas counties and one leaders' school was held in Reno. This project is the most difficult in our list of projects in which to create and maintain interest.

#### COUNTY PROGRAM PLANNING:

Meetings were held during the spring of 1937 and considerable interest was shown. It was felt the future work must present definite projects which Extension Agents and Farm Bureau Committees could attack.

We are planning to hold farm budgeting meetings in Douglas, Lyon, Churchill and Clark counties in which the farm account cooperators are a nucleus. At these meetings both farm and county planning will be stressed.

#### (9) General Farm Accounts

The following is from the report of Mr. W. H. Stodieck:

"Complete farm accounts were completed on eleven farms in Douglas County in January, 1937, through V. E. Scott and Louis Titus

of the Department of Farm Development of the Nevada Experiment Station. On these accounts the County Agent did little more than make contacts occasionally to keep farmers attention, and summarize one account. These accounts, however, are a valuable source of information on the income and state of affairs on the average farm in the county".

Mr. Royal D. Crook, District Extension Agent of Churchill County, has the following to report:

"Farm accounts were kept in cooperation with the Experiment Station. The cooperators were visited only about once during the year by the agent. After the records for 1936 were completed and summarized by the Experiment Station, they were sent to the agent for distribution. Every farmer was visited and the records were discussed in detail with the operator. Figures showing the size of business, efficiency of labor, productivity of the crops and livestock, were given special consideration. Discussing these figures in the light of their effect on the net income for the farm gave splendid opportunity to point out the necessity for following such practices as crop rotation, fertilizing land, the use of better sires and the value of dairy herd improvement association work.

"This procedure is the first constructive plan followed by the agent in improving the farms through the farm records. The analyses sent out by the Station and Extension officers were used for follow up work. Discussing the records with the farmers on their own ranches also gave opportunity to explain the terms used in the analysis, so that they were understood by the farmer.

"Problems of management were discussed with a large number of operators. Recommended practices were really considered in the light of their effect on the farm as a unit for making a living. Several people were advised regarding leases, enlarging the acreage, increasing and decreasing livestock and poultry numbers, buying equipment and many other problems."

(1) Economic Planning.

Mr. Mark W. Menke, County Agent of Elko County reports:

"County Planning Committee meetings were held in nine communities. Sheepmen were also interviewed in Elko. Professor V. E. Scott accompanied the Agent and led the discussion on County Planning activities.



"Approximately 20 per cent of the ranchers throughout the county were contacted. According to this survey, and contrary to the general opinion, Elko County ranchers produce all of their vegetables in season and their meat supply the year round; practically all of their milk and from 90 to 100 per cent of their eggs.

"The average farm garden is one acre in size and all of the vegetables required for family use in season, are raised on the ranch. Vegetables, such as lettuce out of season, artichokes, etc., were not included in the above. From this survey it is evident that Elko County ranchers are producing more garden products than in some areas in the state.

"According to the Bureau of Agricultural Economics in 1935, the gross income from gardens from the State of Nevada was \$78,000 out of a total gross income of \$11,256,000 for all crops and livestock. The value of each garden per farm was \$49.00. According to the Home Economics Division of the Extension Service the figures show that out of Nevada's 3600 farms, 1592 were credited with gardens, and the value of each of these gardens per farm was \$49.00.

"Elko County ranchers produce 95 to 100 per cent of their meat supply. In fact, the only meat purchased is a small amount of ham and bacon. It is true that considerable meat is purchased by ranchers at different times, but the supply is off-set by beef which is killed on the farm, a part of which is sold to neighbors or in town.

"Starr Valley reported more fruit trees than any other community although the White Rock section also was known to be an abundant fruit producing section with fewer ranchers than Starr Valley.

"The average ranch milks 5 cows from a milk cow herd of 8 to 10 cattle. This number of cows supplies sufficient milk and butter for ranch use.

"Most of the communities produced 100 per cent of the eggs used on the farm, although some communities did not produce over 90 per cent. It was the practice in a number of communities to preserve the extra supply of eggs in water glass during the summer months for use in the winter months when the egg supply is short.

"Since inquiries are often made as to the value of radio programs and to the area which they cover a survey discloses that more than 95 per cent of the ranch homes are supplied with radios in working condition. The reception was found to be better in

the country than in the rural towns. Station KSL was available throughout the county at any time of the day or evening. Some of the better radios reported that they could get San Francisco and Los Angeles during the day.

"Most of the communities reported that they were understocked with cattle. Out of more than 50 ranches interviewed 100 per cent were in favor of seeing all grazing permits tied to the land. It was the opinion among ranchers in most of the communities that while their areas were understocked there were certain areas which were overstocked, and that there was a vital need for redistribution of livestock on both range and ranch land.

(j) Rural Rehabilitation and Resettlement.

Royal D. Crook, District Extension Agent of Churchill

County states:

"A total of 91 loans to farmers by the Rural Rehabilitation Division of the Farm Security Administration are outstanding at the present time. This is about 15% of the total number of farms in the county. Practically every loan which has been made has been discussed either in meetings or with the Rural Rehabilitation Supervisor before they have been made.

"A Rehabilitation Supervisor was stationed at Fallon since October 1st, which makes possible closer supervision of the loans and better understanding of conditions before loans are made.

"Close cooperation exists between the Extension Office and the Rural Rehabilitation Office. As far as the Agent has been able to observe, the loans have been well placed and well handled."

J. H. Wittwer, Agent at Clark County says: "Through work of the Resettlement, Rural Rehabilitation (later Farm Security Administration) it developed that specific data on commodity (specialized crops) would facilitate work of preparing farm plans for applications for loans. Merits of providing for such through the Farm Management Division of the Experiment Station will be given further consideration before proceeding with such".

- (k) Agricultural Adjustment
- (l) Soil Conservation and Domestic Allotment Act

INTRODUCTION

There has been no particular change in the operation of the Agricultural and Range Conservation Programs under the terms

of the Soil Conservation and Domestic Allotment Act in 1937. The principal operations of Nevada being for the purpose of carrying out the provisions of the Conservation Program. The administrative set-up in the nation has remained the same with the Western Region containing thirteen states which includes Nevada. A branch of the General Accounting Office is still maintained in Berkeley, California for the purpose of auditing Grants to farmers and the Disbursing Office in San Francisco writes the checks for payments of these Grants as well as payment of County Association expenses.

One change of particular value in the interest of efficiency was the changing of payment of County Association Expenses from the Washington office of the Disbursing Office and putting the responsibility of auditing the County Association Expense claims in the hands of the State Office. This change permits County Association Expenses to be paid within a few months after the submission of such claims by the county.

The Western Region supervisonal work is in charge of Mr. H. E. Schwartz for Nevada, California, Utah, New Mexico and Arizona.

#### ORGANIZATION OF THE WORK IN NEVADA

The Agricultural Conservation Program is supervised in Nevada  
by -

1. The State Agricultural Conservation Committee
2. The State Extension Service
3. The State Technical Committee

4. The County Agricultural Conservation Committees
5. The State Agricultural Conservation Office

The offices of the Agricultural Conservation Program in Nevada are located in the Agricultural Extension Service Building, at the University of Nevada. This office arrangement is worked out through the cooperation of the Extension Service and the University officials. Facilities are adequate and satisfactory.

(A) The State Agricultural Conservation Committee.

The State Agricultural Conservation Committee is composed of farmers appointed by the Secretary of Agriculture. The committee for 1937 is composed of four members who are: George F. Ogilvie, Lee, Elko County, Chairman; Louis Stodieck, Gardnerville, Douglas County; E. A. Settelmeyer, Reno, Washoe County and Edwin L. Harriman, Fallon, Churchill County. The committee is well balanced, carrying one cattle man, one sheep man and two general farmers. Various interests are represented by these committeemen as they are representatives of, or interested in farmers' organizations in the state, especially the Nevada State Farm Bureau. These men also represent activities in the local marketing associations and in the activities of the Taylor Grazing Districts in Nevada.

This committee has the particular duty of supervising all phases of the Agricultural Conservation Program in the state, in making the program effective and seeing that cooperative efforts is carried out with agricultural agencies in the state. They also have the specific job of supervising the work in the county, in carrying on certain types of educational work within the limit of the amount

of time that they have available. This committee has met on an average of about every six weeks during the year for one to two day periods.

(B) The University of Nevada Agricultural Extension Service.

The success of the program in the state is due to the efforts of the Agricultural Extension Service and the County Agents. C. W. Creel, Director, and Thomas E. Buckman, Assistant Director, have cooperated in working out the details of the program from a state and county angle, and have permitted a very close cooperation in the counties with the local extension agents. The Agricultural extension agents have been permitted to take the leadership of the program in the counties and have acted as secretaries to the County Associations and their offices have been headquarters of the Associations and the secretaries in the County Agents' offices have acted as treasurers of the Associations. This permits of an economical and desirable set-up in Nevada which means a great saving in time and money for the success of the program. County agents, acting as administrative officers in counties, have less time than usual to devote to their ordinary educational work. This situation should be corrected to some extent by providing funds in the County Association Budgets for the purpose of taking some of this load off of the shoulders of the County Agent and permitting him to spend more time in promoting the program from an educational standpoint. To do this

would not involve a very large expenditure of money and it is recommended that in at least six counties such assistance should be provided. It is noted in the Report of the Agricultural Extension Service that the County Agents devoted over 512 days work to this program between November 1, 1936 and October 1, 1937, 357 days of the time being devoted to office work. The Extension Agent is really acting as administrator of the program in the county and all phases of the program have to be handled through his office. It is believed that by having some additional funds in county budgets, for the purpose of having office assistants working on the details of the program, that the program will develop much more rapidly and more farmers will participate in it inasmuch as the County Agent will have more time available for the educational part.

(C) The State Technical Committee.

The State Technical Committee officially consists of C. W. Creel, Director of the Nevada Extension Service, S. B. Doten, Director of the Nevada Experiment Station, and Robert Stewart, Dean of the College of Agriculture, University of Nevada. There is a sub-committee consisting of L. E. Cline and V. E. Scott of the Extension Service, F. B. Headley and Charles Fleming from the Experiment Station, George Hardman, Soil Conservation Service, Cruz Venstrom, Land Planning Consultant of the Bureau of Agricultural Economics, and Otto R. Schulz, Extension Soil Conservationist. This committee has the particular job of approving projects under the program from a technical standpoint. They usually meet at the same time as the State Committee and are especially active during the time

when new projects are being discussed. Individuals on this committee have been consulted at frequent intervals for the purpose of obtaining technical knowledge in regard to various practices in the program. The members of this committee have been very cooperative at all times.

(D) The County Agricultural Conservation Associations.

County Agricultural Associations are organized in ten districts, comprising seventeen counties in the state, as follows: Churchill County, Clark County, Douglas-Ormsby Counties, Elko County, Humboldt County, Lincoln County, Lyon-Mineral Counties, Pershing County, Washoe-Storey Counties, and White Pine District including Esmeralda, Eureka, Lander, Nye and White Pine Counties. These associations are organized annually by holding meetings among the farmers of the county for the purpose of electing the Board of Directors of the Association. These directors elect their own officers. The work of the committee is administrative for all phases of the program and, as stated before, the County Agents are secretaries of these committees and the treasurer is usually the County Agent's secretary. The offices of the Association are maintained without expense to the Association in the County Agents' offices. This makes it possible to have desirable meeting place with sufficient personnel to operate the program.

(D) The State Agricultural Conservation Office.

The State Agricultural Conservation Office is maintained in the Agricultural Extension Service Building at the Univer-

sity of Nevada at Reno. Sufficient personnel is employed here to see that the planning and promoting of the Program goes forward properly and to supervise all phases of the Program. All expenses attached to the operating of the program are audited in the State Office as are the Applications for Payment for farmers cooperating in the Program. Personnel of the State Office consists of six people, including the Executive Secretary. These people have charge of all phases of the program with no specially assigned duties inasmuch as the number of farms in the state does not warrant a larger force with specific duties. The accounting work is probably an exception, as one person devotes practically full time to this work.

#### FINANCES

Beginning July 1, 1937 a change in the method of handling finances of the program was made and instead of having Letters of Authorization come through the Director of Extension Service, these letters were issued to the Directors of the various regions under the program. An allotment of funds was then made to the Executive Secretary who was charged with the responsibility of the expenditure of these funds.

Finances for the operation of the program during 1937 may be divided into -



1. Allotment for Grants to farmers
2. Allotment for County Association Expenses
3. Allotment for State Office Administrative Work
4. Allotment for mapping program

The allotment for grants to farmers in 1937 is \$114,228.00. This allotment is for the purpose of paying grants to farmers under both the Range and Agricultural Conservation Programs.

The allotment to cover County Association Expenses for the period from March 1, 1937 to June 30, 1938 has so far been \$67,104.97. This amount really was to cover the Association Expenses for the period from March 1, 1937 to February 28, 1938 and an additional allotment will be needed to run County Associations to June 30, 1938.

The allotment for State Office Administrative work in 1937 was \$11,700.00. This money is to pay salaries of State Office employees and includes the travel for per annum employees.

The allotment for mapping program in 1937 was \$11,600.00. This money is used for the salaries of the personnel of the mapping work in the State Office, including the State Agricultural Conservation Engineer and six District Agricultural Conservation Engineers.

The total of these allotments is \$198,528.00 for the period from July 1, 1937 to December 31, 1937. Expenditures amounting to \$77,371.48 have been made up to December 31, 1937, leaving an unallotted balance for the 1937-38 fiscal year of \$121,156.52.

Additional funds will be needed for County Association Expenses for the period from March 1, 1938 to June 30, 1938, in-

asmuch as new County Association Budgets are presented on March 1, 1938. Additional funds will also be needed for the Mapping Program and State Office Administrative Expenses for the period up to June 30, 1938. The Mapping Program, being a special phase of the Conservation Program, could not be chargeable to Administration costs. Administrative costs in County Associations for the period from March 1, 1937 to February 28, 1938 are about \$13,000.00, or about 10% of the amount of grants paid to farmers under the 1937 Program. The administrative costs for the State Office amount to \$5502.42, or slightly less than 5% of the amount paid for farmers under the 1937 Program. The total cost of the Mapping Program, including the county and state office costs, will run close to \$70,000.00 for 1937.

Upon receipt of these allotments from the Western Division, the State Office allots to each county an amount equal to the approximate amount of the grants estimated for the Program for the particular year. In the case of the County Association Expense, amounts allotted to the counties are the amounts of the approved budgets. The State Office keeps a daily check on expenditures and audits all expense claims against these various allotments.

#### 1936 PROGRAM

Before going into a discussion of the 1937 Program, it will be of some interest to discuss the final results of the 1936 Program. The total amount of grants paid the farmers under the 1936 Program, exclusive of County Association Expenses, was

\$130,836.21. By counties as follows: Churchill - \$25,564.90, Clark - \$5,404.72, Douglas - \$17,328.49, Elko - \$16,594.99, Esmeralda - \$573.00, Eureka - \$1,499.25, Humboldt - \$9,275.38, Lander - \$4,745.97, Lincoln - \$2,523.05, Lyon - \$14,308.91, Mineral - \$50.33, Nye - \$1,647.66, Ormsby - \$609.77, Pershing - \$13,229.76, Storey - \$145.81, Washoe - \$13,090.96, White Pine - \$4,243.26. The above totals include payments under the Range Program for the following counties, Washoe - \$555.10, Humboldt - \$218.96, Elko - \$768.60, Ormsby - \$120.21. All payments for grants had been made, with the exception of a few decedent cases, early in 1937 and by the first of November, 1937 these decedent cases had been paid, thus completing payment for all grants in the 1936 Program. In order to earn these grants, farmers had diverted over 5,000 acres of soil depleting crops, had planted over 18,000 acres of soil conserving crops and had made certain improvements under the Range Program such as spring and well development and fencing. Along with the closing up of the 1936 Program it was necessary to get the 1937 Program under way through educational means and organization of County Committees.

#### THE NEVADA AGRICULTURAL CONSERVATION PROGRAM FOR 1937

The methods used in planning and promoting the 1937 Agricultural Conservation Program were similar to those used on the 1936 Program. Meetings of farmers were held throughout the state in counties, at which time the Extension Service presented the details of the Program to the farmers. The County Committees

Douglas-Ormsby Counties - Ernest Dressler  
 George Heidtman  
 Leslie Jacobsen  
 Edward Godecke  
 W. H. Stodieck, Secretary  
 Leslie Jacobsen, Treasurer

Elko County - M. M. Murphy  
 Archie J. Dewar  
 C. H. Reinken  
 Max F. Uhlig  
 Mark W. Menke, Secretary  
 Dorothy Phillips, Treasurer

Humboldt County - F. B. Stewart  
 Arnold V. Schwartz  
 Irvin Case  
 George Miller  
 Paul L. Maloney, Secretary  
 George Miller, Treasurer

Cherchill	Lincoln County	9,783 acres	- Karl C. Stewart	9,783 acres
Clark		3,340	William Dwyer	3,340
Douglas		5,347	Harry Frehner	5,347
Elko		11,463	Louie A. Gardella, Secretary	
Esmeralda		197.8	Barbara Ibach, Treasurer	
Eureka		200		
Humboldt	Lyon-Mineral Counties		- Roland J. Snyder	8,218
Lander		1,212	Achille Cardelli	1,212
Lincoln		1,438	J. H. Hardie	1,438
Lyon		7,191	W. A. Pray	7,191
Mineral		207	E. B. Recanzone, Secretary	
Nye		1,304	Pearl Henrichs, Treasurer	
Ormsby		194		
Pershing	Pershing County	5,760	- Lavant Lovelock	5,760
Storey		100	Vic Sebbas	100
Washoe		7,821	Howard Sommer	7,821
White Pine		2,493	Matt Smith	2,493
			A. J. Reed, Secretary	
			Geraldine Johnson, Treasurer	
			Andrew Nelson	
	Total.....	63,477.5		

Washoe-Storey Counties - Leo F. Sauer  
 A. A. Nielson  
 Charles Oppie  
 Edward M. Peckham  
 H. E. Boerlin, Secretary  
 Marguerite Savage, Treasurer  
 O. C. Dickinson

The County Committees held meetings during the year for the purpose of transacting business, revising the budget, approving applications for the mapping program, holding educational meetings in the counties on both the 1937 and 1938 programs and preparing for the mapping program. This necessitated, in some counties, about a meeting each month, while in the

Douglas-Ormsby Counties - Ernest Dressler  
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 C. H. Reinken  
 Max F. Uhlig  
 Mark W. Menke, Secretary  
 Dorothy Phillips, Treasurer

Humboldt County - F. B. Stewart  
 Arnold V. Schwartz  
 Irvin Case  
 George Miller  
 Paul L. Maloney, Secretary  
 George Miller, Treasurer

Lincoln County - Karl C. Stewart  
 William Dwyer  
 Harry Frehner  
 Louie A. Cardella, Secretary  
 Barbara Ibach, Treasurer

Lyon-Mineral Counties - Roland J. Snyder  
 Achille Cardelli  
 J. H. Hardie  
 W. A. Pray  
 E. B. Recanzone, Secretary  
 Pearl Henrichs, Treasurer

Pershing County - Lavant Loveleck  
 Vic Sebbas  
 Howard Sommer  
 Matt Smith  
 A. J. Reed, Secretary  
 Geraldine Johnson, Treasurer  
 Andrew Nelson

Washoe-Storey Counties - Leo F. Sauer  
 A. A. Nielson  
 Charles Oppio  
 Edward M. Peckham  
 H. E. Boerlin, Secretary  
 Marguerite Savage, Treasurer  
 O. C. Dickinson

White Pine District - A. N. Carter  
 Carl Madsen  
 J. L. Whipple  
 George Swallow  
 Charles McLeod  
 Reinhold Sadler  
 George McKenna  
 F. M. Schmidlein  
 C. R. Townsend, Secretary  
 Sigrid Oas, Treasurer

Following the election of the county committees and the securing of the work sheets, the county committees met and established soil depleting bases which were approved on June

18th by the State Committee as follows:

<u>COUNTY</u>	<u>COUNTY COMMITTEE RECOMMENDATIONS</u>	<u>STATE COMMITTEE ADJUSTMENT</u>
Churchill	9,722 acres	9,600 acres
Clark	3,340 "	3,340 "
Douglas	5,347 "	5,250 "
Elko	11,863 "	11,000 "
Esmeralda	197.8 "	198 "
Eureka	380 "	380 "
Humboldt	5,216 "	5,216 "
Lander	1,212 "	*1,212 "
Lincoln	1,438 "	1,438 "
Lyon	7,191 "	7,191 "
Mineral	207 "	207 "
Nye	1,506 "	1,350 "
Ormsby	196 "	198 "
Pershing	5,838 "	5,750 "
Storey	108 "	108 "
Washoe	7,221 "	7,000 "
White Pine	2,495 "	2,495 "
Total.....	63,477.8 "	61,931 "

\* Subject to further consideration.

The County Committees held many other meetings during the year for the purpose of transacting business of the Association, revising the budget, approving Applications for Grants, discussing the 1938 Program, holding educational meetings in the counties on both the 1937 and 1938 programs and preparing for the mapping program. This necessitated, in some counties, almost a meeting each month, while in the

smaller counties a meeting every two months seemed to be sufficient.

In adopting the county budgets for 1937, the County Committees had to take into consideration the amount of field and office work needed outside of the mapping program in order to efficiently handle the work in the counties. In most counties sufficient funds were allotted for stenographic assistance and in some counties some funds were allotted for office assistants. Considerable assistance was given counties in 1937 on compliance determination on account of the mapping program and this matter will have to be taken into consideration in developing the 1938 County budgets because it is apparent that additional office assistance will be needed for both the clerical and supervisory work as there will probably be no funds available from the State Office. The thought here is to set up the county offices in such a way that they will operate economically and efficiently but at the same time will have sufficient personnel to properly administer the program. On account of the fact that there appears to be two rush periods during the program, early in the spring and during the summer, it is difficult to maintain full time personnel without increasing the expenses duly. This has a tendency to place considerable administrative work on the county agents, and I believe that this matter should have consideration in setting up the 1938 budgets.

STATE COMMITTEE:

The State Committee met about eight times during 1937 for the purpose of administering the program, approving county bases, and work on the 1938 program. The meetings of the State Committee are always

attended by representatives of the Extension Division and the Technical Committee.

The State Committee, in considering soil-depleting base for each county, found the following table of interest to them. This table shows a total of 2,615 work sheets, covering 2,524,482 acres, with 462,312 acres of crop land.

<u>County</u>	<u>No. Work Sheets</u>	<u>All Land In Farms</u>	<u>Crop Land</u>
Churchill	516	69,576	38,919
Clark	233	15,831	6,574
Douglas	127	80,998	19,806
Elko	310	1,234,514	133,453
Esmeralda	13	12,940	1,411
Eureka	28	53,834	8,651
Humboldt	100	347,373	92,608
Lander	45	115,083	11,599
Lincoln	124	30,968	8,083
Lyon	306	119,340	38,833
Mineral	27	2,560	1,119
Nye	75	80,902	12,073
Ormsby	8	2,891	997
Pershing	122	61,451	31,187
Storey	8	1,311	473
Washoe	405	210,253	38,947
White Pine	167	84,659	17,579

RANGE PROGRAM:

Five counties will participate in the Range Program for 1937 with about 100 livestock men interested. Range carrying capacities were determined under the supervision of the Forest Service but on account of the time available and the lack of personnel it was impossible to complete the work on the 529,000 acres involved in the program. Range carrying capacities were determined in sufficient volume to permit any livestock man to participate in the program up



to his possible range building allowance and his capacity to do the work by the end of the year. The State Committee suggested several adjustments to be made in the 1937 Range Program to the Western Division.

FARM MAPPING PROGRAM:

The Western Division decided it would be desirable to have a farm map made of each farm participating in the program, combining with this the determination of compliance for 1937. It was thought that this would provide the permanent information for future determination of performance on farms in the state. No aerial mapping was done and all the work was done by the ground mapping method. The Equipment consisted of plane tables and alidades, with three men crews, and by June 15th all counties were in full swing on this work. Budgets had been revised to permit of this cost. A State Agricultural Conservation Engineer and six district assistants were appointed to supervise the work in the field. Five men were employed in the State Office for the purpose of doing the planimeter and tracing work. Thirty-three crews were involved with a total force of ninety-men. The work continued until about the first of November, and by December 31st there had been 372,857 acres surveyed, on 1,696 farms. By counties, the results are as follows:

<u>County</u>	<u>No. Work Sheets</u>	<u>Farms Surveyed</u>	<u>Acres Surveyed</u>
Churchill	516	457	47,806
Clark	233	223	8,909
Douglas-Ormsby	135	104	26,189
Elko	310	88	46,362
Humboldt	100	68	22,125
Lincoln	124	108	14,958
Lyon-Mineral	333	216	79,622
Pershing	122	61	19,532
Washoe-Storey	413	196	34,439
White Pine District	329	191	72,915

To December 31st the State Mapping Office has planimetered and traced 50,901 acres and has planimetered an additional 139,369 acres. There will be about six weeks more work on planimetering of farms where payment is involved and about five months work with the present sized crew for completing the tracings on all farms mapped in 1937.

PAYMENTS:

The mapping program being completed in all the counties by November 1, acreage determinations were not completed in sufficient volume for County Associations to start preparing many applications for payment prior to December 31st.

Under our present procedure for Nevada for the 1937 program, County Associations are preparing all applications for payment after the acreage determination is made for the farm in the State Office. In order to avoid errors in preparation of the applications and on Reports of Performance, these forms are prepared by the counties in pencil and forwarded to the State Office for correction. Following this, the applications and Reports of Performance are typed, farmers signatures secured, and County Committee approval secured, the applications are then forwarded to the State Office where, after audit, they are sent to the General Accounting Office for approval and payment. This procedure is a little inefficient on account of the duplicate handlings of the papers but it seems best to handle it in this manner because of the lack of trained personnel in the county offices. This also acts as an educational guide in the county office in preparing the

forms. It is estimated that there will be about 1,240 applications made under the 1937 program for approximately \$95,000.00. On December 31st there had been forwarded to the General Accounting Office 134 applications for \$7,830.00. The average payment per application for the 1937 program is smaller than for the 1936 program, with about the same number of applications involved. This is only a preliminary estimate but indications point to smaller payment for Nevada in 1937 than in 1936. This is probably due to the fact that county committees were more careful in the revision of soil-depleting bases for 1937 consequently reducing the Class I, or diversion payment. It is also to be expected that a smaller amount of money would be paid to the farmers in 1937 than was paid in 1936 because of the establishment of so-called diversion and non-diversion farms. About 75% of the 2,615 farms are non-diversion farms. This means that these farms do not secure a diversion payment and can only secure payment by following the practices. It will be necessary, at a later date, to prepare a statistical summary of the results of the 1937 program following the completion of payments and preparation of statistics relative to planning and diversions. This should be finished in about two months.

1938 PROGRAM:

The 1938 program has been given considerable attention for

the past six months. Work was started on it early in June when county-wide meetings were held in the state for the purpose of submitting suggestions for practices and improvements to the program. The County Committees submitted these suggestions and they were considered by a committee of the State Committee meeting with presidents of County Associations. Mr. H. E. Schwartz of the Western Division participated in this conference along with officials of the Extension Service, Experiment Station, Soil Conservation Service, Forest Service, Taylor Grazing Act representatives and State Planning Committees. Discussion of these proposed practices and changes lasted for two days and the report submitted to Washington. Following this meeting, representatives of the Western States met in Washington for the purpose of outlining the 1938 Agricultural Conservation Program. This program was signed officially by the Secretary of Agriculture on October 23, 1937 and copies forwarded to the states. Following receipt of the approved program for 1938, the state office prepared the list of practices and submitted them to the counties for their consideration. The county recommendations were discussed at a meeting of the State Committee and State Technical Committee and the approved practices for Nevada for the 1938 program were forwarded to Washington early in December. Meetings were held with all county committees in cooperation with the Nevada Extension Service, relative to the 1938 program. Six general meetings of farm leaders in different counties have been addressed on the 1938 program and county agents have held educational

meetings in preparation for the election of new county committees for the 1938 program.

In connection with the 1938 program a potato referendum was held in Lyon, Douglas and Washoe Counties to determine if the potato growers in these counties desired to have special potato goals set under the Agricultural Conservation Program for 1938. The total results of this referendum was 54 "yes" votes and 3 "no" votes. These growers represented practically 95% of the commercial potato acreage in these counties and therefore, as a result of this election, these three counties will have special goals established.

On account of several important changes in the 1938 program, county offices have quite a heavy load for the first two months of 1938. It is necessary to reestablish bases on all farms, secure new work sheets, list all work sheets, secure a county soil-depleting goal and then establish individual soil-depleting goals for each farm in the county, set special potato goals, hold educational meetings on the 1938 program and notify each farmer of the total and special soil-depleting goals for his farm and the soil-building goal. This type of work will necessitate the employment of some clerks in the county offices to handle this matter. At the present time Congress is preparing to pass a new Agricultural Adjustment Act which, we understand, will include the Agricultural Conservation Program for 1938. This Act will probably contain additional features which will be handled

by the Agricultural Conservation Association. It is difficult to say at this time how much of this new legislation will be especially important to Nevada but doubtless there will be some, thus necessitating additional cost to be contemplated by the County Associations.

GENERAL:

The rapidity with which one program follows another, with all the detailed statistical work involved in office and field has made it rather difficult to carry out a desirable educational program among the farmers in the state. Plans are being made for an early effort of education among the farmers in order that they may be thoroughly familiar with the terms of the program and that they may more readily cooperate. Our setup in the state, I believe, is satisfactory primarily due to the close cooperation that the Extension Service has given. I believe that this can be made more efficient by giving careful consideration to more help in county offices. Efforts for the 1938 program should be toward a strong educational program, and to a better financed program in order that more farmers may participate in the program.

7. In Animal Husbandry  
(a) Beef Cattle  
(1) Range improvement (includes revegetation  
and maintenance - control of livestock)

Paul L. Maloney, Humboldt County Extension Agent says:

"The Assistant Director for Agriculture for Nevada sponsored an observation tour of the National Forest in Elko County. The purpose being to observe methods of range improvement as conducted by the Forest Service.

"A two day trip was made throughout the National Forest with the rangers as guides. Studies were made of the different methods of range improvement by the various methods of handling the range. The results were very outstanding and educational.

"Under the Soil Conservation Program range improvement practices are being carried out where possible, this consists of drilling of wells, constructing drift fences and spring development. These improvements permit a better distribution of the cattle over the ranges and allow the operator through fences to hold the stock off of certain areas until the grass is ready to be grazed."

H. E. Boerlin, County Extension Agent for Washoe County reports:

"Washoe County to date has received two range experimental plots which are sponsored by the Forest Service.

"As a result of a tour of the range in the Pyramid Lake Section, with T. E. Buckman of the Nevada Extension Service, C. E. Fleming of the Nevada Experiment Station, and Doc Stewart and A. McQueen of the Forest Service, two plots were located near the road to Pyramid Lake.

"The four-acre plots are fenced by the Forest Service and the tabulation, etc., done in cooperation with the Extension Service and the Experiment Station of the University of Nevada.

"Northern Washoe County stockmen have requested plots be established there and in the Gerlach section. It is hoped that these requests may be taken care of in next year's program.

- (2) Range management (includes standardization of breeding herds-feeding-reduction of losses)

Mr. Paul L. Maloney, Humboldt County Extension Agent

states:

"A Campaign to standardize the breeding herds in Humboldt county was started in 1933. Considering the slowness with which most stockmen accept changes, the program has progressed in a fairly satisfactory manner. While most every rancher in the county has purchased Hereford bulls, many of them have also kept the shorthorn bulls until they were too old for service, which has made it slow in getting all of the calves of a uniform type and color.

"Believing that the weakest factor in the management of our herds in Humboldt county at this time, is the small number of calves raised from each 100 breeding cows the agent started a campaign to increase the calf crop by listing all of the factors involved in connection with the calf crop problem. These factors were incorporated into a newspaper article, which was published in state papers also a national livestock magazine. Copies of the paper containing the article were sent to livestock producers in Humboldt county. Many producers have expressed their complete accord with the factors involved and the principles included in the article will be easier to bring before the stockmen after having read them in the newspaper.

"An important factor in the campaign to increase the calf crop is to keep sufficient bulls of the right age to insure a normal calf crop. In the past many stockmen made a practice of exchanging old bulls for an equal number of old bulls. It has been proven that these old bulls do not cover the range, but stay on the low elevations near the first water hole they come to, as a result there will be a low calf crop percentage the following year. Old bulls will sire rough calves, while the calves from a young bull will be smoother and show more quality.

Ranchers who have been influenced to purchase a sufficient number of young bulls for their herds report the largest branding they have had for many years in the past. One operator was discovered with 3000 head of cattle and only 20 old bulls, which number was not sufficient for a herd of 500 cows. Not



only does this lack of bulls cut down his own calf crop but seriously penalizes those ranchers who range in the same area as it increases the number of cattle to be served by those who do not keep the proper number of bulls.

"In order to raise a larger number of the calves that are born, ranchers are encouraged to regulate the calving period of their cattle, by withholding the bulls from the breeding herd during the months of April, May and June".

"In 1933 the agent constructed a simple, but more or less crude, stanchion type of chute that cost only a few dollars to build. After studying the places where improvements could be made in the chute, the improvements have been added each time a new chute was constructed until at this time one that is satisfactory in most every detail has been perfected and answering the purpose in a satisfactory manner to all who have used it.

"One of these improved, simple, low cost chutes can be found today on most every ranch of any size in the county. Whereas, in 1933 only two operators dehorned their stock, in 1937 every producer in Humboldt county dehorned his cattle and is glad that he started doing so.

"Believing that there should be a standard method of constructing a dehorning chute the agent published a bulletin giving detailed instructions for building one of these chutes. Each step in the construction is described in detail which will enable those who cannot read a blue print to be able to build one of these chutes."

C. R. Townsend, District Extension Agent for White Pine

County reports:

"The agent discussed plans for the management of cattle on the public domain with members of the White Pine Mountain Livestock Association, the Lund-Preston Livestock Association, Sunnyside Livestock Association, and other ranchers in the county. These ranchers presented their plans to the Taylor Grazing District Advisory Board. They made recommendations regarding the shifting of stock driveways, development of watering places, establishment of salt grounds, seasonal use of public domains, better sires, winter feeding, and the control of Bang's disease in cattle herds."

(8) Grading.

H. E. Boerlin, Extension Agent from Washoe County states:

"Washoe County livestock men met recently on the Jones

ranch near Reno to witness a cattle grading demonstration sponsored by the county extension service. J. K. Wallace, senior marketing specialist, W. S. D. A. conducted the demonstration selecting small lots of the various grades of steers from the herd of J. F. Kleppe and Sons.

"Four lots of steers were used, showing first the excellent, blocky, white face fleshy feeder type, the seconds illustrated the more upstanding type which showed less ability to feed out economically; and the third group displayed fair feeders but with horns. The practice of leaving the horns on, according to Wallace, accounts for a lowering in the grade and a loss in moving and handling steers due to bruises. A striking comparison was made between the top grade feeder steers and culls.

"The need for grading livestock offered for sale was thoroughly impressed upon the minds of all those present as was also the economy to be found in feeding only first class steers. Mr. Wallace also capably discussed general marketing problems and trends in livestock prices and quality.

"The demonstration proved to be a regular "field day" for stockmen with the Washoe County Farm Bureau providing light refreshments. Following this there was a lively polo game on the nearby Glendale field between the Glendale Riding Club and the Bar JK."

- (b) Sheep
- (2) Range management (includes standardization of breeding flocks - feeding - reduction of losses)

Paul L. Maloney, Humboldt County Extension Agent:

"Evidenced by the fact that certain producers get a lower price for their wool every year, is the need for a standardization of their breeding flocks to produce a wool desired by the buyers. Practically the same clips are left behind every year and the reasons given by the buyers is that the wool is not the type desired by the mills and must command a lower price. By purchasing the proper type of bucks this trouble can be eliminated. Efforts are being made to get those growers with the off-type wool to change their bucks to produce just as good a lamb and also a better grade of wool. Very little progress is being made in getting this, desirable change, the fact that this group have been unable to see, in past years, why they get a lower price or had to hold their wool for many months after the rest of the clips were shipped, proves that they are the kind of producers

that are slow to accept suggestions for improving their flocks. They can not or will not see far enough ahead to know that they can make more money by producing a wool that is in demand by the mills, and that by paying a few dollars more for bucks of the right type that they can build up the quality of their clips. The cost of self-deception is high".

Mark W. Menke of Elko County reports:

"The Agent accompanied the Forest Service and Extension Service officials on a two day tour of the northern portions of the Humboldt National Forest. The purpose of this very instructive and enjoyable trip was to study methods of forest officials in regulating grazing and range management in this portion of the Forest. Of particular interest was the type of feed used by sheep and cattle and the advisability of rotating these two types of livestock on some ranges. This trip was of particular interest to the Extension Agents from southern and western Nevada where ranges are of a very different type than found here.

"Considerable range improvement has been done in connection with the AAA Soil Conservation Program. This has been limited to water development, fencing, deferred grazing, reseeding and erosion control. It is estimated that under this program the following range development will be completed in 1937.

"Spring and seep developments 140 springs or seeps, fencing 35 miles, erosion control, dams 37, deferred grazing 17,000 acres, reseeding 1200 acres, reservoirs 12, wells 10."

C. R. Townsend, District Extension Agent states:

"The agent made a survey of communities in White Pine County where sheep bands graze during summer, spring and fall months. This information was presented to the Taylor Grazing Act Advisory Board, in order to bring about the best use of the lands by maintaining the forage thereon, and to control the movement of sheep bands, particularly during the spring period, to prevent premature grazing.

"Wool growers throughout the county were furnished information regarding the crossing of sheep for better wool producing. Other plans discussed with wool growers of the county were, seasonal use of the range, supplemental winter feeding, care of handling sheep bands during the early spring months for the reduction of losses, proper care of lambs, fam-

amiliarizing sheep owners with poisonous plants and methods used in the reduction of losses by proper herding of sheep where these plants were found."

(3) Purebred Sires

"Nevada's greatest show and sale", according to an excerpt from Mark W. Menke's report, of Elko County -"was held during the Nevada Livestock Show, at which time 600 rams from five states were exhibited and sold. Prices average approximately \$20.00 per head with select pens running up to \$30.00 per head".

(6) Feeding

Paul L. Maloney, Extension Agent for Humboldt and Lander Counties states:

"Ranging sheep on the deserts in northern Nevada is an uncertain procedure without a supply of baled hay, corn or else pellets constantly available. Two inches of snow is not enough to insure a supply of water should a few warm days occur, and six inches of snow is too much in most districts.

"Last winter an unusual situation developed in that there was more snow on the deserts than had been for many years in the past. There was from two to three feet of snow on the level and drifts from five to six feet deep.

"The snow crusted on top and made it impossible to use even pack mules to carry corn to the stranded bands of sheep. The sage brush was completely covered, and the sheep could not move on the snow.

"Sheepmen in the district appealed to the county officials for assistance in breaking trails so that the sheep could be brought nearer to the railroad where feed could be shipped to them. Paul Mirandeborde sent a telegram that he had 5000 sheep and that they were dying of starvation; Raimunde Erquiaga came to Winnemucca by train from the desert and reported that his sheep and many other bands were starving to death.

"County officials sent a telegram in answer to the urgent plea for assistance, that there was nothing they could

do, that the only snow plow they had was broken down. Raimundo was told the same thing, that there was nothing that could be done. Raimundo came to the County Agents office and explained the desperate circumstances that 25,000 sheep were in, stated that all would die if immediate relief was not rendered. Stark ruin, through the complete wiping out of their life's savings invested in the bands of sheep, was faced by these sheepmen as a grim reality when they were informed by their county officials that no aid could be sent.

"Raimundo was assured by the County Agent that help would be sent immediately. The County Agent secured the telegram from Mirandeborde and wired him that equipment for breaking the trails to the sheep in the district would be sent immediately.

"Twelve hours later, at 2 o'clock in the morning with the thermometer registering 36 degrees below zero, the County agent was dispatching on its trail-breaking errand of mercy, a 60 horse power caterpillar with a 14 foot scraper blade attached. This equipment and two experienced operators was secured from a construction company who were engaged in building an overpass at Winnemucca. The agent was informed that the cost would be \$5.00 per hour.

"County officials stated to the county agent that they could not pay the bills incurred by the privately owned equipment, however, the County Agent ordered the crew and equipment to proceed with the work, and assured them that they would get their money when the job was completed.

"Instead of five days, which was first estimated to be sufficient time to clear the trails, the crew bucked the deep snow for eleven days and nights before the errand was completed.

"Breaking the trails was going to be of little value if feed was not made available for the sheep as soon as the tractor arrived. A supply of hay was located 40 miles north of Winnemucca. Equipment from the nearby CCC camp was secured to break trails to the hay stacks. The only hay bailer in the county was secured and a crew put to work baling hay for the stranded sheep. Trucks were secured to haul the hay, and a truck load of hay was chained to the caterpillar so that when the sheep were reached, feed was immediately available.

"Many of the bands of sheep were so weak that they could not follow the hay trucks when the feed was being distributed to them on their bed ground. Six hundred thousand pounds of hay was baled and transported by trucks and railroad to save the stranded sheep.

"Losses averaged about 15 per cent, whereas if aid had not been sent at the time it was, the losses, according to sheepmen would have been 75 per cent or higher.

"The breaking of these trails through the snow saved not only the herds of sheep, but brought relief to miners in the district as well. At one mining camp where 12 people were stranded, they had been eating beans for several days, and they had to follow the trail to the nearest town in order to get food for the next meal after the caterpillar crew arrived".

(c) Horses

Mark W. Menke, Elko County: "Two pure-bred Belgian draft horses were secured by Mr. George Russell and Mr. C. H. Reinken from breeders in the neighboring Twin Falls County. Addresses of breeders of registered Belgian horses were supplied to these men by the Agent before they went to Idaho."

C.R. Townsend, District Extension Agent, White Pine County reports: "Breeding. The agent accompanied Major Frank L. Carr of the Remount Station, Fort Douglas, Utah, on a trip through the horse breeding section of White Pine County, visiting the Lund and Preston communities. Major Carr was well pleased with the information gathered on the field trip and was agreeably surprised at the class and type of mares in this section. Seven ranchers were assisted in obtaining purebred sires."

A. J. Reed, County Extension Agent, Pershing County states: "One registered, Shire stallion was brought in and placed in the upper valley upon the ranch of Lawrence Devita.

"One, ten-year-old, registered Shire mare, her six months old stallion foal, and a registered three year old Shire filly were brought in by Fred Stewart, of the Big Meadow center. So, in another couple of years, there will be another registered Shire stallion for the Big Meadow district.

"Thirty-five mares have been bred to the Devita stallion,

"Many other items pertaining to horse raising were accomplished- such as, examination by the Veterinary Control Service, for abortion and vaccination against encephalomyelitis. 130 horses were vaccinated for encephalomyelitis, by the veterinary control service in cooperation with this office.

"It is planned to vaccinate every horse, the owner of which desires it, against encephalomyelitis in May of next year. The Extension Service is to line up the horses and to assist the veterinaries from getting from one place to another as advantageously as possible."

## (h) Relationship of the Public Domain to the Range Industry

## (2) Protective Livestock Associations

C. R. Townsend, District Extension Agent from White Pine County reports: "The agent continued to act as Secretary of the Nevada National Forest Sheep Growers Association. The purpose of this association is to discuss management plans with officials of the Forest Service in order to bring about the best use of National Forest ranges and to assist in stabilizing the livestock industry."

## (3) Taylor Grazing Act.

Mark W. Menke of Elko County makes the following statement: "The administration of the Taylor Grazing Act without full time men in each grazing district has resulted in some difficulty to stockmen in securing information. During the past year eighty-two office calls have been given attention on this project. These calls are usually for information on rules or regulations, dates of meetings of advisory boards, procedures to be followed in making protests, methods of securing permits for cutting posts, refunds of overpaid grazing fees, transfers of land and many such questions.

"Calls are usually received from grazing officials passing through and wishing to check up on local sentiment and to secure suggestions for future administration.

"A recent announcement was made that a branch office would be established in Elko to handle grazing affairs in District No. 1. This will probably result in the project being handled by that office and will eliminate it from future extension activity to a great degree."

H. E. Boerlin of Washoe County reports: "Continued cooperation with the grazing division and assistance given applicants was the chief reason for 46 offices and 20 telephone calls received during the year.

"The organization meeting of Grazing District #3 held at Yerington last November was attended.

"The Squaw Butte Desert Range Experiment Station was visited when they held their first field day September 15th. This station is under the directors of the Division of Grazing in cooperation with the Oregon State College. The trip was made in company with Assistant Director Buckman, County Agent Paul Maloney and Extension Soil Conservationist, Otto Schulz.

"The Nevada-California meeting of stockmen called by F. R. Carpenter, Director of the Division of Grazing, was attended in October. Assistant Secretary of the Interior Walters was present and addressed the gathering.

"Assistant Director Buckman's latest bulletin on the Taylor Range Bill in Nevada was circulated to stockmen in Washoe County, many of whom remarked on their interest in the publication.

"The local ECW camp in Idlewild Park, Reno, has very obligingly prepared a new map for this office showing all government land in Grazing Districts Nos. 2 and 3 and classifying its use by departments. The map also shows boundaries of all Nevada districts."

W. H. Stodieck, Douglas County reports: "The County Agent's only activity on Taylor Grazing in 1937 was to try to keep stockmen interested, informed on meetings, new rulings, etc. The call for renewal applications sent approximately twenty users of Taylor Grazing permits to the County Agent for help in preparing these forms. Arrangements were made for the holding of two grazing meetings in Minden. These advisory Board meetings have ironed out most of the controversies created locally and with the force of men now in the field, the Taylor Grazing service has taken over most of the work which used to fall to the County Agents to straighten out".

C. R. Townsend, District Extension Agent of White Pine County says: "The agent cooperated with the ranchers of the county in discussing the Taylor Grazing Act. Assistance was given them in completing their applications and submitting same to the Advisory Board of Grazing District No. 4. The agent met with the Advisory Board and discussed rules and regulations which might be made for District No. 4, which would be suitable to the district and beneficial to the livestock industry. Other work in connection with the Taylor Grazing Act constituted of the following activities: Discussed with ranchers the actual movement of their livestock throughout the summer grazing period; wrote individual letters for them asking that refunds in grazing fees be made for livestock not using the public domain other than the period for which they were permitted; assisted ranchers in completing leases; assisted ranchers in making applications for the winter period; advised Mr. R. R. Nance relative to the basis of a protest to be filed with the Division of Grazing relative to the use of the range and distribution of livestock in Spring Valley proper; distribution of Extension Service Bulletin No. 77 to all ranchers of the county.

"A meeting was held with livestock men at Lund, Nevada, at which time a stock driveway was outlined in this district through what is locally known as the Cove Area. This outline was submitted to the Advisory Board for their consideration."



JUNIOR EXTENSION WORK

The organization of Junior Extension Work is the same as in previous years. Assistant Director Thomas E. Buckman, handling the Agricultural 4-H Club work, while Assistant Director (Mrs.) Mary Stilwell Buol directs the 4-H Home Economics club work. Each Extension Agent in the State carries on club work as part of his or her program and all concerned aim to tie it into the Agricultural Extension Program of the various counties.

The 4-H program has been handicapped some the past year due to lack of personnel but satisfactory results can be reported. Agricultural 4-H Club work was carried on in a satisfactory way during 1937 despite the fact there was no regular Assistant Agent to handle club work in White Pine District and only part time assistance available in the 4-H Club program in Elko and Washoe Counties.

County Agricultural Agents having responsibility for Home Economics 4-H Club work in Lincoln, Pershing, Humboldt and White Pine Counties as well as the agricultural 4-H work, with the assistance of Assistant Director Mrs. Buol and local leadership, secured 71% completions in the girls' work. The local leaders rendered fine assistance in most cases in carrying on this work as is shown by the reports of the Agricultural Agents. While this system is not entirely satisfactory to everyone concerned it is the best that can be done under the circumstances.

Herewith follows a summary by counties of the 4-H Club program in agriculture and activities of Agricultural Agents in the general 4-H Club Program carried on in the respective counties.

CLARK COUNTY

J. H. Wittwer  
County Extension Agent

## Agricultural - 4-H Club Work -

## Objectives:

			Completions
Boys - memberships .....	40	(36 applications) ..	24
Completions .....	80%	.....	66 2/3%
Livestock judging teams ..	2	.....	1
Attendance at State Camp .	3	.....	3
Leaders .....	3	.....	1
Camping out .....	1	.....	1
4-H Fair .....	1	.....	1
Communities participating	5	.....	4

Much effort was expended in securing the leadership of boys 1937 4-H program. Three men, three future farmers, one woman, one girl were secured as leaders. Two men failed. Two future farmers did fair, the one woman exerted a wholesome attitude, one man did excellent work until illness overtook him, and the one girl did a splendid job of her responsibility. In general it may be stated that to make for such effectiveness as the work merits, one of two things should be provided for - cut down on the program undertaken or secure assistance which will enable closer follow-up procedure by the Extension Agent.

Thru the cooperation of the Clark County Farm Bureau Directors, 4-H leaders and the Home Demonstration Agent, Mrs. Florence Davis, the following activities were conducted:

1. Four 4-H Leaders' Council meetings were arranged for, the agent attending three. Policies of 4-H club work, contests, awards, finances and transportation for attendance at camps, a 4-H fair were determined, and for the most part carried out accordingly. These meetings were especially beneficial to new leaders, and much toward promotion of uniformity, continuity in work, and in actually carrying out programs undertaken.

2. Plans were completed early in August for successful transportation of 26 4-H leaders and members to the State 4-H club camp at Lake Tahoe - travelling over 1000 miles for the round trip. Costs \$4.75 per 4-H member, leaders having had transportation paid for by the Clark County Farm Bureau.

Three boys and one Future Farmer leader attended this camp. The boys placed 2nd in the senior livestock judging contest; Joe Lewis was highest in beef cattle judging; Edwin Marshall, Jr. ranked second in all-round livestock judging and also placed second in health among

the boys at the camp.

3. The Charleston Mountain - Kyle Canyon camping-out for two and one half days during latter August in cooperation with Lincoln County proved a very delightful and profitable event, except for one accident, - a 4-H girl from Lincoln County accidentally breaking her arm.

The 1936 attendance to a one-night out encampment was 94; the attendance at this year's two-night-out encampment was 210, of whom there were 12 auto drivers, 21 leaders, 8 visitors, three Extension workers, one R.N. Nurse, Miss C. Voltz, 165 4-H members. Much credit is due the splendid work of each Louie A. Gardella, County Extension Agent of Lincoln County; and Home Economics Agent, Mrs. Florence S. Davis of Clark County, and Miss C. Voltz, Lincoln County health nurse, with the local leadership auto and truck drivers for their splendid work in the conduct of the camp and programs of which one was conducted each evening with an attendance of approximately 225 and 250 respectively. In addition three members of the camp made the "Charleston Peak" hike - an all day hike; older members of those in attendance hiked to the top of "Cathedral Rock" a three hour hike; and all hiked to the "Little Falls" (one hour) under direction of the U.S. Forest Service Rangers who gave a plant study demonstration enroute.

Other demonstrations conducted were: Foods identification for all girls and women, crops judging by boys and men. Evening programs consisted of songs, yells, demonstrations, and impromptu numbers by members and adults. And great was the joy of all, while the time was interspersed with games and visiting in the coolness of Kyle Canyon air, compared with the hot summer days down on the farms.

The closing numbers of the event were: A visit to the Boulder Dam Power House, a swim in Lake Mead and a weiner-hot roll-watermelon bust luncheon served in Las Vegas just before all departed for their several ways toward home.

Much credit is likewise due the U.S. Forest Service thru their splendid facilities at the Kyle Canyon Camp; the Charleston Park CCC Camp officials for their efforts toward helping to maintain order among the camps; the W.P.A. thru courtesy of County Director Claude Mackay and State Director Gilbert C. Ross in extending the Lincoln County Delegation their trucks and drivers for transportation of Lincoln County groups from Las Vegas to the camp and return by way of Boulder Dam and Lake Mead; the Union Pacific for their excellent train service in transporting approximately 50 members and leaders from Pioche, Panaca, and Caliente to Las Vegas and return; the Park Service for the excellent manner in which they escorted the crowds thru the Power House and works of Boulder Dam and the courtesies extended the crowds at Lake Mead bathing resort.

With assistance of Extension Agent Louie A. Gardella of Lincoln County, the most creditable 4-H Fair yet held in Clark County was conducted at the Logandale school house, October 16th. Splendid cooperation of leaders and members from each Las Vegas, Logandale, Overton, Mesquite and Bunkerville, was evident. Approximately 300 people attended same which likewise indicated active interest on the part of a larger number of parents than heretofore. An excellent educational program was also presented by members under direction of leaders largely thru cooperation and direction of Mrs. Davis. Fourteen hogs, two chicken entries were made by boys from three communities.

### CHURCHILL COUNTY

Royal D. Crook  
District Extension Agent

#### Agricultural - 4-H Club Work -

4-H Club work just about held its own, in both quality and in numbers, compared with last year. The quality of local leadership again showed its effect on the work done by the members. Two school teachers volunteered as leaders and both did very good work, probably because they understood the fundamentals of teaching and the necessity of fulfilling the requirements. 4-H Club work will never be as successful as it should be until the leaders are better trained and more willing to sacrifice a little time to the work.

The Harmon boys 4-H club met in the fall and decided to continue meeting throughout the winter. Only two meetings were held and then the work was dropped until spring. The leader was a little young to maintain discipline and to offer the right kind of direction to the activities. The club was, however, well above the average in the county.

With an enrollment of 66 members, with 67 projects, the work got off to a good start under the supervision of Assistant Agent, Vernon Mills. Regular meetings were held with all clubs except Northam, where an epidemic of scarlet fever prevented all public gatherings.

The County 4-H Club Council was organized and began functioning early in the season, meetings being held every two weeks until after the State camp early in August. The work was very worth while in getting the leaders interested and informed about the club program.

The Council approved the change in the date of Achievement Day from August to July, so the winners in the County contests might be chosen before the State 4-H club camp. The date is a little early for the boys' crops exhibits and a little early for the completion of live-stock projects, but on the whole the date was very satisfactory. The Future Farmers participated in the program, as usual. The program was carried out on schedule and with very little confusion. The public address system from the State Extension Office gave great assistance in keeping the program moving.

The exhibits of the Homemakers' Clubs were very good and they added a great deal of interest to the show. The horse show was participated in by a fair number of boys and girls, and the show seemed to draw a good crowd. A little color was added to the show by the awarding of prizes by the newly organized Fallon Lions Club, and the awarding of a prize for a public speaking contest by the American Legion.

The state 4-H Club Camp was attended by a comparatively small group from this county, but for the third consecutive year the members won the American Legion Flag, which was presented at the '49 Show and Rodeo, sponsored by the Legion.

The percentage of completions this year was low, due no doubt to the lack of interested leaders, and somewhat to the lack of systematic work in the latter part of the season. The clubs with active leaders finished with much higher percentage than the clubs without leaders.

#### DOUGLAS COUNTY

Wilbur H. Stodieck  
District Extension Agent

#### Agricultural - 4-H Club Work -

In 1937 there were thirty-three boys and two girls enrolled in Agricultural 4-H club work in Douglas County. These thirty-five club members carried forty projects during the year, divided as follows:

Potatoes	1
Gardens	4
Forestry	8
Poultry	3
Sheep	1
Dairy calves, cows	7
Baby beef	4
Hogs	12

Of these forty projects signed up, four failed to get under way after all arrangements had been made; of the thirty-six carried through only twenty-two handed in completed record books. One club of eight members were unable to finish their project work and none of them are included in the completions.

The livestock club members completing this work carried projects involving one hundred forty chickens, eleven dairy animals, five baby beef and fifty-seven hogs. Aside from completions the club year was successful.

During the late fall of 1936 a fat animal project club of two girls and four boys fattened two baby beef calves and nineteen fat hogs of four different breeds for the Junior Livestock Show in

south San Francisco.

An exceptional exhibit was sent to the show by the Douglas County group, with every animal entered in the show excepting one contributing toward a prize.

Harlan Fricke's exhibit of Duroc Jersey hogs, secured from the Experiment Station at Fallon, won him exceptional honors and a one hundred dollar scholarship to be used in attending the University of California at Davis. This is donated by the San Francisco Chamber of Commerce. Beside winning the scholarship which was based on a good showing in the 4-H club hog department of the show, Harlan won first prize pen, first individual, and fourth individual in his class for a total in prize money of twenty-four dollars. He sold his three pigs which weighed six hundred ten pounds for 19¢ a pound, leaving him a total income from these three pigs after all expenses of the show were deducted of \$132.03.

Fritzi Jane Nedderniep, sixteen year old 4-H club member, made an exceptional showing with her light weight purebred Hereford calf. This calf, weighing eight hundred twenty pounds, took second in its class but was a very close competitor to the first calf in its class, and which calf finally won the grand championship of the show. Fritzi's calf sold for 37¢ a pound, the fourth highest price for a calf at the show and a true indication of its quality. After all show expenses were deducted she realized a net return, including eighteen dollars in prize money, of three hundred ten dollars and seventy six cents.

Next from the standpoint of winnings was the exhibit made by Junior Godecke of a pen of three Spotted Poland China pigs. Through excellent feeding these pigs were developed very rapidly, and were probably in the best bloom of any hogs shown from Douglas County. Junior's pigs sold for seventeen cents a pound and weighed five hundred sixty pounds; he did not have but one other pig for competition and his pigs were judged easily worth first prize. He won first prize pen and first and second individual, with Grace White, showing the same breed, taking the third prize in this class. In addition, Grace White showing a grade Hampshire won fourth prize in the grade class. This grade pig, weighing only 165 pounds and showing against pigs weighing as much as 225 pounds, was of exceptional quality but was too small to get him any further. Junior's total winning were \$28.00 in prize money and Grace with one individual in two classes received \$9.00 prize money.

Marvin Settelmeyer, showing purebred black Poland Chinas produced on his father's farm, ran into the stiffest competition of any exhibit from Douglas County, but he did succeed in getting a sixth individual place and fourth pen in his class, giving him a total of five dollars in prize money. Marvin's pigs sold at \$11.55 per hundred pounds.

Elwood Johnson, the sixth exhibitor from Douglas County showed a Hereford Baby beef calf which he selected in late October, as a substitute for a heifer which was not of prize winning quality, and tried to fatten the steer for the show in March. This calf, getting on feed about the first of November, did exceptionally well for the short time it was on feed. This calf, estimated at weighing five hundred pounds at the start of feeding, sold at eight hundred sixty pounds at \$13.50. He was not fat when started and made an exceptional gain throughout the fattening period. However, he was not in condition to take a prize in the competition at the show.

Two hogs shipped to the show were too small to get into the show classes and weressold at \$10.50 before the show started. Only one of six Hampshire hogs started was big enough to get into the show. This is due to their naturally slower growing habits, and the impossibility of getting pigs old enough to make show weight when the feeding period started. The total value received for the two calves and eleven pigs which were entered in the show was \$731.87.

Following this exhibit, regular enrollements for the summer's club work was started for the community club with membership reaching twenty-seven. This group was under the direct supervision of the County Agent with one local leader and seven older club members assisting. Wm. White, a former 4-H club member, acted as local leader and gave valuable assistance especially with the fat animal projects.

Two new grade Holstein calves were bought by boys starting dairy projects, and other projects previously started were carried on. One boy bought a purebred Hampshire gilt for his project and others bought stock from home to start.

The forestry club in Genoa was started with eight members, but met with trouble all summer long. Boys were forced to miss meetings called and meetings were disappointing. The over-night hike had to be dropped because work interfered with any dates set; the result was incomplete work and no club completions.

The larger group carried their program through the summer with two county wide meetings and with judging and demonstration team training for club comp. The County Agent organized the program for club camp directing girls and boys in the group contests and training boys teams for their contests.

Nineteen Douglas County club members attended club camp the first week in August at Lake Tahoe, where they took part in various contests offered, and made a very good showing for themselves.

The following is a list of contests entered and places won by the Douglas County delegation during the camp at Lake Tahoe, excepting that made by girls under the direction of Miss Hellen Gillette, Home Demonstration Agent:

One act play--"A Major Operation"; characters were Budd Dressler, George Gansberg, Calvin Fricke, Luetta Dressler, Bonnie R. Lange, first place earning 50 points.

Agricultural demonstration by Budd Dressler; lecture demonstration on "Swine Sanitation"; first place for 20 points.

Junior crops judging contest; team of Jerry Neddenriep, Billy Danberg, Kenneth Storke; first place for 20 points.

Junior livestock judging contest with team of Grace White, Calvin Fricke, John Henningsen; first place for 20 points.

Best Junior Crops judge was Kenneth Storke and he earned 10 points for Douglas County.

Best Junior pig judge was Calvin Fricke, who thus earned 7 more points.

Ranking for best junior sheep judge resulted in a tie between Calvin Fricke and Grace White. Each was given 3.5 points.

Club Yell contest, the full Douglas delegation took second place and six points.

Song contest put on by the older boys and girls resulted in 3rd place for the group and 15 points toward the grand score.

Bill Cardinal and John Henningsen in a musical contest took third place and 15 points.

Plant identification contest saw Bill Cardinal taking 3rd place and 2 points and Dennis Heitman also placed.

George Gansberg received 3.5 points for his tie with another club member for best senior sheep judge.

In a health contest, Dick Settelmeyer in Class B won 12 points.

Combining these points with an additional 54 points scored by girls in the girls groups the total scored by the County was 238.

In making the scores in the contest at club camp, the Douglas County delegation of nineteen club members built up a record of scoring the most points per club member at club camp, and took second place in the state contest, being passed only by Churchill County with a delegation of over fifty club members.

The club year was completed with all club members who could, exhibiting their products at the Douglas County High School Fair. There were no cash prizes at the Fair and all club members had to show against



all exhibitors but managed to take the majority of prizes in the few classes exhibited.

Two baby beef calves were shown by 4-H club members at the Fair, and by splitting the class each were awarded blue ribbons. Six 4-H club members exhibited in hog products, two in poultry products, and two in garden projects, and the rest of the club members exhibited products from the home as a substitute for the projects which they could not exhibit.

## ELKO COUNTY

Mark W. Menke  
County Extension Agent

### 1. Agricultural - 4-H Club Work -

Thirty-one junior 4-H club members were enrolled in garden, poultry and baby beef club projects. Nine of these were Indians of the Owyhee-Shoshone Reservation in Northern Elko County enrolled in a beef club project.

An overnight camp in Lemoille Canyon was held before Achievement Day with about fifteen members coming to camp the night before. Each member had to bring complete equipment for himself and arrange for his own transportation. Although the number was small, it is believed that this will provide a start for a better local camp.

Forty members were present the next day for Achievement activities. These were almost all girl club members. The boys were engaged in farm, haying or other jobs and only four were present.

Nine members attended 4-H club camp at Lake Tahoe. These included a local leader and four Indian club members. The camp was greatly enjoyed by all, although the expense of getting a large group there is very great, the round trip being 720 miles from Elko and 940 miles from Owyhee.

A very successful and enjoyable camp was held with a slightly lower enrollment than customary. More recreational facilities especially the soft ball games and motion pictures were responsible for the success of the camp. The use of educational pictures during classes was also a great help in maintaining the interest of the club members. The Agent and five boys and one leader were in attendance at the camp. Ben Butler received the highest score as health contestant.

Final completions for 1937 were as follows:

Poultry Club	- 5	enrolled	- 2	completed	- 40%	completions
Garden Club	- 13	"	- 10	"	- 77%	"
Calf Club	- 9	"	- 9	"	- 100%	"
Co. Average	- 27	"	- 21	"	- 87%	"

ELKO COUNTY

Joseph W. Wilson  
County Extension Agent

## 2. Livestock -

A new departure was made in the 4-H baby beef feeding contest in that five of the older boys were enrolled to feed pens of steers, with six steers to the pen, with the best five steers to be judged. The boys were enrolled in May and most of them started feeding grain the first of June.

The Elko County Fair Board provided new pens and \$150.00 in prize money. The Bankamerica Agricultural Credit Corporation through Chas. Evans and James Stead, Hereford breeder of Reno, Nevada donated a \$300.00 prize heifer for first prize.

The 4-H steer feeding contest officially ended for the boys September 19th at which time the thirty calves fed by the five different boys were auctioned to the highest bidder. The Nevada State Livestock Show Board entered the competition as a bidder and took the calves at  $10\frac{1}{2}$  ¢ per pound for the first prize pen and  $9\frac{3}{4}$  ¢ per pound for all other pens.

The winning pen was that fed by Sammy Mc Mullen of Deeth. The other boys winning prizes were: Roger Smith, Ruby Valley, second; and Bobby Vaughn, Authur; Dan Anderson, Metropolis; and Hugh McMullen Deeth tied for third place.

The Nevada State Livestock Show Board sent these steers to Denver and they brought \$10.15 per hundred. The steers weighed 876 pounds per head and the shrink was only 8 pounds per head between Elko and Denver. The freight rate was 63¢ per hundred. Had these steers weighed 1000 pounds they would have brought a higher price; as it was the Elko County steers brought the third highest price of any steers sold by John Clay and Co. during the week ending Sept. 23rd. The preliminary report of the weights is given herewith:

<u>Name</u>	<u>Total Wt.</u>	<u>Ave. Wt.</u>	<u>Selling price. lb.</u>	<u>Total Price</u>
Sam McMullen, Jr.	4,880	813	10 $\frac{1}{2}$ ¢	\$500.20
Roger Smith	6,250	1,040	9 3/4¢	609.37
Dan Anderson	4,810	802	9 3/4¢	469.97
Bobbie Vaughn	5,450	908	9 3/4¢	531.37
Hugh McMullen	5,150	858	9 3/4¢	595.53
	<u>26,540</u>			<u>\$2,706.44</u>

In addition to the above, the regular contest for 4-H Baby Beef steer feeding has been started with the following members:

<u>Name</u>	<u>Address</u>	<u>Breed of Steer or Heifer</u>
Anita Sustacha	Lamoille	Hereford
Alfred Salicchi	Lambille	Hereford
Kent Jones	Wells	3 Herefords
Merrill Jones	Wells	1 Shorthorn
Blaine Wines	Arthur	Hereford
Calvin Wines	Arthur	Hereford
Carrol Wines	Arthur	Hereford
Bobby Vaughn	Arthur	Hereford

These calves will be fitted for the Inter-State Livestock and Baby Beef Show in South San Francisco, the latter part of March or first of April.

#### HUMBOLDT COUNTY

Paul L. Maloney  
District Extension Agent

#### Agricultural - 4-H Club Work - Livestock

Paul Maloney, District Extension Agent places greater emphasis on what might be termed the utility value of the 4-H club projects. This being strictly a livestock district, club members are encouraged to take projects relating to the range livestock business.

Baby beef feeding projects, which include preparing animals for the Junior Livestock Show at South San Francisco offers the members an opportunity to actually conduct a business transaction themselves. They buy the calves and the feed, and either start a bank account of their own, or buy another animal, with the profits made from the venture.

They are allowed to compare other animals with their own, at the show, they find out what to feed and what not to feed in order to get the best results. They learn how to judge animals, to know

what a good animal really is. Aside from those advantages in their own business they get a trip to a large city. Many of the 4-H members in Maloney's district have never been in a town larger than Winnemucca, with a population of about 1800, until they join the club and take their animals to the California show.

Ten head of baby beef calves were taken to the livestock show at South San Francisco last March--1937. Places of importance secured were: second placing for the herd of five steers; third for Hereford lightweight steer; third for lightweight Shorthorn; fifth for Hereford steers; fifth and sixth for Shorthorn heavy class cattle.

#### Achievement Day -

Before leaving for the California show, the calves were placed on exhibit at Paradise Valley, the community where most of the calves were fed. A total of 156 people attended the showing and the calves created a great deal of interest. The cattle were also placed on exhibition at Winnemucca, where one steer was auctioned off. The local Lions Club appointed six of their members as a judging team to place and guess the weights of the calves. This created a great deal of interest and fun as very few of the business men knew that a fat animal should weigh or how they should be judged. The animals were then placed as they should be according to standards of the show ring and the weights given.

After returning from the San Francisco show, the 4-H members were guests of the local Lions Club with Agent Maloney at a luncheon, where the members gave talks on their experiences at the show and gave a detailed statement of their projects. Leslie Stewart President of the club, stated in part that "while one likes to place close to the top, winning is not the most important thing secured in the baby beef feeding project."

#### LINCOLN COUNTY

Louie A. Gardella  
County Extension Agent

#### Agricultural - 4-H Club Work -

The 4-H membership drive was started in the latter part of April, during which month, leaders were found for the Alamo, Hiko, Caliente, Panaca, and Pioche Clubs and organization of the individual clubs was begun. By the first of August twelve girls clubs and three boys clubs had been organized with a total number of one hundred five members who were already at work at their respective projects.

With the aid of Mrs. Florence Davis, Home Demonstration agent from Clark County, two training meetings and three leaders' council meetings were held in Lincoln County. All the new leaders and a few of the leaders who had been in club work for a number of years were taught new methods in the teaching and training of their club members.

A new method of inspiration has been used this year to keep the youngsters interested in their club work. Outdoor picnics and swimming sprees were held for each club community in the county; these outings were financed by the members, themselves.

#### 1. State 4-H Camp

Two leaders, two boys and one girl accompanied the county agent to the State 4-H Club Camp at Lake Tahoe this year. Miss Virginia Mathews of Panaca entered the State Style Dress Review Contest but did not place, although she placed second in the Tailored Suit Contest and third in the Woolen Fabrics Contest.

#### 2. District 4-H Camp

The biggest success of the year was the Charleston Mountain 4-H Club Camp, August 19th to August 21st. Seventy-six Lincoln County Club members, leaders, and adult assistants attended camp in conjunction with the Clark County 4-H Club members. The camp outing was terminated with a trip to Boulder Dam which included sight-seeing of the dam and swimming in Lake Mead.

#### 3. County 4-H Fair

4-H Club work was brought to conclusion with the County 4-H Club Fair which was held in Caliente on September the 18th, 1937. Financial aid was obtained from the Lincoln County Board of Commissioners, the Caliente Businessmen's Club, and the Lincoln County Farm Bureau.

It was agreed that the Panaca 4-H Clubs sponsor the fair this year and the clubs made all the arrangements with the aid of the 4-H Club leaders and the county agent. Mrs. Florence Davis was called in from Las Vegas to aid in arranging the final exhibits and also act as one of the judges in the foods and clothing sections.

An estimated total number of three hundred visitors attended the fair and over sixty 4-H Club members displayed their work.

Mr. James Gottfredson, President of the Caliente, Businessmen's Club awarded a silver trophy cup to Virginia Mathews of Panaca and one to Le Roy Wadsworth, also of Panaca, for having the most outstanding work in girls' and boys' projects during the year of 1937.

#### 4. Goals and Results

SUMMARY

	Boys		Girls	
	Goal	Completions	Goal	Completions
Enrollments	30	33	40	72
Project Completions	33	23	72	41
Project Completions In Percentage	100%	67%	100%	58%
Achievement Program	1	1	(1)	(1)
Tours	1	1	(1)	(1)
State Club Camp	1	1	(1)	(1)
County Club Camp	1	1	(1)	(1)

This year has proved that the enthusiasm and participation in 4-H Club work has greatly improved and increased and, the agent believes, that if it had not been for the misfortune that befell our communities during the Summer months, which caused a great many of our families to move, the completion percentage would have been very near to 100%.

LYON COUNTY

E. B. Recanzone  
County Extension Agent

Agricultural - 4-H Club Work -

Agricultural Club work during the past year made considerable progress. Club members enrolled during the past year took active interest in their work, and as a result made many worthwhile achievements. Sixty club members were enrolled in seven clubs, with four girls clubs and three boys clubs. Projects undertaken were: Sewing I, II, III, and IV; Canning and Cooking I, II; Swine; Poultry; Gardening; Dairy Calf; and Baby Beef. Club members undertaking these projects were located in Mason Valley, Smith Valley, Wabuska and Weeks. Club work in the Fernley community is sponsored by the Churchill County Extension Agent owing to the geological location of that territory.

The goal set in the program of work was to enroll seventy-five club members which goal was not reached by fifteen members. Completion was set for ninety percent and completion accomplished was seventy-six and seven tenths percent.

Sixteen club members had baby beef as their project and carried on their work. They have not submitted record books due to the project not being completed until next spring. Their books submitted at this time would mean nothing and would disrupt their program, but it is felt that the comparison to time spent and type of work completed, warrants their being reported as complete.

Six local leaders assisted the Agents in carrying on the work. Mrs. C. C. Smith conducted the sewing projects in Smith Valley Mrs. J. P. Faber and Mrs. Joe Farias conducted sewing projects in the Wabuska District; Mrs. G. S. Williams conducted sewing projects in

the Yerington district; and one older club girl, Helen Everett, who has completed nine years of club work undertook assistant leadership in Smith Valley. All leaders worked very diligently in carrying on their club work and much credit is due them for the success of club work during the past year.

#### 1. Girls Clubs Judging Team

Twenty-nine girls took home projects of sewing or cooking. A report on which will be given in the report submitted by Miss Hellen Gillette, Home Demonstration Agent for this county.

#### 2. Baby Beef Club

The baby beef club consists of four girls and thirteen boys having baby beef calves as their project. Of this group eight attended the Junior Farm Bureau Camp, while sixteen completed and reported as having completed their project, in as much as, all will prepare their calves for show competition next spring.

#### 5. Swine Club

This club consists of eight boys, seven of which have completed their project. Only two of this club attended the Junior Farm Bureau Camp. This club is proud of their achievement in that two members now have pure bred registered Duroc gilts, two members have pure bred Hampshire boars and one member a pure bred Hampshire gilt. With this foundation, they intend to build a well bred herd.

#### 4. Mixed Club

This club consists of two girls and five boys having as their projects four gardens, two dairy calves and one poultry. Of this group three attended the Junior Farm Bureau Camp.

#### 5. Senior Livestock Judging Team

A senior livestock judging team competed in the senior livestock judging at the Junior Farm Bureau Club Camp. This team, composed of Warren Henrichs, Duane Smith and Kenneth Strosnider, placed first as a team in competition. By virtue of their first place, this team was awarded the honor of representing the state in the Pacific International Show at Portland on October 4th. This team competed with fifty-two teams placing fifteenth as a team and fifth by state.

#### 6. Junior Livestock Judging Team

A junior livestock judging team was trained. A day prior to entering competition, one of its members received a broken leg. There being no other member eligible at club camp to participate in this contest, the team was not entered. This team was composed of George Henrichs, Stella Moriconi and Jack Linscott.

### 7. Style Dress Review Contest

In this contest, La Verda Fitzgerald represented the county and was the best entry, thus entitling her to represent the state at Chicago. Further details of this contest will be found in Miss Gillette's report.

### 8. Senior Crops Judging Team

A senior crops judging team was trained and entered in the senior crop judging contest at club camp. The team was composed of Noel Willis, Pauline Leveille and Dale Thomas. This team took first honors as a team in this contest. Two of its members, Noel Willis and Pauline Leveille, were members of the previous year's winning junior livestock judging team. Noel Willis received the highest individual score and was awarded the honor of best 4-H Club judge.

### 9. Junior Crops Judging Team

There being no junior members with club projects, this project was omitted.

### 10. Junior Livestock Show

On March 6th, eight 4-H Club members exhibited eleven baby beeves at Yerington. Considerable interest has been built up in this project. It was estimated that more than three hundred people attended the show. A local packer presented a cash award for first prize as did the Lyon County Farm Bureau for a second prize. Third and fourth prizes consisted of cash awards given by business men of Yerington. The calves were all exhibited from twelve noon to four o'clock in the afternoon. At two o'clock Professor Wilson from the University of Nevada judged the animals. Following the judging, five of the animals were auctioned at very good prices. This project has received strong cooperation from the community and business men which has added very materially in the advancement of the project.

On March 19th, six club members with their calves accompanied by the Agent attended the Interstate Junior Livestock and Baby Beef Show at South San Francisco. All of the calves from this County exhibited at the Interstate Junior Livestock and Baby Beef Show made a very creditable showing and while only one placed in competition, none were sifted and all brought good prices at the auction, netting all club members a profit on their project.

An honor falling to a member of the Lyon County delegation was that of representing the state in an address over the N.B.C. network from the banquet room which was the closing event for the



Interstate Junior Livestock and Baby Beef Show at South San Francisco. This honor was bestowed to Tommy Hay of Weeks, Nevada.

### 11. State 4-H Camp

Twenty-four club members and one local leader representing the 4-H Clubs of Smith Valley, Mason Valley and Wabuska, attended the Junior Farm Bureau Camp at the Boy Scout Camp at Zephyr Cove, Lake Tahoe. Transportation to and from Club was provided for through the cooperation of the Lyon County Farm Bureau and the Yerington School board. The Yerington Schools furnished the bus and driver, while the Farm Bureau furnished the gas and oil and insurance on the bus.

The Lyon County delegation competed in many contests and made a very favorable showing, receiving first honor in the senior Livestock Judging Team, Senior Crops Judging Team, Style Dress Revue, Essay Contest, highest individual Crops Judge and tied for first place in the girls' health contest and second place in the boys' health contest. Another honor awarded to the Lyon County group was the election of Helen Everett as Vice-President of the State Senior 4-H Club Council.

This is the fourth year that 4-H Club Camp has been held at Lake Tahoe and it received much praise for this outing afforded 4-H Club members. This praise comes from members in attendance at camp and parents who have visited the camp.

On the following pages is the radio talk given over the N.E.C. network from the banquet room at the conclusion of the Interstate Junior Livestock show at South San Francisco. This address was delivered by Tommy Hay 4-H Club member. Also, is found the prize winning essay at 4-H Club Camp given by Helen Everett who has completed nine years of club work.

### 12. Achievement Stories

Radio Talk

by

Tommy Hay

This year there are twenty-three 4-H Club members representing five of the seventeen Nevada counties. Nevada Club members have been exhibiting their stock at South San Francisco every year since the show started. Our attendance has been growing each year, and we are looking forward to a continued interest in the show.

Under our conditions in Nevada with a small state population and great distances between communities, our 4-H Club work means more to the girls than learning how to bake a loaf of bread or to paint a chair. It means more to us boys than feeding a calf or learning how

to break a horse to ride. It is practically our only means of getting together as a group, and affords us the chance to make educational trips such as this one to the Junior Interstate Livestock Show, which is the grandest experience in the life of most of us.

As the raising of livestock is the primary industry of Nevada this show affords us the opportunity of seeing the finest of animals, and teaches us to know what the market is demanding. The friendly competition such as we find at the show is a great incentive for us to continue to keep the standard of animals exhibited on a higher plane, and causes us to strive to raise better stock for the markets.

Representing the 4-H Clubs from Nevada I wish to thank the interested people who make this show possible and to assure them we appreciate it more than I can express.

Thank you.

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#### 4-H Club Work and Citizenship

by

Helen Everett

The key word of our generation may be said to be Service. A life is recognized as being of greatest value only when thought and action combine in aiding the advancement and welfare of those it contacts.

Life more abundant, The greatest good to the greatest number, The good neighbor, these are more than mere words. They are indicative to the spirit which is becoming more manifest throughout our land, and through greater sections of the world today than ever before in the history of mankind.

Good citizenship is the ideal of every country. The strength of a nation lies in the average man and woman. The character of each young person and child contributes its share to the whole.

The ideals of our 4-H organization are the foundation of Good Citizenship, Responsibility and Co-operation, Loyalty and Thoroughness, Cleanliness and Health, the Development of Individual Strength and Community Strength.

Our weekly meetings are an inspiration to each member. When we gather once a year for Encampment the enthusiasm that is born within

us, as we listen to our adult leaders and join in song and service developes so deep a realization of the beauty and power of life possible for ourselves, and each member of our communities, that we long to be able to transmit into fine service the emotions that stir us.

Country living it seems to me is really ideal living, at least for those fortunate enough to dwell in our high and fertile Nevada valleys in these days of good roads, telephones and radios. We who are away from cities and remote from railroads are nevertheless in touch with the advantages of good music, interesting lectures, and the quick happening events, be they of good or sad import.

Our rural schools are excellent, and the residents of the country are people of broad interests and keenest sensibilities. We have the good times and close friendships that are perhaps crowded out of city life. The 4-H Clubs are strengthening the solidarity of country life throughout the whole United States. When groups of young people grow into common understanding of the best uses of opportunity and the best method of development for success in their way of life, there is going to be an enlargement and an advancement of that way of life.

To have country people united in aim and action has been the dream of foreward thinking folk for many years. Surely this ideal is being made a reality by our 4-H organization. In unity is strength. By working together with a trained understanding of what we are doing, and what we want to achieve, there will be nothing that is needful for citizens of rural districts that the future may not give to us.

Enthusiasm for our organization, devotion to its principles, and the conscientious endeavor to live up to its ideals will carry us to good citizenship.

Our Slogan brims over with possibilities, may we ever strive toward that carrying forward the good--making the best better.

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PERSHING COUNTY

A. J. Reed  
County Extension Agent

Agricultural - 4-H Club Work -

1. All four Pershing County 4-H clubs--namely, Clothing, Cooking, Home Improvement, and Livestock--totaling 27 members, completed their work in 1937, making another 100% year.

2. Mrs. Mary S. Buol, home economics director, made two visits to the county going over club work and helping organize the girls clubs.

3. Mrs. Al Mitchell was leader for the clothing club, and Mrs. Muriel Evarts took charge of the Home Improvement girls. Both leaders did a fine piece of work.

4. Six days were spent at Club Camp at Lake Tahoe. Eight girls, four boys, and two leaders attended Club Camp from Pershing County and all reported an enjoyable and educational time.

5. Livestock Club - Eight boys enrolled in livestock projects in 1936 and finished with 100% completions for the seventh straight year.

6. In 1937, ten boys signed up with the following club projects: Dairy, Joseph Alves, Julio Alves, Ralph Devita, George Reed, Carl Smith; Beef, Leonard Anker, Charles Sommer, Ralph Westergard; Sheep, Harold Munk; Pig, Henry Stewart.

7. The projects were visited monthly, and judging lessons given at intervals.

#### WASHOE COUNTY

H. E. Boerlin  
County Extension Agent

#### Agricultural - 4-H Club Work -

The 1937 4-H Club program in the county was conducted with good success in spite of change of 4-H Club agents during the year. Miss Hayes, Home Demonstration Agent, was largely responsible for the reorganization of clubs under the community club plan at the beginning of the year. Then Assistant Agent Walker carried on during May, June and July.

The final reports and achievement programs in community centers were under the direction of part-time agent Archie Albright. The agent directed the club program in the county throughout the year.

The following statistics summarize the club program and give a three year comparison:

	1935	1936	1937
No. agricultural club members enrolled	58	48	47
No. agricultural club members completing	58	34	43
Percent completing	100%	64 $\frac{1}{2}$ %	91%

	1935	1936	1937
No. community clubs	8	10	9
No. projects	8	7	10
No. leaders	12	13	4
No. older club members who are leaders	0	0	4
No. days devoted to 4-H Club work	94	67	103 3/4
No. farm visits made	385	206	382
No. method demonstrations	25	26	52

## (1) Beef cattle

Washoe County was represented at the 10th Annual Interstate Livestock and Baby Beef Show by Buddy Garaventa and Croston Stead, who exhibited three Hereford calves. Mr. Stead and Mr. and Mrs. Joe Garaventa and their daughter Catherine, attended the show also. Catherine was a 4-H Club member, but her calf did not prove of a quality to enter the show.

Each of the three calves placed in the money at the show. Croston Stead also took first honors and the \$15.00 prize in the Amateur Entertainer's Contest with his banjo, harmonica and yodeling act. The following summary shows the boys' monetary retruns from the show.

<u>Croston Stead</u>	<u>Weight</u>		<u>Price per 100#</u>	<u>Amount</u>
Calf \$1638	840	⊙	\$14.00	\$117.60
" \$1677	1045	⊙	\$13.50	141.07
				<u>\$258.67</u>
Prizes:				
Calf \$1638	12th Hereford		4.00	
" \$1677	5th Hereford		2.00	6.00
				<u>\$264.67</u>
Costs at show (no freight)				10.58
			NET ON CALVES	<u>\$275.25</u>
Amateur Contest Prize				15.00
			Total Net	<u>\$290.25</u>
<u>Buddy Garaventa</u>	<u>Weight</u>		<u>Price per 100#</u>	<u>Amount</u>
Calf \$1636	775	⊙	\$14.00	\$108.50
Prize	6th Hereford			10.00
				<u>\$118.50</u>
Costs at show				10.23
			NET ON CALF	<u>\$108.27</u>
American Hereford Breeders' Association Prize				5.00
			Total Net	<u>\$113.27</u>

The two smaller calves were purchased by Swift & Company for Peninsular Stores and the large calf by the same company for Safeway Stores .

The show this year was of a uniformly higher quality than ever. There was close competition at the top and few poor animals to be sifted. Nevada was well represented with twenty-three 4-H'ers from five counties attending. Oregon was represented for the first time with eight boys from three communities. Utah had sixteen boys showing twenty calves, Idaho had about ten boys at the show, and the balance were California 4-H'ers and Future Farmers. The Oregon delegation was headed by Mr. Allen, Assistant State 4-H Leader.

During the week the two outstanding events outside of the show itself were the afternoon tour of San Francisco, including a trip across the Bay Bridge, and the annual banquet at which about 1,100 people partook of T-bone steaks. Guest speaker at the banquet was Melvin Pervis, ex-federal "G" man.

The judging of the show was done by Henry W. Vaughn of Montana, who judged the beef calves; Dr. E. H. Hughes, University of California, hogs; and Professor Robert F. Miller, University of California, sheep.

The Grand Champion Steer, which was an 820 pound Hereford dressed out 62.37 per cent. Washoe County calves dressed out as follows: Croston Stead's 840 pound steer, 64 per cent; the 1045 pound steer, 65.7 per cent; and Buddy Garaventa's 775 pound steer at 62.3 per cent.

## (2) Swine

One registered pig was secured by a 4-H Club boy in the county this year. Harold Bottini purchased a purebred Duroc-Jersey gilt from the University Experiment Station and has started the first purebred breeding project for club members. There were other prospective members for this project but the proper type pigs at reasonable prices could not be secured.

## (3) Range Management

Under the leadership of Mr. Plympton, agent at Nixon three Indian boys carried on range management work, following the outline in the approved Nevada bulletin for this project. At the close of the year Mr. Plympton and Archie Albright took the boys on a one-day tour of the Pyramid Reservation range. They visited the range test plots and ECW range improvements on the reservation. Plant specimens were also secured for further study in their class work this winter.

## (4) Community 4-H Clubs

The outlines prepared last year were again used in conducting community meetings. All clubs were reorganized at the beginning of the

year and most of the meetings were as community groups. The agricultural members met on project work and for club tours in judging projects.

The following communities had organized clubs with designated leaders:

<u>Community</u>	<u>Leader</u>	<u>Agricultural Enrollment</u>	<u>Home Economics Enrollment</u>
Anderson-Riverside	Mrs. Landis)	9	11
	Mrs. Clark )		
Browns	Mrs. Ferretto	0	4
Glendale	(No leader)	4	3
Huffaker	Mrs. Mary Quilici)		
	A. A. Neilson )	1	3
Lockwood	(No leader)	6	1
Nixon	Mrs. Stimson )		
	Mrs. Russell )		
	Mrs. Hudson )		
	Miss Bourland )		
	Miss Motley )	6	10
	Mrs. Pratt )		
	E. B. Hudson )		
	W. B. Plympton )		
North Truckee	Mrs. A. Oppio )	6	10
	Aubin Meizel )		
Verdi	Mrs. Johnson )	7	4
Wadsworth	Mrs. Garaventa )	2	5
	Mrs. Pabst )		
Washoe Valley	Mrs. Cliff )		
	Mrs. Ghiglieri)	3	8
Baby Beef Club	(Mr. Neilson)	3	0
Totals 9 communities	21 leaders	47 agri.	59 home econ-omics.

The county agricultural enrollment was divided among the following projects: Baby beef, dairy calf, garden, pigs, yard improvement, range management, sheep, rabbits, potatoes and farm accounts.

There were purebred animals used in baby beef and pig projects this year. The garden and yard improvement followed the same project outline as last year and range management was used by members in the Nixon 4-H Club composed of Indian children.

#### Achievement Day

One of the most successful 4-H Achievement Days was held this year. Judging was done with the tour and score card method by

Assistant Agent Paul Walker. The annual Achievement Day dinner was held at the Golden Hotel with 4-H Club presidents occupying and being introduced from the speakers' table. 68 club members and leaders attended. The program was held in the Library building and was climaxed with the presentation of prizes. One hundred and fifty attended.

The Kiwanis Club of Reno presented silver trophies to the outstanding boy and girl in the county at it's luncheon meeting July 28th. A 4-H program was presented at the meeting. Bennie Sciarroni received the boy's award and Gloria Ghiglieri received the girl's award. Mr. F. B. Headley of the Nevada Experiment Station was instrumental in getting these awards made by the Kiwanis Club.

Prizes were awarded in each club on a basis of individual score, arrived at on the 4-H tours. A list of the prize winners follows:

Anderson-Riverside Club - First prize, Neil Mortensen; second prize, Bob Landis; third prize, Jack McGee; fourth prize, Donald E. Peckham.

Glendale Club - First prize, Dick Streeter; second prize, Harold Bottini; third prize, Jack Streeter; fourth prize, Ben Packer.

Huffaker Club - First prize, Earl Casazza; second prize, Lloyd Wholey; third prize, Armando Martini; fourth prize, John Francis Young.

Lockwood Club - First prize, Roy DePietro; second prize, Billy Haynes; third prize, Narciso Perri; fourth prize, Domenico Peri.

North Truckee Club - First prize, Bennie Sciarroni; second prize, Elmer Ghilotti; third prize, Richard Kinsley; fourth prize, Daryl McNeilly.

Verdi Club - First prize, Gordon Adams; second prize, Harold Holstrom; third prize, Edward Silva; fourth prize, Alvin Silva.

Wadsworth Club - First prize, Billy Conley; second prize, Buddy Garaventa, third prize, Catherine Garaventa; fourth prize, Betty Gardella.

Washoe Valley Club - First prize, Joe Lepori; second prize, Urello Pagni; third prize, Albert Pagni.

#### State 4-H Club Camp

A very successful and enjoyable camp was held at Zephyr Cove, Lake Tahoe August 2nd to 7th. Washoe County had twenty-three very active boys and girls at the camp this year. The outstanding achievement for Washoe County was the election of Bennie Sciarroni as state 4-H president and the re-election of Agnes Bluberg as secretary.



Community 4-H Achievement Programs

Final 4-H Achievement Programs were held for all clubs in the county. Six community meetings were held for these programs. The First National Bank of Nevada again presented 4-H pins. "Under the 4-H Flag", a sound movie, was presented. This proved exceptionally entertaining and worthwhile. Some of the clubs put on additional entertainment numbers.

The meetings were as follows:

<u>FARM CENTER</u>	<u>DATE</u>	<u>PRESENTATION MADE BY</u>
Anderson-Riverside	Oct. 7	D. C. Sutherland
Brown-Huffaker	Oct. 15	C. E. Clark
Washoe Valley	Oct. 8	Carl Friesen
North Truckee	Oct. 14	Joe Sbragia
Verdi	Oct. 11	Hugo Quilici
Wadsworth	Oct. 12	Wallace Taber

WHITE PINE COUNTY

C. R. Townsend  
District Extension Agent

## 4-H Club Work

1. Agricultural. Forty-two boys of school age were enrolled in 4-H Club work during the summer period. The eleven boys in the Preston Club studied the following projects: pigs, 5; dairy calf, 2; potatoes, 1; gardening, 1; chickens, 2. Eight club members completed their work.

The thirteen boys in the Lund Club studied the following projects: dairy calf, 5; sheep, 2; potatoes, 1; gardening, 1; rabbits, 2; beef cattle, 2. Nine of the above club members completed their projects.

The eighteen boys in the East Ely Club studied the following projects: garden, 6; chickens, 3; rabbits, 2; range management, 8;. Fifteen of the above members completed their projects.

The above work was under the direction of J. D. Oxborrow, who acted as assistant county agent during the summer months.

2. Home Economics. Three girls clubs were organized at Lund, Preston, and East Ely. The Lund club consisted of six members who studied breadmaking under the leadership of Miss Alice Gardiner. Five girls completed their work.

Six of the Preston girls studied sewing and one studied cooking, under the leadership of Miss Melba Jackman. Five girls

completed their work.

The East Ely Club consisted of five members. They studied sewing under the leadership of Mrs. Dennis. Five girls completed their work.

The Lund and Preston 4-H club boys and girls organized a 4-H club band, rehearsals being held after club meetings. This band made a number of public appearances during the summer months.

NEVADA  
4-H CLUB REPORT  
1937

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HOME ECONOMICS PROJECTS

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MARY STILWELL BUOL  
ASSISTANT DIRECTOR  
FOR  
HOME ECONOMICS

## HOME ECONOMICS 4-H CLUB WORK IN NEVADA:

As Nevada does not have a separate 4-H Club department the home economics 4-H Club work is carried on by two methods:

- A. Under supervision of the home demonstration agents.
- B. Under supervision of the agricultural extension agents and assistant agents, with specialist assistance from the state office.

A summary of the statistics regarding this work during 1937 is given below:

	<u>Enrolled</u>	<u>Completing</u>	<u>% Completions</u>
No. 4-H Club projects carried by girls.....	485	403	86%
No. 4-H home economics projects under supervision of home demonstration agents.....	342	304	90%
No. 4-H home economics projects under supervision of agricultural agents.....	118	84	71%
Total home economics 4-H projects.....	461	389	86%

The discrepancy between the total number of home economics projects and the total number of projects carried by 4-H Club girls is due to agricultural projects carried by girls (such as poultry, beef cattle, dairy cattle, gardens), and five boys who enrolled in 4-H food projects in one county this year.

We are particularly proud of the 90% completion secured in the home economics 4-H Club projects by the home demonstration agents. The fact that the home economics 4-H Club completions in areas handled by the agricultural agents is only 71% is a clear indication of the difficulty encountered in carrying these projects in areas that do not have home demonstration agents. Only a small amount of time can be given by the assistant director of home economics; therefore, the 4-H leaders in these areas do not have as much specific training as in home demonstration counties. Also they lack the general home economics background received in home demonstration counties, where 4-H Club leaders are practically always members of homemakers clubs. The agricultural agents are certainly doing the best they can with this problem of home economics 4-H Club work and so is the assistant director for home economics. The problem has been complicated the past few years because of the additional load that emergency work has given to both agricultural agents and the assistant director for home economics. We will all keep on trying to solve the problems on the present basis but have little hope of much improvement until an increase in home demonstration staff is secured.

The quality of home economics 4-H Club work throughout the state has definitely improved during this year. This is due to the improvement in subject matter instruction books for the clothing and food projects,

and to increased emphasis upon local leader training. Both these factors have not only improved the quality of the work but have increased interest in 4-H leadership. Elko County specifically mentioned that they now have a waiting list of women willing to act as home economics 4-H Club leaders, whereas in previous years they had great difficulty in securing women willing to act in this capacity.

Local leader council work is also slowly but steadily improving. Churchill and Clark counties did outstanding work in this respect during this year, by holding more frequent meetings and better planned meetings, and having a higher percentage of attendance. Elko County also is working on this problem. In an attempt to counteract the unfavorable effect of long distances most of its home economics 4-H leader training conferences are now held in two areas in the county instead of trying to bring all leaders into the county seat. This has increased both attendance and quality of leadership.

In the clothing project improved quality of work has resulted from the use of sewing construction models which are designed by Miss Lena Hauke, the home demonstration agent who acts as part-time clothing specialist. These models were copied by one of the WPA sewing centers and have been used for leaders training and 4-H Club, as well as for homemakers clubs, work with Rural Rehabilitation clients, the Social Security groups, etc.

The recreation phase of 4-H Club work has been decidedly strengthened this year, both in regard to local club meetings, and county and state events. This improvement has been the result of careful, persistent planning on the part of both agents and leaders. We are trying to establish a standard of at least 15 minutes recreation at each 4-H Club meeting. This recreation is to be planned specifically for the age and type of members. We find a considerable difference between recreation that is successful in a girls group and that required where there are community groups with boys and girls meeting together.

One of the phases of recreation that continues to steadily progress is the series of one-act plays put on by 4-H Clubs for the benefit of the various community centers. Five counties this year have put on a series of these plays, covering practically all the communities and ending up with a state contest at the state 4-H Club camp. This activity gives, we believe, wholesome recreation and group activity for the young people involved, as well as providing many of these communities with their only opportunity for attending dramatic presentations. The interest in this phase of recreation is slowly but steadily increasing.

Another phase of recreation for 4-H groups are hikes, swimming parties, etc., which are growing in popularity. As much as possible we are encouraging parents to attend these special 4-H recreational features. Recreation is also playing a larger part in 4-H Achievement days which have grown to be a feature of county and community lives.

County camps are growing in favor. Three counties this year took part in county or inter-county camps. Decided success was secured in getting the cooperation of the families of these 4-H Club members, also local organizations. One of these camps was held in beautiful Lamoille Canyon in Elko County and the other at Mt. Charleston in Clark County. At the latter camp a most successful arrangement was made whereby the total responsibility for eating and sleeping arrangements were assumed by families of 4-H Club members, the whole family coming to camp out. Nature study, crafts, and recreation activities were carried on for both adults and juniors, supplemented by conference groups for senior 4-H Club members, and for leaders. In these camps excellent cooperation was given by the forest service who loaned some equipment and furnished leadership assistance for the nature study work. Also the Maternal and Child Health Nursing Service furnished the camp nurses for both local and state 4-H Club camps.

State 4-H Club camp continues to be an important recreation feature for both the juniors and adults, as well as a training period for specific 4-H Club problems. This year 19 women leaders attended the encampment at Lake Tahoe, along with 117 4-H Club members. Conference groups, leader training periods, handicrafts, nature study trips, and sight-seeing tours were included in the program, as well as the usual 4-H project instruction. Besides this special recreation instruction in community singing and conference work regarding dramatic presentations was given.

There has been a decided improvement in the cooperation given to 4-H Club work by other organizations. The homemakers clubs for years have sponsored 4-H Club work, furnished leaders, put up small prizes, helped with Achievement days and the trips to 4-H Club camp. This year in Churchill County the Future Farmer and homemakers groups cooperated with the 4-H Clubs in putting on a "Youth's Fair" which takes the place of the state fair previously held in this county. The whole county turned out for this fair, and excellent exhibits were put up this year by all three groups. Recreational activities consist of athletic activities, horse races, county style dress revue, and community singing. We believe this is a fine type of cooperation.

Cooperation is also developing among various adult groups. The Daughters of the American Revolution this year gave two scholarships of \$5.00 each to the boy and girl 4-H Club members in Washoe County making the most outstanding record this year. These funds are used to pay expenses to the State 4-H Club Camp. The Kiwanis Club of Reno also put up a loving cup for outstanding club work. They were very complimentary in their comments regarding the program put on by 4-H Club boys and girls at this meeting. The Bankers' Association is providing the club pins in this state which are presented each year to members completing their

projects. The county "key banker" or their representative presents these at the county Achievement days.

Another encouraging development is the growth in community 4-H Clubs. Practically all of Washoe County's work is carried on a community basis, with the boys and girls holding organization and recreational meetings together, with separate meetings for project instruction. We believe this a wholesome development.

DISTRIBUTION OF HOME ECONOMICS 4-H CLUB PROJECTS BY AREA AND PROJECTS:

H.D.A. Areas	Clothing	Food Selection and Preparation	Food Preservation	Home Improvement	Totals
Elko	26-24	31-31	2-2	5-4	64-61
Churchill	52-45	22-21	3-3	0-0	77-69
Washoe	41-38	19-16	1-1	0-0	58-55
Clark	58-46	23-22	0-0	0-0	81-68
Ormsby-Douglas	18-14	15-15	0-0	0-0	33-29
Lyon	21-14	7-7	1-1	0-0	29-22
Sub-Total for H.D.A. Cos.	216-181	114-112	7-7	5-4	342-304
Areas Without H.D.A.'s					
Lincoln	30-19	30-19	8-5	4-3	72-46
Pershing	16-14	0-0	0-0	3-2	19-16
Humboldt	0-0	9-7	0-0	0-0	9-7
White Pine	11-10	7-5	0-0	0-0	18-15
Sub-Total for men agents	57-43	46-31	8-5	7-5	118-84
GRAND TOTAL	273-224	160-143	15-12	12-9	460-388
% in Projects	60%	35%	3%	2.6%	

A study of the above statistics shows that by far the largest amount of home economics club work, (60%), was carried in the clothing project, the food preparation project ranks second (35%), with a decidedly smaller number enrolled in the food preservation (3%), and home improvement (2.6%), projects. The largest shift in this work has occurred in the reduction of the number carrying clothing and food preservation work, and in the increased number carrying food selection and preparation work. We believe this change is due to the improvement in food selection and preparation project instruction books which have decidedly increased interest among

4-H Club members, and confidence of leaders in their ability to carry this project. This is we consider an advantageous change because nutrition is still one of the outstanding problems in Nevada. The 4-H Club age is the age where food habits are still in the formative period and subject to improvements that affect both the home and the individual throughout the rest of the member's life.

We are sorry to see the decrease in the food preservation work and believe it is largely due to inadequate 4-H Club food preservation instruction books. Our present books are mimeographed and lack the detailed instruction given in the food and clothing projects. The same factor effects the home improvement project. As soon as the home demonstration staff and state office can find the time to improve the instruction books in these two projects were confident that a larger enrollment will result.

A summary of 4-H Club statistics and quotations from agents' reports are given below to illustrate problems and methods in the various counties:

No. home economics 4-H Clubs supervised by women agents.....	54
No. members in these clubs.....	342
Per cent completing projects.....	90%
No. home economics club members supervised by men agents....	118
Per cent completing.....	71%
Total home economics 4-H projects.....	480
Per cent completing.....	86%
No. 4-H Club adult leaders under home demonstration agents..	72
No. older girls acting as leaders or assistant leaders.....	16
No. leaders training meetings..	50
Attendance.....	276
No. 4-H meetings held by leaders.....	558
Attendance.....	3046

Washoe County: 4-H Club Organization Problems: "4-H Club work in Washoe County was carried on in ten organized 4-H community clubs in 1936-37, with 59 girls enrolled in club work. 54% of the members completed their work.

"Community 4-H Clubs composed of both boys and girls were elected from the entire group. Joint meetings were held where problems of interest to both groups were discussed. A recreational program was held at each meeting. After the business meeting the girls and boys met separately with their leaders for regular project work. Joint meetings are held once a month. The girls meet more often to do their project work. The county farm bureau sponsors the 4-H Club program in Washoe County. A 4-H club dinner was held at the Golden Hotel for club members and leaders. The directors bore the greater portion of this expense while the club members contributed a third. About 75 people attended the dinner. The farm bureau directors also give the Harvest Ball each year. The proceeds from the dance are used for prizes and other club activities carried on



in the county. Work will be continued on a county 4-H Club fair to be held as soon as there is enough money to carry on the project.

"The club projects were judged in each club. The following score card was used: Record book, 30 points; condition of project, 30 points; knowledge of project, 30 points; and interest in club work, 10 points. Three special awards were made for outstanding club work this year. The Kiwanis Club gave an engraved silver cup to both the outstanding boy and outstanding girl in the county. Three club members and the agents were entertained by the Kiwanis Club at the luncheon at which the cups were presented. Talks were made by the club members and agents telling of club work in the county. A display of canning was shown, also. The local chapter of the Daughters of the American Revolution presented a prize trip to the boy and girl making the most improvement in club work during the year. Two trips were also awarded by the Amerson-Riverside Homemakers Club for excellence in club work. 4-H achievement pins were presented at the farm center meetings by representatives of the First National Bank of Nevada which furnishes pins to all club members in the state. We are very much pleased that outside organizations take an interest in boys' and girls' club work.

"The 4-H Club members assisted with 3 farm center meeting programs in each of the 4 farm centers. 3 meetings were held by club members in unorganized communities - Wadsworth and Verdi. The 4-H Club achievement pins were given out at these meetings.

"The Washoe Valley 4-H Community Club is located in Washoe County about 25 miles from Reno. The valley was settled many years ago when Virginia City was a prosperous mining town. At one time there was a town of 7,000 people in the valley. There are now 16 ranches in this valley. Almost every rancher in the valley owns his ranch and in most cases the second and third generations are living on the ranches. Many of the first settlers were of German descent.

"The Nevada State Farm Bureau and the extension service started work in the county 18 years ago. 4-H Club work was among the first projects started. The entire community has always taken an active interest in all activities that would better the people. The first 4-H Club leaders were Mrs. Henry Heidenreich, Jr., and Mrs. Harry Johnson. They served for about 7 years. They were succeeded by Mrs. Fred Cliff, who was assisted by Mrs. George Box, and Mrs. A. Ghiglieri. Mrs. Cliff has acted as club leader for 9 years. The club members have been very active in all community activities. The results accomplished by the Washoe Valley 4-H Community Club show what happens when the entire community works together to assist in putting on a project. We hope this fine record stimulate other communities to take a more active part in 4-H Club work.

to see if there are any problems and to check on the effectiveness of the work. Not so long ago it was difficult to secure leaders for club work, but now, that training of leaders, both urban and rural, is more effective a waiting list is made of volunteers. Whenever a leader is unable to lead her group for any reason, one of these volunteers is substituted. Wherever possible assistant leaders are provided from the Senior 4-H Council. Completions are higher in clubs with assistants, because the assistants understand all phases of club work due to experience. Two assistants were provided this year.

**"Big Sister Movement:** Wherever possible older members are assigned new members in 4-H Clubs. The older member is known as "Big Sister" and the new member as the "little sister". The duty of the "Big Sister" is to watch over the welfare of the "Little Sister". If the "Little Sisters" work is not up to standard or she does not attend meetings regularly it is the duty of the "Big Sister" to find the trouble if possible and correct it.

**"Specific effort was made to co-ordinate all 4-H Club work in the county. Mark Menke, County Agricultural Agent, gave fine cooperation in leadership training, helping at achievement day, etc. Women leaders in turn helped in the work with the boys by securing leaders wherever possible."**

**Churchill County: 4-H Club Organization:** "One of the major projects carried on in Churchill County this year was the boys' and girls' 4-H Club project. Seventy-three girls enrolled in clothing, foods, and canning work. 89% of the girls completed their projects. Cooperation was given the Indian Service again this year with the organization of a foods club and a clothing club at the Stilwater Indian agency.

**"4-H Club Council:** In order to plan the club activities for the year and to carry them out more successfully, the county 4-H Club leaders' council continued to function again this year. Harry Miller of the Lone Tree community was re-elected president of the council which is composed of voluntary local leaders, assistant leaders and extension agents. Training meetings were held to discuss organization plans, contests, 4-H achievement day and state club camp activities.

**"Achievement Day:** The county-wide joint Achievement day of 4-H Club, homemakers, home arts classes and future farmers was held July 28, with over 500 people in attendance. It was declared to be one of the best ever held. The exhibit building at the fair grounds was well filled with displays of clothing, cooking, canning, fancy work, garden products, etc., and reminded one of the state fairs previously held several years ago. The poultry and livestock exhibits also offered keen competition, as well as the judging contests in foods, clothing, canning, livestock, poultry and garden products. An added feature this year was an exhibit of dresses

to see if there are any problems and to check on the effectiveness of the work. Not so long ago it was difficult to secure leaders for club work, but now, that training of leaders, both urban and rural, is more effective a waiting list is made of volunteers. Whenever a leader is unable to lead her group for any reason, one of these volunteers is substituted. Wherever possible assistant leaders are provided from the Senior 4-H Council. Completions are higher in clubs with assistants, because the assistants understand all phases of club work due to experience. Two assistants were provided this year.

"Big Sister Movement: Wherever possible older members are assigned new members in 4-H Clubs. The older member is known as "Big Sister" and the new member as the "little sister". The duty of the "Big Sister" is to watch over the welfare of the "Little Sister". If the "Little Sisters" work is not up to standard or she does not attend meetings regularly it is the duty of the "Big Sister" to find the trouble if possible and correct it.

"Specific effort was made to co-ordinate all 4-H Club work in the county. Mark Menke, County Agricultural Agent, gave fine cooperation in leadership training, helping at achievement day, etc. Women leaders in turn helped in the work with the boys by securing leaders wherever possible."

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made by the home arts girls of the Churchill County High School, under the direction of Miss Gladys Smith, home economics supervisor. Mr. L. C. Schank, Smith-Heughes instructor, was in charge of the future farmers exhibit. A feature of the afternoon program was the style dress revue in which the girls modeled the garments they had made in their club projects. This was followed by bicycle races and horse shows, for with the Lions' Club of Fallon had donated two bridles and two pairs of bridle reins as prizes. Other cash prizes and ribbons were also awarded in the various projects. Mrs. B. A. Pflum was chairman of the 4-H refreshment booth, from which punch and ice cream cones were sold. Over \$50.00 was taken in and used as premium money. The extension agents feel that the success of this Achievement day was due largely to the splendid co-operation received from the leaders, members and committees of the various organizations. This cooperation is greatly appreciated and shows that more interest is being taken in carrying out the 4-H Club program in Churchill County."

Clark County: 4-H Club Organization. "County 4-H Club work was well under way when the agent arrived in the county. All the leaders had been selected and were ready for training meetings. Two training meetings were held, one in Moapa Valley and one in Virgin Valley with seven and eight leaders present respectively. The complete 4-H Club program for the year was outlined at this time, club books given out, suggestions for 4-H Club meetings, etc.

"Charleston Outing: The last part of August a county outing for 4-H Club members, parents and leaders was held at Charleston Park, 30 miles from Las Vegas, with 203 people in attendance from Lincoln and Clark Counties. The outing was held in Kyle Canyon and each family or group took care of its own camping, eating, etc. Evening programs were filled with songs, stunts, demonstrations, etc. The second evening in each club and community responded with yells and songs. One good feature was a model 4-H Club meeting presented by the Las Vegas 4-H Clubs, which was very instructive for all. Friday morning was taken up with handicraft, taught by Bernice Denton, leader from Caliente, Nevada; hikes to Little Falls and Cathedral Rock. An accident occurred to mar the program, a small girl from Panaca fell from a tater breaking her arm, outside of this no other casualties happened. In the afternoon all girls, parents and leaders interested took part in the textile identification program. Much interest was shown and afterwards a class was held on these same textiles and how to identify the different ones. Later in the afternoon all boys took part in crop-judging contests. Saturday all groups left camp early - going to Boulder Dam, through the dormitory, then to Lake Mead for a swim, back to Las Vegas for lunch and late afternoon saw everyone off for home after a successful and happy camp.

"4-H Library: 4-H Clubs of Clark County have started a library that travels from one community to another. Overton 4-H Clubs this year held a food sale among the combined clubs and donated \$8.00 to the library fund. During the fair punch and cookies were sold and about \$3.00 added to the fund. These books will be bought by a competent librarian and

gave a demonstration on preparing and packing an adequate school lunch at the State 4-H Club Camp and was awarded the first place. Ellen Partridge of the Sheckler community was chosen as the county champion in the 4-H Food Selection and Preparation Contest. This entitled her to enter the state contest where she won first place and was awarded a trip to the National Boys' and Girls' 4-H Club Congress to be held in Chicago November 26-December 4, 1937, given by the Serval Electrolux Company."

Clark County: Food Selection and Preparation. "Score cards were kept by each girl for the club year on health habits. Each girl endeavored to improve her health and weight during the year. This is very important for this county as many of the girls lose their appetite in the extreme heat and then lose many pounds of weight. It was admirable how these girls enjoyed and completed their club work, keeping accurate records - doing extra cooking during the hot summer."

Elko County: Food Selection and Preparation. "One unusual feature this year, was a boys first year foods club in Wells. Five boys entered this club and completed 100%. These boys were far from the "sissy" type, but were huskies. They thoroughly enjoyed the work. The leader, Mrs. E. S. Anderson, of Wells enjoyed working with these boys very much. One idea which was stressed with this group was campfire cookery. A demonstration was to have been put on at club camp by two of the boys but one boy had the misfortune of breaking his arm. So much interest was aroused among the boys in Wells, that a larger club has been started this fall."

Churchill County: Indian 4-H Foods Club: "One foods club was organized at the Stillwater Indian Agency, with six girls enrolling under the leadership of Miss Charlene Bonstel, local missionary at the Agency. These girls were greatly interested in the foods work and in the recreation activities which were held in connection with their club meetings. They exhibited some of their baked goods at their fall festival held annually at the Agency."

Ormsby County: Indian 4-H Food Club. "A considerable group of older girls were enrolled in food preparation under the guidance of their home economics teacher, Miss Florence Clarke. Although their major interest was in cake club work, Miss Clarke gave these girls some excellent work in meal preparation and general cooking. They all felt that this project emphasizing practical skills, cleanliness and health would be of great value to the girls when they returned to their homes or when they want to go into domestic service as many from this group do. At the close of the year these club members served at an afternoon tea and achievement day where examples of their work were placed on display. One of the very interesting features of this exhibit was a group of Indian native foods. Although not especially attractive to white people, these foods are generally used by the older Indians and the girls have learned how to prepare "acorn bread", "pinenut soup", and a number of other dishes."

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## "MY 4-H CLUB EXPERIENCES IN FOODS PREPARATION

I am Lois Fegoni, sixteen years of age and I live on a 135 acre ranch about four miles east of Sparks, Nevada. Out of the 135 acres about 70 acres are used for pasture. We produce mostly hay, potatoes, onions, and grain. A fairly large garden is taken care of by my sister and me. We have a few plum trees, the fruit of which we use to make jelly and jam for our own use. We also have chickens, hogs, rabbits, and turkeys which supply us with meat most all the year. A large herd of milking cows bring in a fairly good income each month.

At the present time I have been enrolled in club work five years, the first two years taking clothing and the last three years foods. I happened to take up club work because I was told it was both useful and helpful to oneself and family. This has certainly proved to be correct. Since club work has done so much for me, I take great interest in encouraging other girls and boys to join.

In 1934, my third year in club work and first year in foods, I learned the preparation of a 4-square breakfast, the preparation of milk drinks, fruits, cereals, eggs, biscuits and toast, and laying the table for a breakfast. These were very helpful to me and my family, because during summer vacation I took the responsibility of cooking the cereal, making milk drinks, and baking biscuits whenever it was necessary. I prepared 48 different foods.

In 1935, my second year in foods, I continued taking high altitude baking and preparing egg and vegetable dishes. During the summer vacation I took the responsibility of preparing all egg and vegetable dishes, making desserts, baking biscuits, cookies, pies, and cakes, and prepared 103 different dishes.

This year, 1937, my fifth year in club work and third year in foods, I continued taking high altitude baking, making breads and cakes which are more difficult. This year I took the responsibility of preparing complete meals and assisting with the bread making. I prepared 29 complete meals, and 275 dishes, which I must say were very successful for a beginner. I also had the opportunity of working out, doing housework for a family in Reno. My last two weeks of work, I took the responsibility of preparing breakfast for three small girls. While doing this I kept in mind a 4-square breakfast, which I learned in 1934, my first year of foods. While working there a dinner was given and I was asked to set the table for eight guests. This I did very willingly for 4-H had taught me how to set a table.

During my five years in club work I took part in plays, community activities, judging and demonstration teams. One of the greatest community activities that I took part in was in 1934 when the children planted vines

and flowers at the North Truckee school. In 1935 a demonstration was given on how to prepare and pack a lunch which was put over very successfully by my teammate and myself. The judging teams I took part in were the individual judging of foods, and this I considered very important for one can place oneself as being a bad, fair, or good cook.

Club work I believe helps both young and old in many ways. It helps the community, it helps the county, and it helps the state. "Make the Best Better" is it's motto and that should be the aim of everyone.

I wish to thank the extension service, the farm bureau, the local leaders, and the extension agents for the help given me in carrying out my club projects.

Lois Figoni, Washoe County"

Washoe County: Senior 4-H Club Work. "An effort has been made to keep all older club members in 4-H Club work. Most of the girls do outside work during the summer. Two girls cooked for hay men; one girl took care of children and prepared lunches; two girls worked in a soft drink stand; and another worked in a laundry. Another of these girls kept books for an electrical shop; one went to summer school and still another helped at home. Five of the girls mentioned have won state trips to Chicago. These girls acted as club leaders whenever possible. It is to be hoped that the club members will continue to closely follow club projects after they pass the regular 4-H Club age. An effort will be made to plan a program to meet the needs of the group. A place to hold meetings is a real problem. We hoped to have a community building through the WPA program but at present it does not seem possible. We will continue to work on this project. The time spent on this project is included in the regular 4-H Club projects. The senior 4-H Club members have taken part in plays at farm center meetings, 4-H Club programs and at Club Camp. The members have also gone to the different farm center meetings to make reports of club activities and accomplishments."

Churchill County: Senior 4-H Club Work. "Considerable recreation work has also been carried on with these older club members as well as with some of the other older young people in the Fallon, Harmon, Beach, Lone Tree, Old River, Sheckler, St. Clair and Union communities. They have been put on committees to have charge of community programs, Halloween parties, Christmas parties, picnics, etc. Six one-act plays have been given this year, including the one-act play given by senior members at the State 4-H Club Camp. Such gatherings offered excellent opportunities for them to plan their programs and to develop leadership among the rural youth. Three of the senior 4-H club girls have received part-time employment at the local Churchill County High School, this type of service being offered through the National Youth administration.

"4-H Clothing Club Work: 4-H Clothing Club work was carried on in seven communities in Churchill County this year, with 52 members enrolled and 45 or 86% of the members completing their work. Fourteen girls enrolled



"The girls do very nice bead work and sell it at the Indian Trading Post. The third year girls also made very attractive children's garments. All of this work was displayed at a community achievement day, at the county achievement day, at a meeting held at Stewart, and at a fair held at the Nixon Reservation."

Lyon County: 4-H Clothing. "A group of older girls from various sections of Mason Valley enrolled for second, third, and fourth year work under the leadership of Mrs. Flora Farias and Mrs. Bella Warr. Five of these seven girls completed their project work. Five girls from this group and one from the Smith Valley group entered the County Style Dress Revue Contest. LaVerda Fitzgerald placed first in this contest and was Lyon County's entry in the state contest held at the State 4-H Club camp last August, where she was declared state winner and Nevada's representative in the National Style Dress Revue Contest to be held in Chicago in December. LaVerda's dress, an informal party dress, together with the necessary underclothing was made at a cost of \$8.11. The accessories purchased cost \$5.00, bring the total cost of her outfit to \$13.11.

Clark County: 4-H Clothing. "An effort was made this year to see that the girls made suitable clothing for themselves and selected materials that would wear a reasonable time. In the Style Dress Revue one fact was stressed - that the girls plan for their outfits with relation to this locality, which would include cool cottons, easily laundered and cared for. There were no demonstration teams this summer inasmuch as the home demonstration agent was new to the territory so that it was thought advisable to stress other factors instead of demonstrations.

"A county style dress revue contest was held the last of July just prior to state club camp. Five girls took part in this county contest. Miss Marjorie Jones, of Overton, won first place in this contest thereby representing Clark County at Lake Tahoe Club Camp. In the state contest she won first place in the afternoon dress division and second place in grand championship contest.

"Following is her 4-H Club story:

#### My Club Story

- By Marjorie Jones -

If I had lived in Alaska I would probably have been interested in the latest style for Parkas, or if I had been fortunate enough to live in northern Nevada, I would have been interested in a wool suit, but as the stork dropped me way down in southern Nevada where old Sol has lots of fun chasin the mercury up and down, I needed something cool. It is against my code of living to be a nudist, so for the coolest dress I could find I chose sheer navy blue marquisette. While looking over my

wardrobe I decided I needed a tailored afternoon dress. I found an illustration of what I wanted in the Good Housekeeping. Mother had a tunic pattern which resembled the illustration in the magazine. With the help of Mrs. Davis, our extension agent, we fitted the pattern to me. The pattern was size 40 and I needed size 34, so it took considerable cutting and slashing before we got it down to my size. This was a very good experience for I learned how to alter a pattern correctly.

I had quite a time getting the material for my dress. The town of Overton is very small and there are no places to buy dress materials, so I made a trip to Las Vegas. I bought some very unsuitable print. After that experience I decided to take Sears Roebuck and Company's advice and "sit down and shop at home". This didn't solve my problem, however, for when my orders came I found that Sears was out of the goods I ordered so I had to make a second selection. After thorough study of their catalog for sheer material to match our climate, I found a very pretty piece of marquisette. While waiting for my dress materials I started to make my slip. The material was navy blue satin and ravelled very much while I was working on it. This was a serious problem to overcome. I had to make flat fell seams to keep the seams from raveling.

After finishing my slip, I made my panties. I put a slide fastener in my placket so that the placket would lie smoother. I had difficulty in getting a brassiere pattern, but finally found a tailored one. It had quite a few seams. This was a difficult problem because my brassiere was of white satin which ravelled. We got some twilled tape and taped all the seams. This made a neat tailored finish.

The chief difficulties I encountered while cutting out my dress were: I had to cut the skirt 8 inches longer than the pattern, and as the skirt was full I cut the front without piecing, but the back had to have a little piecing. The material was easy to sew on, but so sheer that if the room was the least bit dark it was hard to see the material. The real problem came while putting in the hem. We would pin it once and try it on, but would have to pin it again. My slip and dress had to be the same length and this caused a lot of adjusting and fitting. I found that the shoes I was wearing made quite a difference in the length.

I was perplexed trying to decide <sup>on</sup> a finish for the seams. As the material was so sheer and didn't ravel at all, the appearance was better with the seams pressed flat, so that is the way I finished them.

I spent my time and money as follows:

<u>Article</u>	<u>Cost</u>	<u>Hours</u>
Slip	\$0.88	12
Panties	.36	5
Brassiere	.15	7
Dress	2.37	19
Shopping	<u>\$3.75</u>	<u>46</u>
Total		

Compared with my other outfits this one was very inexpensive. A dress and slip of this type and material would probably cost three times \$3.25 if purchased at a dress shop.

The 4-H club has been a source of growth and development for all the girls in our club. It has brought girls who live on ranches a social contact which we otherwise wouldn't have had. It has given us skill in sewing and homemaking and has been a very fine preparation for a home economics course. Because of the very splendid training and assistance we have had in our club work, we feel that we would like to help as club leaders and pay our debt to the state."

Work With Older Rural Young People: Work with older rural young people is not progressing as fast as we had hoped. There are several reasons for this; one is the fact that a majority of the rural young people in this state do not stay in rural communities. After they reach high school age, and certainly after they are through high school they move to town to seek employment. In most of the counties there is only one high school. This means either a long trip into town five days a week, or spending the winter months in the county seat in order to attend high school. This has a serious affect upon the number of young people who can carry on 4-H Club work. In fact, we think it is quite remarkable that as many of high school age stay in club work under these circumstances. When high school days are over there is little or no employment available in rural sections. Therefore, members of the older group, (from 18 years of age and up), either go to town and secure positions or else go on to college. In either case a majority cease to be members of the rural community, and are assimilated into the town groups of young people. Practically all of our county seats are not typical rural communities because of the influence of the mining industry. Therefore, these young people on going to town tend to be absorbed into fraternal organizations, 20-30 clubs, junior departments of federated clubs and other urban activities. At the present time we do not see how this problem can be solved, as a majority of the young people have no opportunity to earn their livelihood in rural environment.

Another reason for the difficulty in reaching older young people in rural areas is the lack of time on the part of both men and women agents. The emergency programs, (Soil Conservation, Rural Rehabilitation, etc.), have so over-crowded agents' programs that they do not have sufficient time to put upon this problem. Definite effort is being made in one county to work with this older group. In two other counties the problem is being seriously studied. So far the number involved is so few that the best solution seems to be to keep them on in club work as leaders or assistant leaders, and at the same time draw them into local Farm Bureau and homemakers clubs.

The present methods seem to be succeeding fairly well. More and more of these young people are taking an active part in local community center meetings and in homemakers clubs acting on committees, as secretaries of local organizations, etc. We shall continue to study this problem and may find some other solution for it.

PRESENT DISTRICT TO OBTAIN BY:

1. Ability to store in dry tanks to maximum capacity.
2. Relief from water shortage.
3. Simplifying and harmonizing water distribution.

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4. Reduction of storage and distribution O. and M. costs.
5. Reduction of construction charges payable to the U. S.
6. Litigation expenses reduced.
7. Proportionate share of P.T.S.R.

PRESENT DISTRICT TO CONTRIBUTE:

1. Pro rata of Battle Mountain transferred water.

UPPER VALLEY TO GAIN BY:

1. Ability to store in Rye Patch to maximum capacity.
2. Relief from water shortages.
3. Lower operating expenses.
4. Removal of litigation expenses.
5. Increased land valuation.
  - a. Stable borrowing values by recognized agencies.
  - b. Increased sale values.
6. Unified protection for all Lovelock Valley water rights.
7. Federal CCC assistance on all ditch maintenance.
8. Reduction of storage and distribution U. and M. costs.
9. Pro rata of Battle Mountain transferred water.

UPPER VALLEY TO CONTRIBUTE:

1. Pitt-Taylor storage rights.
2. Proportionate cost of Project.

BASIS FOR UNIFICATION:

1. Battle Mountain transferred water and all stored water to be distributed so as to equalize, as nearly as possible, the total amount of water per acre delivered to each acre in the district.
2. Pitt Taylor storage to be merged with Rye Patch storage and Pitt Taylor stock holders to be credited with partial payment of their District construction charges.
3. Valuation of Pitt Taylor rights to be determined by a commission of disinterested appraisers, subject to approval of U. S.
4. Construction charges to be inverse ratio to priority.
5. Construction charges to be paid off in 40 years without interest.
6. Project to be redistricted so as to give Upper Valley representation of Board of Directors, limited to five members.

"As a result of the petition circulated in the Upper Valley, C. Jones, Cashier of the local bank and secretary of the Pershing County Water Conservation District, has made a trip to Washington using the Petition as a basis for including the 5000 acres listed, in the new district, and at the same time asking for around \$300,000 of the unex-

"Thousands of rabbits were killed around the hay stacks and trails throughout the sage brush areas.

"Very little damage was reported during the growing season."

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pended money of the original appropriation for the purpose of completing the district development. He was successful in this trip.

"Remarkable cooperation was secured through the Farm Bureau committee work on this matter through regular Farm Bureau channels.

11. In Control of Rodents and Other Pests  
(a) Squirrels

W. H. Stodieck, District Extension Agent, Douglas County states: "Through cooperation with the United States Biological Survey arrangements were made last spring for supplying farmers with poisoned oats for the squirrel control campaign in Douglas County. Damage was reported done by the California grey squirrel which is especially destructive to ditch banks during the irrigation season.

"Five hundred pounds of poisoned oats were secured to be used in the county and this was distributed to farmers on the cooperative basis, the farmer had to buy some grain at the rate of seven and one half cents a pound while other poisoned grain to be used for demonstration was supplied to the farmer for this use free of charge. Approximately 385 pounds of poisoned oats were distributed in May and June to thirty-three farmers and where it was used farmers report satisfactory control in all but a few cases.

"A few farmers used it also for prairie dog control where colonies of these small rodents were established on pastures. It is reported that the oats worked just as well for them as it did for the California grey squirrel.."

Paul L. Maloney, Humboldt County Extension Agent reports: "Due to persistent campaigns in past years by ranchers with the assistance of the Biological Survey, the number of ground squirrels have been greatly reduced. However, more than a ton of poison grain was distributed to the ranchers in Humboldt county during the spring and early summer. This was put out on private lands and the CCC camp furnished a number of enrollees to poison the public domain lands adjacent to the private holdings, which greatly relieved the situation.

(b) Rabbits.

During the summer of 1936 many alfalfa and grain stands were completely destroyed, causing the ranchers to become alarmed over the seriousness of the situation, which made it easy to complete an extensive campaign of extermination during the winter of 1936-37.

"Mr. Holman of the Biological Survey cooperated with the agent in securing WPA laborers and CCC camp enrollees to assist in mixing and distributing the poisoned alfalfa leaves.

"Thousands of rabbits were killed around the hay stacks and trails throughout the sage brush areas.

"Very little damage was reported during the growing season."

## (d) Gophers

Paul L. Maloney of Humboldt County states: "Gophers continue to be a pest that is difficult to control. His habits of living continuously underground makes it harder to effect control than on those species which live above the ground part of the time, such as the squirrel.

"There are several ranches in the county, which at one time were badly infested with gophers, are now completely freed of them. This was accomplished through persistent efforts in poisoning and trapping, but proves that a ranch can be kept free from gophers by considering poisoning and trapping as one of the chores of spring and fall work and doing it every year.

"Many demonstrations have been given during the year in their control, and it is believed that the money and time spent poisoning insect and rodent pests pays a greater return on that money and time than the same amount put to any other work on the ranch."

## (e) Grasshoppers

W. H. Stodieck, District Extension Agent in Douglas County reports: "One small colony of grasshoppers was reported in the county fairly late in the summer. This farmer working through the State Department of Agriculture, had their men come out to demonstrate the mixing and supervise the use of poison. Several farms adjacent to the isolated field affected failed to report any grasshoppers and one did not even know that his neighbor had this infestation."

County Agents in Elko, Humboldt, Washoe, Douglas, Lyon, Churchill and White Pine Counties cooperated with the United States Bureau of Biological Survey and the State Department of Agriculture in making distributions of poison grain to the farmers. The farmers were required to pay for half of the grain they received which was purchased with state funds and delivered to the County Agents who in turn transmitted the receipts through this office. Half of the poison grain furnished to the farmers was purchased with state and federal funds and given to the farmers. A total of 7000 pounds of steam crushed oats was distributed in this way. The agents cooperated in making contacts with the farmers in the development of a control pro-



gram in all the counties where control work was carried on

County Agents in Elko and Lyon Counties cooperated in magpie control work during the past winter. County Agent Menke of Elko County was particularly active in this work in his district.

12. In Rural Agricultural Engineering  
(a) Housing.

C. R. Townsend, White Pine County Agent reports: "The Farm Bureau office maintained files on blue prints for ranch buildings and equipment. These files are for the information of the public and may be used at any time by the ranching population of the county in planning improvements on their ranches.

(d) Irrigation.

C. R. Townsend, White Pine County Agent further reports: "Forty ranchers of the county were given assistance with irrigation problems. This work consisted of preparation of papers for applying for and proving up on water under the state law. Suggested changes in irrigation practices, changes of ditch lines, and construction of reservoirs were made. It is estimated that this service work saved ranchers approximately \$2,700.00.

(e) Home Water Supplies

A. J. Reed, Pershing County Agent states: "Most of the water in the Lovelock valley is very highly mineralized. An attempt was made to find a water softener which would be satisfactory.

"A very satisfactory softener, for use on a small scale, was secured and tried out in the Upper valley by Miss Addie Stoker. It was found that after some use, the softener had to be flushed out at shorter intervals than was claimed by the manufacturers. According to chemical analysis, the hardness of water, run through this machine, was reduced from 615.0 to 35.0, parts per million.

(g) Better Types of Machinery

A. J. Reed further states: "Parts of two days were spent in the farm machinery section at the California State Fair. The pick-up baler, put out by the J. I. Case Company was extremely interesting at that time. It is believed that local farmers will do a great deal of baling out of the field as our methods of handling hay change. Bailing from the fields cuts out the operation of stacking and leaves the hay ready to market at any time.

"Several farmers also assured me that a man can feed more cattle out of baled hay than he can from the stack. This year hay was baled out of the field on several farms."

14. In Publications  
(b) Bulletins

The following bulletins were published this past year:

Setting Up Taylor Grazing Districts in Nevada

Nevada 4-H Club Forestry Book

Nevada Low Cost Dehorning Chute Book

Nevada Junior 4-H Club Baby Beef Book

17. In Forestry  
(c) Distribution of Trees

Royal D. Crook, Churchill County agent states: "No combined orders of forest trees were made to the Utah State Agricultural College in 1937. There were, however, a few larger orders made directly. Mr. Eric Palludan planted a splendid wind break across his farm with Russian Olive seedlings. The farm is one-half mile long and four rows of trees were planted. The trees were fairly well taken care of and they did well. About eighty per cent of them lived.

"Mr. J. Whitney Floyd from the Utah State Agricultural College at Logan, Utah, and Mark Menke of Elko made a tour of the plantings made here during the past few years. The conditions of the trees varied from very good to very poor. In all cases where the trees had been given care, they had done well and some of all varieties of hardwoods offered for distribution were found growing very well. There is not enough use being made of the trees for woodlot purposes in the county, in view of the fact that they do so well."

The following from the report of Mark W. Menke, Extension Agent in Elko County, is of particular interest as he accompanied Mr. J. W. Floyd of the Utah State School of Farm Forestry on an inspection trip throughout Nevada for several days.

"Planting of trees for windbreak, woodlot or shelter belts has not been done in Eastern Nevada until recently. The altitude of 5,000 to 6,500 feet, the long cold winters and short frost free period have discouraged most people from planting. Most trees sold by nurserymen would not stand the climate and died. Native stands of willow, poplar and hawthorne trees are used as shelter for livestock. Plantings of Siberian elm have been disappointing and the most dependable tree yet found has been the Russian Olive. Tartarain Bush honeysuckles have proven excellent for ornamental windbreaks around farmsteads and grow up to a height of over twelve feet. Seventeen ranchers have been provided with trees from the Utah Farm Forestry School at Logan and interest in tree planting is becoming greater.

"Mr. J. W. Floyd of the Utah State School of Farm Forestry was accompanied by the Agent on an inspection trip of farm tree plantings from August 16th to 22nd inclusive. Trees inspected were those supplied by the Utah Agricultural college cooperating under the Federal Clark-McNary Act to farmers and stockmen for windbreak, shelterbelt and woodlot plantings. One hundred plantings were inspected in Elko, Eureka, Lander, Humboldt, Pershing, Washoe, Ormsby, Douglas, Lyon and Churchill counties. The best shelterbelt and windbreak tree for Nevada is the Russian Olive. Other trees doing well over Eastern Nevada are Siberian elm, Siberian pea and in certain parts black locust. In Western Nevada all of the trees grown by the nursery thrive if given proper care. The limiting factors over the entire state are lack of good cultivation, irrigation, pruning and protection from livestock grazing. Catalpa and black walnut trees are the least desirable of the species as they are not so well adapted to conditions except in Western Nevada.

"The trip was very instructive and gave Mr. Floyd and the Agent a comprehensive view of the tree planting and growth conditions in Northern and Western Nevada."

E. B. Recanzone, Lyon-Mineral Counties Extension Agent states: "In cooperation with the School of Forestry, Utah State Agricultural College, during the past few years more than eight thousand trees have been planted in Lyon County.

"In the spring of 1937 twenty-nine farmers in Lyon County received two thousand one hundred seventy-three trees. Most of these trees were planted for windbreaks with two plantings being for wood lots.

UNIVERSITY OF NEVADA

Agricultural Extension Division

Cecil W. Creel

DIRECTOR

Annual Report of Agricultural Extension Work

(Project 2 B)

Extension Work in Home Economics

for

1 9 3 7

By

Mary Stilwell Buol

Assistant Director

for

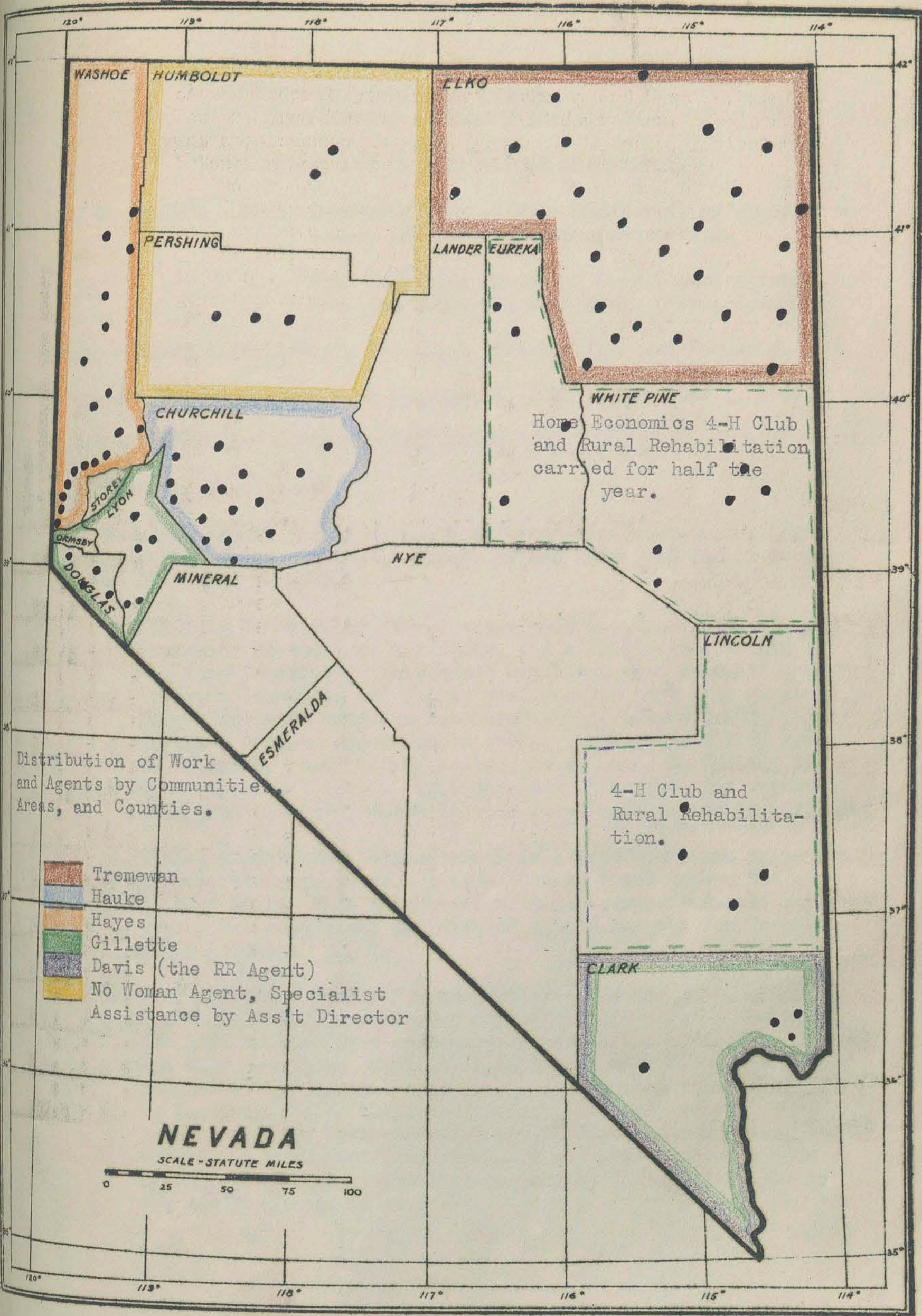
Home Economics

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## DISTRIBUTION OF EXTENSION WORK BY COUNTIES 1937

COUNTIES	Total Projects	Nutrition, Health & Sanitation	Child Care Parent Education	Home Management	Home Improvement	Home Grounds Improvement	Clothing	Recreation	Relief	Farm Security	Community and County Organization	4-H Club Work	Rural Youth	No. Community and Rural Areas
Churchill	18	3	2	1	1	1	1	1	1	11	1	4	1	15
Washoe	17	3	2	1	1	1	1	1	1	1	1	3	1	23
Elko	22	3	2	1	3	2	1	1	1	1	2	4	1	32
Humboldt	3	1	1									1		2
Pershing	2									1		1		3
Lyon	11	3	1	1			1			1	1	2	1	6
Douglas	11	3	1	1	1	1				1	1	2		3
Ormsby	4	1	1									2		2
Eureka	3	1		1							1			4
White Pine	8	2		1						1	1	2	1	6
Lincoln	2									1		1		3
Clark	14	3	1	1					1	3		4		6
TOTALS	115	23	11	8	6	5	4	3	4	21	8	26	5	105



UNIVERSITY OF NEVADA  
 AGRICULTURAL EXTENSION SERVICE

and

U. S. DEPARTMENT OF AGRICULTURE COOPERATING

NAME OF PROJECT - II-B Extension Work in Home Economics, by Means of  
 County and District Extension Agents.

1. Home Economics Extension Work (Women agents)
2. Home Economics 4-H Club Work (Women agents)

Leader - Mary Stilwell Buol, Assistant Director for Home Economics

Progress Report for the Year November 1, 1936 to November 1, 1937

I. FACTORS AFFECTING CONDUCT OF EXTENSION WORK:

A. Economic Conditions:

Economic conditions in Nevada have been quite good during this year, which of course, has had a direct affect upon farm family living and upon extension results.

1. Climatic Conditions: There was a good supply of water in the irrigated sections of the state, and a fairly good supply in the range sections. This meant excellent food production in irrigated sections and fairly good results in the range areas. Larger and more adequate food production, better crops, caused increase in farm and ranch incomes. The summer of 1937 proved an unusually good growing season, there being no killing frost until late in October. This decidedly increased the amount of home produced food, which in turn freed cash for other purposes.
2. Mining Conditions: Mining conditions have continued quite prosperous, although there was some adverse trend toward the end of this year. This high level of mining production has improved employment conditions and created active markets for farm and ranch produce.
3. Tourist Trade: Tourist trade continues to increase and is a growing element in the prosperity of this state. A number of new dude ranches have been established this year in both Washoe and Elko Counties. While this is taking some of the farms and ranches out of agricultural production, on the other hand it is increasing opportunities for employment for some of the young people in these counties, and also provides a better local market. A number of ranch families are going into the dude ranch business as a side-line and are adding considerable to the family income in this way.



4. Relief Agencies: The various governmental agencies for relief and recovery continued to expend considerable sums within this state.

The most direct effect of PWA and WPA employment was the stimulation of urban incomes which had a decided effect on markets for farm and range products.

There was a decided decrease in the number of rural families on direct and work relief due to the improvement in agriculture, increased opportunities for employment in other fields, and the effective work of the Rural Rehabilitation Division of the Farm Security Administration.

Farm Security Administration: Rural Rehabilitation continued to give excellent assistance to about 10% of the farm families in the state, largely those with small land holdings. As a whole, these families have succeeded remarkably well this year, greatly improving the stability of their situation as well as holding a high record in the repayment and prepayment of loans.

Soil Conservation: Soil conservation played only a small part in the economic picture in this state, as there were comparatively few who could qualify under this year's regulations. However, we look for a decided increase next year.

5. Repayment of Funds by Closed Banks: Several of our closed banks have continued the repayment of funds which impounded five years ago. In some cases this has been a direct help to rural families and with many an indirect help. Most of these accounts are tied up in connection with loans; therefore when repayments are made, the money is turned in to reduce indebtedness. However, this is some encouragement to the family morale, and a decided assistance in stabilizing financial condition.

#### B. Emergency Recovery Assistance:

Continuing our previous policy the women extension agents and the assistant director for Extension home economics have devoted a considerable amount of time to cooperation with and assistance to the various phases of relief and recovery work. About one fourth of agents' and assistant director's time has been spent in this cooperation.

1. PWA Women's and Professional Projects, (such as, sewing projects, visiting housekeepers, school lunches, nursery schools, and recreation). Technical advice, subject matter, personnel selection and training assistance has been given.

2. The Social Security Maternal and Child Health Nursing Service; (through the Keep Growing demonstrations, and preschool clinics). Assistance has also been given through having local leaders of these projects act as local leaders and contact agents for this new service. The assistant director also acts as a member of the state advisory board for this organization.
3. Farm Security Administration: The home demonstration agents have acted as home management supervisors and the assistant director as home management state supervisor for Rural Rehabilitation. This work has taken more than the equivalent of one agent's time, in return for which the Farm Security Administration has paid the salary of one agent and a proportionate share of the traveling expenses of all agents.
4. Federal Credit Administration: Cooperation has been given the Farm Credit Administration through discussion groups carried on in homemakers clubs, farm center meetings and with other cooperating groups. We believe this has had a considerable influence in awakening interest and cooperation. On the other hand it has certainly been of decided help to the home management project through stimulation of interest in farm family planning regarding financial problems.
5. Social Security: Cooperation has been given the local agents of the Child Welfare Division of the Social Security Administration through furnishing basic standards for family budgets, and through acting as contact agent between rural families and representatives of this new agency.
6. Surplus Commodities Division, Red Cross, the Social Security program of the Latter Day Saints' Church: Assistance has been given these agencies through the agents and assistant director serving on advisory boards, furnishing technical information, and acting as contact agents.

#### C. Changes in Personnel:

One agent resigned from the staff the first of March, and a new agent was secured. This new agent is a graduate of the University of Nevada, with home economics teaching experience, practical experience in maintaining her own home, and as the mother of two small children. This new agent started work in April, 1937, and being unused to both extension and rehabilitation work, has required intensive supervision and training. However, the results in both extension and rural rehabilitation secured through this agent have amply repaid the time and effort involved.

We are glad to be able to report that this is the only change in personnel that has been made this year. We were threatened with another resignation due to the severe over-work of one of the district agents, and also to the fact that she was asked to consider extension positions in other areas. Fortunately, she finally decided to stay here in Nevada.

#### D. Re-distribution of Territory:

Due to the reduced funds, the desire to contact a greater proportion of the rural population, and increased demand for home economics extension work in the western part of the state, it became necessary in March of this year to re-distribute territory and transfer one agent. Miss Hellen Gillette, who had been working in the southern and eastern sections of the state, (White Pine, Eureka, Lincoln and Clark Counties, with headquarters at Las Vegas), was transferred to the newly established western district, (Lyon, Douglas and Ormsby Counties, with headquarters at the university in Reno).

The new agent, (whose salary is paid from Farm Security funds), was stationed in the southern district with headquarters at Las Vegas. About five-sixths of the work in this district has been done in Clark County, with a small amount of rural rehabilitation and 4-H Club work in Lincoln County.

This re-distribution of territory among the two district agents has left five counties without home demonstration assistance since May. A small amount of work was continued up to June to complete the Keep Growing demonstrations and assist with 4-H Club work. However, beginning with this fall no work has been done in four of these counties because of lack of personnel and the heavy schedule of the assistant director.

It was difficult to make this decision to abandon adult home demonstration work in these five counties, but it was absolutely necessary to do so because the former districts were too large to produce effective results. Agents' health and efficiency were being seriously undermined and the traveling expenses involved were too great for the small population involved. As far as possible, the assistant director has and will continue to give help in 4-H Club work, but it seems absolutely necessary that most adult projects be abandoned until more funds and increased personnel can be obtained. That the decision was wise has already been proven by the improved quality of work that has been obtained with the two district agents since this reorganization was made. However, the abandoned counties continue to worry us and we sincerely hope that in some way funds for two additional agents can be secured.

### E. General Program Features Receiving Emphasis:

The major program factors receiving emphasis during this year have been:

1. Safeguarding health through the maintenance of adequate family nutrition, through the Live-at-Home campaign, Keep Growing demonstrations, food budgeting and other phases of the nutrition project.
2. Conservation of cash in order to pay off the indebtedness accumulated during drought and depression, through the Live-at-Home campaign and through family cooperation in solving financial problems.
3. The maintenance of morale through stabilized, wholesome home and community environment, Home and community recreation have both contributed to this goal.
4. The development of opportunities for rural youth through 4-H Club projects and work with older youth groups.

The major projects receiving emphasis this year were:

1. Live-at-Home campaign, (including food production and preservation).
2. Family Food Selection and Preparation to safeguard health and conserve cash.
3. Keep Growing community demonstration in school child nutrition.
4. Good Growth and Development demonstrations and roundups, (with pre-school children and parents).
5. Home Management, (emphasizing planned spending, home accounts, and consumer education).

The minor projects have been:

1. Clothing, (with emphasis upon clothing budgets and accounts, quality selection, clothing construction and care).
2. Home and Yard Improvement, (with the aim of creating a more satisfactory environment with little cash expenditure).
3. Home and Community Recreation, (to provide a wholesome emotional outlet within both the family and the community, and to develop a cooperative attitude between the generations).

4. Health and Sanitation in cooperation with the State Board of Health's Maternal and Child Health and Sanitation Divisions.

## II. General Supervisory Problems:

The principal supervisory problems that received attention this year were:

1. A more efficient use of reduced funds and limited personnel in the event that it was impossible to secure additional funds and personnel: As it was impossible to increase funds and staff, it became necessary during this year to reorganize the distribution of agents and territory in order to:
  - a. Conserve funds through reduction of travel expense.
  - b. Reduce the serious over-load of work for the two district agents which was seriously endangering both the stability of the work, the health of the agents and therefore their tenure of office.
  - c. Reach a larger proportion of the rural population with the funds at our disposal: This was made possible by concentrating work in areas of the state having the greatest density of rural population, where roads are better and more frequent contacts can be made.

This re-adjustment meant the shifting of one district agent from the southeastern district to a new western district comprised of Lyon, Douglas and Ormsby Counties, which were previously part of the western district. Also a much reduced southern district was established including only Clark and Lincoln Counties.

As previously stated this leaves White Pine, Eureka, Lander, Humboldt and Pershing Counties without home demonstration agent service. The assistant director will endeavor to give a small amount of service to these counties where the agricultural agents are willing to assume the organization responsibility. This seems to be the only solution to the problem until sufficient funds are available to secure two more home demonstration agents. This redistricting of home demonstration area and personnel has made it a rather confused year for these sections of the state, but the improved quality of work has, we believe, completely justified the reorganization. The above problem was further complicated by the resignation of the new agent taken on last year and the necessity of training another agent to take her place.

2. Render Assistance in program determination in order to safeguard the long-time extension goals and also to allow time for the emergency services now delegated to the home economics extension staff: This was done through consolidation of some projects and the laying aside of some of the less essential objectives. This has freed time to agents so they could act as home management supervisors for Rural Rehabilitation and also cooperate with the various relief agencies.
3. Expand interest and effort to include recently developed problems such as Farm Credit, Farm Security, Soil Conservation, Maternal and Child Health Service and other definite efforts to stabilize and improve rural standards of living: This was done through conferences with agents and leaders. An encouraging beginning was made on this broadening of the extension program. Excellent cooperation and assistance was received from the Federal Credit Administration, Soil Conservation Administration, Farm Security Administration, and Maternal and Child Health Division of the Social Security Administration. On the other hand, fully one-fourth of extension time was devoted to cooperation with these agencies.
4. Continued cooperation with the Rural Rehabilitation Division of the Farm Security Administration: This has been done. One fifth of total agents' time, plus about one fourth of the assistant director's time, has been spent upon this work. We believe encouraging results have been secured not only from the Rural Resettlement, but from the extension standpoint. A high percentage of rehabilitation clients are up-to-date or ahead of time in repayment of their loans. Family situations and standards of living are definitely improving. Also the extension service has contacted a number of families which otherwise would not have been reached, and these are being gradually assimilated into extension and community groups of which they were not usually members.
5. Encourage community organizations, project groups, and leaders to assume an increasing proportion of responsibility in order to free agents' and supervisory time for the emergency work such as Rural Rehabilitation. Excellent cooperation has been secured with this problem.
6. Reorganize extension technique in order that agents may do effective work with the very limited stenographic assistance at present available. Some progress has been made in this difficult problem through simplification of reports, reduction in the number of individual and circular letters, and the simplification of project records. We are not happy over the project handicaps

that this reduction of stenographic assistance involves. We believe it has in several instances, weakened the quality of the work, particularly in the sparsely populated areas and where the roads are blocked in winter. However, it has been a matter of frankly facing existing conditions because the amount of stenographic help has had to be curtailed in order to handle various emergency work, such as, Soil Conservation and Rural Rehabilitation. Our effort has been to make the adjustment as easily and in as friendly a spirit as possible, but there is still much to be done to solve this problem.

7. Revise 4-H Club subject matter material and strengthen 4-H leadership: Because of lack of time no revision of 4-H Club subject matter material has been possible. 4-H leadership has definitely been strengthened through leaders' conferences and councils, and increased use of assistant leadership drawn from the rural youth of the communities who have had previous 4-H Club experience.
8. Revise the Keep Growing nutrition and health project and make adjustments to include the new Maternal and Child Health Nursing Service of the Social Security Administration: Friendly cooperative relationships have been established and committee work is under way preparatory to an inter-department agreement and plan of work.
9. Experiment with young adult groups between the ages of 18 and 25 years: Experimental work has continued in Churchill, Washoe and Elko Counties, with fairly encouraging results. More time, however, needs to be devoted to this work.
10. Give technical advisory assistance to county and state relief agencies, such as, WPA Women's and Professional Projects, Surplus Commodities, National Youth Administration and the Maternal and Child Health and Child Welfare Divisions of the Social Security Administration. This has been done through the assistant director acting in an advisory capacity, supplying technical information and subject matter, helping secure and train personnel, and securing field cooperation from extension agents.

## III. SUPERVISORY PROBLEMS, METHODS AND ACCOMPLISHMENTS:

## A. Relationships and Conditions Within Counties:

## 1. County and Community Organization:

- a. **Work Load and Area Distribution:** The extension service and Farm Bureau state and county committees have continued working cooperatively on the problem of adjusting agents' heavy work load and extending influence over as large a part of each county as possible. In many cases this has meant a reduction in the amount of work carried in each locality, so as to free time for reaching new areas.
- b. **Departmental Responsibility:** The departmental organization of home economics extension work, established three years ago, continues to grow slowly but steadily in effectiveness. In most counties there are two home economics departments; one for nutrition and the other called "Home and Community" which covers all other phases. The county chairman of each division acts as a member of the county advisory board and she and her committee helps determine programs of work, and assists in securing and developing leadership. It certainly would have been impossible for extension agents to carry on the vastly increased program of work that resulted from the new responsibilities in regard to Rural Resettlement, etc., if it had not been for the excellent cooperation secured through these county departments.
- c. **Community Organization:** Because of the heavy programs that the agricultural agents and assistant agents have to carry in regard to Soil Conservation, Taylor Grazing Districts, etc., more and more responsibility in regard to the community organization work has been placed upon the shoulders of the women agents and the women members of county and community committees and boards. Both the agents and local women have responded valiantly to this increased responsibility. Our only fear now is that they are doing such a good job that the men seem inclined to let them keep on doing it. We do not believe that this is a wholesome thing to continue permanently; therefore, we are doing our best to arouse a feeling that masculine responsibility and initiative are indispensable, which we believe to be a fact.
- d. **Organization in Home Demonstration Counties:** In the three counties having county home demonstration agents, both county and community organization has definitely strengthened during this year, in both community center and homemakers club work. There has also been a continued growth of extension



influence with other groups, such as the Parent-Teachers Association, Federated Clubs, Service Clubs, church organizations, etc. This is a decided help in reaching a larger proportion of the population.

- e. **Organization in Districts:** In the two reorganized districts the handicap of a new agent totally untrained in extension work, and another agent unacquainted with her new district has retarded progress. This always happens when an agent is new either to the work or the territory. However, an encouraging beginning has been made in each district; in fact, better results than we expected. We have found that the slow patient work the first year that an agent is in a district prepares the ground for future work that is both substantial in quality and adequate in volume. Therefore, in these two districts this year has been a time of patient preliminary work in getting to know the people and local conditions.
- f. **Organization in Counties Without Home Demonstration Agent Service:** In the counties now without home demonstration agent assistance there continues to be a strong evidence of the need for such assistance. The northeastern counties, (from which the home demonstration agent was withdrawn in March), are now quite alarmed regarding the weakening of their county and community organizations, and both men and women are pleading for home demonstration agent assistance. We only wish there were funds to secure this for them, but on our present budget it seems to be utterly impossible. Everything possible is being done for them within our present limitations. Outstanding assistance is being given by the executive secretary of the State Farm Bureau, Mrs. Florence Bovett, who has an unusual amount of organization ability. The assistant director has and will continue to give all the assistance possible within the limits of her time and physical strength. However, organization without a definite program of work and good follow-up is proving to be unstable, despite the best efforts of all concerned. The great isolation of the population in these counties complicates the problem and we don't know how the situation can be remedied without additional funds. The two counties on the western side of the state are in much better condition because they are not so isolated and the population is a little more concentrated.

## 2. Methods of Creating Favorable Sentiment Toward Extension Work:

- a. **Newspaper Publicity:** This year home demonstration work in Nevada has had to depend more upon spontaneous public opinion to create favorable sentiment in its behalf, be-

cause so much of our state news service has had to be given to emergency problems, such as, Soil Conservation, Taylor Grazing Districts, etc. However, we have found no diminution in public support and what newspaper publicity we have had has received its usual wide adoption.

We have always felt that programs of work suited to local conditions, persistent and effective follow-up work, training and encouragement for organized groups, and wholehearted cooperation between the rural and urban population and the extension service are the best basis upon which favorable sentiment can be established and maintained. Therefore, we don't believe that this year's lack of newspaper publicity has done any harm; but of course, this omission will have to be remedied during the coming year if possible.

Local newspaper stories, prepared by the agents and leaders, have, in most areas, maintained their standards in both quality and quantity due to the efforts of the agents involved. We are greatly encouraged over the initiative shown by the women agents in this respect.

- b. Reports of Leaders: Project leaders continue to give verbal reports regarding the home demonstration program at community, county, and district meetings. More effort has been made this year to have such leaders give similar reports before urban groups. We believe this is useful in increasing urban cooperation and support.
- c. Mimeographed Reports: Much favorable publicity continues to be secured through the annual Keep Growing report, which is circulated to county and community Farm Bureau boards, county commissioners, sponsoring organizations, members of the Legislature, etc. We need similar reports for other projects, but lack of stenographic assistance is the limiting factor.
- d. Achievement Days: Community and county Achievement days continued to be outstanding features and are creating increased interest not only in rural areas but in the county-seats, where a majority of such Achievement days are held. They have now reached the point where newspaper publicity regarding these events is spontaneous, rather than solicited.
- e. 4-H Club Publicity: 4-H Club work has continued to gain in strength as regards publicity. This year increased cooperative support has been given by Service Clubs, Federated Clubs, Parent-Teachers Associations, etc., in regard to prizes, scholarships to club camp, etc., due to skillful agent contacts and programs presented by leaders and 4-H Club members.

The new agent has of course required detail training and has responded very well to this instruction.

The agent transferred from the eastern district to the western district is an unusually well trained extension worker. Therefore she has required little assistance in organizing her new territory. This has been fortunate because of the many demands made upon the assistant director's time. In fact, this agent not only has worked in seven counties during this year, and organized this new three-county district, but carried on a considerable proportion of the assistant director's office work during her two months' absence due to an accident.

The assistant director has continued the effort to interest agents in the study of organization problems, and encouraging results have been developed during this year, after a rather slow preliminary period during the preceding two years. We believe both agents and leaders are becoming increasingly able to think in terms of long time organization objectives.

Professional study has been stimulated by the sending out of books, periodicals, reviews, magazines, as "round robins" to the agents.

No progress has been made with the problem of leave of absence for advanced study. This is badly needed and greatly desired; but as no funds are available the problem seems incapable of solution. Practically all of Nevada's home demonstration agents have home responsibilities which makes it impossible for them to save enough money to take a leave of absence without pay. There is no doubt that both professional standards of work and the personal lives of these agents suffer from this lack of the usual sabbatical leave. However there seems to be nothing that we can do about it at present.

3. Subject Matter Assistance: Not as much progress as usual was made in the matter of subject matter assistance. Each agent has continued to act as a specialist along some line and has prepared a certain amount of mimeograph material. No new bulletins were printed during this year due to lack of time to prepare them, and this in turn was due to the added responsibility concerned with the Rural Rehabilitation work. We deeply regret that no new subject matter bulletins could be prepared; however, considerable mimeograph material was prepared. As long as the agents are handling both Extension and Rural Rehabilitation we doubt if there will ever be time to do justice to subject matter specialists' work.

4. Office and Field Equipment: There has been little or no change in regard to office and field equipment other than small additions to canning equipment.

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The agent in the new western district now has her office at the the state extension office, as this is the most central point and we can, with effort, supply a small amount of stenographic help. Sufficient office equipment was already here so no new investment was made, aside from a filing case.

5. Stenographic Assistance: Lack of stenographic assistance for home demonstration agents continues to be a great handicap. Reduced funds and the increased demands of the emergency programs, (particularly Soil Conservation, Taylor Grazing and Rural Rehabilitation), have made it imperative to reduce stenographic assistance for home demonstration work, and there seems no possibility of improving the situation in the near future.

#### C. Assistance in Determining Extension Program:

In compliance with the usual Nevada procedure, extension programs of work are the results of conferences between leaders, community and county committees, extension agents, and the assistant director. The procedure moves from the community to the county and then to the state, and at each stage "wants" are checked against the long-time program of work and the present situation as regards emergency demands, funds and personnel available. Then conflicts are adjusted as well as possible.

The assistant director's function is largely one of stimulating an analysis of local and county conditions, and in the districts compromising conflicts and excessive demands to harmonize with our very limited personnel and funds. This has been a particularly difficult year because during this year we were forced to realize that our two districts were entirely too large for effective results, agents' strength and travel funds. Therefore these districts have had to be reorganized, and programs of work much restricted in the counties left without home demonstration assistance. Of course, there was considerable disappointment on the part of these counties now left without home demonstration agent help, and an increasing anxiety as to what the future will hold not only in home economics extension work but as regards community and county organization. We expect the problem to be very seriously considered at the next annual meeting of the Farm Bureau. However, until additional funds can be secured for the salary and travel of two more women agents, we know of no other solution for this problem. We still feel that it is sound judgment to use our limited funds to reach the largest possible proportion of the rural inhabitants with the least travel expense. Also we are quite certain that the ultimate stability of the work demands that these districts be limited to an area which

can be covered by an agent and still maintain her health and mental poise. Also from the view point of the people themselves, it is useless to attempt to have the agent cover more territory than she can service effectively enough to produce permanent results.

D. Assistance in Planning and Carrying Out Work:

1. Guidance in both the planning and carrying out of plans is given through field trips and conferences with leaders, committees and agents, also by correspondence with committees and agents. This year less time was given to this phase of supervision in counties having home demonstration agents, due to the problems involved in the reorganization of the two districts. As previously stated a new agent or a new territory always necessitates readjustment of programs. The readjustment this year seems to have been made with a minimum of disturbance and we feel that these two districts are now on a much more stable basis than they have been for several years.
2. The fact that the assistant director has acted as state supervisor of the home management phases of Rural Rehabilitation and also done the field work for this organization in counties without home demonstration work decidedly reduced the time available for extension supervision. It was a fortunate thing under these circumstances that four out of five of Nevada's home demonstration agents have been with us for a number of years and are unusually capable. This made possible a concentration of supervision into a shorter space of time and freed this time for Rural Rehabilitation and the training of the new extension agent.
3. Each agent (excepting the new agent taken on this year) has been acting as a part-time specialist and has prepared subject matter guidance for the other agents along her specialist line. Lack of funds still makes it impossible to provide for specialist trips to the various areas of the state as was the custom until our drastic cut in extension funds. This lack of specialists' trips is a real handicap to the quality of work and the volume of results. This personal contact with the specialists' service is urgently needed by both agents and leaders in a sparsely populated area such as Nevada. It does more to awaken interest, help agents and leaders to analyze their local situation, and arouse enthusiasm to produce results than any other extension procedure with which we are familiar. We deeply regret that funds are not available for such specialists' trips and only hope that the time may come when they can again be established.

4. Major Projects Emphasized: As previously mentioned in this report the major projects emphasized this year were:
- a. The Live-at-Home Campaign, (including food production and preservation.
  - b. Family Food Selection and Preparation.
  - c. Keep Growing community demonstrations in school child nutrition.
  - d. Good Growth and Development home demonstration and roundups with pre-school children and parents, supplemented by discussion groups before Homemakers Clubs and Parent-Teachers Associations.
  - e. Home Management, emphasizing family councils for planned spending, home accounts, and consumer education.

The minor projects have been; clothing, home and yard improvement, home and community recreation, and health and sanitation, (in cooperation with the State Board of Health's Maternal and Child Health and Sanitation Divisions).

5. Effort has been continued in the problem of reaching a larger proportion of both the rural and small town populations.
- a. In the three counties having county home demonstration agents excellent progress has been made with this problem. In Elko County 32 out of 37 communities and areas have been reached this year. This included all rural areas; all but one Southern Pacific Railroad community, one Nevada Northern Railroad community, 10 out of 12 of the Western Pacific Railroad communities, and 2 out of 4 of the Oregon Short Line communities. (There is a duplication as between railroad communities, therefore this leaves five communities not reached.)
  - b. In Churchill County all communities and areas are now being reached, a total of 15.
  - c. In Washoe County all 18 communities and areas are now carrying on one or more phases of extension work. This year considerable progress has been made in reaching the Italian group in this county, a new homemakers club having been organized in the North Truckee-Glendale region. The type of leaders from this area who came in as delegates to the annual meeting in this county, and the interest and breadth of view that they showed makes us feel that the problem of making contacts

with this hitherto isolated group is really being solved. This is a problem upon which we have been working for many years.

- d. In the two reorganized districts, the effort to reach a larger proportion of the population is also showing encouraging results. Twenty-nine out of a possible 31 communities and areas are now carrying on extension work. Now that the agents have more time to devote to smaller areas more frequent contacts are possible, local problems are receiving the intensive analysis that they deserve, and leadership development is already showing encouraging response. Of course, in these two new districts much work is still to be done; but we are confident that we are moving in the right direction.

In the five agricultural counties which are now left without adult extension work there are twenty-seven communities and areas that should be carrying on work if funds and personnel were available. Some of these were serviced during the first half of this year, but in the future only 4-H Club work will be carried on in these counties until additional funds are secured.

- e. In urban communities in home demonstration areas a definite effort has been expended to contact the already established groups, such as, the Federated Clubs, Parent Teachers Associations, and church organizations. Here work is concentrated on giving guidance in the study of local situations, the supplying of subject matter for the use of leaders, and occasional method demonstrations by the agents.
6. Choice of Means: Study in regard to choice of extension methods has continued to receive the serious consideration of leaders, agents and assistant director. The very serious enlargement of demands for assistance due to the emergency work, (especially Rural Rehabilitation), has made this a vital problem in which all have been interested. We are particularly pleased at the sense of responsibility shown by committees and leaders in regard to the effective use of agents' time. We also appreciate the earnest efforts of the agents in objectively studying their extension technique with a view to improving methods, conserving time, and pursuing the long-time objective of reaching a larger proportion of the population.

We are all coming more and more to the conclusion that repeated attacks on major problems and objectives through giving a smaller amount of subject matter at a series of meetings ultimately produces



better results than are obtained by concentrating effort in one or more complete meetings during the year. Under this plan of repeated emphasis, local leaders, who have carefully prepared themselves under agent guidance, present one principal thought or subject at several meetings during the year to be studied and carried out by the group membership. This presentation may take the form of reading an especially prepared report on some special phase of a project, presenting a short demonstration, or preparing an exhibit with a brief discussion of its local application.

7. Use of Local Leaders: Local leadership continues to slowly but steadily develop greater effectiveness throughout the state. This year 389 local leaders devoted  $2104\frac{1}{2}$  days of time to leadership in adult projects. As compared to 1936 this is a 3% decrease in the number of local leaders, but a 40% increase in the time which these leaders spent.

The quality of leadership also continues to slowly but steadily improve. More initiative is shown, a higher quality of technical work is being developed, and real pride in leadership ability is manifest. This improvement in leadership we believe to be due to three factors: personal contact and advice given by the agents to the leaders, more skillful organization of projects with special responsibility and definite goals assigned to the leaders, and community, county, and state publicity and praise carefully planned and systematically carried out.

8. Methods of Evaluating and Checking Results: Results continue to be evaluated in Nevada in terms of families adopting specific practices as compared to the amount of time agents have devoted to the project. In the three counties having county home demonstration agents we feel that this is a just basis upon which to judge extension accomplishments, and often surprising results are obtained.

In a newly established district, or a district having a new agent, this is not a just basis of judgment, as is demonstrated in this year's reports from the two district agents. The agent who is now in the reorganized western district has this year worked in seven counties. Her transfer took place in the late spring so that she has only had a little over a half year in the new area. Besides this, she has carried the heaviest load in Rural Rehabilitation, acted as home management part-time specialist, and on top of all this has substituted for the assistant director, (as far as office work was concerned), during the two months that the latter was confined to bed because of an accident. Of course, with this greatly disturbed program and all the additional responsibility it would be unjust to expect the fine results in adopted practices this agent has usually secured.

The new agent, who took over the southern district in April, should also be exempt from this standard of accomplishment because she is new to extension work, new to her territory, and has not only had to carry on a very heavy load in the home management phase of Rural Rehabilitation, but after the withdrawal of the agricultural supervisor of Rural Rehabilitation in her district has had to assume a large share of the responsibility in collecting loans, etc. Despite the fact that there has not been a large adoption of practices in this district we feel that this agent has been unusually successful in getting to know local conditions, starting an analysis of major problems, and becoming personally acquainted with a large proportion of the rural population in her area. No more than this could be expected of a new agent in this length of time.

#### IV. PROJECT ACTIVITIES AND RESULTS:

##### A. Project Organization:

This year the usual Nevada plan of project organization has been carried out. At the beginning of the year project plans were drawn up in each county giving the scope of the work, project goals, and the extension methods to be used. At the end of the year progress reports were handed in giving the results of the year as contrast with goals, supplemented with such information as time spent by agents, by leaders, the type of extension methods that were successful. This is followed by illustrations of the conditions in the county and the particular problems encountered.

Despite the fact that the time of only four home demonstration agents instead of five was devoted to the home economics extension work during this year, we believe that real progress has been made. The quality of the work has decidedly improved, and 75% of the total goals of the state were reached this year as compared to 70% last year. We believe that this is a commendable improvement, particularly during a year when one agent resign<sup>ed</sup>, a new agent took her place, another agent was transferred from one district to another, and the many problems concerned with Rural Rehabilitation and relief were added to the usual extension load.

The project load was not as large this year as last, there being 115 county projects in 1937 as compared with 137 in 1936. This decrease was due to the discontinuance of work in five counties. There were a total of 474 project goals with a completion of 75% as compared to 498 project goals in 1936 with a completion of 70%.

The number of communities and areas in which extension work was carried on was 96, a reduction of 11% from the number of extension areas reached last year. On the other hand, despite this decrease in total projects, project goals, and extension areas there was a decided increase in the volume of adopted practices secured. The number of rural families adopting practices increased 14.7% and the number of urban families adopting practices increased 13.3%.

We believe that these results vindicate our decision to reduce the area in which home economics extension work is carried on in this state; in order to conserve time and funds, and to enable agents to contact a larger proportion of the population and to contact them more frequently.

The summarization of extension results that follows gives additional evidence that the decrease in area has improved both the quality of work, and quantity of results in most phases of home economics extension work.

## RESULTS IN HOME ECONOMICS EXTENSION WORK

	<u>1936</u>	<u>1937</u>	<u>% Change</u>
No. communities where extension work should be carried on.....	125	103	-17
No. communities where extension work was carried on.....	108	96	-11
No. rural families adopting practices.....	1461	1676	<del>/</del> 15
No. urban families adopting practices.....	1627	1867	<del>/</del> 13
No. groups carrying on adult home economics extension.....	143	153	<del>/</del> 7
No. members in above group.....	3753	3660	- 2
No. children in Keep Growing.....	3510	2858	-19
No. children in pre-school work.....	434	521	<del>/</del> 20
No. women extension agents.....	5	4	-20
No. days agents' time spent.....	1478	1165	-21
No. days average per agent.....	295	291 $\frac{1}{2}$	- 0.1
No. local leaders in adult work.....	403	398	- 3
No. days assistance given by local leaders...	1497	2104 $\frac{1}{2}$	<del>/</del> 40
No. days average per leader.....	3.7	5.3	<del>/</del> 43
No. meetings held by agents.....	1637	1303	-20
No. attendance.....	43248	42994	- 0.6
No. meetings held by leaders in adult work...	168	143	-15
No. attendance.....	3850	5206	<del>/</del> 26
No. training meetings for adult leaders.....	29	31	<del>/</del> 6
No. attendance.....	662	288	-57
No. homes visited by agents.....	1264	1427	<del>/</del> 10

this leadership women's organizations with whom the agent works are approached and volunteers are asked in the case of 4-H Clubs or in the case of project leaders the club is asked to appoint leaders. If there are a number of leaders on the same project these leaders are organized and trained together. This is done in some communities where there are several 4-H Clubs. If there is only one leader on a project in a community she is trained by personal visits of the agent. Leaders do most of the follow-up work with the agent contacting the leaders to learn if there are any difficulties.

"General organization problems of a community and county-wide nature have been discussed by Farm Bureau Directors. It is their opinion and also that of the agents that the organization of community Farm Bureau Centers and development of community leadership has been neglected. The emergency government projects have taken so much time of men extension agents and available men local leaders, that little time has been left for development of new leaderships. This thought was started last year but as yet the problem is still acute in Elko County. Much work must be done to strengthen the community and county organizations ere they fall to pieces. Because of this and because the men agents have no time to aid in this work the woman agent has taken upon herself the strengthening of community organizations by more definite programs. To make strong community centers there must be both men and women working together. Men will not come out to meetings conducted solely by women. Also, there must be definite planned programs. There must not be fewer than four meetings a year."

Churchill County: "Program planning days were held by County Farm Bureau directors, leaders from the local communities and officers of the homemakers' councils. Local policies of a county-wide nature that would be helpful to a large majority of the people in the county were included in the program of work. Committees were appointed by local chairmen to take charge of the monthly programs and to take care of other matters of a community-wide nature.

"The homemakers' council continued to function again this year. Meetings were held with the home demonstration agent to discuss community problems and to plan a program of work most suitable for the majority of people in the respective districts.

"The 4-H Club council, which consisted of leaders and assistant leaders of the Boys' and Girls' Clubs, met at regular intervals to talk over problems and to plan 4-H Club activities of a county-wide nature, such as club organization and club meetings, project work, 4-H Achievement Day, county and state contests and State 4-H Club Camp, etc. These training meetings gave the extension agents an opportunity to become better acquainted with the leaders and their problems, and a chance to help them in every way possible, in carrying out the 4-H Club program and in

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developing local leadership. A "model" Farm Bureau meeting was held at one of the training meetings, at which time the proper order of procedure for conducting meetings was carried out, as well as the making and disposing of motions and transacting other matters of business that would usually come before such a meeting. Planned programs were carried out, including both educational and recreational features."

Washoe County: "The Washoe County Farm Bureau coordinated its leadership membership and program behind a wide range of activities beneficial to all of the county's agriculture. The county farm bureau organization also cooperated to the fullest extent in promoting better agriculture in western Nevada through the meetings of Nevada Farm Bureau Region No. 1, better agriculture in the State by close cooperation with the State Farm Bureau; and, in the nation through the county's support of the American Farm Bureau Federation. There is also close cooperation between the farm bureau organization and the Extension Service through the dove-tailing of the two programs with both organizations working together toward the betterment of all agriculture.

"The county directors hold one regular meeting each month, and as many more as are deemed necessary for the proper functioning of the county organization. They are charged with the duty of carrying out the county program of work and any other activities that provide a service to the members and strengthen the organization. Individually they look after the interest of the farm center or department which they represent and report the board's activities back to their respective community. They manage the membership drive through a county chairman, arrange for and hold a Harvest Ball in support of 4-H Club work, and handle the necessary arrangements for the annual county meeting.

"Community centers are the source of all leadership. Leadership comes from center committeemen by way of the center officers and delegates to the annual county meeting. Community centers are likewise the source of membership and program. There are four organized farm centers in Washoe County working on projects of benefit to their community and supporting the county farm bureau program. Regular monthly meetings are held except during the summer months. The community leaders maintain an active community organization and membership in support of the county farm bureau. They also arrange and execute a community program of work and take part in anything furthering the development of their community. Each community center is represented at the annual county meeting by five delegates chosen as follows: The center chairman, the president and secretary of the home-makers club, and two delegates elected from the membership. These delegates are the community leaders at the county meeting and elect the county board of directors and map the program of work for the coming year.

"Regular monthly meetings have been held with the women of the Verdi community. They have a strong PTA in the community and do not care for another club. Since it is the policy of the extension service to work

with clubs already organized rather than form new ones, the agent meets with the group once a month. The members voted to change the date of their meeting in order that the agent might attend. The women seem to be very much interested in the extension work and the attendance is very good. Nearly all of the women in the community attend the meetings. The women of North Truckee and Glendale, (Italians), have been meeting monthly for the last year. The meetings are small but gradually they are increasing in size. In October officers for the club were elected. This is the first time anyone has succeeded in organizing a club in the community. Many home visits have been made in the two communities to assist in any way possible and to encourage the women to come to meetings. We hope to increase the membership during the coming year."

White Pine County: "White Pine County has a very scattered population, interested primarily in livestock and does not have the community consciousness nor the sense of community organization that can be found in more populated areas. The condition has made organization for extension work somewhat difficult. However, during the year, leaders have accepted the responsibility of carrying on, in a great measure, the Keep Growing nutrition work."

Eureka County: "The county board meets at regular intervals throughout the year, and has built up quite a sense of organized responsibility throughout the county. The population of Eureka County is small, and except for Eureka, Palisade and Beowawe, consists almost entirely of ranch people. Palisade and Beowawe are railroad towns that have very little interest in any rural activity. For purposes of home demonstration work extension groups have been organized in the various valleys in the county, but due to the scattered population, only a few people can be reached in each group."

Clark County: "The annual meeting of the Clark County Farm Bureau was held in Bunkerville in December 1936, with four communities represented, Delegates from the Moapa Valley, the Las Vegas Valley, Bunkerville and Mesquite discussed various problems confronting the agricultural industry in southern Nevada. The agent presented the program of work offered to the homes of the county and Mrs. Herman Tobler, Director, urged greater use of this opportunity be made. Director C. W. Creel and Assistant Director, Mrs. Mary S. Buol represented the extension service and talked with a group regarding the outlook for agriculture and the conditions affecting homes throughout the western states. The following Board of Directors was elected, to serve for the next year: Wallace Jones, Chairman; Max Hafen, Vice-Chairman; Lester Mills, Secretary-Treasurer; C. B. Phillips, E. G. McGriff and Mrs. Leah Tobler.

"The annual convention of the National American Farm Bureau Federation was held in Pasadena. The Clark County Farm Bureau and the extension agents, together with representatives from the State Office, greeted the special train carrying delegates that stopped in Las Vegas for



a visit to Boulder Dam. Favors of desert holly and sagebrush were distributed to the visitors. Also bulletins and pictures showing the highway development and some of the colorful points of interest in Nevada. The visitors were most enthusiastic regarding their reception and their brief visit to this section of the state."

### B. Project Emphasis:

The project emphasis adopted in 1932 at the beginning of the depression was continued because rural families are still not back to a normal level as regarding incomes and living standards. Therefore measures to safeguard health, conserve cash, improve home conditions and the development of wholesome family and community relationships have been the basis for the home economics extension projects in 1937. We believe that evidence of definite progress has been secured for each of these main objectives, and comments regarding these results will be given under the various projects as they are taken up.

### C. Project Techniques and Results:

#### 1. Nutrition:

- a. Live-at-Home Campaign: This campaign, the objective of which is to protect health and conserve cash, is a combination of several projects; food production and preservation, food selection and preparation, and food budgets and costs. As usual, the work was started early in the spring through taking up the Live-at-Home food production and preservation budgets, and with homemakers groups, Parent Teachers Associations, Relief Societies, etc., and with individual families contacted through both extension and Rural Rehabilitation work. The main impetus of this campaign is through these group meetings but there was a definite increase in the number of personal contacts through home visits where definite help was given in planning the home production, preservation and storage of food, and the use which should be made of both home produced and purchased food during the year. Local conditions and the wide range of economic status found among our Nevada families, (ranging from our large wealthy ranch families to Rural Rehabilitation families living on a bare subsistence level), made these home conferences of particular importance. Therefore, much more time was spent on these home visits than has been possible during the preceding years where district agents covered larger areas and emergency work took so much time.

Plans for an adequate garden that meets the Nevada standard of four green leaf vegetables, two root vegetables, two pod vegetables, and three miscellaneous vegetables, including

tomatoes, (wherever they will grow), received special emphasis. These detailed plans are supplemented by lists of varieties suited to local conditions of water supply and length of growing season. Particular attention was given to home demonstrators who were testing out new varieties of vegetables or who were starting to grow new types which they had never grown before.

As a whole, the increased water supply that was available this year because of the heavy snows and rain during the fall and the winter produced encouraging results. Because of the reduced area covered by extension work this year there was some reduction in the number of families contacted in this project, but the individual results secured per family was increased. Next year we look forward to an increase in the total number of families reached.

Emphasis regarding food preservation were concentrated upon three phases:

- (1) The use of safe canning methods for all non-acid fruits, vegetables, and meats. This means the use of a pressure cooker because of the high incidence of botulimus bacteria in Nevada soils.
- (2) The securing of suitable canning equipment and the keeping of such equipment in good working order.
- (3) Adequate storage both for canned and bin stored food products.

Statistics and comments regarding this phase of the Live-at-Home campaign are given below to illustrate the types of problems handled:

	<u>1936</u>	<u>1937</u>
No. families producing and preserving home food supply according to annual food supply budget.....	730	643
No. families assisted in canning and otherwise preserving fruits, vegetables and meats.....	890	721
No. quarts canned by these families..	111,334	108,542
No. other containers of jam, jelly, and other products.....	29,195	21,933
No. families following recommended methods of storage.....	487	398
Estimated value of all products canned, etc.....	\$48,742.	\$40,104.
No. families following recommendations for storage of home food supply.....	476	398

Elko County: Food Production. "Five times more calls were received by the agent on this Live-at-Home project this year than last year. People residing in towns are beginning to realize the value of a garden, and more had small gardens this year even though it was only a patch of lettuce and a few radishes. The raising of more greens needs to be stressed however. Unless an individual has four green leafy vegetables, three root vegetables, two pods and three miscellaneous vegetables we do not consider that the garden is adequate here in Nevada.

"There are four different methods of presenting vegetable gardening in Elko County. The first is for the woman agent to make arrangements for the agricultural agent, who acts as the garden specialist, to meet with groups of women to discuss technical phases of vegetable gardening. Or, sometimes the woman agent does this herself. The second method is by individual contact. Upon calling at a home in the spring, the agent is asked advice upon what to plant in a vegetable garden. Sometimes if the seed is a new variety which the individual wishes to plant, this is referred back to the garden specialist for information regarding satisfactory growth in this locality. The third method is by office calls either direct or by phone or letter. Information with bulletins is given to the individual seeking advice. The fourth method is by the use of leaders in a community. These leaders often give short talks before women's groups. Also they call on individuals in their locality and talk over gardens."

Churchill County: Food Production. "The Live-at-Home plan for making the farm feed the family was again one of the major projects to be carried on this year in Churchill County. The climatic conditions were very favorable for the growth of garden products and for the fruit and berries. There was plenty of water for irrigation purposes. The "killing" frost which generally hits this valley about September 15th did not come until around October 1st. This gave about fifteen extra days for the maturing of garden products and for the canning and storage of food products. 432 families adopted the Live-at-Home plan and produced and preserved the greater part of their family food supply this year. Through the Live-at-Home plan, the rural families were encouraged to produce as much of their own food supply as possible, in order to help save on cash expenditures for food. The money thus saved could then be used for other necessary items. For an average family of five people, a maximum of \$10.00 per month was advocated for groceries, and some families by raising much of their food supply, reported spending less than that amount. However, since food prices have raised, that average will probably be exceeded in some cases. The Rural Rehabilitation clients were given assistance in planning gardens that would be adequate for their family needs. The raising of their own garden products greatly helped to reduce their food costs, and the money thus saved could be used for other necessary items."

Washoe County: Food Production. "The Live-at-Home project was again adopted by Washoe County in 1937. The aim of the project is to produce as much of the food supply on the farm as possible and use the cash income for other necessities. The income from the farm is gradually increasing but

if the farmer is to continue to own his property he must produce more of the food supply. The farmers of Washoe County who are having the least trouble meeting their obligations are the ones who are producing as much of the food supply as possible on the farm. 131 families adopted the Live-at-Home project this year. 137 families had an adequate garden and 75 families raised at least one new green leaf vegetable in their garden. 21 method demonstrations were given on Food production and preservation as follows: 4 demonstrations were given on planning the vegetable garden to meet the needs of the family. 138 families grew an adequate garden. 4 demonstrations were given on the making of food budgets. 134 families made out food budgets. 9 canning and pressure cooking demonstrations were given. 153 families were assisted in preserving fruits and vegetables for winter use. 4 demonstrations were given on the storage of fruits and vegetables for winter. 41 families improved their storage space during the year. The county farm bureau offered \$7.50 in prizes for the three best Live-at-Home plans submitted at the Live-at-Home programs. The prizes were offered to encourage the members to keep records and make reports of work done. 121 families took part in the Live-at-Home program during the year.

"Since the growing season is very short in Washoe County, an effort is always being made to find new varieties that will mature in the shortest time. This year seeds were purchased from Bismark, North Dakota to learn if varieties grown there would do well in Nevada. The growing season in both states is very short and the altitude is high. Three varieties of tomatoes, two varieties of peas, and four varieties of squash were tried. Buttercup squash, which has a composition similar to the sweet potato, grew well in Washoe County. The storage of the squash will be tested during the coming winter. The same varieties of tomatoes and squash will be tried out again next year to find out whether or not they are suited to the Nevada climate. Herbs grow well in the vegetable gardens. Some people plant the seeds in the open and other plant them in boxes or tubs. The average Italian garden grows six herbs - mint, thyme, basil, rosemary, sage and parsley. One meeting in each <sup>home</sup> makers club was devoted to the identification of herbs and their use. More time should be spent on teaching American people how to use and store herbs. They grow them in their gardens but do not use them as much as they might."

Clark County: Food Production. "In this county it has been found, among the children especially, that the teeth and muscle tone are very poor, due probably to some lack in the diet, or perhaps some definite deficiency in the mineral content of the soil. A survey has been carried on since July among cooperating families. One Rural Rehabilitation client and two other families from each community were contacted. A chart was given to them, for a record of each family's food that was consumed for a week. Since the charts have been filled out and handed to the agent, she feels that the main cause of the poor teeth and muscle tone is the lack of a good fresh and canned vegetable supply in these communities.

Due to the heat in summer, the summer gardens are not very successful, but spring and fall gardens are essential. Food can be preserved and canned, but it is felt that when any fresh vegetable can be grown, (of course with work), every effort should be made to see that as many families as possible plant gardens.

"In the spring, by the time the agent arrived, spring gardens were well along, but after this season was over, many families had no vegetables during the summer. In July every Rural Rehabilitation client and many other were sent a circular letter giving the time of planting for each vegetable grown here in southern Nevada. Also each Rural Rehabilitation client was urged on every visit to prepare his ground in August for his fall garden. During the month of August each client was urged to prepare his ground for fall planting. In September and October planting was done. During October and November tours have been made to at least two cooperators in each locality and a demonstration given on planting of the garden.

"A local man, who sells seeds to the community has reported to the agent that he has sold more seed this year than for a period of years. Ten home demonstrators have taken part and have planted fall gardens in four communities. Assistance in all ways has been given to Relief Agencies in the form of bulletins on Live-at-Home plans and canning bulletins. A total of 325 bulletins have been distributed throughout the county."

Douglas County: Food Production. "Douglas County is distinctly an agricultural and livestock area. The population is definitely among the most prosperous and economically independent of any rural peoples in the state. Good farm practices have provided for home produced food on an adequate Live-at-Home basis. Practically all the rural women do a considerable quantity of canning of fruits and a supply of pork is cured at home or is taken to the local packing plant for processing."

Churchill County: Food Preservation: "A total of 432 families adopted the Live-at-Home plan this year in the different communities. The saving of cash means a great deal to the ranchers in this district since many of the farms are mortgaged, taxes and irrigation charges are heavy, and many of the incomes have been greatly reduced during the past few years.

"The amounts and kinds of foods adequate for good growth and development were worked out for an average family of five people, so it was easy for each family to work out the amount needed. Since this area of Nevada has nearly 26 non-producing weeks during the year when home grown products are not available the homemakers and Rural Rehabilitation clients were urged to can a food preservation budget that would provide a sufficient food supply for that period, which included:

	<u>"Canned</u>	<u>Dried</u>	<u>Stored</u>
Meats	100 qts.	-	30 #3 cans salmon
Fruits	100 "	15 lbs.	10 bu.
Vegetables	150 "	30 "	565 "

In some cases more of the fruits and vegetables were canned and less dried than the amounts called for, and probably less meat canned, since beef, lamb, hogs and poultry were usually available for butchering or use the year around. Canning in pressure cookers, as advocated by the Bureau of Home Economics, was stressed as the only safe method of canning non-acid fruits, vegetables, and meats because of the danger of the botulinus organisms in the soil. Eight new pressure cookers were tested.

"The amounts of canned and stored food products canned by 455 families the past year were as follows:

"Fruits and vegetables	57,740 quarts
Meats, canned	3,250 "
Jellies, jams and preserves	12,280 "
Pickles and relishes	8,325 "
Fruit juices	3,210 "
Total	<u>84,805 quarts</u>
"Meats cured	26,500 pounds
Fruits and vegetables dried	340 "
Fruits and vegetables stored	85,725 "
Total	<u>112,565 pounds"</u>

Elko County: Food Preservation: "Methods of presenting food preservation varied. One way is for the individual to call for information and instruction at the extension office. Usually this type of individual has had some experience in preserving. Another method is for individuals to write for instructions. Another method is to stress Food production and preservation under home management and food selection and preparation. Another method is to demonstrate some method of canning in a home at request.

"Another method is for trained leaders who have had much experience along this line to demonstrate or give advice regarding canning problems. Mrs. Eugene Drown of Elko gave a demonstration in Elko and one in Starr Valley. Mrs. E. G. Reynolds, Superintendent of the Fair received more than 30 calls regarding canning problems, before the Fair. During the Fair she aids those who have questions regarding canning problems. The exhibit at the Fair also has much to do with arousing interest in this project. This year there were 147 exhibits. In this canning exhibit was an exhibit of meals. Seven women competed in this contest. All the meals were good. A menu had to appear with five jars of foods to be used in the meal."

Clark County: Food Preservation. "Much of the agent's time is spent working through the Relief Society of the Latter Day Saints Church. In their church work they have a social security program. Each community church has purchased a large pressure cooker and from 1,000 to 2,000 cans for food preservation. In each place much canning has been done. The agent has seen that 100 canning bulletins have been given and sent to these people. Also, there are two cookers owned by the Farm Bureau of the county. By having these cookers at a certain place, all Rural Rehabilitation clients are free to use them as well as others. The cookers have been passed around from family to family all summer and fall. There isn't much summer canning due to the intense heat."

- b. Food Selection and Preparation: Efforts in regard to food selection and preparation were concentrated upon the protection of health and conservation of cash in order to free money for loans, and other obligations. Another problem, that of preparing attractive meals with a minimum expenditure of time and effort received increased emphasis during the year.

The methods used in carrying on this phase of the nutrition projects were, demonstrations before group meetings, personal conferences during agent visits to the home, personal conferences, and group instruction in connection with the Keep Growing work with school children<sup>and</sup> with mothers taking part in the preschool work. Also exhibits have been prepared for county and 4-H Club fairs and group meetings.

Two series of material on "Winter Meals and "Summer Meals" created decided interest. This material was carried out in the form of menus, marketing orders, and recipes which were prepared by Mrs. Helen S. Tremewan, (the home demonstration agent of Elko County, who acts as part-time nutrition specialist), assisted by the state leader and Dr. Penelope Burtiss Rice (nutrition specialist, who now lives as a homemaker in Reno, and closely cooperates with this department). This material was so popular that there were a number of calls from outside organizations for this type of assistance. Other problems taken up were the preparation of vegetables, the use of inexpensive meats, simple desserts.

The problem of mineral and vitamin content of food was also given special attention at a training conference held by Dr. Rice during the annual extension conference, the follow-up work<sup>being</sup> done by the agents. In one section of the state, (Clark County), there is still evidence of a decided mal-nutritional condition among the population. This point was commented upon by the Maternal and Child Health Division

of the State Board of Health during work in this section of the state. The question was raised as to whether this was due to insufficient protein in the diet or to a lack of mineral and vitamin content. Detail study of this problem was started this year through having selected families in each community keep a record of actual food used. So far, results indicate there is a decided lack of vegetables, although this is the only section of the state where winter gardens are possible. An earnest effort is being made to increase interest in fall and winter gardens. The problem is further complicated by the possibility of a mineral deficiency in the soil in this county. This is a section of the state where due to lack of funds the home economics extension work has been discontinued several times and therefore no continuous work under home demonstration guidance has been possible. We are sincerely hoping that the present agent can be continued in Clark County if for no other reason than to help with this problem. No permanent results can be secured for several years due to the isolation of the people in this area and their long established habit of not growing gardens because of the poor results secured from summer gardens. The instability of their water supply, the severe summer heat and the low incomes received from the very small land holdings are very greatly complicating this problem. However, considerable interest has been created among the women belonging to the Latter Day Saints Relief Society, a number of good demonstration gardens were secured this year, and we believe that results can be secured if home demonstration work can be maintained in this county.

Interest continues to grow in regard to the home management phase of the food selection problem, i.e.; the legitimate amount of money that should be spent for the purchase of food. An increased number of families reported the use of a year's food budget, the suggested monthly grocery bill of \$10 to \$12 per family, and such consumers' problems as, large quantity buying and the selection of the grade of canned goods suited to family situations. (This problem is discussed in greater detail under Home Management).

Considerable time was also spent upon the problems involved in the school child nutrition. A large amount of this was done in the Keep Growing project or a supplement to this project. The contents of the school lunch box, a hot supplement to the school lunch, adequate breakfasts and evening meals for school children were taken up with both group and individual families. Cooperation was given to the hot school lunch project carried on under the WPA, Equipment, menus, recipes being furnished and assistance given in securing and training personnel.



A large amount of individual assistance was given to Rural Rehabilitation clients in the planning of their food supply and the use they make of it. This work was started through the home management plan required from each Rural Rehabilitation client by the Farm Security Administration. As the home demonstration agents this year acted as home management supervisors for this work, these home management plans gave an effective approach to this problem. In a majority of these cases it was found that the greatest possible saving a family could make was through food production and preservation. Special assistance was given these families through arousing interest in making a definite plan of how much should be spent for the monthly grocery bill, what types of food should be bought with the funds allotted and finally, the use that should be made of the foods that are available. Most of this work with the Rural Rehabilitation families was done through home visits in which the regular home management supervisory work was supplemented by extension instruction; (menus, marketing orders, recipes, etc.).

Every effort was made to bring these Rural Rehabilitation mothers into local community groups studying these problems, so that they would feel that they were taking a part in general community effort. This, we believe, did much to dissipate the feeling that these Rural Rehabilitation families were being set apart and asked to live upon a lower level than their more fortunately placed neighbors. The encouraging results secured by a large majority of these Rural Rehabilitation families in reducing the food costs at the same time they were improving the nutritional status of their families created much interest in the general population and stimulated non-relief families to try and adopt the same methods.

- c. **Special Nutritional Problems:** A large volume of special nutrition problems continued to be brought to the extension agents with the request for their personal assistance. These home demonstration agents are the only residents of these counties who have been especially trained in nutrition and, therefore, are capable of giving this technical advice. The medical and dental professions are more and more referring patients with special dietary problems to the extension agents with the request for assistance in carrying out prescribed diets for such conditions as weight control, anemia, constipation, tooth development, etc.

Cooperation is growing up between the Maternal and Child Health nurses, the Social Welfare secretaries, and the extension service in regard to social service nutrition problems. Assistance has been given regarding minimum food budgets, (with marketing orders, menus and recipes to go with them), as well as much help in regard to nutritional problems of individual families.

- d. **Keep Growing:** June, 1937, marked the completion of the fifteenth year of the Keep Growing demonstrations. In view of this fact a summary of the 15 years of work was made with a report of the accomplishments which we believe have been secured during these many years of effort upon this particular nutrition activity.

At the end of this period of 15 years, the question was placed before the state whether or not Keep Growing demonstrations should be continued. By an over-whelming majority the various communities signified their earnest desire that the work should be continued as there seemed no other agency in the state that could step in and carry on this type of work. In compliance with this request the extension service this fall started a reorganization of this project that would suit our present conditions. Cooperative plans are under way whereby the extension service takes the responsibility for nutrition and posture work, while the new Maternal and Child Health Nursing Service, (now established under the joint supervision of the State Board of Health and the Maternal and Child Health Division of the Social Security Administration), carries on the phases concerned with physical condition, immunization, etc. This reorganization has decidedly lightened the burden formerly carried by the extension service. Also the fact that the Sparks community has secured a full-time school nurse has made it possible for us to drop the Keep Growing demonstrations in this community. Close cooperation is, however, continued with this community through advisory service on the nutrition phases of the program and specific nutrition assistance given individual problems that are forwarded to us by the school nurse. The local leaders who were trained by us in this community are continuing to give assistance to the school nurse in carrying on the reorganized work in these schools.

- e. **Specialist Assistance Received from Washington Office:** We deeply appreciated the visit of Miss Miriam Birdseye, Extension Nutritionist, U. S. Department of Agriculture of Washington, D. C. The week which she spent with us at

the state 4-H Club camp was surely a profitable one not only to 4-H Club work but to adult work. The ideals and standards regarding posture, nutrition, and general wholesome attitudes toward health problems which Miss Birdseye gave to club members, leaders, and agents have proved of great value to us. This type of specialist assistance is greatly needed in Nevada where we have no full-time specialists. We also wish to acknowledge the help received from the subject matter material which Miss Birdseye has sent us throughout the year. The correlation of nutrition and home management has been especially helpful.

Statistics regarding this work and excerpts from agents' reports giving accounts of problems encountered and methods used in presenting this work are given below:

	<u>1936</u>	<u>1937</u>	<u>% Change</u>
No. communities in which work was conducted.....	90	79	-12
No. voluntary local leaders assisting.....	156	108	-30
No. adult result demonstrations conducted.....	2338	1492	-36
No. community Keep Growing demonstrations.....	87	73	-16
No. children involved in above.....	3309	2858	-13
No. families budgeting food expenditure for year.....	277	353	+32
No. families following food-buying recommendations.....	676	895	+31
No. families serving better balanced meals.....	2180	1671	-23
No. families improving home-packed lunches.....	1392	848	-39
No. schools following recommendations for a hot dish or school lunch.....	77	58	-24
No. children involved.....	2426	1908	-21
No. families following recommended methods of child feeding.....	2107	1569	-25
No. individuals adopting corrective feeding and other special diets prescribed by doctors (such as weight control, anemia, constipation, etc.).	1571	1477	- 5

to keep the family in good nutritional condition. The value of cod liver oil has been brought out when food selection has been discussed.

"Four demonstrations were given on the place of liver in the diet. Ways of serving liver are welcomed because not many people seem to like it unless it is combined with other foods. Calves' liver is very expensive and is not always available at the local markets. Therefore, the use of liver from other animals was stressed. Four demonstrations were given on planning meals for winter months. Material prepared by Mrs. Helen Tremewan, Elko County Home Demonstration Agent, was used to help with this problem. The women are interested in one-dish meals and are also interested in serving the family well balanced meals. Four demonstrations were also given on the serving of new vegetables on the market. Avacados were prepared in five different ways. Many of the women of the groups had never tasted this fruit before. Avacados are on the Reno markets several months during the year and are inexpensive. The preparation of Zucchini squash was also demonstrated. This squash is grown in many Washoe County gardens. Buttercup squash was also grown for the first time in the county. This squash is said to be used in place of sweet potatoes in cold climates where the sweet potato will not grow.

"The use of one raw vegetable each day was stressed. Spinach salads and the use of endive were demonstrated. Endive may be had in the home garden most all winter and is always on the Reno market. Salad dressings were also demonstrated at these meetings.

"A demonstration was given by the president of the North Truckee Homemakers Club on the making of Italian noodles. She has a noodle cutting machine and the noodles were ready to serve in an hour. The Italian noodle dishes are truly "one dish meals", meat, tomato sauce, cheese and herbs being used to make the gravy which is poured over the noodles. More time could well be spent in learning to prepare Italian dishes.

"650 families were helped to serve better balanced meals. 289 families are following food buying recommendations. 137 individuals adopted recommendations for corrective feeding, such as weight control, anemia and constipation. 317 families followed recommended methods of child feeding. 247 families improved the packing of school lunches."

Churchill County: Food Selection and Preparation. "Method demonstrations were given at various community meetings on preparing and serving of fruits, vegetables, meats, one-dish meals, milk dishes, whole-grain cereals, etc. Particular stress was placed upon planning menus that would be adequate for safeguarding the health of each member of the family. 503 families reported serving better-balanced meals as a result of meetings held. Home visits were made and personal conferences were held with some of the homemakers to plan adequate diets and to explain the forms for keeping the food expense accounts. Forty-five families budgeted food expenditures during the year.

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"Assistance has been given various committees during the year in planning menus and table decorations for dinners and banquets, including the annual County Farm Bureau meeting, Homemakers' meetings and various church and fraternal organizations. Assistance was also given to the relief agencies and Rural Rehabilitation clients in planning adequate menus. Many recipes, low cost dietaries, and bulletins were distributed during the year. Consumers problems were also studied, stressing economical purchases and grade labeling of canned foods. 421 families reported following food-buying recommendations during the year."

Lyon County: Food Selection and Preparation. "The importance of the hot school lunch has been emphasized in every community in the county participating in the Keep Growing nutrition program. Although practically every child carries a lunch to school, there are only a few who have thermos bottles and take any warm beverage or soup for their noon meals. Effort is being continued along this line and plans for better school lunches this next year are under way."

White Pine County: Food Selection and Preparation. "Early in the year the extension agent met with Mrs. Louise Springer, State Supervisor of the WPA hot school lunch projects and Mrs. E.E. Hinckley, County Director of WPA work projects for women and outlined to them some of the needs for hot school lunches in the various sections of the county. Through the efforts of these agencies hot school lunches were established in Baker, Cherry Creek, Preston, and Lund. Also for a time a hot supplement was maintained in the Steptoe school with the local teacher in charge. Although practically all the children in these rural schools of White Pine County are so situated that they can go home for their noon meals a large percentage of them do not go home for their noon meals. Hence the projects carried on by the WPA, and with which the extension service has cooperated whenever possible, have been of outstanding value in improving the general nutrition of the school children in this county."

Report for the Year 1936 - 1937

This report marks the completion of the fifteenth year of Nevada's Keep Growing demonstrations in the Nutrition and health of school children.

Ultimate State Goals Reached At Last: We are happy to be able to announce that Nevada has at last reached the ultimate state goals of these nutrition and health demonstrations. There are now 76.35% of these Keep Growing children who are in Good Nutritional Condition and only 9.02% who must still be classified as being in Poor Nutritional Condition.

Years ago, soon after this project was started, the ultimate goals were set up to some day have 75% of the children in Good Nutritional Condition and 10% or less in Poor Nutritional Condition. We hoped to reach these goals in ten years; but instead, it took fifteen years. For many years the high prevalence of handicapping physical defects kept many of the children from being "free to gain". The depression, which brought with it bank failures and low family incomes, caused a decided reduction in the family diet for four years. However, even during the depression, there was some improvement secured in nutritional condition, but the rate of progress was decidedly reduced. Now, with improved economic conditions, the rate of improvement has increased, the family diet has been liberalized to include greater amounts of milk, vegetables and fruits, and many more physical defects have received medical attention.

The cooperation secured from Nevada's lone health nurse through all the years that she was maintained jointly by the Public Health Association and the State Board of Health, and this year from the newly established Maternal and Child Health Nursing Service has been a large factor in securing improvement regarding physical defects. Getting rid of these physical defects has resulted in many more children being "free to gain".

Also, each year the cooperation and skill of sponsoring organizations, (such as the Farm Bureau, Homemakers' Clubs, Parent Teachers Associations, and schools), has steadily increased. The follow-up work of the local leaders has become more effective, and community interest and support is more general. To all these cooperating agencies, the Agricultural Extension Service of the University of Nevada offers its sincere thanks and hearty congratulations upon at last reaching the ultimate state goals of these Keep Growing demonstrations.

Progress Through the Years: Now, when the ultimate state goals have at last been reached, it is interesting to look back and note the progress made in the scope and results of these demonstrations. Therefore a tabulation of the yearly statistics is given below:

Statistics Regarding Keep Growing Results at the End of Each Year's Demonstration:

Year	No. Communities	No. Children	% in Good Nutritional Condition	% in Poor Nutritional Condition	% Free from Serious Physical Defects
1923	8	853	73.20%	12.10%	No
1924	30	1846	56.00	15.00	Record
1925	47	1969	65.00	18.00	
1926	51	2427	71.50	17.40	Kept During
1927	61	3342	67.40	18.00	
1928	45	1696	71.70	13.50	These
1929	58	2048	71.20	15.02	Years
1930	63	2145	70.62	15.15	29.00%
1931	66	2507	72.04	14.72	35.00
1932	83	3396	71.73	14.87	46.00
1933	74	3255	67.47	10.75	53.50
1934	76	3065	70.21	10.87	63.00
1935	88	3231	72.36	10.21	
1936	87	3309	73.82	11.45	
1937	73	2858	76.35	9.02	

The above record shows the gradual spread of the work, and the fairly steady improvement that has been made during these fifteen years, both in nutrition and health. These figures give definite proof of the results that community cooperation and devoted volunteer leadership can secure. We believe these communities and local leaders should be, and are, justly proud of these results. But more valuable than statistical results is a general interest and belief in Positive Good Health as a family and community responsibility, and this, we all believe, these Keep Growing demonstrations have implanted in the general life of Nevada.



Nutrition Results For This Year: During this school year (1936-1937), the number of children in Good Nutritional Condition was increased 8.37%. This decidedly exceeds the annual goal of 5% improvement in this group. The number in Poor Nutritional Condition was decreased 3.63%. This does not fulfill the annual goal of 5% decrease; but this rate of progress was hardly to be expected as the ultimate goal was more and more closely approached.

A very encouraging element in this year's record is the fact that there was so little ground lost during last summer's vacation. Frequently there has been a decided set-back during the summer months. This year special effort was made to prevent this summer loss through greater attention to sleep and rest, regular meals, and the adjustment of farm work and physical exercise to fit the ability of individual children. As a result, the number of children in Poor Nutritional Condition remained practically stationary during the summer (May 1936, 11.42%; Sept. 1936 11.65%); and the number of children in Good Nutritional Condition dropped back only 5.84% (May 1936, 73.82%; Sept. 1936, 67.98%). Both these records are a decided improvement over former years, when there was often a set-back of from 15% to 25% during summer vacation. We believe this is an indication of definite improvement in the nutrition and health condition of this large group of children. The credit for this improvement is due to the teachers, who, during the last weeks of the school year, emphasized the wise use of vacations. Credit is also due the parents and children, who gave special attention to daily living habits in an effort to help solve this problem. The figures given above prove that this concerted effort regarding the wise use of vacations really produced excellent results.

More Children "Free to Gain!" The new Maternal and Child Health Division of the State Board of Health has given active cooperation with the problem of physical defects. This public health nursing service was established in Nevada, May 15, 1936. Ten field nurses, the supervisory nurse (Mrs. Christie A. Thompson), and the director (Dr. H. Earl Belnap) have carried on an effective campaign to interest parents in securing medical attention for all children having physical defects that might handicap them in their effort to "Keep Growing". The field nurses have given physical inspections to practically all these children. Where indications of defects were found, the parents have been so informed, and advised to consult their family physicians. Help has also been given to arranging for medical attention for those children whose parents were unable to pay for medical aid. Local organizations have cooperated by furnishing funds (for glasses, etc.); physicians have been most generous in reducing fees, and have

even donated services in urgent cases. As a result of all this cooperative effort, 1012 physical defects were reported as having received correction since June 1, 1936. We are not sure that even this impressive figure represents all the corrections that were made; but local leaders and nurses do have definite records for the above 1012 corrections, which include 58 eye, 45 nose, 141 throat, 274 tooth, and 473 posture corrections. These records also indicate that 63% of the 2858 children who completed this year's demonstration are now free from serious physical defects, and therefore, are "free to gain". The correction of these physical defects and interest aroused, in both parents and children, in being "free to gain", is a valuable contribution to the Positive Good Health of the State of Nevada. Great credit is due to the Maternal and Child Health Nursing Service, and the fine work it is doing. We are all deeply grateful to it.

Immunization Campaign: Another fine service rendered by the Maternal and Child Health Nursing Service is the immunization campaign, which they have carried on in cooperation with local physicians and health authorities. The records show that 1375 or 48% of the Keep Growing children have been vaccinated against small pox and 1137 or 40% immunized against diphtheria. This is a decided contrast to previous records. Up to this year only about 4% of the children enrolled in the Keep Growing demonstrations had been vaccinated, and only 1% immunized against diphtheria. All the communities that have taken part in this immunization campaign are sincerely proud of this improvement, and many other communities are planning to avail themselves of this service in the near future. While immunization has no immediate effect on nutrition and health conditions, it is a very real protection for the future, particularly in this state where tourist travel is growing so rapidly, bringing with it the inevitable danger of conduct with both of these diseases.

The Problem of Tuberculosis: Real progress was also made this year in attacking the problem of tuberculosis in this state. Mantoux tests have been given by the Maternal and Child Health Nursing Service to selected groups in four communities in the state. Here, again, close cooperation was maintained with the local medical profession. The parents of all positive reactors were strongly advised to consult their family physicians immediately. The State Board of Health cooperated by furnishing the material used for these skin tests. The Nevada Public Health Association, (whose funds come from the sale of Christmas Seals), has given invaluable cooperation in this campaign by furnishing money for the X-ray films. A total of 665 Mantoux tests and 70 X-ray pictures have been made, and the results are "disturbing", to say the least. If conditions throughout the state are as serious as this preliminary

work seems to indicate, Nevada is faced with a very grave situation that deserves the serious consideration of all parents, civic organizations, and the whole population of the state. We strongly urge that wholehearted cooperation be given to the Nevada Public Health Association, (which is now devoting all its meager funds to this problem), and to the Maternal and Child Health Service, (whose staff is carrying on the field work), in this attempt to find out the actual conditions in this state. Surely Nevada, which has the highest per capita wealth and most scattered population of any state in the union, should be deeply concerned over the fact that it has the fourth highest death rate from tuberculosis of any state in the nation. Some people may say that this is a problem not directly involved in the Keep Growing demonstrations, which are primarily concerned with the nutrition of school children; however, any widespread infection of tuberculosis is a constant menace to the general health of the whole population, and therefore, has a direct bearing upon the nutrition and health of school children in particular. Therefore, we again solicit the active cooperation of all organizations such as the Farm Bureau, Homemakers' Clubs, Parent Teacher Associations, Federated Women's Clubs, and schools. We urge that they study this problem in their local communities, in cooperation with the Nevada Public Health Association and the Maternal and Child Health Nursing Service, so that actual conditions can be definitely determined. Plans can then be made to solve this problem. If present indications are correct, Nevada faces a more serious situation than any of us have realized. No time should be lost in contacting these organizations and arranging to have the children in your community receive the Mantoux test, followed by X-ray pictures for positive reactors. Then, and only then, will you have definite knowledge of conditions in your community. We sincerely hope that this will be done in all Keep Growing communities during the coming year.

Posture: A steady and persistent posture campaign has been carried on for a number of years in connection with these Keep Growing demonstrations. Poor muscle tone (due to Poor Nutritional Condition and over-fatigue), desks that do not fit, and poor lighting are, we believe, the reasons for the large number of poor postures that were originally found in this state. The nutritional condition has improved decidedly, and effort is being made by the school authorities to improve seating and lighting as fast as funds are available. A number of schools are also giving posture instruction. This year there were 473 children who made decided improvement in posture during the school year.

School Sanitation: Each year there has been steady progress in the sanitation phases of these Keep Growing demonstrations. This year 65 schools had safe drinking water (as proved by test), 62 had sanitary toilets as far as present local conditions would permit (i.e., at least kept clean and protected

from flies), and 61 had safe handwashing facilities. This provision for washing hands under running water, sometimes meant using the "teakettle method", where the school had no running water and no pump with a safe, leak-proof drain. This emphasis on safe handwashing and the discarding of the common washbasin was started about eight years ago by the "lone" state nurse who was maintained by the Nevada Public Health Association at that time. It has done so much to reduce the number of cases of skin diseases among school children, that now there is only an occasional flare-up, and that is quickly controlled.

This year special emphasis has been placed upon sanitary toilets. The Sanitation Division of the State Board of Health, (under the direction of Mr. W. W. White, Mr. Frank Ingram, and Mr. Joseph Smith), in cooperation with the W.P.A., has carried on a sanitary privy project. 364 installations have been made in the state and 6 have been installed for Keep Growing schools. The Farm Bureau and the Agricultural Extension Service have cooperated by sending out notices to all rural communities regarding this opportunity to secure these excellent units at just the cost of the materials, a very small expense. We sincerely hope that many rural schools and rural homes will avail themselves of this opportunity. It will certainly do much to safeguard health in this state.

#### Supplementary Keep Growing Activities

There are a number of supplementary activities which have influenced Keep Growing results. This year has been an unusually encouraging one in regard to interest in these activities, and the good results are in a large part due to this coordination of effort.

Prepare-for-School-Roundups: Prepare-for-School-Roundups were held, in cooperation with the Maternal and Child Health Nursing Service, in 11 communities, with 212 children in attendance. Many of these preschool clinics had to be postponed until later in the summer, due to the prevalence of epidemics this spring. The Maternal and Child Health Nursing Service, in cooperation with local doctors, is gradually establishing a regular pre-school consultation service in a number of the more settled areas of the state. Therefore, in the future, the primary responsibility for this type of work will gradually pass into their hands, freeing the time of the extension agents for more intensive nutrition service. As a whole, the results of these pre-school conferences indicate a decided improvement over conditions that existed a few years ago. There are fewer signs of rickets and teeth defects, most of these little folk are within the average range of weight for height, age, and body build. Nutrition conferences

held with parents and children show that there is a much more general observance of good food and sleep habits. All these factors indicate that the Keep Growing demonstrations have carried over into the homes and become a part of general family living habits. As a result, these younger children are entering school in much better condition than did their older brothers and sisters six, ten, and fifteen years ago. Much credit is due the Keep Growing children themselves for this improved condition. They have taken real interest in finding out what nutrition and health habits little folks should establish, and both by precept and by example have sought to establish these habits among their younger brothers and sisters. This has been an excellent piece of community service, quietly and effectively performed. Therefore, to these Keep Growing demonstrators we express our sincere thanks on behalf of their communities and the Agricultural Extension Service.

Hot Supplement to the School Lunch: Sixty-one communities saw to it that children who ate lunch at school had a hot food at noon during the cold winter months. In some communities, children brought this hot food in a thermos bottle. In others, food was brought in pint jars and heated in a pail of water placed on top of the school heating stove. In other places, committees of older children and the teacher prepared one hot food in the school room, the hall, or cloak room, using equipment furnished by a local organization; or the school board, and food supplies brought from home. In some communities a hot lunch was provided by the W.P.A., as a women's work project under the direction of Mrs. Harriet Gaddis Spann, (State Director for Women's and Professional Projects), and Mrs. Louise K. Springer, (Field Supervisor). Long years of experience have proved conclusively that a hot food at noon during cold weather prevents over-fatigue, improves nutritional conditions, and keeps children gaining during this difficult part of the school year. Teachers testify to the fact that hot food at noon also makes for much better school work in the afternoon.

Supervised Lunch Periods: Practically all schools that served a hot food at noon, and some that did not, had a supervised lunch period in which teachers and pupils sat down and enjoyed a leisurely lunch together. This is another decided help to good nutrition because more of the lunch is eaten, and the food is eaten more slowly and not "gobbled". Also, the social intercourse relaxes nerves, and gives an opportunity for effective education concerning what constitutes a good lunch, and the conventional table manners that make one an acceptable table companion. The busy teachers, who find or take time to carry on both the hot lunch and supervised lunch activities, are deserving of real community appreciation and we believe they receive it. We have heard school board members and parents

brag about their fine teachers, and these are two activities that are frequently mentioned.

Supplementary Food: In 38 schools milk was provided for a supplementary feeding at morning recess. In some places the children brought milk from home; in others it was delivered by a dairy, with most children contributing a quarter a week for the half pint a day. The Parent Teachers Associations and Homemakers' Clubs cooperated by providing milk for children whose parents could not afford to do so, and it was always done so quietly that no one but the teacher knew "which was which". We wish also, to express our gratitude to those rural mothers who quietly sent extra milk to school for children who would otherwise not have it; it is certainly a good deed. This drinking of milk at recess serves more than one purpose; it prevents over-fatigue, increases the amount of milk consumed, and is one of the best methods of breaking down the prejudice against milk that some children still have. We have many direct proofs that the milk habit learned in this way at school carries over into the home, and then the "milk problem" is solved. We feel that every community should arrange for the serving of milk at morning recess to all children in the first three grades, to all seriously underweight children, to easily fatigued children, and to children from families living on inadequate incomes.

Many children have adopted the practice of eating a sandwich, or some fruit at afternoon recess, or before starting home on the bus, or taking a glass of milk upon reaching home, or at bed time. Again, this small supplementary feeding has done much to make good gains and prevent over-fatigue. Candy or other sweets are avoided in order not to interfere with normal appetites at regular meal time.

Rest Periods: We are sorry to have to report that only four schools carried on rest periods in school for seriously underweight and easily fatigued children. Here is an activity that costs practically nothing to establish. The donation of a cot or two, quilts or blankets, and pillows is easily arranged. The results of a ten or fifteen minute rest period are very noticeable in preventing over-fatigue, and produces not only better gains but better school work. Rest periods for selected pupils are an established practice in most private schools, and in many big city systems. We strongly urge that this matter get active support by school authorities, Parent Teachers Associations, and Homemakers' Clubs. A number of communities emphasized rest periods at home, (at noon, or after school) for all pupils in the first, second, and third grades, and for seriously underweight and rapidly growing children. Excellent results have been secured in increased weight and lessened nervous tension.

Child Health Day Celebrations: In 40 communities Child Health Day celebrations were held, with a total attendance of 2844. Washoe County held its usual county-wide Health Day as the guest of the Sparks school system. Many more celebrations would have been held but for the epidemics which broke out just before the end of the school year. These health "Achievement Days" are not only keenly enjoyed by the children who take part and the parents and friends who attend, but they are an effective means of educating the whole community as to the basic factors affecting child health, and arouse wholehearted community cooperation. The quality of the programs steadily improves. At first the Agricultural Extension Service had to furnish mimeograph program material. Now, each community prepares its own program, much of it being written and produced by the children themselves as a coordinated project involving many aspects of their regular school work. The originality of the material and the effective presentation deserve special comment, and do much to "sell" the idea that "Positive Good Health" is a joyful part of community life, as well as a personal and community duty.

Silver and Gold Star Awards to Keep Growing Demonstrators: Silver and gold stars are used as an "outward and visible" reward for achievement in these Keep Growing demonstrations. When a child reaches Good Nutritional Condition for his age, height, and body build, he is given a silver star on the Keep Growing report which he takes home each month and one is placed after his name on the class room wall chart where height and weight records are kept. A child who is in Good Nutritional Condition and free from indications of serious physical defects (according to the nurse's inspection or the family physician's examination), and has good posture, receives a gold star. This simple recognition of nutrition and health achievements has done much to maintain interest, and has furnished an effective motive for establishing good nutrition and health habits.

Silver and Gold Star Communities: In the same way, Silver and Gold Star Certificates are awarded to communities that meet certain nutrition, health, and sanitation standards. A community that reaches the ultimate nutrition goals (75% of the children in Good Nutritional Condition and 10% or less in Poor Nutritional Condition), receives a silver star certificate signed by the State Superintendent of Public Instruction, the Director of the Agricultural Extension Service, the extension agent, and the local leader. Communities that fulfill these nutrition requirements and also meet the health and sanitation standards, (10% improvement in number of children free from indications of serious physical defects, and have safe drinking water, toilets, and handwashing facilities), are awarded gold

star certificates, signed by those listed above and also by the President of the State Board of Health (because the Nursing and Sanitation Services are part of this department). Communities that maintain a silver or gold star rating throughout the entire school year are awarded "all year" certificates. It is the ambition of every Keep Growing community to achieve an "All Year Gold Star" rating; and when they do we all feel that a completely successful Keep Growing demonstration has been achieved.

Silver and Gold Star Counties: In the same way silver and gold star certificates are awarded to counties that meet nutrition, health, and sanitation standards. A county that reaches the ultimate state nutrition goals (75% of the children in Good Nutritional Condition and 10% or less in Poor Nutritional Condition) receives a silver star certificate. When a county also has 33% of its Keep Growing children free from indications of serious physical defects, and 75% of its Keep Growing schools fulfill the sanitation requirements regarding drinking water, toilets, and handwashing facilities it is declared a Gold Star county. Only a very few counties have ever won a silver or gold star certificate, and no county has as yet won an "All Year Gold Star" certificate. Perhaps Nevada's population is too shifting ever to reach this last and most perfect achievement of being an "All Year Gold Star County". However, as more gardens are planted, more family incomes reach the adequate zone, more physical defects are corrected, and school sanitation gradually improves even this high state of Keep Growing achievement may not be impossible. We know two counties that have their ambitions set upon reaching this "sometime".

These community and county awards have grown to mean a great deal to Keep Growing communities and counties, and are much sought after. They are framed and then presented at a community meeting or special school assembly. They are usually hung on the wall beside athletic penants, or put in trophy cases along with the loving cups, plaques, etc., won in athletic competition. Communities and counties are just as "human" as the people who live in them, and these public awards for Keep Growing achievement have done much to awaken public interest and cooperation.

1937 Silver and Gold Star Communities: This year 10 communities won a Silver Star certificate and 32 communities reached a Gold Star rating. A list of these communities follows. Those starred (\*) are "all year" star communities. Our congratulations to all these communities. They are certainly a credit to themselves, their county, and the State of Nevada.



Silver Star Communities

Community	County	Good Nutri. Condition	Poor Nutri. Condition	Community	County	Good Nutri. Condition	Poor Nutri. Condition
*Cobre	Elko	100.00%	0.00%	*Lamoille	Elko	85.71%	0.00%
*Elburz	"	100.00	0.00	*Metropolis	"	82.35	0.00
*Halleck	"	100.00	0.00	Mountain City	"	78.94	5.26
*Humboldt	"	83.33	0.00	Preston	White Pine	82.76	0.00
Jiggs	"	100.00	0.00	Cherry Creek	"	73.91	8.69

Gold Star Communities

Community	County	Good Nutri. Condition	Poor Nutri. Condition	Community	County	Good Nutri. Condition	Poor Nutri. Condition
Beach	Churchill	80.00%	6.66%	*South Fork	Elko	100.00%	0.00%
*Harmon	"	80.00	10.00	Spanish Ranch	"	75.00	0.00
Island	"	85.71	0.00	*Wells	"	89.00	3.20
Northam	"	78.57	10.71	Beowawe	Eureka	79.31	3.45
Oats Park	"	80.00	8.80	Eureka	"	77.65	4.70
Old High	"	78.30	8.49	Palisade	"	93.33	0.00
Stillwater	"	79.31	10.34	*Meisner	Lyon	78.57	7.14
West End	"	75.57	9.92	Brown	Washoe	90.90	0.00
*Boulder	Elko	84.61	7.69	*Clark	"	100.00	0.00
*Carlin	"	88.54	7.63	*Galena Creek	"	100.00	0.00
*Contact	"	89.00	0.00	St. Thomas	"	83.59	8.46
*Jack Creek	"	80.00	0.00	Vista	"	87.50	0.00
*Lee	"	91.66	0.00	Wadsworth	"	81.25	9.37
*Montello	"	89.15	3.61	Rob't Mitchell	" (Sparks)	74.60	6.58
*Rabbit Creek	"	100.00	0.00	Mary Lee Nichols	" (Sparks)	71.91	3.25
*Ryndon	"	100.00	0.00	*Steptoe	White Pine	85.71	0.00

Silver Star Counties			
County	% in G. N. C.	% in P. N. C.	% free from serious physical defects
* Elko	85.88%	4.83%	68.00%
			% meeting school sanitation goals
			70.00%

\* Elko County failed to receive a Gold Star certificate because only 70% of its Keep Growing school buildings met the sanitation requirements in regard to toilets and handwashing facilities. 83% met the requirements regarding safe drinking water.

Gold Star Counties			
County	% in G. N. C.	% in P. N. C.	% free from serious physical defects
Churchill	78.06%	9.05%	64.00%
Eureka	79.54	3.79	36.00
			% meeting school sanitation goals
			100.00%
			75.00

Churchill and Eureka Counties now have the highest standing that has ever been reached by a county carrying on the Keep Growing demonstrations. Congratulations! Churchill and Eureka Counties!

Elko, Ormsby, Washoe, and Humboldt counties are very near the Gold Star standards. A small improvement in nutritional condition and some sanitation improvements would make all four Gold Star counties. We hope this improvement will be secured soon.

Communities Having No Children in Poor Nutritional Condition: Another group of communities that deserves special praise is composed of those having no children in Poor Nutritional Condition. There may be some "doubters" who still feel that it is not important for a community to have 75% of its school children in Good Nutritional Condition; but we know of no community that would not be proud to boast of having no school children in Poor Nutritional Condition. It means not only good food and sleep habits, but a high degree of freedom from physical defects and a community-wide interest in "positive good health". The following communities are members of this especially fine group. Those starred (\*) had no children in Poor Nutritional Condition throughout the entire school year!

Communities Having No Children in Poor Nutritional Condition

White Pine County

Melvin  
Preston  
\*Steptoe

Churchill County

\*Island

Washoe County

Brown  
\*Clark  
Franktown  
\*Galena Creek  
Vista

Eureka County

Palisade  
Diamond Valley

Elko County

\*Cobre  
Contact  
\*Lee  
\*Elburz  
\*Halleck  
\*Humboldt  
\*Jack Creek  
\*Jiggs  
\*Lamoille  
Metropolis  
\*Rabbit Creek  
\*Ryndon  
\*South Fork  
Spanish Ranch

Health Booklet Contest: Every year for the past five years a Health Booklet contest has been carried as another supplementary Keep Growing activity. This contest has furnished motivation for an excellent health education project. Each child, who is interested and has the time makes a health booklet upon any subject or subjects he wishes. Stories, rhymes, and essays regarding nutrition, health, sanitation, etc., are prepared by the children. These booklets are illustrated by "cut-outs", magazine pictures, traced or free hand drawings, etc. Each has an attractive cover with the words "Keep Growing" incorporated into its design. In these booklets are kept the height-weight records for the year, the health standing based upon a doctor's examination or the regular inspection by the Maternal and Child Health nurse, and information regarding corrections of physical defects. By the end of the year these booklets give a cross section of the nutrition, health, and sanitation knowledge and activities of each child. Excellent correlation is secured in the art, language, and health activities of the school program.

No credit is given for artistic ability; but original and forceful presentation as well as accurate and locally useful information are given much credit. Nutrition improvement, posture, and health condition as regards physical defects (and their correction) are also considered in judging these books. The judging is done independently by three persons representing nutrition, health, and educational interests. The six highest ranking books in two classes are awarded ribbons and small cash prizes, and four others in each group receive ribbons and honorable mention. The first prize winner in one class has the cover of his book used to illustrate the cover of the yearly Keep Growing report.

Last year the highest ranking book in Division A was considered so good in educational value that it was made the subject of two radio talks over the Western Farm and Home hour of the National Broadcasting Company. Also one national radio talk from Washington D. C. was devoted to this booklet. Nevada is proud of the distinction given to this Keep Growing method of motivating nutrition and health education.

These booklets serve a very useful purpose. They are exhibited at local P.T.A. and Farm Center meetings, at county fairs, at district and state meetings of various kinds; and do much to build up public interest and cooperation, not only in the Keep Growing demonstrations, but also, in the Positive Good Health of the state as a whole. They also travel from school to school and add interest to the succeeding year's work.

There were 102 Health Booklets entered in the state contest this year, after elimination contests were held in the communities and counties.

#### HEALTH BOOKLET CONTEST WINNERS, 1937

##### Division A

Division A - for children in Poor Nutritional Condition who make a decided improvement in nutritional condition. Score card - 40% for nutritional improvement, 10% for posture, 25% for health information, 25% for forceful presentation.

1st Prize - Calliope Frugoli, Empire, Washoe County, age 12 years. Gained 12 pounds, from 109 to 121 pounds. Grew 2 inches. Ended the school year with good muscle tone, color, posture, and nutritional condition. Subject of booklet: The Keep Growing Ladder, (good food, sleep and rest, cleanliness, exercise, play). Illustrated by magazine cut-outs.

2nd Prize - Myrtle Lee, Lamaille, Elko County. Age 12 years. Gained 8 pounds, from  $79\frac{1}{2}$  to  $87\frac{1}{2}$  pounds. Also grew 3 inches, ending the school year with good muscle tone, color, posture, and nutritional condition. Subject of booklet: Food For Health. Illustrated with water color drawings.

3rd Prize - Alice Williams, Lamaille, Elko County. Age 11 years. Gained 2 pounds, from  $52\frac{1}{4}$  to  $54\frac{1}{4}$  pounds. Also grew 2 inches, and ended the school year with good muscle tone, color, posture and fair nutritional condition. Subject of booklet: Health Habits. Illustrated by crayon drawings.

4th Prize - Bobbie Late, Glendale, Washoe County, Age 15 years. Gained 14 pounds, from 100 to 114 pounds. Also grew 1 inch and ended the school year with fair muscle tone, good color and posture and fair nutritional condition. Subject of booklet: The Health Journey. Illustrated by original drawings.

5th Prize - Maie Nygren, Harmon, Churchill County. Age 12 years. Gained 7  $\frac{3}{4}$  pounds, from 85 $\frac{1}{4}$  to 93 pounds. She also grew 1 $\frac{1}{4}$  inches, and ended the school year with good muscle tone, color, posture, and good nutritional condition. Subject of booklet: Rules of Health. Illustrated with cut-outs.

6th Prize - Bessie Nisheguchi, Gerlach, Washoe County. Age 13 years. Gained 10 pounds, from 68 to 78 pounds, also grew 1 inch. She ended the school year with good muscle tone, good color, good posture and fair nutritional condition. Subject of booklet: A Health Story. Illustrated by crayon drawings.

Honorable Mention: Loretta Lewis, Clark, Washoe County; Renee Bates, Kate M. Smith, Sparks, Washoe County; Thelma Chase, Franktown, Washoe County; Theresa Roberts, Rabbit Creek, Elko County.

#### Division B

Division B - for children who are free from physical defects, or have had defects corrected. Score card, average increase in weight 5%, Good Nutritional standing 10%, posture 10%, freedom from physical defects, or defects corrected 25%, health information 25%, forceful and original presentation 25%.

- 1st Prize - Betty Schaffer, Beach, Churchill County. Age 14 years. Gained  $13 \frac{3}{4}$  pounds, from  $121 \frac{1}{4}$  to 135 pounds, and grew 1 inch. She ended the school year with good muscle tone, color, posture and good nutritional condition. Subject of booklet: Posture. Illustrated with cut-outs.
- 2nd Prize - Catherine Gibbons, Kate M. Smith, Sparks, Washoe County. Age 9 years. Gained  $2 \frac{1}{4}$  pounds, from  $61 \frac{3}{4}$  to  $64 \frac{1}{2}$  pounds. Also grew  $1 \frac{1}{2}$  inches and ended the school year with good muscle tone and posture, fair color and good nutritional condition. Subject of booklet: Sleep. Illustrated with cut-outs.
- 3rd Prize - Joe Garcia, Lakeside, Washoe County. Age 12 years. Gained  $5 \frac{1}{2}$  pounds, from  $67 \frac{1}{2}$  to 73 pounds and grew 1 inch. He ended the school year with good muscle tone, color and posture and good nutritional condition. Subject of booklet: Family Cooperation to Keep Growing. Illustrated with cut-outs.
- 4th Prize - Eileen Pezzi, Glendale, Washoe County. Age 7 years. Gained  $4 \frac{3}{4}$  pounds, from  $48 \frac{1}{4}$  to 53 pounds and grew 2 inches. She ended the school year with good muscle tone and posture and good nutritional condition. Subject of booklet: Keep Growing with Vitamins. Illustrated with original drawings.
- 5th Prize - Clinton Peterson, Elburz, Elko County. Age 8 years. Gained  $6 \frac{1}{2}$  pounds, from  $49 \frac{1}{2}$  to 56 pounds and grew  $1 \frac{1}{2}$  inches. Ended the school year with good muscle tone and posture and good nutritional condition. Subject of booklet: Keep Growing Helps. Illustrated with original drawings in water colors.

6th Prize - Gloria Antoinelli, Mary Lee Nichols, Sparks, Washoe County. Age 8 years. Gained  $5\frac{1}{4}$  pounds, from  $61\frac{1}{4}$  to  $66\frac{1}{2}$  pounds, and grew  $\frac{1}{4}$  inch. She ended the school year with good muscle tone, color, fair posture and good nutritional condition. Subject of booklet: A Keep Growing Day. Illustrated with magazine cut-outs.

Honorable Mention: Jim Smiley, North Star, Elko County; Aldo Lepori, Mary Lee Nichols, Sparks, Washoe County; Norris Clark, Kate M. Smith, Sparks, Washoe County; George Jensen, Moleen, Elko County.

#### THE RESULTS OF FIFTEEN YEARS OF KEEP GROWING DEMONSTRATIONS

Now that Nevada's Keep Growing project has at last reached the ultimate state goals, toward which it has worked for fifteen years, this is a good time to take stock of what really has been accomplished. Therefore, we are listing below the results that we believe have been secured through these community demonstrations in the nutrition and health of school children.

1. Positive Good Health Made Popular: For fifteen years 2532 children on the average, have received nutrition and health education, motivated by their own personal development. Also an average of 61 communities in the 12 agricultural counties of the state have been stimulated to improve these conditions.
2. Nutritional Condition has Been Improved: a. The percent of Keep Growing children who can fairly accurately be judged as being in Good Nutritional Condition has been increased 20.15% (from 56.20% in the fall of 1922 to 76.35% in the spring of 1937). The percent of children classified as being in Poor Nutritional Condition has been decreased 16.48% (from 25.5% in the fall of 1922 to 9.02% in the spring of 1937).

b. The proportion of observable indications of malnutrition, i.e.; rickets, cavities in teeth, poor muscle tone, etc., has been decidedly decreased. Although no exact statistics are available a conservative estimate made by checking samples of communities for 1922 and comparing them with this year's records, places the improvement in teeth at about 25% for whole school populations, and 45% for first grade children.

The subject of individual variation in nutrition conditions has always been a much discussed question. However, these Keep Growing demonstrations have proved, we believe, the definite knowledge of community nutritional condition is of value as a means of securing concerted effort toward improvement.

3. Family Food Habits Have Improved: There has been a wide-spread family adoption of better food habits, particularly in regard to the use of milk, vegetables, cod liver oil, and a more substantial breakfast. The proof of this statement rests on the following facts:

a. The nutrition of pre-school children has been decidedly improved, as indicated by the reduction of the number of cavities in teeth, and observable rickets.

b. There has been a decided increase in the consumption of milk. Nearly all rural families now maintain at least one cow, and this was far from true in 1922. The state per capita consumption of fluid milk has more than doubled; from .6 pints per person in 1921 to 1.3 pints in 1938, (based on figures for total production less butter, cheese, and ice cream manufactured).

c. There has been an estimated increase of 40% in home vegetable gardens. A large proportion of rural families now have as much of a garden as the water supply and frost conditions permit. Also the home preservation of food has greatly increased.

d. Members of homemakers clubs and teachers report that much better breakfasts are eaten by school children, (both as to total amount of food and the use of whole-grain cereals).

e. There has been a very noticeable increase in the use of protective foods, (cod liver oil, orange and tomato juice, green leaf vegetables, and whole-grain cereals).



f. Community interest in a hot food for the noon meal, a supervised lunch period, and the use of milk for supplemental feeding has greatly increased. None of these activities was in existence fifteen years ago. This year 84% of the Keep Growing schools had a hot supplement to the noon meal, 86% had a supervised lunch period, and 53% used milk as a supplementary feeding at morning recess.

4. Posture Has Improved: There has been an estimated improvement of 15% in the number of children having good posture, and a general improvement in the posture of a large majority of the rest of these Keep Growing children. Interest in posture problems has also increased among school authorities and the homes of Keep Growing communities.

5. More Children Are "Free to Gain": There has been a 34% decrease in the number of children having indications of serious physical defects (from 71% in 1933 when this work started, to 37% in 1937). There is a definite record that 9032 defects have been corrected during this time. Of course, credit for this improvement belongs to the State Public Health Nursing Service, maintained at first by the Nevada Public Health Association and the State Board of Health, and this year greatly expanded under the Maternal and Child Health Division of the State Board of Health.

6. School Sanitation has Improved: When sanitation was added to the Keep Growing program in 1932 only 10 or 13% of the Keep Growing schools could qualify for Gold Star Certificates. This year 32 or 43% of the schools met all sanitary requirements as regards drinking water, sanitary toilets, and handwashing facilities.

7. Community Interest in Positive Good Health has Increased: When the Keep Growing work was started in 1922 only a few scattered members of Homemakers' Clubs, Parent Teachers Associations, and Relief societies showed active interest in community nutrition and health, and fewer still were interested in sanitation conditions. In 1922 only eight communities were willing to assume responsibility for carrying on Keep Growing demonstrations. For the past twelve years from 51 to 88 communities have fostered these community demonstrations by having some local organization sponsor the work, furnishing volunteer leaders, and equipment; and correlating the study of nutrition and health with the rest of the school work.

engineers on its staff. Would it not be a good idea to invite them to cooperate in promoting the sanitation phases of this work? We are sure that they would be a real addition in both service and guidance.

The Agricultural Extension Service would be entirely willing, and glad to work with these agencies in your behalf, in any cooperative way that we three agencies and the state Department of Education can work out. The basis of the work might have to be decidedly changed to do justice to the activities of these new agencies. This would be entirely acceptable to the Extension Service. The main thing we are interested in is arousing community interest and effort in securing the best possible results from the agencies you now have available.

We earnestly urge that each Keep Growing community and the state as a whole, devote real thought to this problem. Then, we suggest that a conference be held early in September at which representatives of the school system, the Farm Bureau, the Parent Teachers Association, the Federation of Women's Clubs, Keep Growing leaders, parents, and the Maternal and Child Health and Sanitation Divisions of the State Board of Health, and the Agricultural Extension Service can sit down around a table and consider how the Keep Growing communities and the rest of the state can best use these nutrition, health and sanitation services. These three agencies are all supported by your taxes and are organized to help solve your problems. Therefore, we believe the best interest of the state will be secured when you fulfill your responsibility by helping to determine how these agencies can best be mobilized to serve your communities.

COMMUNITY COOPERATION SINCERELY APPRECIATED

Finally, may we express the admiration of the Agricultural Extension Service for the devoted leadership and community interest that has been given to these Keep Growing demonstrations. Not only has nutrition, health, and sanitation conditions been improved, but a spirit of community cooperation has been developed that is of real value to the life of this State. To all these cooperators, children, parents, leaders, schools, and civic organizations, we wish to express our sincere appreciation, our best wishes for the future, and our desire to cooperate in any way that you may desire.

(Signed) (Mrs.) Mary Stilwell Buol  
Assistant Director for  
Home Economics,  
Agricultural Extension Service,  
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NEVADA KEEP GROWING NUTRITION DEMONSTRATION  
 STATE SUMMARY FOR THE YEAR 1936-1937  
 STATE AND COUNTY RESULTS COMPARED WITH STATE GOALS

COUNTY	#Ex:	#Com:	%Com:	ANNUAL STATE GOALS			ULTIMATE STATE GOALS		
				Increase in num-ber of children in Good Nutritional Condition	Decrease in num-ber of children in Poor Nutritional Condition	Number of children in Good Nutritional Condition	% of children in Good Nutritional Condition	% of children in Poor Nutritional Condition	% of children from physical defects
**Churchill	653	517	79	+17.42	-8.56	278	78.06	9.35	64
Douglas	171	132	77	School closed early due to epidemics, no complete record available.	-0.20	101	85.88	4.83	68
*Elko	596	517	87	+3.84	-14.39	36	79.54	3.79	31
**Eureka	132	100	76	+21.21	+3.42	28	70.58	9.80	55
Humboldt	47	51	108	+6.76	+8.04	149	63.22	16.09	26
Lyon	87	88	101	-5.74	+7.31	46	75.62	12.00	37
Ormsby	298	275	92	-1.20	-1.50	260	71.85	14.49	86
Washoe	495	469	95	+11.45	-14.17	26	75.77	6.00	75
Sparks	585	516	88	+18.85	-5.34	13	68.00	9.33	36
White Pine	150	138	92	+11.33					
STATE TOTALS	3214	2838	91	+8.37	-2.63	970	75.35	9.02	63

COUNTIES	TOTAL NO. COMMUNITIES (or school units)	SILVER STAR COMMUNITIES (Having reached ultimate state nutrition goal)	GOLD STAR COMMUNITIES (Having reached state health, as well as nutrition goal)	NO. COMMUNITIES (Having no children in Poor Nutritional Condition)
Churchill**	10	0	8	1
Douglas	2	0	0	0
Elko*	23	8	11	14
Eureka**	4	0	3	1
Humboldt	1	0	0	0
Lyon	3	0	1	0
Ormsby	1	0	0	0
Washoe	20	0	6	4
Sparks	3	0	1	2
White Pine	6	2	2	0
Total	73	10	32	22

\* Silver Star County

\*\* Gold Star County

The greatest handicap we have in this problem is lack of time to adequately handle the demands that are made for this type of work. The time spent upon Rural Rehabilitation and emergency relief problems had to be taken from some other phase of the work and this project suffered as a result. Only 45% as much agents' time was devoted to this project this year as last. This resulted in a decrease of 39% in the number of adults participating in the program and a decrease of 66% in the number of children involved. However, a large part of this decrease was due to dropping this project from the urban area of Sparks, where there is a larger pre-school population than in our rural areas. The pre-school roundups held in the more isolated rural areas reached a smaller population but secured more specific and lasting results. Also the fact that Sparks now has a school nurse and a Maternal and Child Health nurse in this county, resulted in the extension service deciding to withdraw pre-school roundups in this area in order to free time for more isolated areas.

Considering the amount of time devoted to this work we feel that the results in regard to the number of families involved, and results in habit formation, substituting positive for negative discipline, providing play equipment, adopting furnishings to children's needs, as well as the numerous phases reported under the nutrition and clothing projects are excellent. The various problems encountered and the extension methods are illustrated below by excerpts from agents' reports:

Washoe County: Good Growth and Development Specialist's Report. "The Washoe County agent, who acts as a part-time specialist for the good growth and development project, spent 23 days on specialist's work this year. The two projects, pre-school home demonstration and prepare for school roundups, are the projects carried on in connection with this work.

"The following subject matter material was prepared this year:

1. A scrap book of sources of material on child care and training.
2. Five sets of intelligence tests for parents.
3. List of books for children of different ages.
4. Exhibit of books for children.
5. Exhibit of children's toys.
6. Children's play equipment made from apple boxes and orange crates.
7. Children's self-help furniture made from apple boxes and orange crates.

"The above material was presented at the annual extension conference and at five homemakers clubs in Washoe County. Another phase of specialist's work is to summarize county reports and assist in making the state report."

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## State Statistics Good Growth and Development Projects

	<u>1936</u>	<u>1937</u>	<u>% Change</u>
No. communities involved.....	41	48	✓12
No. volunteer local leaders.....	68	66	- 3
No. adult demonstrations.....	349	279	-20
No. families improving habits of children.....	505	498	- 1
No. substituting positive for negative methods of discipline.....	172	178	✓ 3
No. providing play equipment.....	160	85	-46
No. adapting furnishings to child needs..	42	38	- 9
No. different individuals participating in child development and parent education programs.....	768	489	-39
No. children involved in above.....	1507	521	-66
No. pre-school roundups.....	38	33	-13
No. children involved.....	461	211	-54
No. days agents' time spent on project...	65	34	-45

Washoe County: Good Growth and Development. "The number of children in the rural communities of this county is very small. The farms are far apart and the children have practically no playmates of their own age. A nursery school in the rural districts is prohibitive because of the long distances and the expense of operating such a school. The project as planned in Washoe County, therefore, is to apply nursery school methods in the home. The project as planned would work nicely if enough time could be spent on the work to get the desired results. 13 communities in Washoe County carried on pre-school home demonstration work. 95 children were reached during the year. Most of the work is done by home visits. This year more work was done at regular meetings as 11 meetings on this project were held with adult groups. Some of the children are brought to the school and weighed with the school children, others are reached at the prepare for school roundups. 3 demonstrations have been given on the selection of toys and play equipment to suit the child's needs. Three demonstration have been given on books for children of different ages. Three demonstrations have been given on the making of home-made play equipment using orange crates and apple boxes. Three demonstrations have been given on the making of self-help furniture for the pre-school child, using apple boxes and orange crates, clothes closet, a chair, and book cases. Family relationship talks have been made in 3 homemakers meetings and 3 PTA meetings. The mothers are becoming more interested in the importance of a better understanding of the child and his place in the group.

"The work done on the pre-school home demonstration is difficult to report because of the varied type of assistance given. In nearly every casual conversation with a mother she asks for some type of help. When

home visits are made the child is weighed and measured and the improvement noted. If the child has made no apparent improvement the same is noted and an effort made to see what is causing the trouble. The following habit developments are always checked: Toilet training, sleep, sunshine and fresh air. More parents have asked for help in forming good habits of eating, playing with toys, and how to get along with other children this year than ever before. Two mothers have asked for help on sex training. The mothers are realizing more and more that habit training must start early in life. Most of the children enrolled in the project have been given a physical inspection by a doctor or nurse. Most of the babies enrolled are under the doctor's supervision. This is a real step forward to have the babies given a regular check-up by a doctor. Practically all of the children enrolled have been vaccinated for small pox and immunized against diphtheria. Seven years ago this seemed impossible because the parents did not think it necessary.

"In the pre-school roundups 93% of the children were found to be in good nutritional condition and 6% in poor nutritional condition. All reported drinking a quart of milk a day and eating vegetables. 48% reported taking cod liver oil. In 1936 only 76% were found to be in good nutritional condition while 13% were in poor nutritional condition. However, last year a very high percentage of the children were from small towns. The incomes were low and there was not enough money to buy adequate food. In 1931, the year the project was started, 84% of the children were in the "good nutritional group. The 1937 figures are such an increase over those for 1931 that we sincerely hope we can maintain this good record with the ultimate goal of having all the children in the first named group. Real progress has been made in the improvement of the physical condition of the children since the project started. In 1931, 90% of the children inspected showed signs of physical defects. In 1937 only 16% showed signs of physical defects. The number of children having teeth defects has also greatly decreased. In 1932, 35% of the children showed signs of needing dental care; in 1936 21%, while in 1937 only 11% needed dental care. The greater part of this progress has been made through the education of the parents in the necessity of watching the child's teeth and in having them checked by a dentist from time to time. Many parents still have the idea that the temporary teeth should not be filled. Most encouraging, however, is the growing realization of the value of a balanced diet in making good bones and teeth. 33% of the children were immunized for small pox and 30% for diphtheria. This is a splendid record. The Maternal and Child Health nurses and doctors are doing good work in getting the children immunized against contagious diseases.

"The WPA nursery schools in Reno now take children from families other than those on relief. The teachers are provided by the WPA and the parents pay<sup>10¢</sup> food and a few other items. 6 children enrolled in this project attend the nursery school. There is also a cooperative nursery



school organized by a group of mothers in Reno. The supervisor is a WPA worker. The mothers take turns helping the regular nursery school teacher. The children are kept three hours each day. They have tomato juice and cod liver oil but go home for their lunch and nap. The school is held in a church. Heat and lights are paid for by the mothers. (The agent gave advisory service). The American Association of University Women have a study group for the study of the pre-school child. They have no background for the work. At each meeting two members have charge of the discussion. The agent was asked to join the group and help with the program.

"Case 2.

Sex: Female

Date of birth: Year, 1935; Month, May; Day, 20th.

Weight at birth: 7 lbs. 1 oz. Height 21 in.

Weights: 12 mos., 22 lbs.; Height 28 in. NW 19 lbs.  
2 yrs., 29 " " 33 " NW 25 "

"Parents: The parents operate a poultry ranch. They live in the home with the grandmother, an elderly aunt and usually other relatives are in the home.

"The baby: The baby is the second child in the family. She was born at St. Mary's Hospital. Normal birth. The baby was 15 days old when the demonstration was started. After coming from the hospital the baby did not make regular gains. The mother's milk was tested and found not to be meeting the baby's needs. The doctor put the baby on a formula of cow's milk and karo syrup. Help was given in working out the formula and making the changes as the baby grew. Help has been given on planning meals for the child and suggesting ways to get the baby to eat cereals and vegetables. Cod liver oil has been given the baby since she was 3 months old. She showed signs of rickets at the age of 4 months and was given cod liver oil twice a day. The mother was encouraged to have the child vaccinated against small pox and immunized for diphtheria. She has had whooping cough and a number of colds.

"The baby is very active and is considered a bit rough when playing with other children. Help has been given on the selection of play equipment suited to her age and that belongs to her. She always wants to take the toys away from someone else. However, the baby started to the WPA nursery school this fall and got along real well with the children. She did not like to take a nap at school. It took some time to get her adjusted to the new sleeping room.

"The mother has many problems to overcome with so many adults in the family. They work with her but it is almost impossible to deal with a child when there are so many adults around to humor her. The child is growing rapidly. She is very active and gets along better with the other children as she grows older."

Churchill County: Good Growth and Development. "The pre-school home demonstration project was carried on with twelve pre-school children this year in seven different communities. The children were weighed and measured at regular intervals and suggestions given the parents regarding proper food and health habits, such as sleep, rest, clothing, toilet training, and suitable toys for children of different ages. Methods used in carrying on this project include: (1) The home visit method where the agent conferred with the parents in their homes. (2) The office visit where the children were brought to the extension office by the parents to consult with the agent. (3) The group method where conferences were held with the parents at Homemakers' club meetings or other community gatherings.

"Occasional help and assistance was also given to 77 other families, including 28 Rural Rehabilitation clients and Relief families. With reduced incomes during the last few years, the proper feeding of children has been quite a problem in some of the homes. Cod liver oil was secured from the Public Health Association and given to nine families who were unable to buy it. Bulletins and circulars were distributed dealing with the planning and serving of adequate meals, care of the teeth, desirable eating habits, sleep and rest habits. Demonstrations were also given on self-help garments for pre-school children.

"Results of these twelve home demonstrations were as follows:

Number of children establishing regular eating habits....	12
Number of children establishing sleep and rest habits....	11
Number of children establishing toilet training habits...	5
Number of children taking cod liver oil.....	8
Number of children taking sun baths.....	12
Number of children cooperating with other children in use of toys.....	7
Number of children learning to accept new foods pleas- antly.....	5
Number of families adopting self-help garments.....	8"

Eureka County: Good Growth and Development. "The two small youngsters at the Wallace Bailey ranch in Diamond Valley have been in pre-school home demonstrations since infancy. These children give an interesting demonstration of how food and health habits can be modified from year to year. Although their nutritional improvement has been rather slow, it has been continuous and bears definite tribute to the untiring efforts of their parents. The older youngster is making such marked improvement that when he enters school in another year we have every reason to expect he will be an example of a sturdy, well-developed child."

Clark County: Good Growth and Development. "In April preparation had been made by the former agent for the county pre-school roundups to be held in four communities, Mesquite, Bunkerville, Logandale and Overton.

Four days were given to this spring pre-school roundup. The nutritional inspection and check-up was given by Mrs. Mary S. Buol, Assistant Director, Extension Service, and weighing and measuring was done by the agent. Two volunteer leaders from each community cooperated during the day. 110 children were examined in the four days. There was a great deal of enthusiasm and interest shown by all the parents concerned. Most of the questions involved were how to increase appetite and weight of the children, immunization against contagious diseases and habit formation for the young child. Follow-up inspections have been made in June and October in the four communities with the cooperation of Mrs. C. Miller, Public Health Nurse, and follow-up visits made to those expressing a need for more nutritional instruction. Many of these mothers who have pre-school children have also been contacted through the nutritional meetings."

Lyon County: Good Growth and Development. "Through the cooperation of the extension service and the Nevada Public Health Service, the district nurse, Mrs. Mary Williams, worked with the extension agent in conducting roundups in Smith Valley, Yerington, and Dayton. The homemakers clubs in each community provided the assistance needed for these roundups. Mrs. Williams had charge of the health and the physical inspections and the extension agent of the nutrition conference. Mr. Elmer Pedrolli, Superintendent of the Smith Valley schools arranged for the roundup to be held in the grade school auditorium in that community, and the Mason Valley homemakers arranged for the Legion Hall in Yerington as the place for the roundup there. Dr. Magee and Dr. Reese attended the conference in Yerington at which 24 pre-school children and 17 parents were present. Dr. Mary Fulstone attended the conference in Smith Valley which 12 pre-school children and 7 parents attended. Dr. Ross of Virginia City attended the conference in Dayton at which 14 pre-school children, 6 school children and 8 parents were present."

### 3. Home Management:

Six phases of the home management project were carried on during this year:

- a. Consumer education.
- b. Indirect Home Management phases included in other projects such as food, clothing, child care, house furnishing equipment, etc.
- c. Budgets and accounts with extension families.
- d. Home management plans, including budgets and accounts, with Rural Rehabilitation families.
- e. Budgets and accounts with a small number of demonstration families which are doing special demonstration work in farm and home accounts, under the direction of the Experiment Station and the agricultural economist of the extension service, with consultant service from the home economics extension staff.
- f. Family financial problems in cooperation with the Farm Credit Administration.

a. **Consumer Education:** This work has been a part of the program of practically all homemakers groups and a number of other groups such as the Relief Societies of the Latter Day Saints Church, and some Parent Teachers Associations and Federated Women's Clubs. In each of these groups a consumer chairman is appointed who receives guidance and subject matter assistance from the extension agent, and has charge of the scrapbook to which all members contribute as the opportunity presents itself. One or two meetings during the year are devoted specifically to consumer problems; and at the rest of the meetings about ten minutes' time is spent in presenting some particular phase in which the group is interested. In furtherance of this project specific topics are assigned to certain individuals for continued study, (clothing, drugs and cosmetics, standards for grading foods, labels, advertising material, etc.). As this information is secured it is presented to the group and the illustrative material is incorporated into the consumer scrapbook. Governmental material such as "The Market Basket", "Consumers' Guide", reports from the Bureau of Home Economics, Bureau of Standards, Federal Trade Commission, American Home Economics Association, etc., are brought to the attention of these groups by the extension agents or consumer chairmen. This is supplemented by material from books, magazines, newspapers, which members and the chairman believe bear upon the questions being studied. Both agents and consumer chairman report a sustained interest in consumer problems and that these scrapbooks are frequently consulted in solving family consumer problems. Both the extension service and the groups are finding at every meeting that this continuous emphasis upon consumer problems ~~brought out~~ develops a larger body of interest and information than just one or two meetings devoted entirely to such problems.

The aim of the extension service in this work is to arouse interest, to develop standards by which consumers may judge commercial and professional information, and to stimulate both individuals and groups to accumulate a fund of specific information to which they may refer when individual problems arise. Real effort is made by the extension agents to avoid radical attitudes and to keep before these groups the idea that this is a long-time problem in which cooperation of consumers and merchants is necessary in order to work out a satisfactory solution. The initial antagonism shown by local merchants toward consumers actively is gradually changing to a more intelligent desire to find out the real needs and desires of their local patrons and to cooperate in solving mutual problems. On the other hand we believe that these groups are realizing more and more that merchants have serious problems

during this period of economic change, and that most merchants are now making an earnest effort to find the sensible, middle of the path between the pressure exerted by wholesalers and the demands of consumers.

- b. Indirect home management phases included in other projects such as food, clothing, child care, house furnishing equipment, etc., are producing increased interest, and re-enforcing the more direct project instruction. This indirect approach possibly has more results in terms of adopted practices than the more formal consideration of consumer problems. Many women who are not "consumer conscious" are much interested in specific problems involving the welfare of their families such as providing food, clothing, etc. Repeated emphasis along these lines does in time build up good consumer habits, and finally consumer consciousness.
- c. Budgets and Accounts with Extension Families: A large part of this work is done on specific problems such as the value of home produced food, (in connection with the Live-at-Home campaign), the cost of purchased foods, (in connection with the Live-at-Home grocery bill), the cost of clothing, (in connection with planning seasonal wardrobes and particularly in connection with the 4-H Club clothing project), the cost of other specific family needs, (such as medical care, education of children and recreation). Nevada's public opinion is still quite antagonistic toward a direct consideration of this problem of family planned spending. However, a large proportion of our rural population is now compelled to live on a budgetary plan imposed by the various loan agencies, such as the Farm Credit Administration, local banks, and Rural Rehabilitation. Of course, where this financial pressure is brought to bear upon a family it accepts the inevitable, and then is faced with the problems involved/adhering to the budget allotments. With such families the extension service devotes a considerable amount of time to unobtrusive help. On the one hand, this consists of listening to "tales of woe" regarding the inadequacy of the budget imposed by the loan agency, complaints regarding the slavery involved in keeping track of expenditures. On the other hand, there is the worry as to whether financial obligations can be met and family standards of living maintained, particularly in regard to medical care and education of children. These confessional periods occur usually during home visits because there is a strong antagonism to discussing these personal financial problems in group meetings because of the dread of neighborhood gossip. However, it is just on such occasions that the extension agent is able to give unobtrusive but much needed

guidance, technical assistance in account keeping, and encouragement to face realities and make the adjustments that are vitally needed if financial security is to be maintained. This is a period of radical transition for many of Nevada's agricultural families. The financial worries and necessary change in buying habits have raised many problems in regard to family relationships, such as irritation between family members and the sense of "loss of face" in the community. We believe this quiet method of family council has been helpful and has produced some results. In fact, we feel we are getting further by this method than we did by the formal and direct attack involved in urging definite work as enrolled budget and accounts demonstrators. More families are becoming able to talk over these problems with the agent and have confidence in her ability to help them analyze their difficulties. Above all, there is an increasing sense of confidence that the agent will "keep her mouth shut" and not discuss these intensely personal problems with someone else. On the other hand there is some evidence that this super-sensitiveness in regard to financial problems is gradually wearing away. One group in Elko County has asked for specific appointments with the agent in her office so that they can all bring in their budgets and accounts and discuss mutual problems. This work has already started with the new project year.

There is a slow increase in families volunteering for demonstrations in budgets and accounts, but aside from those forced to accept loaning agency budgets, this remains a small number. There is an increased number keeping budgets and accounts for some particular phase of family living, such as food, clothing, education, etc. 4-H Club clothing accounts is an outstanding example of this approach. There is good evidence that such activities awakens family interest and discussion, and in a fair proportion lead on to a more sustained effort toward planned family spending.

- d. Home Management Work with Rural Rehabilitation Families: Because Nevada home demonstration agents are acting as home management supervisors for Rural Rehabilitation under the Farm Security Administration, they have had close contact with a majority of these families in regard to Rural Rehabilitation home management plans and the accounts which each client family is supposed to keep. 254 Rural Rehabilitation plans (which include the total family financial set-up), have been made with families who are clients of the Farm Security Administration. Difficulty was encountered in making out these plans because so few families had any idea what their past expenses had been. But the experience has been an educational one for both the client families and the extension agents, and there is strong evidences that next year's plans will be

much more effectively prepared.

Throughout the year home demonstration agents have made frequent calls on client families who were willing to keep up their Rural Rehabilitation accounts. There was a considerable proportion, about one third, of these families who absolutely refused to keep accurate accounts, and <sup>neither</sup> the agricultural supervisor nor the home supervisor have been able to overcome their reluctance. With these families we have simply done the best we could through getting them to put down the larger items of expenditure. However, even where this rebellious attitude has been encountered there have been indications of improvement and on most return home visits agents find that more and more items of expenditure are being recorded, and better attitudes toward planned spending are gradually developing.

With the other two-thirds of these Farm Security clients definite and systematic work on farm and home accounts have been carried on. As with our extension families we find that both farm and home accounts involve many difficult problems of family relationships. Where good farm and home accounts are secured it is usually the results of the tact and persistence of the mother in the family, as most of the work for both the farm and home accounts is done by her. Home demonstration agents have given detailed assistance with this problem by sitting down with the mother, (and sometimes the fathers or older children), and helping them make up their accounts. Of course, the greatest benefit comes through assisting these families analyze the situations which are involved in regard to inadequate expenditures for some items and unwise expenditures for others. Our greatest effort has been made toward safeguarding health by seeing that an adequate amount of money was spent for food and that such funds are wisely spent. On the other hand, repeated effort has been made to cut down unwise expenditures in regard to clothing and recreation. This work has been particularly effective with the younger families who are, of course, much more open minded and better able to form new habits than the older group.

Aside from the general supervision that has been given Rural Rehabilitation families through the usual home management supervision, the extension agents, as part of their regular extension work, have given guidance to these families in regard to home production of a greater proportion of their food supply, preservation of the same, and better buying habits in regard to food, clothing, etc. This has meant detailed work but the volume of results have more than justified the expenditure of time.

Despite their many handicaps, these Rural Rehabilitation families are showing considerable ability in meeting their Rural Rehabilitation obligations. We estimate that 76% of the families are up-to-date or ahead of time in repaying these Rural Rehabilitation loans. As of September 30th, a little over 19% of the money loaned in this state had been repaid. We believe that this ability to pay out on these loans is proof of the fact that these families are capable of obtaining economic security in their present set-ups. However, undoubtedly many of them need continued guidance in order to establish stable habits in regard to financial problems.

- e. Budgets and Accounts Demonstrations in Cooperation with the Experiment Station and the Farm Economist of the Extension Service, with Consultant Service from the Home Economics Extension Staff: The Agricultural Experiment Station and the Agricultural Extension Service have continued their plan of cooperation in regard to home demonstration in farm, and home accounts. Sixty-nine families are carrying on farm accounts, and of these, 66 families are also carrying on home accounts this year. Of these 66 families 61 records were sufficiently well done to be considered completed demonstrations. These farms are scattered throughout the state. In 13 of these families income was secured from specific crops, 19 of them live on general farms, 17 are dairy families, 8 are typical livestock families and 3 are poultry producers. The average family membership was 5.2. the average gross income was \$5539. The average total living expenditure \$1628, but varied from \$1444 for the crop group to \$2375 for the livestock group. The percent of income spent for family living was 29.4%.

The present of living expenses spent for various items are as follows:

Groceries	28.1%
Clothing	11.6%
Personal	7.1%
Operating & Supplies	8.6%
Furnishing equipment	7.7%
Health	6.5%
Development & Recreation	18.1%
Miscellaneous	2.3%



On the basis of expenditure per person the following figures were obtained:

Foods	from \$49.00	to \$73.00	average \$60.00
Clothing	" 14.00	" 29.00	" 25.00
Personal	" 4.00	" 24.00	" 15.00
Operating & Supplies	" 13.00	" 26.00	" 18.00
Furnishing & Equipment	" 10.00	" 23.00	" 16.00
Health	" 10.00	" 20.00	" 14.00
Development & Recreation	" 25.00	" 46.00	" 39.00
Insurance	" 7.00	" 31.00	" 14.00
Housing	" 3.00	" 13.00	" 8.00
Miscellaneous	" 3.00	" 11.00	" 5.00

Total expenditures per person for living expenses figured from \$183 to \$263 with an average of \$214. These figures show the wide variation in standards of living among this group; for most items the poultry families had least and the livestock families had the most cash expenditure for family living. This is, we believe, fairly typical of living standards throughout Nevada.

Most of the detailed work for this sub-project is done by a representative of the Agricultural Experiment Station and one of the agricultural economists from the Agricultural Extension Service. The home demonstration staff has cooperated through home visits, analysis of family problems, and assistance in analyzing the final figures. The best results have been secured in families where the mother has been interested in the problem of money management, as many of the farm as well as home accounts were kept by the mother in the family. There is a growing sentiment with the experiment station and extension men having charge of this work that for both farm and home budgets and accounts the cooperation of the mother is the family is necessary not only to secure good records but to profit by an analysis of them. Therefore, more and more effort is being made to secure family cooperation for this project. We only wish there were more time to devote to this type of home management work. Next year we expect a small increase, particularly among the better types of Rural Rehabilitation families, several of whom are signing up as farm and home account demonstrators with this service.

- f. Family Financial Problems in Cooperation with the Farm Credit Administration: A new phase of home management work was started this year in cooperation with the Federal Credit Administration. A meeting for the purpose of training selected leaders and the home demonstration staff was held

from an economic standpoint and those pleading for human as well as dollar and cent values. The states of Utah and Nevada seemed the two states most concerned about the permanency of farm families living on small land holdings and what would happen to American life if these families passed out of the agricultural picture.

We wish to make grateful acknowledgement for the assistance received from the Federal Extension office through the good efforts of Miss Mary Rokahr and her subject matter material and reference regarding home management problems. Such assistance is particularly valuable to Nevada because of the fact that we do not have a full-time home management specialist. It would be impossible to carry on this project if it were not for the guidance received from Miss Rokahr and the subject matter information sent us by the Bureau of Home Economics.

Excerpts from agents' reports will give illustrations of the various types of work carried on in the different sections of the state.

	<u>1936</u>	<u>1937</u>	<u>% Change</u>
No. communities conducting organized work.....	40	35	-12
No. volunteer leaders.....	40	38	- 5
No. adult result demonstrations.....	240	285	/13
No. families adopting recommendations in care of home.....	454	342	-25
No. families assisted in using timely information for adjusting family living (other than reported under food and clothing).....	311	292	- 6
No. families keeping home accounts....	59	174	/195
No. 4-H Club members keeping personal accounts.....	82	70	-15
No. families budgeting expenditures according to recommended plan.....	79	195	/147
No. families following recommended methods in buying, other than food and clothing.....	254	469	/85
No. families assisted in making adjustments in home making to gain a more satisfactory standard of living..	358	478	/34
No. kitchens rearranged or improved for convenience according to recommendations.....	91	82	-10
No. families following recommendations in obtaining labor saving equipment...	246	112	-55

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	<u>1936</u>	<u>1937</u>	<u>% Change</u>
No. families assisted in making home made equipment of convenience.....	311	130	-55
No. families following recommended schedule for home activities.....		54	
No. families increasing time for rest and leisure activities.....		165	
Estimated saving due to home management program.....		\$6,375.	
No. <sup>days</sup> agents' time spent.....	61	58	- 5

White Pine County: Home Management. "Budgets and accounts and consumer education phases of home management problems have occupied the attention of the extension agent in all contacts with rural families during the past year. The fact that so many from this group have been operating on an extremely limited budgetary allowance, particularly for family living, has necessitated the utmost caution on the part of the homemakers in spending their money. Effort has been made to stimulate in the mind of the purchaser an attitude of inquiry regarding the value and service ability as well as the satisfaction to be derived from any purchase. A large percentage of the ranch population is still operating on budgets fixed by banks or loan corporations of one kind or another. These budgets have a decided effect in determining the living standards of these people. Home accounts have been kept by very few families except where they have been required by the loan agencies. Some families have, however, used the information gained from keeping these business records to make a more satisfactory adjustment to their economic conditions. In a few instances these records have been a means of helping to raise the standard of living in the homes."

Lyon County: Home Management. "A limited amount of work has been done on the question of food buying to assist the consumer in getting greater food value for the money spent. All work in consumer education has been for the purpose of arousing greater interest in the home management, as well as in the spending of the family income. Since the price trend of foods has been consistently higher there has been a decided need for better management of spending to prevent any serious decline in the standard of living of rural families."

Elko County: Home Management. "Each of the three groups of homemakers, Elko, Lamoille and Lee, appointed a consumer chairman, who at each meeting brings something of interest on consumer problems before her group of women. Some of the topics presented were "Soap vs. Soap Powders", "Canned Goods", "What to Look For in Buying Textiles", "Labor Saving Devices", etc. Mrs. John Patterson, Consumer Chairman of Lamoille, spent all last winter while she was snowed in gathering all sorts of materials covering home management problems for scrap books of consumer problems.

When summer came she had over two scrap books full of materials. She presented these materials to the Lee Homemakers and the Montello Relief Society. Mrs. Eugene Drown and Mrs. Mark Menke of the Elko homemakers prepared a short skit on finance called "Dr. Kurzum". This was presented at Lee, Elko, Montello, Metropolis and Wells."

Churchill County: Home Management. "Home management plans were made out for each Rural Rehabilitation client receiving a loan, and record books given out for the keeping of their farm and home records. This was necessary for the clients to really get a true picture of the amount to their income and expenditures. This work was carried on in the following communities: Soda Lake, Union, Wildes, Harmon, Island, Lone Tree, Old River, Stillwater, Sheckler, Northam, Beach, St. Clair and Fallon. Group discussions were held regarding the use of Farm Credit available for rural families with the following topics presented: "The ABC's of Farm Credit", "Factors determining the need for Credit Studies", "The Farm Family and Short Term Credit", "The Farm Family and the Farm Mortgage".

"Consumer's buying problems were studied relating to food, clothing and household furnishing, in order to better enable the families to choose wisely and to save money whenever possible. A study was also made of grade labels on canned products, as well as the advisability of buying large-sized cans of food for large families and for hay crews. The purchase of foods in bulk rather than in package form was also found to be economical.

"A bulletin entitled "Guides for Buying Coats" was prepared and used when giving the demonstration on buying coats. Swatches of coating materials were shown and tested for the amount of wool content. Lining materials suitable for both inter and outer linings were shown and samples tested to see if they were weighted or pure-dye silk, or cotton or rayon. Different labels found on ready-made coats and on coating materials were also shown and points denoting good or poor construction were demonstrated, including accurate cutting, stitching, proper staying, buttons, buttonholes, fur and other trim. In all phases of the home management project, the buying for good quality and long wear rather than poor quality at low price, was strongly emphasized."

Clark County: Home Management. "The home management project was carried on in five communities, Mesquite, Overton, Logandale and Bunkerville with Rural Rehabilitation cooperators especially. Fifteen cooperators were secured among Rural Rehabilitation clients and trained to use extension and Rural Rehabilitation record books. Since April home visits have been made to each cooperation family and definite information given to each on home management so that the families will know their own resources and expenditures. It has been a difficult procedure. The biggest obstacle to overcome is to create an interest in budgets and records. With any discouragement at

all from sale of any farm product this record account is immediately stopped and consequently it is difficult to get started again. It is hoped by next year to have all Rural Rehabilitation clients with working records. Through cooperation with Rural Rehabilitation clients, it has been possible to have two Rural Rehabilitation records taken over by extension records; i.e., made home demonstrators for home and farm accounts under the joint extension service-experiment station project."

Washoe County: Home Management. "The home management project has been carried on in Washoe County for four years. The aim of the project is to educate the consumer in better buying practices with the results that the housewife receives a dollar's worth for a dollar spent. "The Consumer's Guide", published by the Agricultural Adjustment Administration, was used as a basis for part of the project as all commodities are found in this bulletin. "The Market Basket", issued by the Bureau of Home Economics, was also used. Two members from each homemakers club were appointed to report on consumer's problems at each meeting. Very valuable information was presented by the committee at each meeting.

"Four very interesting demonstrations were given on the study of containers used to sell products. Attention was called to the size of packages used to sell soap chips and soap flakes. The size of the box has little to do with the contents of the package. Glass bottles and other glass containers were also studied to show how the lines of the container may deceive the public. Also the buying of products just to get the container was discussed. Another phase of buying stressed was the purchase of products in order to get a premium such as a dish, glass or some other prize which costs very little if purchased but added greatly to the cost of the article purchased. The attention of the homemakers has also been called to the market reports explaining the effects of surplus crops or a shortage of some particular crop. The women were shown how they might help to use more potatoes, eggs, fruits, etc., to help relieve the market and keep prices up. They were also told how to select fruits and vegetables in the local markets. The project is becoming more and more interesting as well as educational as shown by the reports given by the women at the meetings. The more knowledge the housewife has on better buying the more she will receive for her money."

SPECIALIST WORK IN HOME MANAGEMENT  
(Hellen M. Gillette, Part-time Specialist)

The Extension Service in Nevada is organized without any full-time women specialists. Instead, each woman agent has a special field in which she does some extra work, such as preparing subject matter, writing 4-H bulletins, or planning and arranging for demonstration materials which may be loaned to the various counties interested in the particular line of work. Due to the press of county work in the area the agent has served during the past year, very little specialist work has been done. What has been done in the

limited time available has been worked out in direct cooperation with Mrs. Mary Stilwell Buol, Assistant Director for Home Economics in Nevada.

The outstanding work of the year was the conference, attended by all women agents, on Farm Family Credit with Miss Barbara Van Heulen of the Farm Credit Administration and Mr. W. S. Guilford of the Federal Land Bank of Berkeley. The particular theme of this conference was "How Much Credit Can a Family Afford to Buy". Miss Van Heulen, assisted by Professor V. E. Scott, Extension Economist of the University of Nevada, led the discussion in which the actual problems, confronting ranch families throughout the state, were considered. Mr. Guilford presented use of credit from the view point of the loaning agency and outlined some of the information that loaning agencies throughout the country wished farm families had before they applied for credit.

The use of long term, short term and installment credit and how to determine the amount of credit a family is justified in buying were discussed in detail. At the close of the conference Miss Van Heulen presented a mimeographed booklet "The ABC's of Credit", and a scrapbook of the pamphlets available from the Federal Land Bank and other credit organizations which were placed on exhibit during the Home and Community sessions of the Nevada State Farm Bureau conference.

We, of the Nevada Extension Service, are grateful to the Farm Credit Administration and the Federal Land Bank for the many helps they have given us in our programs and particularly to the personnel from these organizations who have visited us from time to time and given us valuable assistance. We also express our thanks to the various states who have so kindly sent us material and guidance for furthering home management work in Nevada.

A summary of the 1937 Cost of Living Outlook for Nevada indicated sufficient advance in cost of supplies and equipment to warrant continued emphasis on <sup>con</sup>sumer education along these lines if better habits of buying were to prevail. Accordingly a scrapbook of material giving sources of information valuable for consumer education together with the type of information available was assembled. It was suggested that this type of scrapbook be assembled by every community consumer chairman. Recommendations for the use of this information by each community organization were briefly outlined.

#### 4. Home Improvement:

In Nevada the home improvement project involves the part of the usual home management work dealing with kitchen arrangement, labor saving equipment, storage, etc., agricultural engineering as it affects the farm home, as well as the usual work of home furnishings, treatment of walls, floors, woodwork, design and color, and general household repair. The amount of time devoted to this project was decidedly reduced this year, (from 58 to 27 days), due to the added responsibility for Rural Rehabilitation. 24 communities and areas carried the work instead of 35 as in 1936. As a result there was a decrease in the total amount of results secured under most items. But, on the other hand, there was an increase in savings, as estimated by the various homemakers at the end of the year, (from \$6,837 in 1936 to \$7,715 in 1937).

Practically all of this work was the result of specific requests from individual families and from groups, as the agents made no effort to stimulate interest in this project this year. Due to increase in farm income there was an increased amount of interest in home improvement. However, due to the fact that many of our families are still deeply in debt most of the home improvement costs were limited to material, and nearly all the work was done by family labor. In each agents' office there is a considerable file of reference material including house plans, plans for storage space, plans for rearrangement of kitchens, and suggestions in regard to suitable home methods of refinishing walls, woodwork, furniture, etc. This material is available to any group or individual family on a loan basis. Smaller files are placed in the hands of local leaders, and the 30 local leaders assisting in this work report that practically all the families doing home improvement work in this district availed themselves of the privilege of consulting these files and conferring with either the local leader or the agent. Excellent cooperation has been secured from the merchants in our county seats, who have loaned illustrative material such as samples of wall paper and floor coverings, swatches of curtain material, color cards, etc.

One of the long-time objectives in this project is stimulation of appreciation of the fundamentals of color and design as applied to interior decoration. Another aim is to increase conveniences and create a sense of restfulness and contentment through improved storage facilities in regard to food, clothing, equipment, and recreational facilities such as toys, games, and books. The third objective is the creation of centers of interest and activity so that each member of the family may feel that he has a spot to "call his own", in which to study, to keep his belongings, including hobbies, to rest, to enjoy life. Many phases of this



work tie in with the child care and parent education work that involves family relationships. Others are closely linked with food problems, with clothing, with home management. Progress along these lines is slow, but we know definite improvement is being made. One of the most stimulating methods used in this project is the family and group aim stated each year; i.e., that each family shall improve its home surroundings in one or more respects. When income is small this improvement has to be made for very little cash expenditure, but this naturally stimulates thought and initiative. The results throughout the years prove that this project is helping to make Nevada homes more attractive and more convenient. As a result there is a growing feeling of permanency among Nevada's rural population.

The summary of project statistics and excerpts from agents' reports give an insight into the type of problems handled. Considering the small amount of time spent on this project this year, we feel these are commendable results.

	<u>1936</u>	<u>1937</u>	<u>% Change</u>
No. communities conducting the work.....	35	24	-26
No. volunteer leaders.....	41	30	-27
No. kitchens rearranged according to recommendations.....	91	82	-10
No. families obtaining labor saving equipment.....	246	112	-55
No. families improving selection of household furnishing.....	424	337	-21
No. families repairing, remodeling, re- finishing furniture.....	197	177	-10
No. families following recommendations in improving treatment of windows.....	303	256	-15
No. families following recommendations regarding arrangement of rooms.....	190	208	+ 9
No. families improving treatment of walls, woodwork, and floors.....	389	374	- 4
No. families applying principles of color and design.....	226	235	+ 4
Total estimated saving on home furnish- ing.....	\$6837.	\$7715.	+13
No. days agents' time spent on project...	58	27	-61

Churchill County: Home Improvement. "Twenty-four method demonstrations with 479 people attending were given this year on problems relating to the interior home improvement and house furnishings project. Demonstrations were given on treatment of walls, floors and woodwork, remodeling of furniture, selection for drapery and curtain materials, pillows and couch covers. Household accessories suitable for gifts and bazaars were also demonstrated around the holiday season. Patterns were distributed to the women at these meetings and many inexpensive articles were made. The making of quilts continues to be popular, with some of the homemakers as well as all-day quilting parties. Such gatherings, together with the homemakers' meetings each month, afford recreational advantages and a chance for the women to become better acquainted with their neighbors.

"Homemakers clubs held an exhibit in connection with the County 4-H Club Achievement Day, July 28th, which was declared by local leaders to be the best exhibit of handicraft work displayed in Churchill County since State Fair time. This exhibit was sponsored by the County Homemakers' Council. Cash prizes amounting to \$28.00 were donated by the homemakers' clubs. Awards were given to the clubs having the best exhibits, with Island winning first place, LDS Relief Society second, Stillwater third and the Thimble Club fourth. Keen competition was offered in the handicraft work, with the quilt and bedspread divisions outstanding.

"Due probably to an upward trend of economic conditions, more improvements have been made in the homes this year than in several years past. The number of rooms improved were as follows: 61 kitchens, 37 dining rooms, 93 living rooms, 85 bedrooms and 17 bathrooms.

"The following improvements were reported by some of the demonstrators:

1. Mrs. Wilson improved her living room and dining room by calcomining the walls and ceiling cream color, varnishing the woodwork, securing new curtains and new shades at each of the windows and purchasing new rugs. New curtains and shades were also secured for the kitchen and one bedroom.
2. Mrs. Crurry painted the walls and ceiling of the kitchen ivory and the woodwork and cabinet work green. Green and white curtains were secured and a new sink with proper drains was installed.
3. Mrs. Howard has transformed an old house into practically a new one. In the dining room and living room the walls and ceiling were given a coat of interior stucco and the woodwork was painted ivory. The floors were sanded and the border around the rugs was varnished. Marquisette glass curtains and new shades were secured for the windows. The two bedroom were calcomined, the woodwork was painted ivory, and white ruffled curtains secured for the windows. The bathroom fixtures were rearranged, new linoleum secured for the floor. The outside of the house was stuccoed

a tan color to replace the old brown, weatherbeaten boards. It makes an entirely different looking house, both inside and out, and it is now one in which it will be a pleasure to live.

4. Mrs. Taylor has a new porch across the front of the house which adds greatly to the appearance of the home and really makes another living room and a sun porch for plants. The house also received a coat of white paint, trimmed in green.

"Assistance was also given to the Rural Rehabilitation clients regarding the improvement of their homes and rearrangement of furniture and rooms to make them convenient."

Washoe County: Home Improvement. "Thirteen method demonstrations were given during the year in the following problems; the selection and use of electric equipment, small kitchen equipment, children's furniture, refinishing of furniture, curtain materials, etc. Useful and attractive Christmas gifts were shown at all of the homemakers meetings. They consisted of candle wick work for bed spreads, table runners and pillows, luncheon sets using various trimmings, the use of ric-rae braid for trimming table covers, dresser scarfs, bed linens, etc., aprons, tea towels and hot dish pads. The making of Swiss embroidery work proved to be of interest to all groups. Metal patterns for making the work were made at the tin shops. 30 patterns have been given out. The work is done with yarn and is suitable for many household purposes. The use of local materials for table decorations at holiday times has been shown at the meetings. Pine cones of various sizes are used to make turkeys and gilded or silvered for table decorations and wreaths for the holidays. Pine and fir branches were also gilded to carry out the holiday spirit to be made into wreaths and table decorations. Pine needle baskets, picture frames and trays were also made. More time is to be devoted to this work the coming year. The homemakers clubs answer roll call part of the time by giving household hints and magazine articles. Many new and helpful ideas were learned. This is one phase of the work in which all members usually take part.

"A great deal of the home improvement work is done by home visits. 79 home visits were made to assist with the project this year. Practically all home improvement work is done by members of the family, with the only cash expenditure being for materials. The following story by a home demonstrator illustrates this type of work;

'I wanted a new living room set of furniture. My husband told me to get what I wanted but be sure and let him keep his old chair. The set of furniture we had was out of style but the chairs were comfortable and my family seemed to dislike the idea of giving them up. They were covered with leather. The chairs were rocking chairs

and I found were bolted together and were very easy to take apart. I decided perhaps the best thing to do was to reupholster the furniture we had because the room would not take care of two sets. The material I liked in Reno was too expensive. To have the work done would cost over \$50.00. I sent for samples from a mail order house and persuaded my husband to get busy on the job. He agreed, but neither of us realized just what a real task we were in for. The furniture, two chairs and a davenport, was taken apart. The springs were mended first and felt padding, excelsior, and cotton were used for the padding. The set is entirely changed and no one would recognize it as being the same pieces of furniture.

'Cost of materials used:	10½ yds. material @ .87	8.19
	Tacks	.80
	9 yds. gimping @ .04	.36
	Felt padding	3.60
	Wire	.30
	10 yds. webbing @ .03	.30
	6 lbs. padding @ .40	2.40
		<u>\$15.95</u>

'We are very much pleased with the work and learned many new things about upholstery work. The furniture will last a number of years.

Mrs. A. C. Swesey  
Anderson-Riverside District' "

##### 5. Home Grounds Improvement:

This is another project which has practically carried itself this year. Effort along this line was carried on in 15 communities this year with 13½ days agents' time devoted to the project. 17 volunteer leaders assisted and gave 32 days of time to furthering the work. With this small amount of time and attention, we consider excellent results were secured. There were 222 adult home demonstrators; who made definite plans in regard to improving home grounds and carried out the same. Elko County organized a very active garden club in the county seat and this group took over a considerable amount of work that has usually been carried by the agent and project leaders with, of course, advice from both the agricultural and home demonstration agents. Interest was also shown in Clark County where home demonstration work is again established on what we hope to be a permanent basis. Flower Shows were held in three counties and plant and seed exchanges in four counties.

We estimate that we are doing about 25% of the work that could be done in this project if time were available. But as more time is not available we are trying to make up for this lack through

more skillful organization of the project, increased use of volunteer leaders, and the stimulation of garden clubs as separate groups. Through the years this project has begun to make a decided difference in the appearances of Nevada rural homes. The project practically carries itself now and we no longer feel that we are justified in expending time in community and county-wide yard improvement contests as we did ten years ago. The agents, however, continue to keep on hand a large amount of subject matter which can either be distributed or loaned. They also continue to stimulate the cooperation between leaders, groups, and the local or nearest source of good garden supplies. A considerable proportion of time is also spent on planned publicity. Agents' comments regarding this project illustrate problems and methods used.

**Lyon County: Home Grounds Improvement.** "Improvements in the yard and garden adds much to the attractive appearance of the home surrounding and to the satisfaction accruing from living in such surroundings. Directions for controlling certain diseases and pests in the flower gardens were given to cooperating individuals who desired this service. The fall care of perennials, bulbs, lawns and shrubs was the subject of discussion at one meeting of the homemakers clubs. The extension agent discussed some of the desirable features of fall planting and urged cooperation in a general yard improvement and home grounds beautification campaign next year."

**Elko County: Home Grounds Improvement.** "The Elko Garden Club was started a year ago and has a membership of 49 members. Early in the year a program was drawn up and put in each members hands. The following are some of the topics of different programs. These were discussed by different club members, (with subject matter guidance from the two agents).

- "Seed Boxes and Cold Frames".
- "Spring Division of Perennials".
- "How To Transplant".
- "Propagating Shrubs from Slips".
- "Setting out Young Plants".
- "Conservation of Natural Beauty and Plants".
- "May Flower Tour".
- "Planting for Continuous Bloom".
- "Cultivation and Care of Roses".
- "Garden pilgrimage with Special Attention to Outdoor Living Rooms and Vines".
- "Mulches".
- "Summer Care of Trees and Lawns".
- "Lily Pools and Rock Gardens".
- "Planting for the Shady Garden".
- "Plans for Fall Planting".
- "Forcing Bulbs for Winter Bloom".
- "House Plants".

"The work of the agents in the club was divided, Mr. Menke taking the technical end of the work and Mrs. Tremewan the organization problems. The major project of this club was to improve the cemetery. It was decided a hedge was needed for a windbreak. Volunteer donations were received from individuals and organizations. Work was also donated. At the present time a nice hedge is stated.

"Elko County Flower Show: This show was started in 1928. In 1929 it was held separately from the Fair. From then on, however, it was held in connection with the Women's Department of the Fair until this year. This year the dates for the Fair were changed to the 17th of September. It was feared frost would spoil flowers for that section of the Fair. Because of this, the Flower Show was held during the Rodeo at the end of August in the Legion Hall. Although there were fewer exhibits than last year the quality of exhibits was high. The Elko Garden Club prepared the premium list. In this list was a yard improvement contest. There were 12 entrants. Before and after pictures were shown at the Flower Show. This Garden Club provided Superintendents and aids in classifying and arranging exhibits for the Flower Show. Judges remarked that the exhibits were of much higher quality than last year."

Churchill County: Home Grounds Improvement. "A list of shrubs and trees best suited to the soil and climatic conditions in this county was obtained at the Experiment Station. This information was the result obtained from 20 years experiments carried on at the Station and was very valuable for landscaping purposes. A general clean-up of yards and surroundings was urged to help improve the appearance of rural and urban homes. It was felt that this could be accomplished by the cooperation of every member of the family and was greatly needed, in most cases, to help raise the standard of living and to maintain the family morale. A total of 193 different families improved their home grounds in at least one respect over last year."

Washoe County: Home grounds Improvement. "The Home Grounds Improvement project gives a great deal of pleasure to all members of the family because good results may be obtained with a small amount of cash. Therefore, the project continued to grow more successful each year. The homemaker and her family do most of the work of caring for the yard. The outdoor exercise is good for all members of the family and gives the homemaker a change from her regular household duties. The aim of the project is to have every ranch in the county with an attractive yard. In 1931, 55 homemakers improved their home grounds; in 1936, 146, and in 1937, 153. Five communities took part in the yard improvement project during the year 1936-37. 153 families planted flowers, 2,475 trees were planted in the county. 79 shrubs were planted and 15 new lawns started. Five communities took part in a plant and seed exchange. At least 550 shrubs, plants, and bulbs of all kinds were exchanged during the year. 83% took

part in the plant exchange and 77 persons in a seed exchange. The exchange of plants is a fine way to increase the number of shrubs and plants each family may have in their yard. Also this is a splendid way to learn new plants. The Washoe County Farm Bureau gave \$7.50 to be used as prizes in the County Yard Improvement Contest. A new contest will be worked on and prizes given in the spring. 9 demonstrations were given during the year, 3 on planning the home grounds, 3 on care and selection of plants and shrubs, and 3 on the selection of trees for farm use. Assistance was given in making a program of work for the Garden Gate Club. A display of flowers and shrubs were shown at each homemakers club. A great many of the members took part in the flower show sponsored by the Garden Gate Club and the Century Club. 10 members of the Washoe County homemakers attended the flower show held in Minden by the ladies of the homemakers clubs of Douglas County. A display of flowers was sent to this show by Mrs. George Holcomb. Practically every homemaker takes part in the yard improvement project. They can grow flowers when they cannot grow a vegetable garden. The home ground improvement project will be continued until every home in the county has attractive surroundings. Emphasis is placed on cleaning up the grounds and removing unsightly accumulations. 153 adult demonstrations were conducted this year. 2475 shade trees were planted, 96 fruit trees, 225 bush and small fruit trees, and 550 seeds and plants were exchanged."

Douglas County: Home Grounds Improvement. "There have been no actual demonstrators in home grounds improvement but practically every member of the homemakers club as well as several members of other groups in Minden and Gardnerville have made improvements in their yards and flower gardens. County Agricultural Agent Wilbur Stodieck has given excellent advice and help on planting and cultural methods both to the extension agent and to the members of the club. Advice in precautions for controlling diseases and methods for combatting pests in the flower garden were given to those cooperator who desired this assistance. One meeting was devoted to a group discussion of the fall care of perennials, shrubs and lawns and to the planting of bulbs and the winter care of bulbs and tubers. The homemakers featured a plant exchange at one of their meetings early in the year.

"The annual Flower Show was held late in August. There was an excellent display of flowers from all sections of Douglas County and some from Washoe County. The number of entries, particularly in the senior division showed an increase this year over previous years. Local committees who were in charge and 4-H Club members who assisted with the show deserve a great deal of praise for their efforts."

## 6. Clothing:

The volume of clothing project activity carried on in this state seems to maintain itself despite efforts of leaders and agents to reduce the amount of time devoted to this work. The persistence of this demand for clothing work makes us doubt the judgment that we have had for several years; i.e., that clothing is a minor project. Every year in the preliminary program plans committee chairmen, leaders, and agents agree that clothing has grown to be a minor project and therefore less time should be devoted to it. However, when project plans are completed, about the same volume of work on clothing continues to persist. Therefore, we are all coming to the conclusion that clothing continues to be a major problem with rural families. The emphasis in clothing has undoubtedly changed, more time being given to clothing budgets, costs, and clothing selection, and considerable less to construction problems. However, the reconstruction of clothing continues to be the major factor in the clothing project. Part of this, we believe, is due to the deficiency in clothing which occurred during the recent depression. Families are now being forced to replace the clothing which they wore so long and so hard during the years of low family income. Therefore, we rather expect that if family income keeps somewhere near its present level there will come a time in the next year or two when clothing assistance will be somewhat reduced.

The encouraging aspects of this project are the fact that more assistance is being requested for guidance in clothing budgeting. The increase this year was 102%. There was an encouraging increase in the estimated total savings due to both the adult and junior clothing program. The former increasing 17% and the latter 65%. This, we consider, evidences that the clothing project is meeting the needs of rural families and is having a decided effect upon their clothing planning and selection habits. The fact that with a reduction of 7% in the number of communities conducting the work, 19% in the number of volunteer leaders and 11% in the amount of agents' time spent on this project. There has been an increase of 16% in the number of adults adopting clothing construction recommendations, 38% increase in the number of families adopting suggestions regarding children's clothing, 102% increase in the number of adults budgeting clothing expenditures according to recommendations, a 40% increase in the number of adults keeping clothing accounts, a 21% increase in the number of adults following recommendations in clothing selection and a 10% increase in the number of families assisted in using timely economic information, is an indication of increased efficiency in carrying on this project.



4-H clothing club work has been decidedly strengthened this year due to the revision and reprinting of the first, second and third year project instruction books. This has decidedly strengthened local leadership and reduced the amount of time the agents need to spend on technical instruction.

Another method of strengthening both adult and junior clothing has been through the preparation of models showing technical construction problems and methods. These models were designed by Miss Lena Hauke, (our part-time clothing specialist), and then reproduced by a WPA sewing group. They have been used for all types of clothing instruction work, WPA sewing groups, Rural Rehabilitation families, adult and junior extension work, and have done much to improve the technical proficiency of clothing construction.

Decided help was also received from two loan exhibits secured from the Bureau of Home Economics and a clothing scrapbook.

Statistics and quotations from agents' reports are given below to illustrate the trends in this work.

	<u>1936</u>	<u>1937</u>	<u>% Change</u>
No. communities conducting work.....	57	53	- 7
No. volunteer leaders.....	128	104	-19
No. days of assistance rendered by leaders.....	525	332	-39
No. adults following recommendations in selection of clothing.....	456	556	+21
No. adults budgeting clothing expendi- tures according to recommendations.....	96	194	+102
No. individuals keeping clothing accounts	27	135	+400
No. families assisted in using timely economic information.....	430	477	+10
No. adults following clothing construction recommendations.....	455	529	+16
No. adults following recommendations on care and renovation.....	482	484	+05
No. adults improving children's clothing.	227	313	+38
Total estimated savings due to adult clothing program.....	\$5082	\$5926	+17
Total estimated savings due to junior program.....	\$ 819	\$1357	+65
No. days agents' time spent.....	223	198	-11

Churchill County: Clothing. "The clothing project was one of the major projects carried on this year in the various homemakers clubs. Thirty demonstrations were given. Eighteen demonstrations were given regarding selection and construction problems. Points to look for when buying winter coats were discussed and demonstrated, as well as the buying of other ready-to-wear garments, such as slips, dresses and undergarments. The reading of labels on ready-made garments, as well as on yard goods, was urged before making purchases in order for the consumer to be better informed regarding the quality of the garments under consideration.

"Construction problems demonstrated included appropriate hems, seams, placket, necklines, collars, etc., suitable for cotton, rayon, silk, linen, and wool materials. Twelve demonstrations were held regarding the renovation and remodeling of clothing and millinery. After careful cleaning, some of the garments were made to look like new with slight alterations and by adding a new clip, belt, buttons, or a different collar and cuff set. Others were improved by the use of harmonizing or contrasting material in yoke or sleeves. The millinery renovation work consisted of brushing and cleaning hats and then perhaps re-shaping or changing the brims or crowns to bring them more up-to-date."

Clark County: Clothing. "The extension agent, meeting with members of the Latter Day Saints Relief Societies, continued the series of meetings on clothing selection and construction started last year. Meetings held in Mesquite, Overton and Logandale featured particularly work in clothing rehabilitation problems. In Overton the work was almost entirely one of fitting coats, with particular attention to the applying of collars. In Logandale, re-lining and also putting on collars took up the time. The group in Mesquite worked with altering patterns, cutting and fitting. Some attention was given to cleaning articles preparatory to making them over. The women in Mesquite and Logandale worked on dresses, jackets and trousers for children and coats for adults. A loan exhibit of childrens' clothing aroused considerable interest in selection and methods of construction. In work with the Rural Rehabilitation clients special attention has been given to budgeting clothing needs for the year. In this area of large families this has necessitated careful planning and buying, so that the needs of all members of the family could be met."

Douglas County: Clothing. "While no definite clothing project has been organized and carried through to completion in Douglas County the extension agent has through home visits and other personal contacts offered assistance in selection and buying problems. Knowledge of good selection of clothing, whether ready made or not, is of the utmost importance if results are to be satisfactory. Knowing what and how to combine fabrics as well as the construction methods to use affords the homemaker who sews the satisfaction of creating a beautiful article. In an effort to serve this interest and aid the women with their individual clothing problems and knowledge the extension agent has given assistance wherever possible.

Washoe County: Clothing. "The selection, care and renovation of clothing was taken up in nine communities. Adult dothing projects were carried on in 5 communities. 4-H Club clothing work was done in 9 communities. 21 leaders assisted and the agent spent  $19\frac{1}{2}$  days on the project. 175 individuals followed recommendations in the selection of clothing. 115 families improved the selection and construction of children's clothing. 158 families were assisted in using timely economic information in determining how best to meet clothing requirements. As the farmer now has more money to spend more garments are purchased ready made. Emphasis has been placed on the selection of ready made garments and a knowledge of the new materials on the market. The clothing stores in Reno carry a good line of ready-to-wear garments at reasonable prices. The market is easily accessible to the people in Washoe County, and as a result, most of the clothing is purchased ready made.

"Reno has a number of excellent dry cleaning establishments, but the work is very expensive. 352 garments were dry cleaned in the home this year with a saving of at least \$428. There is always a need for safe methods of dry cleaning that may be used in the home. Most families cannot afford to send all of the dry cleaning to a professional cleaner.

"The agent serves on the local Red Cross Board to assist in planning the year's work. The quota from the homemakers clubs this year was three layettes. Each club gave three layettes."

Elko County: Clothing. "Methods of presenting this project are varied. One method is by direct demonstration. Another method is by leaders demonstrating before a homemakers group some thing of interest. For example, a leader in Elko presented fall fashions and materials. Still another method is by loaning patterns and models, and books. Twenty patterns were loaned, a sun suit and pattern were loaned, as were also rompers and pattern. Six books on crocheting were loaned. Last year a set of seven model aprons and patterns were made for the use of the women of the county. To this were added five more this year. Approximately 100 aprons were constructed. These aprons are in great demand in the fall of the year for bazaars. There is help given to individuals as they ask for it. This is either by home calls, telephone or office calls.

"Under miscellaneous aid, help was given to the local Business and Professional Women at their Fashion Tea. Fall fashions were displayed by the merchants at this time. 241 attended."

Report of Clothing Specialist Work, (Miss Lena Hauke): "Besides performing the duties of a home demonstration and home management supervisor for the Farm Security Administration, the agent here also acts as state clothing specialist. Owing to lack of funds, no trips were made to outside counties this year. Plans were made at the extension conference held in January and demonstration supplies were distributed by mail to the other agents throughout the state.

"A bulletin entitled "Guides for Buying Coats" was prepared jointly by the clothing and home management specialists to be used and distributed in connection with consumers buying problems.

"The clothing renovation and remodeling project was stressed again this year, in order to help save on clothing expenditures. Cleaning and pressing problems were emphasized as well as fitting problems and construction processes. The keeping of clothing records was urged and clothing budgets made out by members of the homemakers clubs, 4-H Clubs, and Rural Rehabilitation clients. An exhibit of aprons and inexpensive gifts for the holidays, bazaars and other occasions was prepared and shown at community meetings. Samples of new textiles were also shown and methods of identifying the different textiles demonstrated.

"At the Boys' and Girls' State 4-H Club Camp held at Zephyr Cove, Lake Tahoe, in August, the clothing specialist had charge of the clothing projects, including clothing exhibit contests, clothing judging contests, textile identification and style dress revue contest.

"The following recommendations are offered for clothing specialist work in Nevada for 1938:

1. Continue the study of Consumer Buying problems relating to clothing.
2. Stress textile identification work.
3. Prepare subject matter material on guides in buying shoes and hose.
4. In cooperation with the child development specialist, prepare subject matter material on guides in buying children's clothing.
5. Prepare exhibit of inexpensive gifts and favors for the holidays, bazaars and other occasions.
6. Prepare exhibit of suitable accessories.
7. Prepare demonstration material on new textiles for the various seasons."

## 7. Home Health and Sanitation:

No formal project in home health and sanitation is now carried on in this state. The direct responsibility of this work has been turned over to the new Maternal and Child Health Nursing Service and the Sanitary Division of the State Board of Health, both of which during the last year have been established as a division of the State Board of Health, with finances largely supplied from Social Security funds. The Agricultural Extension Service however, continues to closely cooperate with these new services in home health and sanitation problems in the various areas of the state having home demonstration agents. Instead of having a separate project for this cooperation, a large part of this work is intergrated with the Keep Growing and good growth and development projects.

Also, help has been given to the nurses in introducing them to rural communities, arranging for them to use our volunteer leaders, and to give instruction before homemakers and other groups on problems of mutual interest. The extension agents have been glad to help in this way. On the other hand, the nurses have given valuable assistance in re-enforcing many of the points where we have been placing emphasis for many years. This has been a direct assistance in such problems as the sanitation, health habits, home nursing, and safety in the farm home.

Special cooperative assistance has been given to the sanitation division regarding the sanitary privy campaign, the labor for which has been financed through WPA work projects. The announcements regarding this project, the methods through which it was to be carried out, etc., were mimeographed in this office and distributed to all extension communities, Keep Growing and pre-school leaders, as well as program chairmen, homemakers groups, and Farm Bureau officials. The extension service also assisted in carrying on the publicity, filling out applications, and otherwise acting as contact agents. As a result 224 sanitary privies have been installed in home demonstration counties this year and 575 in the state as a whole. Not only have these new privies been installed by these WPA projects, but the general discussion concerning sanitary conditions has resulted in considerable improvement in localities where the project could not be carried out at the present time.

Similar cooperation has been given to the immunization campaign carried on jointly by the Epidemeological and Child Health Divisions of the State Board of Health. For the past four years the extension service has been urging Keep Growing communities to

take an interest in this problem of vaccination against small pox and immunization against diphtheria. Keep Growing records show that only 4% to 5% of these children had been vaccinated and a little over 1% immunized. This year an active campaign has been carried on. The extension service cooperated through the Keep Growing leaders and agents appealing to parents and children to take advantage of the special rates arranged for this work done on a group or a community basis. As a result home demonstration records show 783 children have been vaccinated and/or immunized, while for the state the figures are 2558 for vaccination and 2338 for immunization. Also there were 101 immunized against typhoid and 1099 received the Mantoux test. We have been sincerely glad to cooperate with this immunization campaign as we feel it is an important measure for health protection.

Cooperation has also been continued with the Nevada Public Health Association, which has recently be reorganized as the Nevada Tuberculosis Association. As Nevada has the fourth worst rating in the United States regarding tuberculosis we consider this a major health problem. Here again, groups, local leaders, and agents have acted as contact agents between low income families and this organization in order to secure funds where families were unable to finance chest X-rays and adequate care for tubercular cases. This organization is the only one in the state having funds available for direct medical relief. Extension agents have also acted as contact agents between rural families and this organization in regard to financing much needed medical assistance, such as, tonsil operations, dental work, and glasses. This organization and the Surplus Commodities commission have also given much appreciated assistance in the distribution of cod liver and haliver oil to rural families unable to finance the problem for themselves. This has been a very real assistance in both the Keep Growing and pre-school work.

Besides this direct project cooperation the assistant director is a member of the Maternal and Child Health State Board, and the assistant director and one home demonstration agent are directors in and members of the executive committee of the Nevada Tuberculosis Association.

Statistics and excerpts from agents' reports follow:

	<u>1936</u>	<u>1937</u>	<u>%Change</u>
No. communities carrying on the work.....	87	53	-39
No. voluntary leaders.....	74	34	-54
No. individuals having health examination.....	2353	1871	-20
No. improving health habits (sleep, rest, etc.) according to recommendations.....	2385	2136	-10
No. adopting recommended positive preventive measures to improve health (immunization diphtheria and small pox)..	442	783	/77
No. improving posture according to recommendations.....	770	718	- 6
No. adopting better home nursing procedure as recommended.....	100	335	/235
Total number enjoying improved health as result of health and sanitation program.....	2726	2566	- 5

Washoe County: Health and Sanitation. "The Maternal and Child Health nurses visited 19 schools in Washoe County. 345 children were given physical inspections. 163 children have been immunized against small pox and 120 against diphtheria. The nurse also attended 4 prepare for school roundups in Washoe County. 69 children were given physical inspections by the nurse. The agent arranged the meetings, took the nurse to the meetings, kept all records, made up the community and county summaries of all work, and turned the reports in to the Maternal and Child Health office. The nurses are very nice to work with and have cooperated with the extension agent in every way possible.

"The agent works with the Nevada Public Health Association with a view to assisting needy people to get medical care and correction of physical defects among school children. The agent is a member of the executive committee of this association. The agent also served on the committee to revise the constitution and by-laws of the organization. The Maternal and Child Health nurses now do the work of the Nevada Public Health nurse. The same cooperation given the latter group is given the Maternal and Child Health nurses. The organization will now devote most of its work to the tuberculosis program. The money for carrying on the program is derived through the sale of Christmas Seals. 64 physical corrections were made during the past year among the rural school children of Washoe County.

"Assistance was given the Rural Sanitary program by supplying the office with a mailing list of the ranches in the county and members of the school boards. Assistance was also given in mailing out the material explaining the project. Announcements were made at farm center and homemakers meetings telling of the project and where the clients might go to make arrangements for the toilets. Three schools put in toilets and more than 300 were placed in the county."

Eureka County: Health and Sanitation. "Throughout the year the extension service has placed emphasis on the need for acquiring proper habits of rest and sleep. Emphasis has been placed on the need to improve posture, and some advance has been noted in both these fields as well as in the improvement of food habits. All schools in the county have handwashing facilities, with some type of running water available for use. Paper towels and paper cups are generally used. These facilities have tended to make for better and safer sanitary measures within each community."

#### V. COMMUNITY AND COUNTRY LIFE ACTIVITIES:

##### A. Community Organization:

As previously stated under supervisory problems, efforts in behalf of community organization has suffered because of the heavy programs carried by both agricultural and home demonstration agents. Responsibility for this work due to, lack of time on the part of agricultural agents, tends to be placed more and more upon the shoulders of the women agents and women members of county and community committees and boards. The women agents and local committee women have earnestly tried to do their best with this increased responsibility and in the counties where permanent home demonstration work has not been disrupted by a new agent, or a transfer in agents, real progress in community organization has resulted. The programs at community meetings are slowly but steadily improving both as to content and local responsibility. We also feel that considerable progress has been made in the responsibility shown by county boards. These responsibilities in both community and county organization, however, ultimately depend upon both the men and women agents having or taking time to cooperate in this work. Our greatest fear at the present time is that too much of the responsibility in regard to this problem is being left in the hands of the women, and if this continues, it cannot but weaken community and county organization.

##### B. Recreation:

The recreation project this year has had to be carried on without any out of state assistance. Despite this handicap a considerable volume of planned recreation has been maintained. This work took the form of conferences with community and county committees to plan the recreation features of community meetings, county annual meetings, county picnics, and 4-H Club recreation. In nearly all rural communities the program chairman acts as recreation chairman with the assistance of a local committee. In the county seats conference work is done with not only the homemakers clubs but various church and fraternal organizations. A recreation reference file is kept in the county and in the state extension office which is available to all groups. These include loan exhibits, on drama, music, material for community singing, and suggestions for recreation for special occasions. One community has secured



a phonograph with a loud speaker which helps considerably in both community singing and community games.

One of the phases of recreation that continues to steadily progress is the series of one-act plays put on by 4-H Clubs for the benefit of the various community centers. Five counties this year have put on series of these plays, covering practically all the communities and ending up with a state contest at the state 4-H Club camp. This activity gives, we believe, wholesome recreation and group activity for the young people involved, as well as provides many of these communities with their only opportunity for attending dramatic presentations. The interest in this phase of recreation is slowly but steadily increasing.

County Farm Bureau picnics are also improving in both attendance and the type of activities carried on. Both the urban and rural populations now take an active part in these events. Urban and rural teams compete in the various athletic events with a wholesome attitude of friendly rivalry and cooperation. A community picnic dinner is served at noon and afterwards there is a short period for special speakers and discussions of county problems, also musical numbers, dramatic presentations, etc. We believe that these county picnics do much to develop county cooperation and the sense of solidarity in solving county problems.

The greatest handicap in this recreation program is the lack of specialist assistance in order to train leaders in new material and to help them analyze local situations. The lack of community halls in which to hold meetings is also a limiting factor. Effort is being made in two counties to have such a community hall built in or near the county seat, so it can be used for all types of county-wide meetings. At the present time community meetings are held in school houses which are small and inadequate for the type of recreation our rural groups would like to carry on. In one community a WPA appropriation was allotted for a rural recreation center, but the building has never been started due to lack of unemployed skilled labor.

Two counties are carrying on library work. In one county the 4-H Clubs are taking the library project for their special community service, and each year raise money and purchase a small number of high grade books. In another county the homemakers clubs have donated books and the library is kept in the county agent's office.

County or inter-county 4-H Club camps were participated in by three counties this year, and decided success was secured in getting the cooperation of the families of these 4-H Club members and local organizations. One of these camps was held in beautiful Lamoille Canyon in Elko County and the other at Mt. Charleston in Clark County. At the latter camp a most successful

arrangement was made, whereby the total responsibility for eating and sleeping arrangements was assumed by families of 4-H Club members, and the whole family came to camp out. Nature study, crafts, and recreation activities were carried on for both adults and juniors, supplemented by conference groups for senior 4-H Club members and for leaders. In these camps excellent cooperation was given by the forest service who loaned some equipment and furnished leadership assistance for the nature study work. Also the Maternal and Child Health Nursing Service furnished the camp nurses for both local and the state 4-H Club camps.

State 4-H Club camp continues to be an important recreation feature for both the juniors and adults, as well as the training period for specific 4-H Club problems. This year 19 women leaders attended the encampment at Lake Tahoe. Conference groups, leader training periods, handicrafts, nature study trips, and sight-seeing tours were included in the program, as well as the usual 4-H project instruction. Besides this special recreation instruction in community singing and conference work regarding dramatic presentations was given.

An effort was made this year to hold a woman's camp either directly before or after State 4-H Club Camp, but two major obstacles prevented the carrying out of this proposal. These were lack of transportation facilities over the long distances that would have to be covered, and lack of time due to the summer rush of feeding hay crews. We very much doubt that these two problems can be solved at the present time. Therefore the women's groups and the extension service are considering overnight camps for women on a purely recreational basis.

The good results from the training schools carried on in this state by the National Recreation Association and the specialist assistance given by Miss Ella Gardner, the national extension recreation specialist, continue to produce results. We only hope that in the future another series of recreation training schools can be arranged, as we decidedly need this stimulation. The most encouraging aspect of the present situation is the fact that the rural population through their Farm Bureau and homemakers organizations and the town groups through their various clubs are conscious of the fact that there are recreation needs in their localities and are earnestly endeavoring to do the best they can with this problem under the handicaps of lack of funds and trained leadership. The Elko County agent reports that the largest number of persons reached through any project are contacted through the recreation project.

~~Statistics and~~ Examples from agents reports follow:

Washoe County: Recreation. "The recreational program has been carried on in Washoe County for six years as a result of the three recreation schools held under the direction of the National Recreation Association and two training meetings conduded by Miss Ella Gardner of the Washington office. Four farm center recreational groups have been organized to take care of the entertainment at the community meetings. Then 4-H Community Clubs carry on recreational programs at their meetings and also assist with the farm center programs and other recreational programs carried on in the county. A county recreation council was organized but it was not satisfactory because there was no place available for the group to meet. The present method is satisfactory if time is available to meet with the committees to plan the programs. The aim of the recreation project is to assist in promoting a balanced program of business and recreation at the 4-H Community Clubs and farm centers. It is also intended to encourage groups to take part in their own entertainment instead of importing it from the outside and to develop a healthful and beneficial use of leisure time. A phonograph with a loud speaker attachment has also been purchased. Musical games may now be played, providing there is space in the hall, and fortunately, good phonograph records are available. Community singing and musical numbers are a part of the farm center programs during the year, but we are handicapped at some of the meetings by not having anyone to play the piano or lead the singing. However, a few of the 4-H Club members play musical instruments and we have a number of good accordian players who may be called on to give a few musical numbers. We hope to build up the musical part of the farm center programs.

"More time was spent on this project than is shown by the report as the recreational work is combined with so many other meetings. 11 training meetings were held with an attendance of 249. 43 home visits were made. We are very much in need of a centrally located community hall where recreation meetings might be held. The Farm Bureau Board of Directors applied for such a building under the WPA, and an allotment of \$17,000 was made, but the building has not materialized. Every effort has been made to push the project through but so far nothing has been accomplished."

Churchill County: Recreation. "Office conferences were held with program committees to outline programs and to acquaint the leaders with the recreation material available for use and distribution in the extension office. A program chairman was appointed in each community to have charge of the recreational activities at community gatherings. Numerous requests for material of this sort were received from Farm Bureau leaders, homemakers groups, 4-H Club members and leaders, and from various church and fraternal organizations. Requests were also taken care of regarding place cards, favors, table decorations, etc., for banquets, card parties and dinner parties. Five communities presented one-act plays at local Farm Bureau meetings. A one-act play was also presented by senior 4-H Club members at the State 4-H Club Camp at Lake Tahoe in August. Six schools gave excellent health numbers at Child Health Achievement Day programs."

Elko County: Recreation. "Although it has been three years since a recreational program was held under the direction of the National Recreational Association, the work still goes on. The Recreational Council as "set up" under this program holds no more meetings. However, the members are still known for their leadership and are called on frequently to lead music, games or call for "old time dances". The main object of the Recreational Council was to stress a Recreational Hall for the youth of the community. Elko and other small communities of Elko County have little in the way of wholesome recreation for its youth. Most recreation is sought in pool halls or night clubs which are always questionable. Although this Recreational Council holds no more meetings, each members helps the Recreational Hall idea wherever possible. A year ago the 20th Century Club of Elko asked every civic organization to send a representative to form an organization to discuss ways and means of improving the community. This committee approaches the city council or the county commissioners for whatever they desire. Because they are backed by all civic organizations of Elko they usually obtain what they desire. At the present time the representatives of the Elko homemakers and the Business and Professional Women have been instructed to work for a recreational hall for the youth of the community. A year ago a hobby department was started in connection with the Elko County Fair. More interest was shown this year, as evidenced by a larger number of exhibits. A small recreational library composed of plays, games, music, suggestions for parties, etc., is in almost constant use. This project probably touches more people than any other project with which we deal."

Lyon County: Recreation. "The county Farm Bureau picnic held in Smith Valley in June was the big recreational meeting of the year. Games and contests were the order of the day. Farm Bureau members from both valleys attended this gathering. The county Farm Bureau assisted the 4-H Club of the county in their drives for successful dances to raise funds to send club members to the state 4-H Club camp at Lake Tahoe last summer, and also to send competing teams to Regional Contests in the western part of the United States."

### C. Discussion Groups:

Discussion groups for homemakers groups, Farm Bureau centers, federated clubs, and Parent Teachers Associations were held. Such topics as legislation in behalf of agriculture and in behalf of women and children, soil conservation, farm loans and loaning agencies, consumer problems, health and sanitation problems, and aims and objectives of the Farm Security Administration have been taken up. This work is usually done through having one person or a local committee prepare the initial presentation and then have this followed by group discussion. We believe this has done much to awaken interest and a feeling of responsibility in furthering the aims of the federal government and awakening group responsibility in solving local phases of these problems.

#### D. County and Local Fairs and Achievement Days:

The same type of local responsibility and cooperation has been manifest toward county and local fairs and achievement days. Special committees are appointed by community and county Farm Bureau organizations with the cooperation of urban organizations such as women's clubs, men's service clubs, and fraternal organizations. At the present time we have only one county fair still in existence; that is in Elko County. Splendid county-wide cooperation is given to this event and it is truly a home coming and county get-together occasion. Year by year more responsibility is taken by local committees and the extension agents now act largely in an advisory capacity.

In Churchill County where the State Fair used to be held a county-wide "Youth's Fair" is carried on in cooperation with the 4-H Club, Future Farmers and all the adult organizations. Although this is only a one-day event it does produce remarkably good results, all the county turning out to attend. Good exhibits were prepared this year by not only members of the 4-H and Future Farmer organizations but by homemakers clubs. A large amount of recreation is worked in with this event, there being a style show, various athletic contests, and a general county-wide get-together. A similiar one was started in ODouglas County.

Statistics and excerpts from agents' reports give further details in regard to community and country life activities:

	<u>1937</u>
No. communities in which work was conducted.....	50
No. volunteer leaders assisting.....	124
No. days assistance rendered by leaders.....	307
No. meetings held.....	367
No. days agent time devoted to project.....	86

Elko County: Fairs & Exhibits. "More interest was shown in the fair this year than for several years. The cause may have been a later date for the fair - September 17th in place of the first of September. Or, it may have been because people had more available money this year. The handwork department was especially large with the finest workmanship ever displayed. The premium list in the canning department was increased with marked results.

"Whenever a superintendent drops out another takes her place from a waiting list of women interested in working with the fair. This new superintendent is trained by the agent, who goes over the entry list with her. She is told all entries bearing the same number should be placed

together for the convenience of the judges. When the judging is done she is told to arrange her exhibit anyway she desires just so they are attractive. All superintendents are told to remain in their department when judging is proceeding. This is to enable her to tell the public why one exhibit received a ribbon and another did not. Many superintendents are efficient in this type of educational work. This has a great bearing on higher quality of work each year. At the close of the fair each superintendent is asked for criticisms of the women's department in general and her department in particular. In other words, each superintendent is made to feel the success or failure of the fair remains with them. Several women are so well trained in fair organization it is felt they could conduct the women's department without the help of the agent. Again a Senior 4-H Club Council member took charge of the Junior Canned Goods and Baked Foods Departments. Scores for articles entered in the fair are explained through the local newspapers and by demonstrations. Suggestions for making exhibits as attractive as possible are made through the newspapers and by demonstrations."

Elko County: Agricultural and Civic Problems. "This project is stressed along with other programs. It takes up a detailed study of legislation, national, state, and local law enforcements and what it means to be a voter; a study of consumer problems, for the Soil Conservation Act, various farm loans, and state as well as local health problems. Outside of health chairmen in each group no individual person was appointed to take charge of any particular phase of this work. Some topics noted in various homemakers clubs or Relief Society programs are "Ideas on World Peace", "Home as Influenced by Radio, Pictures and Newspapers", "Home as Influenced by Community and Community as Influenced by Home", "Health Problems of Community and State", "Soil Conservation", "Farm Bureau Legislation and Problems", "Consumers Problems"."

Douglas County: Agricultural and Civic Problems. "Although there is no rehabilitation work being carried on in the county the agent has attempted to acquaint the homemakers of Douglas County with the program of the Farm Security Administration. Some time has been given to discussion of the program of the Agricultural Adjustment Administration, with particular reference to the Soil Conservation program in Nevada."

Douglas County: Fairs and Exhibits. "The county Farm Bureau, through the Douglas County homemakers club and the 4-H Club boys and girls cooperated with the high school in putting on a county school fair in Gardnerville. The homemakers assembled and put up a most interesting exhibit of home-made quilts, comforts and spreads. Over 30 quilts and comforts were exhibited. Some of them were very lovely. Also there were a number of hand crocheted, knotted and embroidered spreads. Various members of the homemakers club exhibited cooking, canning, foods and flowers in their respective divisions. Most of the 4-H clothing club members, as well as canning club members exhibited some of their work. The agent assisted in the organization and setting up of these displays."

## VI. COOPERATION WITH RELIEF AND OTHER AGENCIES:

### A. Rural Rehabilitation Work Under the Farm Security Administration:

Due to a cooperative agreement between the Farm Security Administration and the Agricultural Extension Service in this state, arrangements were made in the fall of 1936 whereby the Farm Security Administration pays the salary of one extension agent, the traveling expenses of another and contributes to the traveling expenses of other extension agents and the assistant director for the time spent on Rural Rehabilitation. In return for this the four home demonstration agents and the one Rural Rehabilitation agent during this past year, spent a total of 325.75 days or 1.11% agents' time carrying on the home management phases of Rural Rehabilitation work. The work was carried on in 39 rural areas in this state with a total of 255 client cases being handled. Only those cases in which families were involved were included in this list. Cases involving bachelors and widowers without children were handled entirely by the agricultural supervisor of Rural Rehabilitation.

Assisting in this work have been 20 volunteer leaders who gave a total of 41 days to assisting in contacting client families, getting them to attend community meetings, getting their children into 4-H Club work, etc. Agents made a total of 646 home visits to these families for specific Rural Rehabilitation work, (this is not counting home visits made in the interest of extension problems which grow out of these cases). 328 office calls directly concerning Rural Rehabilitation problems were also handled.

With each of these families a home management plan was drawn up covering the entire family expenses for the year, this including clothing, household furnishings and operating, medical care, recreation, church and charity, insurance and savings, and miscellaneous items. Because a majority of these Rural Rehabilitation families had no definite idea as to how money had been spent the previous year the first home management plans were prepared largely on an estimate basis, and some of them varied a good deal from actual expenses as shown by the home account records kept during this year. Home management plans made later in this year, when both clients and agents had more definite information as to the expenses incurred have worked out to be fairly accurate, although not as accurate as we hope to have in the coming year.

In these home plans for Rural Rehabilitation families special emphasis has been placed upon the home production of food and its preservation and storage. This, we found to be the weakest point on the home sides of the financial set-up of these families, as the majority of them either never had raised good gardens, or had fallen out of the habit of doing so. Over and over again we have had to emphasize with

this group that the agricultural families in this state who are successfully maintaining their financial independence are those who produce from one-half to two thirds of their food supply, and thereby conserving their cash for repayment of loans and for education, health, and other needs. A study of 45 Rural Rehabilitation families in one area shows that this year the average food production per family was \$275 (based upon local farm prices). We estimate from the data available that this is an increase of \$90. over the food production for last year. Given a good water supply we hope to increase this family average to \$300 this coming year.

This problem of the home production of the family food supply is a complicated one with some of these families because of poor land, inadequate water supply, and lack of the technical skills involved in both gardening and home food preservation. It will take several years to bring these families up to the point where they will be producing as much of their food supply as our more successful type of rural family. A considerable amount of extra extension time has been spent with these families in the attempt to supply this technical instruction.

Clothing has been another serious problem with these Rural Rehabilitation families. Their clothing supply was seriously depleted because of their bad financial situation, and they have not all shown good judgment in the type of clothing they have selected. The trend has been to buy cheap clothing which gave very little wear, and the care of clothing has not been up to the average. Here again, effort has been made to improve their judgment in regard to clothing selection, and their technical skill and habits in the care of clothing.

Very little has been done with these families in regard to home and yard improvement, because we felt the other two factors were more important in safeguarding their financial situation. Much time has been spent, not only during the regular visit, but during the follow-up extension visits, in regard to home management problems particularly the budget and accounts work. About two-thirds of these families have kept fair to good home accounts and there is evidence that they have really profited by this experience. It has caused many of them to realize the serious "leaks" which have occurred due to faulty spending habits. This work on budgets and accounts has taken a surprising amount of agents' time. It has meant sitting down with these families and helping them with the details of their home accounts work, both to give them the technical skill required in keeping accounts, and to help by persistent encouragement in the establishment of the habit of recording the day by day expenses. Some of these families have required only a monthly visit, but a number of them have had to be visited once in two weeks, and a few of them once a week.

Every effort has been made to get the mothers of these families to attend the local homemakers clubs or project groups in order to stimulate interest, strengthen their technical information, (particularly in



regard to the selection of food and clothing), and above all, to make them feel that they are taking part in a general community-wide effort to raise living standards and reduce cash expenditure. We have felt this to be of particular importance in order not to have these families feel that they were a group "set apart", who were expected by the government to live on a standard below that of the rest of the rural community.

We feel that much good has been accomplished by getting the children of these families into 4-H Club, as a general thing they had not been in club work. This year's experience has shown that the ideas which these girls carry home from 4-H Club work has a direct affect upon family attitudes and habits. Frequently parent interest and cooperation can be stimulated more effectively this way than through direct work with the parents themselves.

Medical care is a serious problem with these families. Due to their straightened financial condition they have not felt it possible to secure medical care and the large volume of neglected medical problems that have accumulated forms a serious menace to family efficiency. Every effort has been made to secure help for these families through contact with the Maternal and Child Health Nursing Service, and the Epidemiological Division of the State Board of Health, etc. A number of cases have been handled through free tonsil clinics which have been held this year under these services, but there is still a grave problem in regard to these health handicaps. During the coming year effort will be made to increase the budget for medical care wherever the financial status of the family makes it <sup>at</sup> all possible. Nevada having no regular free clinics makes this a serious problem and in some cases special medical grants will have to be made.

Recreation is also a problem with these families. Here again, every effort has been made to draw them into local community center meetings, to get them to re-establish their contacts with church groups, and particularly to get the children into the 4-H Club work. The tendency of these families has been to withdraw more and more from community life, because of lack of funds, poor clothing, and general depressed mental condition. Considerable success has been secured in getting these families back into the normal stream of community life, and it has a definite affect upon family attitude and cooperation. The fact that some of these Rural Rehabilitation families have been keeping such excellent accounts has resulted in their having been asked to act as local demonstrators for farm and home accounts for the coming year. We have taken all opportunities to give praise wherever it has been due <sup>so</sup> that these Rural Rehabilitation families would feel the stimulus of wholesome self respect, and the communities would look up to them as families contributing to the progress of the community and county.

The great handicap in this work has been lack of time. To give a completely satisfactory service would take at least twice as much time as it has been possible to give, because of the wide-spread distribution of these families and the amount of time it takes to reach them. We have endeavored to give every advantage to these client families, particularly the younger families now forming their life habits.

As a whole, we believe this cooperation between the Farm Security Administration and the Agricultural Extension Service has been of benefit to both organizations, to client families, and to the state. It has certainly given more service than could be secured through the maintenance of one home management supervisor by the Farm Security Administration. It has also conserved travel expense in covering the immense distances over which the Rural Rehabilitation cases are scattered.

Extracts from agents' reports are given below to illustrate volume of work and the types of problems handled:

No. communities in which work was conducted.....	39
No. days agents' time spent.....	325.75
No. volunteer leaders assisting.....	20
No. days assistance rendered by leaders.....	41
No. client cases handled.....	255
No. meetings held.....	17
No. home visits made.....	664
No. office calls.....	328

Churchill County: Rural Rehabilitation. "In September, 1936, the home demonstration agents in Nevada were appointed part-time home management supervisors for the Rural Rehabilitation division of the Resettlement Administration.  $55\frac{1}{2}$  days or 19% of the agent's time was spent on this project this year.

"No. communities in which work was conducted.....	13
No. voluntary committeemen assisting.....	3
No. days of assistance rendered by committeemen.....	15
No. home visits made.....	163
No. office calls received.....	137
No. homes directly assisted by extension agents to carry out the Rural Rehabilitation program.....	56

"Home Management plans were made out for 56 clients. Farm and home record books were given out to each one, fifty of whom kept fairly good records. Food, clothing, operating and household expenditures were budgeted according to income. Each client was encouraged to plant a garden to help provide the family food supply and to can as much of their food supply as possible to help save food expenditures. There was plenty of water for irrigation purposes and 52 clients reported

having excellent gardens. Some garden truck and fruit was sold by a number of the clients and the proceeds used to buy the necessary staple supplies and to help pay on their indebtedness. Home visits were made to the clients to assist them in keeping their accounts and to advise them in every way possible, to help them re-establish their financial standing, and to make them feel that they really belonged to the community in which they live. A total of 37 or 56% of the clients attended community meetings during the year."

Clark County: Rural Rehabilitation. "Home management plans were made out for each client who has a loan. In this county there are 45 clients. This business plan must be followed with home visits and it is always planned to make at least one visit each month to each client. During home visits it is the purpose of the agent to give assistance along all types of home problems such as the food supply, clothing for the family, budgeting the income, and the keeping of business records. It has also been the plan to include all clients in a county wide nutrition program along the line of lining up cooperators in fall and spring gardens. When the home plans were worked out in detail there was a decided lack of vegetables and fruits in most diets. This is not necessary here when there are really three seasons for having a good garden, fall, winter and spring that could supply the family with an adequate fruit and vegetable diet.

"Home accounts are urged from each client for his own good and of course has helped the agent determine for the government the security of the loan. There are fifteen clients who keep excellent accounts while some of the others do it spasmodically, but it is felt that in time some excellent accounts will be forthcoming. As long as a county agricultural supervisor was in the southern part of the state it was not necessary that the agent need to know all about each loan, but now that the supervisor handles the business from Utah it is felt that the agent will do some collecting and disburse funds. This will be an excellent check on the accounts of each client."

Lincoln County: Rural Rehabilitation. "Most of the clients have been visited once a month. Nine of the fourteen clients keep detailed accounts. For example, one family in particular had a chicken project. There was a question whether any financial help at all was derived from the chickens. With this in mind the accounts were kept and in one month the chickens had paid for all of their feed and furnished the family of five with groceries. This family has no place for a garden either. Just one proof that accounts are valuable in any business especially a farm business. This county has an entirely different climate than Clark County. Gardens are in the late spring and summer. Most of the clients have good gardens. Late summer and fall there is a great deal of canning of vegetables especially tomatoes, corn and beans. All fruit is bought from peddlers and canned. Information concerning canning was given to each of the clients."

Lyon County: Rural Rehabilitation. "The national program for assisting rural families to become established with self-supporting units operating on a sound economic basis is a most significant one in Lyon County. There are 65 rural families besides a number of bachelors in this area who are being refinanced and supervised through their economic difficulties by the Farm Security Administration. Home management plans covering the estimated cost of all family living expenses for the year were completed with 47 of the clients of this county, and the agent made consistent efforts to get this group to keep home business records. About 50% of the clients keep fairly satisfactory records of their expenditures. As a whole these families have given very good cooperation, but in order to secure the general adoption of desired practices there is great need for frequent contact with each family and for a great deal of individual assistance and supervision."

Elko County: Rural Rehabilitation. "It has been the agent's privilege to have known most of the clients in this project for a number of years. Because of this she knows many things which they need. She knows whether they need much instruction or little. Many of the clients have been in homemakers clubs or are in homemakers clubs. Time was concentrated on families who apparently had the most difficulties. For example, one family could not "make it" on the piece of land which they had leased. The nine year old girl had no access to school. The ranch was ten miles from a highway where there was no phone, no radio, no car and no neighbors. The mother was almost insane with all of it. She had seen much better homes and days. The father often came to Elko and stayed in the agent's home while he attended to business. The agent contacted the local re-employment office and obtained a job in Wells for the man where his family could be moved. The entire attitude of the family changed. They were much happier. But the father is not overly ambitious. So he moved the family back to this impossible ranch before school was out. Now they are back to the same spot they were a year ago. There seems to be but one way to deal with this family. That is, to give no more aid of any kind until they see they must meet their responsibilities."

Washoe County: Rural Rehabilitation. "The county agricultural agent and the home demonstration agent worked on the Rural Resettlement project in an advisory capacity until September, 1936. The county committee meetings were held in the county extension office and the agent acted as secretary. In September, 1936, the agent was named home supervisor (without pay) to work with the resettlement clients. 31 clients were listed in Washoe County at the beginning of 1936. 25 clients are now on the list. One client died, three paid up and two were closed out.

"The first work done was to visit each client in the county and make out a home management plan for the year 1937-38. 25 home management plans were made out and records started. At the present time 21 records are being kept. Out of the 25 clients starting the records one family cannot read or write, one man is alone, one client paid up his loan and another was closed out. Home management plans were not

made for three men living alone. The records in some cases are very good and mean a great deal to the clients. In other cases they are not so good. More time will have to be devoted to the work if good records are to be kept. If the client knows the agent is coming she makes an effort to get the record book up to date. 13 clients had vegetable gardens and produced all of the food supply they could. 12 clients did not produce any of the food supply but the agent felt that it was possible for most to grow a garden. Surplus commodities, both food and clothing, were obtained for each client if they wished to be placed on the list. The clients all felt that the products received were very good and helped greatly to reduce the food and clothing bills. The WPA Surplus Commodity department cooperated in every way with the clients to give them as far as possible all materials asked for. Two emergency grants were made this year, one for dental work and the other for clothing. Three mattresses were renovated through the WPA. The client paid for the labor and the WPA furnished the material. The mattresses were good but needed new covers. This was a great help to the family."

#### B. Cooperation with Emergency Relief, Social Security, and Red Cross Agencies:

Cooperation has been given throughout the year to the various relief agencies such as the WPA Women's and Professional Projects, the Surplus Commodities Division, etc. The home demonstration agents acted as contact agencies between rural families and the agencies able to give assistance in various types of problems. This contact work is decidedly needed because our rural families are often puzzled as to how to contact these agencies, or very reticent about asking for assistance. The extension agents have been able to quietly bring these needs to the attention of the right organization in order to obtain the help needed. We find that this avoids embarrassment, for the families concerned, and reduces neighborhood gossip to a minimum. On the other hand, this service has supplied the cooperating agencies with accurate information regarding these families, and there have been a few cases where it has prevented imposition by families who really were able to work out their own problems.

Agents have acted on the county advisory boards of these agencies and the assistant director on the state boards. Help has been given in regard to adequate diet, estimates of clothing needs, methods of using surplus commodities, etc. Special assistance has been given to the WPA sewing projects, and to their school lunch projects.

Cases needing medical assistance have been referred to the Maternal and Child Health and to the Nevada Tuberculosis Association. Through these agencies considerable assistance has been obtained regarding serious physical conditions that need immediate attention; such as tonsils, glasses, teeth, etc. Cooperation has also been given in regard to the campaigns for

immunization and of the Mantoux testing which are being carried on in this state by these organizations.

Cooperation has been given to the Red Cross by agents acting as members of the county committees, assisting in planning local relief work, and securing the cooperation of homemakers clubs in preparation of layettes, donation of funds, referring cases, etc. The home demonstration agents not only assisted in local rural conditions but also assisted in Red Cross cases referred to them from other parts of the United States, wherever there was need. Cooperation has also been given in regard to the accident prevention campaign representative of the Red Cross, by arranging schedules for talks before homemakers and community groups.

Illustrations from agents' reports are given below:

Elko County: Cooperation with Emergency Relief Agencies. "Often various relief agencies contact the agent to find the status of various families because she has been working <sup>in</sup> the county for a longer period of time. The agent often acts as a contact agent between rural families and relief agencies by obtaining clothing, bedding, food, jobs and medical aid. The agent also acts as a technical advisor in regard to school lunches, clothing, surplus commodities, women's work and recreation. Aid is also given destitute rural families in establishing their children in school. The agent also acts as local home service chairman of the American Red Cross. Because her name is the only one listed in the American Red Cross Directory for this locality, cases are referred to her from various parts of the United States. Letters were received regarding individuals from California, Utah, and Wyoming."

Churchill County: Cooperation with Emergency Relief Agencies. "Cooperation was given the supervisor of the WPA sewing room in giving technical information regarding construction processes. Sets of model sewing processes were made in the sewing room. These were available for leaders and for Rural Rehabilitation clients to use when constructing and making over garments. The cooperation of the supervisors in this matter was greatly appreciated. Needy relief families were assisted in securing surplus commodities to help them through this difficult period when they had very little money to spend. Names of needy families were also suggested to the Christmas committees of various organizations, who were donating Christmas baskets. Relief families and Rural Rehabilitation clients were invited to attend homemakers meetings and other community meetings. They were urged to take an active part on the program and to act on various committees. By thus becoming interested in local affairs they <sup>were</sup> made to feel that they had an important part in the building up of their community. This office was glad to cooperate with the County Red Cross officials in furthering the accident prevention campaign. Talks were given at community meetings relative to numerous hazards found in the homes and on the farms and how they might be eliminated with very little cost or labor."

Washoe County: Cooperation with Emergency Relief Agencies: "Assistance was given families in the selection of foods in order to give a well balanced diet on a limited income. Recipes were also given out on ways to prepare the foods purchased. Suggestions and grocery lists were supplied giving an idea of how to divide the food dollar. The amount of money to spend for food is very limited among these families. Suggestions and recipes have also been given out on ways to use powdered milk, canned meat and prunes. The agent is a member of the clothing committee of the local Red Cross. Meetings were attended to assist in planning the year's work. The three homemakers groups furnished six layettes as their part of Washoe County's quota for the year. Three homemakers clubs have a charity fund in their club. They help people in the local community if there is need and if not the money is used wherever it is needed. They have supplied clothing for a new baby, a needy school boy, bought licenses for a car so the man of the family could go to work, and fixed Christmas baskets for unfortunate families."

#### C. Cooperation with the Indian Service:

Cooperation with the Indian Service in 4-H Club activities has been placed upon a more substantial basis this year. In three areas of the state; i.e., the Schurz Reservation, the Pyramid Lake Reservation, and the boarding school at Stewart, a small volume of good 4-H Club work was carried on. The extension agents assisted through furnishing subject material and leadership guidance with a small amount of technical instruction.

The Indian 4-H Club members in all these areas took part in the Achievement days and made a very creditable showing. We particularly commend the fine spirit of good fellowship manifest at these Achievement days.

A state-wide Achievement roundup was held at the Stewart Indian School in August for all Indian 4-H Club members of the state, delegations being sent in from the two out-lying agencies. An interesting program was put on, including a conference of leaders, and exhibits of work including a very interesting exhibit on 4-H Club foods and Indian foods.

The extension service is glad to cooperate with the Indian Service in regard to 4-H Club work, because we feel it is one of the most effective ways of raising the standard of living of the Indian families in this state.

## VII. HOME ECONOMICS 4-H CLUB WORK:

Home economics 4-H Club work is this year reported in the 4-H Club section of Nevada's annual extension report.

## VIII. OUTLOOK AND RECOMMENDATIONS:

### A. Economic Conditions:

Economic conditions for Nevada are fairly good as so far we have not felt the present recession as much as other parts of the country.

One disturbing factor for the coming year is the threatening drought. Heavy warm rains in the late fall melted most of the snow in the Sierras and since then there has been less than normal precipitation. The irrigated areas in Washoe and Churchill Counties will very likely have a fair water supply. Whether it will last through the growing season is becoming more and more questionable as late snow falls usually do not freeze hard enough to sustain the water supply through August. A drought would, of course, have a serious effect upon the Live-at-Home campaign and available cash for paying off farm loans, education, medical care, etc. We are decidedly disturbed regarding the outlook because of the serious affect upon both extension and Rural Rehabilitation families.

The reduction in the prices of silver has had an adverse effect upon the mining situation in this state. A number of mines have already laid off men and the outlook for many of our marginal mines is far from encouraging. If the mining industry continues to regress it will have a decided affect upon employment, and markets for rural families and therefore upon rural family income.

### B. Extension Outlook:

Because of our present restricted extension funds there seems no hope for increase in home demonstration agents during 1938. We hope to be able to continue the cooperation with the Farm Security Administration whereby they pay the salary of one agent and some travel expenses for the rest. If this arrangement can be continued we will continue to have the benefit of five women agents in this state. Otherwise, the number will have to be reduced to four and the work in the southern part of the state will again have to be discontinued.

If the present cooperation continues five women agents will devote an average of four-fifths of their time to extension problems and one-fifth to Rural Rehabilitation work. The double responsibility of Extension and Rural Rehabilitation will mean a very heavy schedule for both the home demonstration agents and the assistant director, and this in turn will necessitate very careful planning as to program content and extension methods.



Under the best circumstances the home demonstration area in the state will continue to be reduced to seven counties. This will leave five counties without home demonstration help, and here the assistant director will give assistance with 4-H Club work and in a very few places give a small amount of time to adult work.

The two projects receiving the most emphasis during the coming year will be nutrition and home management, with child care, clothing, home improvement, and recreation carried as minor projects. In the home management project increased emphasis will be placed upon farm and home accounts, although work with consumers problems will be continued. In the nutrition project the Live-at-Home campaign, the Keep Growing demonstrations and the selection and utilization of food will be continued.

Every effort will be made to safeguard the quality of the work and the stability of the women extension agents under the present heavy program. This means a reduction in number of projects and project goals and a concentration upon doing a good piece of work. We will continue efforts to place increased responsibility upon local leaders in order to conserve the time and strength of home demonstration agents.

Four home demonstration agents will continue to act as part-time specialists for various projects. The agent hired by the Farm Security Administration will not carry specialists responsibility because she is too new to extension work and has too heavy a program in both extension and Rural Rehabilitation.

The assistant director will continue to act as part-time nutrition specialist and also state supervisor for Rural Rehabilitation work if that cooperation is continued.

A small amount of nutrition consultant assistance will be obtained from Dr. Penelope Burtis Rice, largely devoted to preparation of subject matter training and advisory service with agents.

Effort will be made to expand the homemakers clubs to at least three new areas, and to establish special groups for young mothers.

We will continue to study the problem of older rural youth.

Four-H Club work will be held down to its present volume, due to lack of time for a larger quota.

IX - ILLUSTRATIVE MATERIAL

UNIVERSITY OF NEVADA  
AGRICULTURAL EXTENSION DIVISION

CECIL W. CREEL

DIRECTOR

Annual Report of Extension Work in Agricultural  
Economics and Marketing

(Project No. 6)

for

1 9 3 7

L. E. Cline

Extension Agricultural Economist

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COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS  
UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION DIVISION  
AND UNITED STATES DEPARTMENT OF AGRICULTURE  
COOPERATING

Report for 1937

L. E. Cline

- I. NAME OF PROJECT      Extension Work in Agricultural Economics and Marketing.
- II. SUB-PROJECT        Introduction and Miscellaneous Activities.

Agricultural Extension activities for the year 1937 have been carried out according to plans submitted early in the year. In addition to the planned projects, a large number of additional activities have required much time and effort. Some of these new activities have been of an emergency nature and others of considerable importance could not be foreseen.

The miscellaneous activities referred to will be discussed separately under the sub-project phase "Miscellaneous".

Livestock Loan Committee

One of the important items under miscellaneous activities was the work in connection with the Agee livestock loan legislation. This legislation provided for a legislative visiting committee from the Nevada Legislature to call upon the Farm Credit Administration at Washington and upon Congressional representatives from Nevada for the purpose of reestablishing temporarily a branch of the Regional Agricultural Credit Corporation in Nevada to make special loans to rejuvenate the livestock interest of the state.

The Committee named by the State Legislature required a considerable volume of exhibits and data with which to present the Nevada case in Washington. The Nevada Extension office

spent several days in assembling this material in the form of a mimeographed pamphlet for the use of the delegation.

#### Revised Turkey Bulletin

Early in the present year it became apparent that there would be a demand for information on turkey feeding problems from turkey growers in Nevada and from others outside the state, who in the past have sought information on this subject from this state. Since literature on this general subject was about exhausted at the Extension office, the preparation of a mimeographed circular on the subject was planned, amounting to fifty pages. This circular has been freely distributed in the state and many calls for it have been made from outside the state.

#### Farm Bureau Reorganization

During the past year considerable time has been devoted to the reorganization of County Farm Bureau organizations. New complete corporation papers have been prepared for the counties, Eureka, Lincoln, Clark and Pershing. The necessary legal steps were taken by each county to adopt new organization papers and reorganization meetings were held in each county for the adoption of the new corporation papers. In this connection, also, it was found early in the year that none of the county farm bureau corporations were in good standing in the Secretary of State's office because they had not been filing annually a list of officers and resident agents. In order to reinstate these corporations, it was necessary to prepare a statement for each corporation explaining the cause of the omission, asking for reinstatement and filing the present list of officers, directors, and resident agents.

### Reorganization of Cooperatives

During the present year it has been found desirable on the part of the Churchill County Poultrymen, Inc., the Nevada Turkey Growers' Association, the Fallon Turkey Growers' Association, and the Nevada Wool Marketing Association, to revise their organization papers. This office was asked to prepare new Articles of Incorporation and By-Laws for these organizations. This has been done for each association and the proper procedure has been carried out in this connection and the new corporation papers are now in effect.

### Herd Testing Association Organized

During the past summer a herd testing association was organized in Churehill County and this office was asked to prepare suitable organization papers for the group so that they might incorporate under the cooperative laws of Nevada. Accordingly, Articles of Incorporation and By-Laws for the purpose were prepared.

### Lincoln County Power Association

A group of prospective power users in the two valleys adjacent to Pioche were desirous of forming a small corporation for the purpose of building a power distribution system and purchasing power from the Lincoln County Power Association. Upon invitation from this group, this office prepared a complete set of organization papers for the purpose of setting up this corporation.

### Agricultural Conservation

Throughout the year considerable time was devoted to acting on the State Technical Committee for the State Agricultural Conservation program. These meetings have been held regularly each month. At these meetings the policies of the State Committee have

been carefully discussed. Recommendations for practices and benefit payments for same have been made to the Regional Committee. In some instances modifications have been made beneficial to Nevada. In most instances, however, where practices were scheduled for Nevada and were not especially applicable, it was not found possible to make changes because such practices were set up on a regional basis. For the most part, however, the practices, for which benefit payments could be received, were acceptable because of the emphasis on soil conserving acreages and operations. Nevada farming operations are very largely of a soil conserving nature. Soil conserving crops such as alfalfa usually occupy about 80% of the tillable land in the cultivated valleys.

#### 4-H Club Participation

A small amount of time has been devoted to 4-H Club work activities. This work has been confined to assistance in connection with the preparation of 4-H Club Camp grounds at Zephyr Cove, Lake Tahoe, assisting with various camp duties including giving instruction to classes and in dismantling the camp.

Some time was devoted to attending club meetings held by the Stewart Indian School at Stewart, Nevada. The Nevada Indian agencies desire to organize their 4-H Club work along the same lines as the regular 4-H Clubs so that the members may participate in the contests with the white children. These meetings were held for the purpose of discussing plans for promoting 4-H Club work among the Indians and coordinating this work with the 4-H Club work carried on by the University.

#### Farm Bureau Activities

In addition to the reorganization efforts devoted



to four of the Nevada County Farm Bureaus, regional Farm Bureau meetings have been attended and assistance rendered in the programs at Reno, Fallon, Yerington and Winnemucca. County Farm Bureau meetings have been attended in Pershing, Churchill, Lincoln, Clark, Washoe, Lyon, and White Pine counties. In addition a few farm center meetings in Churchill and Washoe counties were attended.

The National Farm Bureau Convention which was held in Pasadena, December 9-11, was attended in company with other representatives from Nevada.

#### Meetings

The Western Farm Economic Conference was held at the University of Nevada, June 24-26 inclusive. All meetings were attended. A number of interesting papers were delivered, followed by roundtable discussions. The attendance was good.

A regional dairy meeting was held at Fallon, Nevada by dairymen from Washoe, Lyon, Douglas, and Churchill Counties. Representatives of the Modesto Milk Producers' Association were also in attendance. One of the principal subjects for discussion was the value of dairying as a market for alfalfa hay. This office prepared a mimeographed circular on this subject for the occasion and a short talk was given. At this meeting a movement was launched for organizing herd testing associations in Lyon, Churchill, and Douglas counties. By the end of the year herd testing associations were organized in Churchill and Douglas Counties.

Forest Service Tour. On July 8 a trip was made to Elko, Nevada for the purpose of attending a county agents' conference and making a tour of the Humboldt National Forest, located in Elko

County. Following the county agents' conference in Elko the Forest was traversed from north to south and from east to west in company with other Extension agents and National Forest officials for the purpose of observing the results of controlled grazing of cattle and sheep on the National Forest of that district. For a number of years the cattle and sheep have been limited on this part of the National Forest and the beneficial effects, as shown by the increased vegetation, were very pronounced. This increased vegetation makes it possible for cattle and sheep to put on weight much faster than when the forage was scant as was the case with unlimited grazing.

The annual meeting of the Pacific Coast Poultry, Butter, Egg, and Cheese Association was attended in Salt Lake City, February 22 and 23. Preceding this meeting the annual meeting of the Utah Poultry Producers Cooperative Association was attended in Salt Lake City. All of these meetings were well attended and many items of especial interest to poultrymen and dairymen were discussed.

The possible effect of proposed legislation on the poultry and egg industry were important questions discussed.

#### Wool Marketing

The subject of wool marketing has been an important one during the past year, although it was not included in the 1937 program as a project. The marketing of wool in Nevada has been carried on by a number of methods. In the past cooperative methods have dominated the field for certain periods to be later replaced by private agencies. When wool is moving easy at good prices, private buying is always easy and has the advantage of being more flexible than cooperative handling of wool so that cooperative marketing of wool has varied

considerably in the volume handled.

The National Wool Marketing Corporation, operating through its member agency, the Nevada Wool Marketing Association, has been a large handler of Nevada wools, handling in excess of 3,000,000 pounds in one year, but handled less than 500,000 pounds in 1937.

The Pacific Wool Marketing Corporation also has Nevada membership, but its marketing experience has been about the same as the National Wool Marketing Corporation. The State Extension office has undertaken to promote the Nevada Wool Marketing Association with the hope that its former volume of business might be reestablished.

Close contact has been kept with the representatives of the National Wool Marketing Corporation in Boston and Salt Lake and representatives of the National have made trips into the state for the purpose of working out plans for increasing the volume of wool handled by the State Association.

It was thought advisable also to reorganize the Nevada Wool Marketing Association and this office was authorized to draw up a new set of corporation papers for adoption at the regular annual meeting of the Association. A new draft of the corporation papers was made and presented at the regular meeting and were adopted. According to latest plans the National Wool Marketing Corporation will send a field representative into the state to work in the interest of the Nevada Association and the National Association and solicit membership and wool as soon as the new season opens.

At the close of the year there was practically no activity in wool marketing in the state and very little any place else.

It is anticipated that if these conditions prevail in the spring of 1938 the National Wool Marketing Corporation will be in a favorable position in so far as getting membership and wool is concerned, if favorable advances can be made.

In October of the past year a trip was made to Boston, Massachusetts, in connection with a trip to attend the National Outlook Conference at Washington, for the purpose of visiting the offices and warehouses of the National Wool Marketing Corporation and to study its methods of operation. Three days were spent with the National Wool Marketing Corporation. All phases of grading and marketing wool were studied in as much detail as a short visit would permit.

During the year five wool outlook stories were prepared for publication in the various papers of the state. One illustrated circular letter of eleven pages was prepared and distributed to sheep men throughout the state. This circular letter dealt primarily with differences in price levels for the different grades of wool produced in Nevada. This circular with a sample news story is attached.

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS  
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Report for 1937

L. E. Cline

- I. NAME OF PROJECT      Extension Work in Agricultural Economics and Marketing.
- II. SUB-PROJECT         Marketing Agricultural Products.
- III. SUB-PROJECT  
      PHASE                Marketing Cattle and Sheep.

The marketing of feeder cattle and sheep in Nevada continues to be an important sub-project with practically all counties participating. Activities in connection with this project were started by the middle of July this year with the sheep men, and about the middle of August with the cattle men. The same procedure was carried out this year as last which was as follows: The county agents prepared a list of all cattle and sheep producers in their counties. An inventory blank was then mailed to each cattle and sheep man in which he was asked to fill in the number of feeder cattle and sheep which he would have for sale. The blank also called for other information such as the time the stock would be offered for sale, and where they could be seen. As fast as these inventories were assembled current summaries were prepared for each county by the county agent and a copy sent to the state office, where state summaries of the information were compiled. Copies of these state summaries were returned to the county agents about every ten days as the information was collected. Copies of these state summaries were also sent to a mailing list of approximately one hundred addresses of persons, firms or organizations, interested in the purchase of feeder cattle and sheep.

The movement of cattle and sheep was very satisfactory during the buying season, and it was felt that this activity was very helpful in promoting interest in Nevada feeder livestock.

During the inventory period there were listed through these efforts 43,267 sheep of all descriptions and 51,331 cattle from thirteen counties. This project was probably instrumental in serving a larger number of individual farmers than any other one project. Seven separate lists were sent out.

Five current news stories were prepared by this office and others by the various county agents during the active marketing period for feeder livestock. These news stories were intended to set forth current demand, prices of local sales, and movements of cattle out of the state, as well as marketing activities on the nearest primary markets.

The following are lists of sheep and cattle inventories showing the total participation by counties.

SUMMARY OF CATTLE OFFERED FOR SALE IN THE STATE OF NEVADA  
(Report compiled up to September 18, 1937)

COUNTY REPORTING	Weaners	Steers			Heifers		Cows		Bulls	Stockers	Total no. of head
		1 Yr.	2 Yr.	3 Yr.	1 Yr.	2 Yr.	Fat	Canners			
Clark	5		6	6			5				22
Douglas		250	50				260				560
Elko	870	1027	400	391	483	26	1002	53	850	6659	
Esmeralda		10	16		12		4			42	
Eureka	40	125	160	80			10	5	560	1005	
Humboldt	960	5500	2300	1500	850	300	750	60	750	12970	
Lander	175	75	50	75		80	125	4	600	1184	
Lincoln	14	117	70	42	10	25	31	6		455	
Lyon	298	207	19	284	17		389	26		1440	
Nye	180	171	181	44	23	25	144	8	1245	2021	
Ormsby			42		5	2	10	3		62	
Washoe	77	111	612	19	30	109	329	8		1418	
White Pine	360	825	180	50	40	141	710	31	1156	3493	
TOTAL	2979	8158	5568	2485	1470	708	3769	204	5161	31331	

ADDRESS COUNTY AGENTS: J. H. Wittwer, Las Vegas, Nev. (for Clark Co.); W. H. Stodieck, Minden, Nev. (for Douglas & Ormsby Counties); J. W. Wilson, Elko, Nev. (for Elko Co.); C. R. Townsend, Ely, Nev. (for Eureka, Esmeralda, Lander, Nye, & White Pine Counties); P. L. Maloney, Winnemucca, Nev. (for Humboldt Co.); L. A. Gardella, Pioche, Nev. (for Lincoln Co.); E. B. Recanzone, Yerington, Nev. (for Lyon County); H. E. Boerlin, Reno, Nev. (for Washoe County)

SUMMARY OF SHEEP OFFERED FOR SALE IN THE STATE OF NEVADA  
(Report compiled up to August 27, 1937)

COUNTY REPORTING	Fat Lambs	Feeder Lambs	Ewes	Bucks	Others	Total
Clark		35				35
Douglas	2300	1750	800			4850
Elko	4526	600	9300			14426
Lander		1600	2100			3700
Lincoln	500	300	930	16		1746
Nye		900				900
Ormsby	500		60			560
Washoe	2100		3050			5150
White Pine	2500	5600	3800			11900
TOTAL	12426	10785	20040	16		43267

ADDRESS COUNTY AGENTS: J. H. Wittwer, Las Vegas, Nevada (for Clark County); W. H. Stodieck, Minden, Nevada (for Douglas and Ormsby Counties); J. W. Wilson, Elko, Nevada (for Elko County); C. R. Townsend, Ely, Nevada (for Lander, Nye, and White Pine Counties); L. A. Gardella, Pioche, Nevada (for Lincoln County); H. E. Boerlin, Reno, Nevada (for Washoe County).



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Report for 1937

L. E. Cline

- I. NAME OF PROJECT      Extension Work in Agricultural Economics and Marketing.
- II. SUB-PROJECT         Marketing Agricultural Products.
- III. SUB-PROJECT  
      PHASE                 Marketing Eggs and Poultry.

The poultry and egg situation in Nevada during the past year has not been very encouraging. Egg prices have been out of line with feed prices most of the year. Poultry prices, however, have been better and some money has been made on broilers and friers. Much of the time egg prices for 1937 have been below the 1936 prices. The average price for fresh extra eggs for 1936 in San Francisco was 26.42 cents, while the 1937 average price was 23.93 cents.

Activities in connection with this project were directed along the lines of assisting in a reorganization of the Churchill County Poultrymen, Inc., conferences with the Virgin Valley Poultry Association in an effort to secure a better outlet for their output in Las Vegas, Nevada and in an attempt to organize an egg marketing association in the Pahranaagat Valley, Lincoln County.

The Churchill County Poultrymen, Inc. was organized with the writer's assistance about ten years ago for the purpose of marketing eggs and poultry and for the purchase of feed for its members. The association has been active since its first organization. With the organization of the Nevada Poultry Producers' Inc., most of

the members of the Churchill County Poultrymen, Inc. joined the former organization for the purpose of marketing eggs and poultry, and the Churchill County Poultrymen, Inc. have confined their activity to supplying feed to the members. The change in the method of operation of the organization called for a change in the organization plan, and this office was asked to rewrite the organization papers, which was done and the organization perfected, after three meetings of the organization were attended for that purpose.

The question of the association financing itself for more extensive feed operations was also discussed at some length at these meetings, but it was thought best to operate with its present finances and credit.

During the past year two visits were made to the Virgin Valley Poultrymen's Association for the purpose of assisting if possible in securing a better market outlet for that association's eggs in Las Vegas. For a number of years poultrymen and vocational students of the Virgin Valley, Southern Nevada, have operated a volunteer association by which they have assembled, graded and shipped their eggs to Las Vegas, Nevada for marketing purposes. These eggs have been sold in competition with eggs of a miscellaneous quality from Utah without the Nevada eggs getting proper recognition for quality, or any advantage in price over the Utah eggs. It has been hoped all the time that the Southern Nevada Meat and Provision Company would be able to act as agent for this group of poultrymen, render a better marketing service and stimulate production in this territory. So far nothing has been accomplished in this direction, due partly to the slow progress made by the Southern Nevada Meat and Provision Company in this direction.

This group of producers was urged to formally adopt corporation papers and incorporate as a step toward more responsible organization. Efforts in this connection will be continued throughout another year.

Upon application from the vocational agricultural teacher at Alamo, Lincoln County, a set of organization papers for a small poultry co-op was prepared for a group of poultrymen in Pahrnagat Valley. Up to the end of the year no definite action had been reported from this territory.

In February of the past year, meetings of the Pacific Coast Butter, Egg, Cheese, and Poultry Association were attended at Salt Lake City and also the annual meeting of the Utah Poultry Cooperative Association. Meetings of the Virgin Valley Association and the Nevada Poultry Producers, Inc., of Reno, Nevada were also attended.

Seven news stories dealing primarily with poultry and egg outlook have been prepared and published during the year.

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Report for 1937

L. E. Cline

- I. NAME OF PROJECT      Extension Work in Agricultural Economics and Marketing.
- II. SUB-PROJECT          Marketing Agricultural Products.
- III. SUB-PROJECT  
    PHASE                  Cooperation with the Nevada Livestock Production Credit Association, Resettlement Administration and Bank for Cooperatives.

Close contact has been maintained with the community and cooperative division of the Resettlement Administration and the Nevada Livestock Production Credit Association during the past year. These two credit organizations are becoming very important as sources of agricultural credit for Nevada farmers.

The principal contact with the Resettlement Administration was in connection with the financing by that institution of the Southern Nevada Meat and Provision Company, a cooperative fostered by the Nevada Extension Service.

The second important contact was in connection with a proposed farmers' cooperative that would in addition to other activities slaughter meat animals and process the meat for Eastern Nevada farmers. A set of organization papers were prepared and considerable work done for this proposed organization, but because of apparent lack of suitable livestock and other products, the project has been dropped for the time being.

During the year conferences were held in Reno, Ely, Las Vegas, Nevada and San Francisco, California with the Resettlement

Administration on matters pertaining to the above organizations.

Some time and effort has been devoted to the Nevada Livestock Production Credit Association during the year. That office has been kept informed through this office of feeder livestock offerings and prices asked, so that its clients might be informed of opportunities to buy and sell cattle and sheep.

The annual meeting of the Nevada Livestock Production Credit Association was attended and several other contacts were made during the year to give information regarding prospective loans and regarding price outlook for turkeys and livestock.

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Report for 1937

L. E. Cline

- I. NAME OF PROJECT      Extension Work in Agricultural Economics and Marketing.
- II. SUB-PROJECT         Marketing Agricultural Products.
- III. SUB-PROJECT  
      PHASE                 Marketing Turkeys.

Turkey production in Western Nevada continues to be an important industry with approximately 550 farmers engaged in the industry. The cooperative marketing of turkeys has been an important activity of the Extension Service since 1926. Each year greater refinements are made along this line and cooperative methods in marketing turkeys are becoming more thoroughly established as a regular procedure.

The county extension services in Churchill, Lyon, Pershing, Clark and Washoe Counties include cooperative marketing of turkeys each year in their regular programs and this becomes an important activity from November 1st until March 1st. This office has from the start of cooperative turkey marketing operations acted in an advisory capacity to coordinate the work of the various local associations in assembling, grading, packing and shipping their turkeys through the Northwestern Turkey Growers' Association, in which they are represented through their membership in the Nevada Turkey Growers' Association.

The marketing operations for the 1937 season beginning November, 1937 were approximately 34% less than for the same period beginning November, 1936, because of the smaller crop throughout

the state. The quality of the turkeys marketed this year was practically the same as for last year. The percent of the shipments grading prime amounted to 82.5% as compared with 83% last year. The total shipments this year amounted to 260,000 pounds net as compared with 408,000 pounds last year.

Average prices received on the Pacific Coast markets this year amounted to approximately 5 cents per pound above prices received last year. The following are the approximate prices received for the two past years.

1936	November	23¢	December	19.6¢	January	20.1¢
1937	"	27¢	"	24.6¢	"	25.5¢

These slightly better prices that prevailed this year as compared with last year are attributed to a smaller national turkey crop and slightly higher prices for competitive meat products. The net returns to the producers for the 1937 turkey crop are reported to be considerably better than net returns for last year.

During the past year activities in connection with cooperative turkey marketing included two trips as a delegate to the annual and semi-annual meetings of the directors of the Northwestern Turkey Growers' Association at Salt Lake City, and attendance at meetings of County Associations at Lyon, Churchill, Pershing and Clark Counties.

During the year the Nevada Turkey Growers' Association and the Fallon Turkey Growers' Association were reorganized and new corporation papers were prepared for them, which they adopted.

One of the important developments in the turkey marketing project during the past year has been the increased marketing

activities for the city of Reno. This city in the past has been of very minor importance as an outlet for Nevada turkeys, but during the active marketing season this past year, the local demand was stimulated and a market was furnished for approximately four carloads of turkeys from the Nevada pools. The prices for these turkeys were based on the San Francisco market quotations and some savings in transportation and marketing costs were made.

#### Quick Freezing Studies

During the month of June a study was undertaken to determine the feasibility of using dry ice (solid C O 2) for the purpose of quick freezing fresh drawn turkeys. For this purpose a trip was made to the laboratories of Solid Gas Corporation in San Francisco where a supply of dry ice and various refrigerator equipment was available. After some preliminary tests were made and the possibilities figured out from technical information available, it was determined that the cost of freezing turkey meat by means of dry ice would be considerably in excess of costs for the same service by regular refrigerating companies or regular equipment, if operations were on a commercial scale.

After a second trip to San Francisco to further verify these findings, the studies were discontinued with the recommendation that quick freezing of drawn turkeys with dry ice was not practicable.

#### Marketing Broiler Turkey Studies

During the month of August the past year studies were undertaken in a small way to determine the practicability of marketing broiler turkeys. Accordingly an experiment was planned at Fallon in cooperation with the Churchill County Agent. This experiment included



fourteen broiler turkeys, seven hens and seven toms of very uniform sizes. The seven toms weighed  $34\frac{1}{2}$  pounds on August 16th and the seven hens weighed 29.7 pounds. These turkeys were put on a fattening ration, containing approximately 20% protein for a period of ten days in order to give them extra finish. During this period the seven toms gained 5.9 pounds and the seven hens gained 4.9 pounds or a total of 10.8 pounds. The total dry weight of feed eaten, including 8.3 pounds of alfalfa leaves, was 44.8 pounds or 4.09 pounds of total feed to make one pound of gain. These turkeys at the end of the experiment weighed a total of seventy-five pounds at ninety-one days of age. The turkeys were shipped to the Reno market and were slack-scalded when dressed. Further observations were made on the loss in weight in fasting and dressing. The loss in shrinkage during shipping, fasting, market dressing, and cooling amounted to 19.3% of the original live weight.

Further studies were made on the basis of one of the broiler turkeys and it was determined that in the case of this tom turkey broiler, weighing 4 pounds and 15 ounces market dressed, a further loss of one pound was sustained in preparing the bird for table use, or a further shrinkage of 20.5%. On further studies it was found that this table dressed bird weighing 3.87 pounds contained a skeleton weighing .75 pounds leaving a weight of edible meat equal to 3.12 pounds. The percent of edible meat to the table dressed broiler was in this case 80.6%. The percent of edible meat to the market dressed broiler was 64%. The percent of skeleton to table dressed broiler was 19.4%.

The conclusions from these studies were that broiler turkeys should weigh between seven and eight pounds live weight in order not to compete with heavy roasting chickens and to reduce the

overhead cost per pound of broiler. Indications are that the market will pay as much for a seven or eight pound turkey as for a smaller turkey, or as much as for roasting chickens. These broiler turkeys sold for the same as the highest priced roasting chickens. The advantage in producing turkey meat is that turkeys will produce edible meat at a rate twice as fast as chickens and at half the feed consumption per pound for young stock. The disadvantage in producing turkey broilers is in the high cost per poult and the overhead cost represented in death loss, labor and the high cost of shrinkage.

It would seem from these figures that during periods of high prices for broilers and roasting chickens that young turkeys weighing eight pounds may be produced and marketed advantageously. While no market has as yet been developed for this product, it is generally felt that an active demand can be created.

During the year sixteen news stories, including turkey outlook material were prepared on the general subject of turkey production and marketing, a sample of which is herewith attached.

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Report for 1937

L. E. Cline

- I. NAME OF PROJECT      Extension Work in Agricultural Economics and Marketing.
- II. SUB-PROJECT          Marketing Agricultural Products.
- III. SUB-PROJECT  
      PHASE                  Nevada Agricultural Outlook Reports.

Beginning with 1937 the agricultural outlook work of the Nevada Extension Service was delegated entirely to the Economist in charge of this office. Since no representative from Nevada attended the 1937 outlook conference in Washington, the entire dependence for outlook material was placed on reports sent from the Washington office early in January, 1937 and during the succeeding months.

The outlook for the various agricultural commodities of importance to Nevada was taken up in the order of their timeliness for study. All available material was assembled from state sources and the Salt Lake statistician's office for supplementing the material sent out from Washington. After a thorough study of the material at hand for each commodity, news stories, circular letters and talks were prepared on the various crop and livestock subjects. Beef cattle, sheep, wool, poultry and eggs, dairy products, turkeys, potatoes, hay, and feed grains were the items covered. Sixteen special outlook news stories were prepared for the state press. One 11-page wool circular was prepared for distribution to the entire sheep mailing list of the state. One 8-page dairy circular was prepared and distributed through the county agents' offices. "Economic Talks" a four page publication issued jointly

by the Extension Service and the State Experiment Station for releasing outlook and agricultural information was discontinued after the December issue because of lack of funds.

Agricultural outlook talks were prepared for nine different farm group meetings. Some of these talks covered all the principal commodities for the locality, and three covered only the subject of turkeys. One radio talk was prepared and delivered for broadcasting to the KGO broadcasting station at San Francisco.

The 1938 agricultural outlook conference in Washington was attended the last week in October, 1937. This meeting was well attended by state representatives and the discussions by representatives interested in special commodities were very helpful in enabling those not especially interested in such commodities to understand their problems.

No special outlook bulletin was published for 1937, as it was thought best to present the material through special commodity circulars, news stories and talks at farmers' meetings, and present the material when it seemed to be most timely throughout the year.

STATISTICAL SUMMARY OF ACTIVITIES

Report for 1937

L. E. Cline

During the year 1937, forty-eight visits were made to county agents in pursuance of extension projects, involving both the county extension offices and the state extension office. During this time 119½ days were spent in the field and 195 days in the office. The total mileage traveled on official business was 17,718 miles. Approximately 4,000 miles of this was by train and the rest by automobile.

The following is a partial numerical statement of extension activities.

Number of method demonstrations given	8	Attendance	21
Meetings at result demonstrations	5	Attendance	24
Other meetings attended	55	Attendance	1708
Number of individual letters written	415		
Circular letters written	14		
News stories written and published	50		
Conferences with Extension Agents by phone	59		
Days devoted to project planning	30		
Days devoted to cooperating agencies	79½		
Days devoted to subject matter material	12		
Days devoted to preparation of material for county agents	35		
Days devoted to training leaders	14		
Days devoted to determining accomplishments	11		
Days devoted to 4-H Club work	8		
Days devoted to research studies in extension methods and subject matter	30		
Days devoted to reports and miscellaneous	15		

EXHIBITS

Specimen copies of news stories and mimeographh  
circulars issued during the year on the principal subject matter covered.

News Stories:

Stock Marketing Service in Nevada is Under Way.

Nevada Egg Outlook is Better For Fall.

Meat Poultry Outlook is Brighter for Nevada.

Turkey Feeding Practice Discussed by U. N. Man

Nevada Turkey Outlook Improved, Cline Says.

Nevada Potato Crop May be Fifth Bigger.

Nevada Dairy Products Outlook is Favorable.

Nevada Dairy Outlook Continues Favorable.

Wool Hits Price Low of Year Each Summer.

Mimeograph Circulars:

Nevada Dairy Outlook.

Marketing Nevada Wool.

Turkey Production Studies.

STOCK MARKETING SERVICE  
IN NEVADA IS UNDER WAY

FIRST LISTINGS BY NEVADA STOCKMEN OF THE FEEDER CATTLE AND RANGE SHEEP THEY WILL HAVE FOR SALE THIS SEASON ARE NOW BEING MADE AS PART OF THE ANNUAL LIVESTOCK MARKETING INVENTORY BY THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE.

BLANKS SHOWING THE LISTINGS ARE BEING FORWARDED BY THE CATTLE AND SHEEP MEN TO THE AGRICULTURAL EXTENSION OFFICES IN THE VARIOUS COUNTIES, AND FROM THEM COUNTY AND STATE INVENTORIES ARE MADE UP.

"AFTER FOUR YEARS OF OPERATION, THIS CO-OPERATIVE EFFORT IS PROVING HIGHLY EFFICIENT AS A MEANS OF WIDENING THE MARKET FOR NEVADA LIVESTOCK AND IS FACILITATING THE CONTACTS BETWEEN THE PRODUCER AND THE PROSPECTIVE BUYER WITHOUT COST TO EITHER," SAYS L. E. CLINE, WHO IS IN CHARGE OF THE WORK.

WITH 65 PERCENT OF THE STATE'S AGRICULTURAL INCOME DERIVED FROM BEEF CATTLE AND SHEEP PRODUCTION, ADVANTAGEOUS MARKETING IS VERY IMPORTANT, HE STATES.

"THE ASSEMBLYING OF THIS FEEDER LIVESTOCK FROM A THOUSAND HILLS TAKES PLACE EARLY IN THE FALL," CLINE EXPLAINS, "BECAUSE WINTER SETS IN SOON AT THESE HIGH ELEVATIONS.

"PLANS MUST BE MADE FOR MARKETING THIS LIVESTOCK AS SOON AS IT COMES FROM THE RANGE, SINCE WINTER FEED IS SUPPLIED ONLY FOR THE  
(MORE)

BREEDER STOCK.

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FROM-UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE, RENO, NEV.  
COOPERATIVE AGRICULTURAL EXTENSION WORK, ACTS OF MAY & JUNE, EDITOR  
CECIL W. CREEL, DIRECTOR, . . . . . A. L. HIGGINBOTHAM, EDITOR

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"THE ASSEMBLYING AND MARKETING SEASON IS A BUSY ONE. PROSPECTIVE BUYERS MUST BE CONTACTED, MARKETING INFORMATION STUDIED, AND EFFORTS MADE FOR ADVANTAGEOUS SALES; AND THIS MUST ALL BE DONE IN A SHORT TIME WHEN FEEDER LIVESTOCK IS IN DEMAND AND BEFORE THE SNOW FLIES."

IT IS HERE, ACCORDING TO CLINE, THAT THE LIVESTOCK INVENTORY SERVES ITS PURPOSE.

WORKING TOGETHER IN THE CO-OPERATIVE EFFORT, HE SAYS, IN ADDITION TO THE AGRICULTURAL EXTENSION SERVICE, ARE THE LIVESTOCK DEPARTMENT OF THE NEVADA STATE FARM BUREAU, AND THE CO-OPERATIVE LIVESTOCK MARKETING ASSOCIATIONS OF SAN FRANCISCO AND SALT LAKE CITY.

FIRST STEP IN THE WORKINGS OF THE MARKETING SERVICE IS THE LISTING BY MAIL BY THE OWNER OF ALL FEEDER LIVESTOCK TO BE OFFERED FOR SALE BY HIM. THIS IS DONE WITH THE AGRICULTURAL EXTENSION AGENT COVERING THE COUNTY IN WHICH THE RANCHER LIVES ON BLANKS PREPARED FOR THAT PURPOSE.

THIS INVENTORY, GIVING OWNERSHIP, KIND AND CLASS OF STOCK, LOCATION, TIME READY FOR SALE, AND OTHER INFORMATION, IS KEPT IN THE EXTENSION AGENT'S OFFICE FOR THE INFORMATION OF PROSPECTIVE BUYERS WHO ARE ATTRACTED TO THAT PARTICULAR LOCALITY.

FROM THESE COUNTY INVENTORIES, STATE SUMMARIES BY COUNTIES ARE MADE UP IN THE STATE EXTENSION OFFICE AT THE UNIVERSITY OF NEVADA AND MAILED TO A LARGE LIST OF PREVIOUS PURCHASERS, NEW INQUIRERS, AND TO OTHER PERSONS OR CORPORATIONS INTERESTED DIRECTLY OR INDIRECTLY IN FEEDER LIVESTOCK OPERATIONS.

BY CONSULTING THE STATE SUMMARIES, INTERESTED PERSONS CAN LOCATE AVAILABLE CATTLE IN THE VARIOUS COUNTIES. THEN THEY MAY GO TO THE EXTENSION AGENT IN ANY PARTICULAR TERRITORY AND OBTAIN MORE DETAILED INFORMATION, SUCH AS OWNERSHIP, EXACT LOCATIONS, AND SO FORTH.



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A G R I C U L T U R A L   N E W S   S E R V I C E

RELEASE UPON RECEIPT - 1937-#90-7-23-B&AB-400-EXCLUSIVE IN YOUR CITY

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NEVADA EGG OUTLOOK  
IS BETTER FOR FALL

AN IMPROVED OUTLOOK FOR NEVADA EGG PRODUCERS TOWARD THE END OF THE YEAR WAS SEEN THIS WEEK BY L. E. CLINE OF THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE.

AFTER NOVEMBER 1, HE SAYS, IT IS LIKELY THAT THE RATIO OF FEED COSTS TO EGG PRICES WILL BE MORE FAVORABLE TO THE NEVADA POULTRYMAN THAN SO FAR THIS YEAR.

TWO IMPORTANT FACTORS, ACCORDING TO CLINE, CONTRIBUTE TO THE IMPROVED OUTLOOK.

"A 15 PERCENT REPORTED INCREASE IN TOTAL ACREAGE OF GRAIN CROPS FOR THE COUNTRY THIS YEAR OVER LAST AND AN ANTICIPATED 56 PERCENT GAIN IN TONNAGE IS DEPENDED UPON GREATLY TO RELIEVE THE HIGH PRICES OF POULTRY FEEDS," HE STATES.

ALREADY SEVEN IMPORTANT POULTRY FEEDS ON THE SAN FRANCISCO MARKETS HAVE DROPPED IN AVERAGE PRICE 12 PERCENT SINCE MAY 1.

SECOND IMPORTANT FACTOR EXPECTED BY CLINE TO REMEDY THE UNFAVORABLE EGG PRICE SITUATION FOR THE REMAINDER OF THIS YEAR AND THE FIRST HALF OF 1938 IS THE GREAT REDUCTION IN THE 1937 PULLET CROP OVER THAT OF LAST YEAR.

"THE LOW EGG-FEED RATIO WHICH PREVAILED DURING THE SPRING MONTHS," CLINE SAYS, "GREATLY DISCOURAGED THE STOCKING OF COMMERCIAL  
(MORE)

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FROM-UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE, RENO, NEV.  
COOPERATIVE AGRICULTURAL EXTENSION WORK, ACTS OF MAY & JUNE 1914  
CECIL W. CREEL, DIRECTOR . . . . . A. L. HIGGINBOTHAM, EDITOR.

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POULTRY FARMS WITH NEW CHICKS, WITH THE RESULT THAT YOUNG CHICKENS ON FARMS JULY 1 ARE REPORTED AS BEING 19 PERCENT UNDER THE SAME DATE A YEAR AGO AND THE FEWEST FOR THAT TIME IN 13 YEARS.

"HEAVY CULLING OF HENS HAS ALSO RESULTED FROM HIGH FEED COSTS AND LOW EGG PRICES, SO THAT A HIGHER PERCENT THAN USUAL OF THE 1935 CROP OF PULLETS HAS BEEN ELIMINATED BY CULLING."

ONE OF THE SERIOUS HANDICAPS, ACCORDING TO CLINE, RESPONSIBLE FOR THE LOW EGG-FEED RATIO HAS BEEN THE VERY LARGE STORAGE HOLDINGS OF CASE EGGS AND FORZEN EGGS. AT PRESENT, IT IS 28 PERCENT HIGHER THAN AT THIS TIME IN 1936.

NOTWITHSTANDING THIS EXCESS IN STORAGE, THE AVERAGE PRICE FOR THE YEAR IS 1.6 CENTS A DOZEN MORE THAN FOR THE SAME TIME A YEAR AGO.

"THESE STORAGE HOLDINGS," THE EXTENSION MAN SAYS, "ARE EXPECTED TO DECREASE RAPIDLY AND HAVE LESS INFLUENCE ON THE MARKET AS THE SEASON ADVANCES."

MEAT POULTRY OUTLOOK  
IS BRIGHTER FOR NEVADA

AFTER SEVERAL MONTHS OF UNFAVORABLE NEWS, THE OUTLOOK FOR NEVADA MEAT POULTRY PRODUCERS IS BRIGHTENING, L. E. CLINE OF THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE, SAID THIS WEEK IN AN ANALYSIS OF THE MARKET.

POINTED OUT BY HIM AS INDICATING BETTER TIMES FOR THE STATE'S POULTRYMEN ARE :

1. A CHICK OUTPUT FOR 1937 BY COMMERCIAL HATCHERIES 16.9 BELOW THAT OF 1936.
2. CURRENT RECEIPTS OF MEAT POULTRY SMALLER THAN THAT OF LAST YEAR.
3. PROSPECTIVE FEED PRICES LOWER THAN AT THIS TIME LAST YEAR.
4. STORAGE STOCKS OF MEAT POULTRY ABOVE LAST YEAR'S FIGURES BUT PRICES ADVANCING AND STORAGE RAPIDLY DECREASING.
5. BOTH LOWERING FEED COSTS AND INCREASING SALES PRICES FOR MEAT CHICKENS.

THE PRESENT CONTRADICTIONARY SITUATION OF GREATER POULTRY SUPPLIES AT THIS TIME OVER THE SAME TIME LAST YEAR, ACCOMPANIED BY INCREASING PRICES FOR MEAT POULTRY IS ATTRIBUTED BY CLINE TO THE HIGH CURRENT CONSUMPTION OF MEAT POULTRY THROUGHOUT THE COUNTRY, LOWER MARKETINGS AT THIS TIME, AND FURTHER PROSPECTIVE REDUCTION IN MARKETINGS OF MEAT POULTRY FOR THE REST OF THE YEAR. (MORE)

"MEAT POULTRY PRICES, ACCORDING TO WHOLESALE QUOTATIONS IN SAN FRANCISCO, AT THE END OF AUGUST WERE ALL THE WAY FROM 2 CENTS TO 4 CENTS HIGHER ON HENS AND ABOUT 10 CENTS HIGHER ON BROILERS AND OTHER YOUNG CHICKENS THAN AT THIS TIME LAST YEAR," CLINE STATED. "THE VERY SHORT CROP OF YOUNG CHICKENS ON FARMS JULY 1, AND SHORT CURRENT MARKETINGS NO DOUBT ACCOUNTS FOR MUCH OF THE INCREASE IN PRICES."

THE LATEST COMMERCIAL HATCHERY REPORT SHOW, HE SAYS, THAT THERE WERE 16.9 PERCENT FEWER CHICKENS SOLD THIS YEAR THAN LAST YEAR AND THE JULY 1 REPORT OF CHICKENS ON FARMS SHOWED THAT THERE WERE 19 PERCENT FEWER YOUNG CHICKENS ON FARMS THAN FOR JULY 1 THE PREVIOUS YEAR AND THE SMALLEST NUMBER FOR A 13-YEAR PERIOD AT THAT TIME.

THESE REDUCED POULTRY NUMBERS, TOGETHER WITH INCREASED CONSUMPTION, HE SAID, ACCOUNT FOR THE CHANGE FROM THE VERY POOR POULTRY SITUATION WHICH HAS PREVAILED UNTIL RECENTLY.

"ON AUGUST 1 OF THIS YEAR, COLD STORAGE HOLDINGS SHOWED 35 PERCENT MORE CHICKENS ON HAND THAN AT THIS TIME LAST YEAR, BUT THESE STORAGE HOLDINGS SHOWED A VERY MATERIAL DECREASE FROM THE FIGURES REPORTED EARLIER IN THE YEAR," CLINE STATED.

"HEAVY CULLING OF HENS WHICH HAS TAKEN PLACE THROUGHOUT THE PRESENT YEAR, DUE TO HIGH FEED COSTS, AND LOW EGG PRICES ARE RESULTING IN A FEWER THAN USUAL NUMBER OF HENS ON FARMS. WITH INCREASED EGG PRICES AND LOWER FEED COSTS, THE HEN MARKET MAY BE EXPECTED TO STRENGTHEN ALONG WITH THE BROILER AND FRYER MARKET.

"POULTRYMEN MAY EXPECT TO EXPERIENCE A FURTHER RELIEF  
(MORE)

FROM HIGH FEED PRICES AS SOON AS NEW FEED CROPS, INCLUDING CORN, ARE MORE GENERALLY PLACED ON THE MARKET. FUTURE PRICES QUOTED INDICATE A SUBSTANTIAL REDUCTION IN POULTRY FEEDS, ALTHOUGH THE PACIFIC COAST PRICES ARE NOT AFFECTED GREATLY UP TO THIS TIME.

"IN COMPARING LAST YEAR'S SAN FRANCISCO WHOLESALE PRICES WITH THIS YEAR, WE FIND THAT BARLEY, CORN, WHEAT BY-PRODUCT AND PROTEIN CONCENTRATES ARE NOW LOWER THAN LAST YEAR, WITH A GOOD PROSPECT OF FURTHER DECLINES, WHILE DURING LAST YEAR ADVANCES WERE EXPERIENCED THROUGHOUT THE FALL AND WINTER AND UNTIL THE 1937 GRAIN CROP WAS ISSUED."

AGRICULTURAL NEWS SERVICE

RELEASE UPON RECEIPT - 1937-#114-9-25-A&AB-500-EXCLUSIVE IN YOUR CITY

TURKEY FEEDING PRACTICE  
DISCUSSED BY U. N. MAN

WITH THIS A CRITICAL TIME IN THE DEVELOPMENT OF A TURKEY FOR MARKET, L. E. CLINE OF THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE THIS WEEK POINTED OUT SOME OF THE THINGS WHICH OUGHT TO BE DONE OR AVOIDED IF A MARKETABLE BIRD IS TO RESULT.

FAST GROWTH IS BEING MADE BY TURKEYS NOW, AND A LIBERAL FEED ALLOWANCE OF THE RIGHT KIND IS NECESSARY TO BRING ABOUT PROPER DEVELOPMENT BY MARKETING TIME, HE SAID.

LETTING TURKEYS FORAGE FOR A FEW WEEKS IN ORDER TO HARVEST FEED IN THE FIELDS THAT OTHERWISE WOULD BE WASTED IS A GOOD IDEA, CLINE STATED, BUT THIS FEED CAN BE UTILIZED ONLY TO A LIMITED EXTENT AND SHOULD BE SUPPLEMENTED WITH LIBERAL AMOUNTS OF CONCENTRATED FEED IN ORDER NOT TO RETARD DEVELOPMENT.

"ROUGH FEED," HE STATED, "IS INVARIABLY LOW IN PROTEIN, AND THIS LACK SLOWS DOWN THE DEVELOPMENT AND MATURITY OF THE FLOCK SO THAT, IF AMPLE CONCENTRATES WITH A PROPER PROTEIN CONTENT ARE NOT PROVIDED, THE TURKEY FLOCK IS ALMOST SURE TO BE SLOWED DOWN SERIOUSLY IN ITS DEVELOPMENT, IN WHICH EVENT THERE MAY BE AN ACTUAL <sup>MONEY</sup> LOSS IN HARVESTING FORAGE WITH TURKEYS."

THE FEED REQUIREMENT OF A TURKEY FLOCK, CLINE POINTED OUT, INCREASES VERY RAPIDLY.

"TURKEYS 18 WEEKS OF AGE," HE SAID, "SHOULD HAVE AT LEAST 3.6 POUNDS OF PREPARED FEED PER BIRD EACH WEEK. THIS INCREASES TO 4 POUNDS PER BIRD PER WEEK BY THE TIME THE BIRDS ARE 20 WEEKS OLD, (MORE)

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COOPERATIVE AGRICULTURAL EXTENSION WORK, ACTS OF MAY & JUNE, 1914  
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AND BY THE TIME THEY ARE 24 WEEKS OLD, THE REQUIREMENT HAS INCREASED TO AT LEAST 4.8 POUNDS PER WEEK. UNLESS THE TURKEYS ARE GIVEN FEED WITHOUT LIMIT, THESE INCREASING FEED REQUIREMENTS MAY NOT BE APPRECIATED.

"IF AMPLE GREEN FEED OR CURED ALFALFA HAY IS READILY AVAILABLE AND CLOSE BY, THE TURKEY FLOCK WILL CONSUME APPROXIMATELY 25 PERCENT OF THE TOTAL RATION FROM THE GREEN FEED AND ALFALFA. THIS ALFALFA HELPS TO PROVIDE ITS NECESSARY PROTEIN AND MINERALS, BESIDES BEING A VERY CHEAP SOURCE OF FEED FOR NEVADA TURKEY GROWERS."

IT IS A NOT UNCOMMON PRACTICE AT THIS TIME OF YEAR FOR NEVADA TURKEY GROWERS TO ALLOW THEIR BIRDS FREE RANGE ON ALFALFA AND PROVIDE WHOLE BARLEY OR WHEAT OR BOTH IN TROUGHS WITHOUT LIMIT, ACCORDING TO CLINE, FEELING THAT THIS SHOULD SUFFICE FOR AN AMPLE BALANCED RATION WHEN THE TURKEYS ARE  $4\frac{1}{2}$  TO  $5\frac{1}{2}$  MONTHS OF AGE.

"THIS KIND OF A RATION IS NOT SUFFICIENT FOR RAPID OR NORMAL DEVELOPMENT," HE STATED, "SINCE IT IS TOO LOW IN PROTEIN. THIS RATION WILL PROVIDE ABOUT 12 PERCENT PROTEIN, WHILE REQUIREMENTS ARE FOR ABOUT A 16 PERCENT PROTEIN RATION, IF THE TURKEYS ARE TO MATURE AND FEATHER PROPERLY.

"THE ABOVE RATION CAN BE REMEDIED PROPERLY BY SUBSTITUTING ONE-THIRD OF THE GRAIN SUPPLY WITH A 20 PERCENT LAYING OR GROWING MASH, OR IF AMPLE SKIM MILK IS AVAILABLE, ONE GALLON OF SKIM MILK WILL TAKE THE PLACE OF ONE POUND OF 20 PERCENT PROTEIN MASH. EQUALLY GOOD RESULTS CAN BE SECURED BY A COMBINATION OF 7 PARTS OF GRAIN AND 1 PART OF SOY BEAN OIL, OR 9 PARTS OF GRAIN AND 1 PART OF FISH MEAL, TOGETHER WITH THE ALFALFA.

"WHILE THESE PROTEIN SUPPLEMENTS WILL ADD TO THE COST OF THE RATION, THEY ARE NECESSARY TO INSURE AGAINST UNDERGRADE BIRDS AT MARKETING TIME AND THE EXTRA COST WILL BE OFFSET MANY TIMES BY THE INCREASED RETURNS FROM PRIME TURKEYS AS COMPARED WITH CHOICE OR COMMERCIAL GRADES."

AGRICULTURAL NEWS SERVICE

RELEASE UPON RECEIPT - 1937-#113-9-23-B&AB-450-EXCLUSIVE IN YOUR CITY

NEVADA TURKEY OUTLOOK  
IMPROVED, CLINE SAYS

A SMALLER CROP THIS SEASON, COUPLED WITH A STRONGER DEMAND BY CONSUMERS, HAS IMPROVED THE OUTLOOK FOR NEVADA TURKEY GROWERS.

IN NEVADA ITSELF, THIS YEAR'S CROP OF THE HOLIDAY BIRDS IS ESTIMATED AT FROM 25 PERCENT TO 35 PERCENT UNDER THAT OF A YEAR AGO, ACCORDING TO L. E. CLINE OF THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE.

DISAPPOINTING RESULTS OF LAST YEAR'S OPERATIONS, CAUSED IN PART BY THE INTERRUPTION OF SHIPPING, WAS THE MAIN FACTOR IN THE DECISION OF NEVADA FARMERS TO REDUCE THEIR TURKEY NUMBERS THIS YEAR, CLINE SAID THIS WEEK.

PROSPECTIVE HIGH FEED COSTS FOR THIS YEAR AND EXCESSIVE STORAGE AT THE BEGINNING OF 1937, HE STATED, ALSO WERE IMPORTANT IN FARMER'S DECISION TO REDUCE TURKEY NUMBERS.

IN THE UNITED STATES AS A WHOLE, THE SAME REASONING WAS OPERATIVE, WITH THE RESULT THAT THE CROP FOR THIS YEAR FOR THE ENTIRE NATION IS FORECAST BY THE U. S. DEPARTMENT OF AGRICULTURE AT 10 PERCENT UNDER THE 1936 CROP.

BECAUSE OF THIS SITUATION, NOT ONLY AT HOME BUT IN THE WHOLE COUNTRY, PRICES MORE FAVORABLE TO THE NEVADA TURKEY PRODUCER ARE EXPECTED BY CLINE.

OTHER FACTORS HAVE IMPROVED THE OUTLOOK AS WELL, HE STATED.

AMONG THESE, INCREASED CONSUMER DEMAND IS REGARDED (MORE)



AS ONE OF THE MOST IMPORTANT. ANOTHER IS THE REDUCTION IN THE TURKEYS IN COLD STORAGE BY MUCH HEAVIER CONSUMPTION IN AUGUST THAN IS USUAL. DECREASED SUPPLIES OF COMPETING MEAT PRODUCTS, AND THEIR COMPARATIVELY HIGH PRICES, HAVE REACTED FAVORABLY FOR THE TURKEY PRODUCER. ESPECIALLY IS THIS TRUE, CLINE SAID, OF MEAT CHICKENS,

INDICATIONS ARE THAT THE NEVADA TURKEY CROP WILL BE MORE LARGELY MARKETED FOR THANKSGIVING AND CHRISTMAS THAN WAS THE CASE LAST YEAR, IN THE OPINION OF THE EXTENSION WORKER. THIS ALSO APPLIES QUITE GENERALLY TO THE UNITED STATES AS A WHOLE.

PRODUCERS WHO HAVE TURKEYS THAT CAN BE HELD WITHOUT DANGER OF OVER DEVELOPMENT UNTIL AFTER THE FIRST HOLIDAY MARKETINGS, CLINE BELIEVES, MAY BE ABLE TO MARKET TO A BETTER ADVANTAGE THAN IF THEY ARE SOLD EARLY BECAUSE OF THE ANTICIPATED HEAVY MARKETINGS DURING THE THANKSGIVING AND CHRISTMAS PERIODS

"AT ANY RATE," HE SAID, "IT WOULD BE A POOR POLICY TO MARKET UNDEVELOPED BIRDS FOR THANKSGIVING, ACCORDING TO THE PRESENT INDICATIONS. THERE HAVE BEEN A NUMBER OF PREVIOUS MARKETING OCCASIONS WHEN THE TURKEY MARKET ADVANCED AFTER THE FIRST HOLIDAY RUSH OF MARKETING. IT IS MUCH MORE ADVANTAGEOUS TO MARKET TURKEYS DESTINED FOR COLD STORAGE AFTER THE HOLIDAY SEASON IN ORDER TO HOLD DOWN STORAGE COSTS ON SUCH TURKEYS."

NEVADA POTATO CROP  
MAY BE FIFTH BIGGER

A NEVADA POTATO CROP ONE FIFTH GREATER IN TONNAGE THAN THAT OF LAST YEAR IS IN PROSPECT FOR THIS FALL, ACCORDING TO THE ESTIMATES OF THE U. S. BUREAU OF AGRICULTURAL ECONOMICS.

WITH AN INCREASE BOTH IN YIELD AND IN ACREAGE, THE EXACT TONNAGE GAIN FOR THIS YEAR, WEATHER AND OTHER CLIMATIC CONDITIONS REMAINING NORMAL UNTIL HARVEST, IS FORECAST BY THE BUREAU'S CROPS DIVISION AT 21 PERCENT.

NEVADA USUALLY IS COMPARATIVELY UNIMPORTANT AS A POTATO GROWING STATE, BUT THIS YEAR, IN THE OPINION OF L. E. CLINE OF THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE, IT IS CONTRIBUTING ITS SHARE TO A NATIONAL CROP MUCH LARGER THAN NORMAL.

ON AUGUST 1, THE OUTLOOK FOR THE U. S. POTATO CROP WAS FOR A 5.4 PERCENT INCREASE IN ACREAGE AND A GAIN IN TONNAGE OF 22.4 PERCENT OVER THE 1936 CROP.

"THE MARKED GAIN IN TONNAGE HAS BEEN BROUGHT ABOUT LARGELY BY THE VERY HEAVY YIELD," CLINE STATES, " WHICH IS ESTIMATED THIS YEAR AT 124.9 BUSHELS PER ACRE AS COMPARED WITH 107 LAST YEAR AND A TEN-YEAR AVERAGE OF 112.7.

"PRACTICALLY NO CHANGE IN THE CONDITION OF THE CROP FOR THE COUNTRY AS A WHOLE HAS TAKEN PLACE DURING AUGUST, AND UNLESS UNSEASONABLE FREEZES OCCUR BEFORE THE LATE CROP IS HARVESTED, A TOTAL YIELD FOR THE COUNTRY OF ABOUT 402,537 BUSHELS IS ANTICIPATED. (MORE)

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FROM-UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE, RENO, NEV.  
COOPERATIVE AGRICULTURAL EXTENSION WORK                      ACTS OF MAY & JUNE 1914  
CECIL W. CREEL, DIRECTOR                      . . . . . A. L. HIGGINBOTHAM, EDITOR

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"NATIONAL YIELDS OF POTATOES THIS LARGE HAVE ALWAYS RESULTED IN SURPLUSES AND LOWER PRICES," THE EXTENSION MAN SAYS, "AND PRESENT PROSPECTS HAVE ALREADY AFFECTED THE MARKET IN THE PRINCIPAL LATE PRODUCING DISTRICTS, WITH CONSIDERABLY LOWER PRICES THAN AT THIS TIME LAST YEAR.

"THIS CONDITION OF OVER PRODUCTION," CLINE STATES, "WAS FORECAST IN THE 1937 POTATO OUTLOOK OF THE FEDERAL BUREAU, IF THE INTENTIONS OF FARMERS TO PLANT, AS ANNOUNCED BY THEM EARLY IN THE YEAR WERE CARRIED OUT. A CROP OF 400,000 BUSHEL'S IS GREATER THAN THE CONSUMPTIVE NEEDS OF THE COUNTRY," ACCORDING TO THE BUREAU.

"NOT ONLY DID THE FARMERS CARRY OUT THEIR INTENTIONS TO PLANT," CLINE SAYS, "BUT THEY WENT EVEN FURTHER, AND IN ADDITION GROWING CONDITIONS WERE UNUSUALLY FAVORABLE.

"THE POTATO CROP IS GENERALLY RECOGNIZED AS A HAZARDOUS ONE TO GROW," HE STATES. "ALTERNATE SURPLUSES AND SHORTAGES ARE FREQUENTLY EXPERIENCED. EFFORTS OF THE GOVERNMENT TO RELIEVE THESE CONDITIONS THROUGH INTENTIONS TO PLANT AND CROP OUTLOOK INFORMATION WOULD NO DOUBT BE OF GREAT ASSISTANCE IF TAKEN SERIOUSLY BY PRODUCERS IN GENERAL."

NEVADA DAIRY PRODUCTS  
OUTLOOK IS FAVORABLE

THE NEVADA DAIRY INDUSTRY, WHICH PRODUCES ABOUT ONE TENTH OF THE STATE'S AGRICULTURAL INCOME, IS IN A MUCH MORE FAVORABLE POSITION THAN AT THE TURN OF THE YEAR.

BROUGHT ABOUT BY HEAVY REDUCTIONS IN CURRENT RECEIPTS, AND COLD STORAGE HOLDINGS THROUGHOUT THE COUNTRY, THIS IMPROVEMENT IS REFLECTED IN STEADY PRICE INCREASES, ACCORDING TO L. E. CLINE OF THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE.

AND, FURTHER PRICE GAINS ARE IN SIGHT, HE BELIEVES.

FACTORS CONTRIBUTING TO THE REDUCED PRODUCTION AND INCREASED PRICES OF DAIRY PRODUCTS THROUGHOUT THE COUNTRY WHICH HAVE AFFECTED NEVADA PRODUCERS DIRECTLY HE CITES AS THE LOW PRICES OF DAIRY PRODUCTS LAST FALL AND EARLY WINTER, ACCOMPANIED BY UNUSUALLY HIGH FEED PRICES WHICH DISCOURAGED PRODUCTION MATERIALLY.

"THIS SITUATION, TOGETHER WITH AN ESTIMATED 2 PERCENT FEWER PRODUCING COWS FOR THE COUNTRY", HE STATES, "SERVED TO QUICKLY RIGHT THE SITUATION AND START THE PRICES UP."

"THE MARCH 22 PRICE FOR 92-SCORE BUTTER THIS YEAR WAS 10 CENTS A POUND HIGHER THAN FOR THE SAME DATE LAST YEAR ON THE SAN FRANCISCO WHOLESALE MARKET."

A REVIEW OF THE INFORMATION AT HAND, ACCORDING TO CLINE, INDICATES THAT DAIRY PRODUCT PRICES WILL CONTINUE STRONG THROUGHOUT THE YEAR AND HAVE A GOOD CHANCE OF REACHING A HIGHER POINT THAN HAS PREVAILED FOR THE PAST FIVE OR SIX YEARS.

(MORE)

"CURRENT MARKET REPORTS, WHICH INDICATE THE REASON FOR STRENGTHENING MARKETS, SHOW THAT RECEIPTS OF BUTTER ARE ESPECIALLY LOW IN THE PACIFIC COAST AREA, WHERE PRICES HAVE ADVANCED MOST RAPIDLY", THE EXTENSION MAN SAYS.

"BUTTER RECEIPTS FOR LOS ANGELES AND SAN FRANCISCO UP TO MARCH 22 THIS YEAR HAVE BEEN 12.7 PERCENT LESS THAN FOR THE SAME PERIOD LAST YEAR. FOR THE FOUR PRINCIPAL MARKETS, CHICAGO, PHILADELPHIA, NEW YORK, AND BOSTON, GOVERNMENT REPORTS SHOW THAT THE STORAGE HOLDINGS OF BUTTER ON MARCH 22 THIS YEAR WAS 32.4 PERCENT LESS THAN FOR THE SAME DATE LAST YEAR, WHILE FOR THE COUNTRY AS A WHOLE, AS INDICATED FROM REPORTS OF 35 PRINCIPAL CITIES IN THE UNITED STATES, STORAGE HOLDINGS ARE ONLY SLIGHTLY ABOVE THIS TIME LAST YEAR, BUT 36 PERCENT BELOW THE FIVE YEAR AVERAGE FOR THIS DATE."

CURRENT PRODUCTION IS CONSIDERABLY BELOW NORMAL AT THIS TIME AND UNDER WHAT IS REGARDED AS THE COUNTRY'S NEED.

THIS IS IN DIRECT CONTRAST TO THE HIGH PRODUCTION OF LAST FALL, WHICH RESULTED IN A 50 PERCENT HEAVIER STORAGE OF BUTTER JANUARY 1 THIS YEAR THAN THE YEAR PREVIOUS.

INCREASES IN BUTTER PRICES FOR THIS YEAR OVER THE SAME TIME LAST YEAR BEGAN FEBRUARY 26. AT THAT TIME 92-SCORE BUTTER IN SAN FRANCISCO WAS QUOTED WHOLESALE AT 35 CENTS. IT WAS IDENTICAL WITH THE FEBRUARY 26, 1936 PRICE.

SINCE THAT TIME, BUTTER PRICES HAVE CONTINUED TO RISE RAPIDLY AND, CLINE BELIEVES, MAY BE EXPECTED TO CONTINUE UNDER PRESENT HIGH FEED PRICES AND LOW CURRENT RECEIPTS OF BUTTER.

"SINCE BUTTER PRICES BEGAN TO RISE ON THE SAN FRANCISCO MARKET", HE SAYS, "VALUE OF ALFALFA HAY TO THE NEVADA DAIRY MEN HAS INCREASED RAPIDLY. THE RETURNS PER TON OF HAY, IN VALUE OF DAIRY PRODUCTS, HAVE INCREASED IN LESS THAN A MONTH APPROXIMATELY \$2 PER TON, BASED ON THE AVERAGE PRODUCING CAPACITY OF NEVADA DAIRY HERDS."

NEVADA DAIRY OUTLOOK  
CONTINUES FAVORABLE

THE NEVADA DAIRY PRODUCTS SITUATION, WHICH HAS BEEN IMPROVING SINCE EARLY MARCH, CONTINUES TO BE FAVORABLE, L. E. CLINE OF THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE SAID THIS WEEK FOLLOWING A SURVEY OF PRICE CONDITIONS OF THE MARKETS AND OF THE OUTLOOK.

DECREASED CURRENT RECEIPTS OF BUTTER AND DECREASED COLD STORAGE HOLDINGS, AS COMPARED WITH LAST YEAR AT THIS TIME, ARE SAID BY HIM TO BE THE CHIEF FACTORS IN THE STRENGTHENING OF THE MARKET.

IN SAN FRANCISCO AND LOS ANGELES MARKETS, RECEIPTS OF BUTTER FROM THE FIRST OF THIS YEAR UNTIL MAY 15 WERE NEARLY 10 PERCENT UNDER THOSE FOR THE SAME PERIOD A YEAR AGO. SINCE THE FIRST OF MAY, HOWEVER, THERE HAS BEEN A SLIGHT PICKUP IN PRODUCTION.

"REPORTS FROM 35 CHIEF CITIES OF THE COUNTRY", CLINE SAYS, "SHOW THAT THERE IS APPROXIMATELY 10 PERCENT LESS BUTTER IN STORAGE ON MAY 1 THAN A YEAR BEFORE."

REFLECTING THESE FACTORS, THE PRICE OF BUTTER IS MUCH STRONGER THAN A YEAR AGO, BEING BETTER BY NEARLY 15 PERCENT THAN THE MAY 1, 1936 PRICE.

BUTTER PRICES MEAN MUCH, ACCORDING TO CLINE, NOT ONLY TO NEVADA DAIRY FARMERS, BUT TO ANY RANCHER WHO RAISES HAY, SINCE MUCH OF THE HAY GROWN IN THE STATE IS MANUFACTURED THROUGH COWS INTO BUTTER AND OTHER DAIRY PRODUCTS.

"TRANSLATING THE INCREASED BUTTER PRICE INTO INCREASED  
(MORE)

RETURNS FOR HAY CONSUMED BY DAIRY HERDS," HE STATES, "MEANS FOR A GOOD AVERAGE PRODUCING DAIRY HERD ABOUT \$2 A TON MORE THAN WAS RECEIVED FOR HAY LAST YEAR AT THIS TIME.

"AT THE PRESENT PRICES FOR BUTTERFAT, BASED ON SAN FRANCISCO QUOTATIONS FOR 92-SCORE BUTTER, A HERD OF NEVADA DAIRY COWS CAPABLE OF PRODUCING AN AVERAGE PER COW OF 275 POUNDS OF FAT, SHOULD RETURN APPROXIMATELY \$14 A TON GROSS IN THE VALUE OF BUTTERFAT ALONE, LEAVING THE CALF, SKIM MILK, AND FERTILIZER TO APPLY TO OVERHEAD COSTS

"THESE FIGURES INDICATE THAT DAIRYING, WITH GOOD COWS UNDER GOOD MANAGEMENT, IS CAPABLE OF PRODUCING GOOD RETURNS FOR NEVADA ALFALFA HAY PRODUCERS AT THE PRESENT TIME, WITH PROSPECTS EVEN BETTER FOR THE REST OF THE YEAR, SINCE MAY IS GENERALLY THE MONTH OF LOWEST BUTTERFAT PRICES."

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A G R I C U L T U R A L   N E W S   S E R V I C E

RELEASE UPON RECEIPT - 1937-#71-6-29-SPL.-400-EXCLUSIVE IN YOUR CITY

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WOOL HITS PRICE LOW  
OF YEAR EACH SUMMER

THE SUMMER MONTHS ARE A POOR TIME FOR THE NEVADA SHEEPMAN TO SELL HIS WOOL, IF A STUDY OF THE PRICES PAID OVER A PERIOD OF YEARS ON THE BOSTON MARKET ARE ANY INDICATION, L. E. CLINE OF THE UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE SAID THIS WEEK FOLLOWING A STUDY OF PRICE TRENDS.

FOR ALL GRADES OF WOOL PRODUCED IN THIS STATE, THE FIGURES REVEAL THAT THE MARKET HITS BOTTOM GENERALLY IN JUNE AND REACHES ITS HIGH POINT USUALLY IN JANUARY.

IT IS ONLY NATURAL, ACCORDING TO CLINE, THAT PRICES SHOULD BE THE LOWEST AT ABOUT THIS TIME, SINCE THE GREATEST AMOUNT OF WOOL IS AVAILABLE AND OFFERED FOR SALE AT THIS PERIOD OF THE YEAR.

MARKETING OF WOOL THROUGH A WELL ESTABLISHED NON-PROFIT COOPERATIVE ASSOCIATION, SUCH AS THE NEVADA WOOL MARKETING ASSOCIATION, AFFILIATE OF THE NATIONAL WOOL MARKETING CORPORATION, IS INTENDED TO ENABLE THE PRODUCER TO SELL AT THE RIGHT TIME.

NEVADA WOOL CLEARED THROUGH THESE ORGANIZATIONS, WHICH ARE GOVERNMENT SPONSORED, FARMER-OWNED GROUPS, IS STORED AT THE MARKET PLACE WHERE IT CAN NOT DETERIORATE OR BE LOST BY FIRE, AND MAY BE ORDERED SOLD WHEN THE PRICE HAS REACHED ITS HIGHEST POINT.

"THE PRACTICE OF SELLING WOOL AT A FIXED PRICE FAR IN ADVANCE OF DELIVERY," CLINE SAYS, "SOMETIMES INDICATES THAT BOTH THE BUYER AND SELLER HAVE A POOR REGARD FOR THE INTELLIGENCE AND JUDGEMENT OF THE

(MORE)

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FROM-UNIVERSITY OF NEVADA AGRICULTURAL EXTENSION SERVICE, RENO, NEV.  
COOPERATIVE AGRICULTURAL EXTENSION WORK, ACTS OF MAY & JUNE 1914  
CECIL W. CREEL, DIRECTOR . . . . . A. L. HIGGINBOTHAM, EDITOR.

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OTHER PARTY TO THE CONTRACT AND THAT EACH EXPECTS TO PROFIT BY THE DEAL AT THE OTHER'S EXPENSE."

ONE OF THE BEST WAYS FOR THE NEVADA SHEEPMAN TO GET THE MOST MONEY FOR HIS WOOL IS FOR HIM TO PRODUCE THE BEST PRODUCT POSSIBLE AND TO KNOW AS NEAR AS POSSIBLE THE GRADE OF HIS WOOL AND ITS VALUE ON THE CURRENT BOSTON MARKET.

"THE ULTIMATE SELLING PRICE OF ANY LOT OF WOOL IS BASED UPON WHAT THAT PARTICULAR LOT OF WOOL WILL BRING WHEN IT HAS BEEN GRADED AS TO CONDITION, AND FINENESS AND LENGTH OF FIBER, AND WHEN LOSS IN WEIGHT, AFTER SCOURING, IS DETERMINED," CLINE SAYS.

"IT SHOULD BE APPRECIATED THAT COUNTRY BUYING OF WOOL IS BASED UPON ESTIMATES AS TO THE DIFFERENT ITEMS THAT MAKE UP THE GRADE AND VALUE OF THE WOOL, AND THAT THE BUYER IS USUALLY IN A BETTER POSITION TO JUDGE THESE VALUES THAN THE PRODUCER BECAUSE OF HIS CONSTANT CONTACT WITH THE MARKET."

NEVADA DAIRY OUTLOOK

As of May 1, 1937

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Chart Showing Average Weekly Variations in Butter Quotations  
on San Francisco Market for 1936 and 1937.

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Dairy Cows Furnish Best Market for Nevada Alfalfa.

L. E. Cline

Nevada Extension Service

University of Nevada

Reno, Nevada

## NEVADA DAIRY SITUATION

The Nevada dairy situation is very much the same, insofar as price outlook is concerned, as is the national dairy situation. Butter is so generally handled in interstate commerce that inequalities in supply and demand are quickly equalized. The only advantage or disadvantage any one locality may have over another in price is merely a small difference in transportation costs.

### Outlook Not Bright January First

The Nevada dairy situation was not especially encouraging at the beginning of the year. At that time feed prices were up and dairy products were lower in price than the year previous at the same time. On January first this year butter prices amounted to  $2\frac{1}{2}$  cents per pound less than January first of last year, and the month of January averaged  $1\frac{1}{2}$  cents less than the average for January 1936.

Chief among the causes contributing to this adverse condition was the heavy production of dairy products in the middle west and east last fall and winter, brought about by very mild weather in that territory. This unseasonably large current production of butter resulted in large fresh supplies and increased the butter storage as of January first this year 50% above that of last year. This situation was not at all encouraging to Nevada dairymen because of advancing feed prices, and the prospects of a greater seasonal decline in price than occurred in 1936.

Dairy Outlook Improving

The dairy outlook, however, which was not at all encouraging for the first three months of the year has taken on a more favorable aspect and promises much more encouragement for the rest of the year. The ordinary seasonal increases in production and decreases in prices have not occurred, but instead we have had a reverse situation, which plainly demonstrates the fact that agricultural outlook reports may change materially over a very brief period, due to natural causes, and that producers of agricultural commodities need to keep their outlook information up to date to properly direct their operations.

Unfavorable weather conditions and high feed costs in the western part of the United States have resulted in a 10.5% decrease in receipts of butter on the Pacific Coast since January first as compared with last year. Similar reduction in butter receipts for the same period are also shown for the four principal markets; New York, Chicago, Philadelphia and Boston. These figures may be taken as an indication of reduced production throughout the country since the first of this year as compared with the same time last year. Had it not been for the heavy storage holdings on January first, butter prices would no doubt be much higher today than prevails at the present time.

April First Five Cents Above Last Year

The most encouraging aspect of the dairy situation today is the fact that decreased production and increased prices of competing commodities

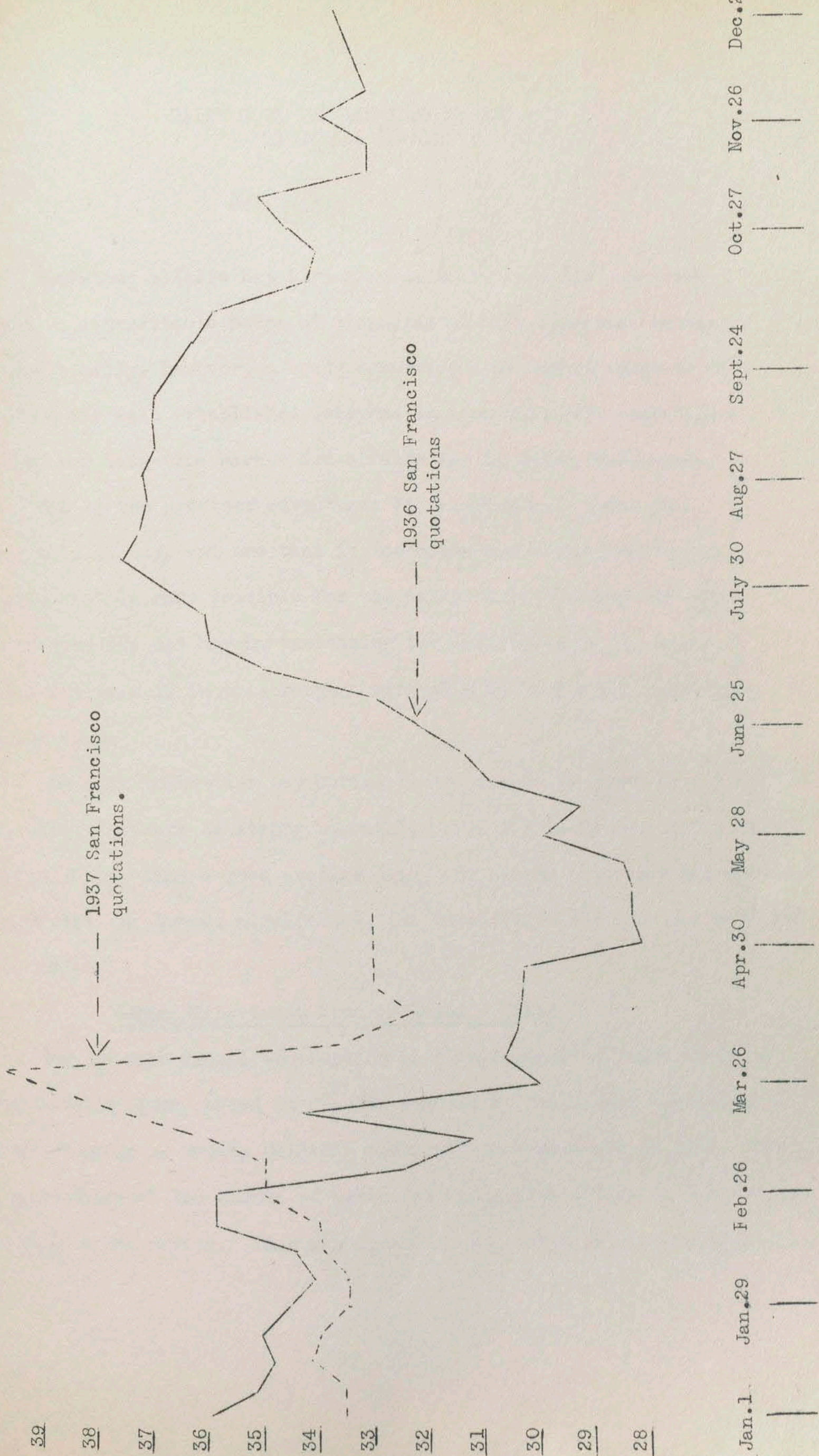
and increased consumer demand have resulted not only in preventing the usual seasonal decline in prices, but have actually resulted in adding to the average prices based on San Francisco quotations of 1.09 cents per pound for the period January first to the end of April.

It is also encouraging to note that the month of April this year shows an average price increase of 2.36 cents per pound over April last year, and that the month of April has just closed with a price of 5 cents per pound increase over the same date last year. These are very encouraging figures and every day's delay in the normal seasons's increase in dairy production will add to the future strength of the market. It will be interesting to note that the low price month last year for butter was the month of May, with an average price of 28.62 cents at San Francisco, and Nevada dairymen are starting into May this year with a 5 cents pound increase over May first last year.

cents  
per pound

Chart showing average weekly variations in extra butter quotations  
for 1936 and 1937 on San Francisco Market

40  
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DAIRY COWS FURNISH BEST MARKET  
FOR NEVADA ALFALFA

Marketing alfalfa hay through good dairy cows has long been recognized as a profitable means of disposing of this important Nevada crop. Occasionally, however, a ready temporary cash market tends to mislead any but the well established dairyman so that this most profitable, dependable, and long time market for alfalfa hay is often overlooked.

One of the greatest advantages of dairying as a means of marketing alfalfa hay, and one that is too often underestimated is the opportunity that is made possible for the dairyman to increase the price he will receive for his hay by increasing the efficiency of his dairy herd. The dairyman is in this respect virtually his own price maker for his alfalfa crop.

The cash market for hay during recent months has been considered by some alfalfa growers as strong competition for the dairy cow, but a little figuring will show that a good average dairy cow during this time has provided the best market for Nevada alfalfa hay, and in addition has paid for overhead cost and labor.

Nevada Experiment Station Records Cited

The average annual consumption of alfalfa hay, when fed alone in dry lots to dairy cows, based on results secured by the Nevada Agricultural Experiment Station on twenty Holstein cows, put on experiment in 1925, producing an average of 258 pounds of butterfat was 12,746 pounds of hay per cow for a twelve month period. This was equal to an average hay consumption of

49.4 pounds of hay to produce a pound of butterfat during the twelve month period per cow. When these twenty cows are divided into a high and a low group, the big advantage in economy of production with good cows stands out prominently, and emphasizes the possibilities of high returns for alfalfa through dairy cows.

The ten highest cows out of the twenty, averaging 293 pounds of fat for a year, produced butterfat at the rate of one pound of butterfat for forty-five pounds of hay, while the ten lowest producers, producing an average of 230 pounds of fat for a year, required 53 pounds of hay for one pound of fat.

To further illustrate the advantage of high producing cows over low producing cows, as a means for marketing alfalfa hay, this feeding experiment showed that the lowest producing cow in the group with only 210 pounds of butterfat to her credit, required 61 pounds of hay to produce one pound of fat, while the highest cow in the group, with 342 pounds of butterfat to her credit, required only 41 pounds of hay for one pound of butterfat.

#### Big Difference Between High and Low Producing Cows as Market for Hay

While these figures are interesting from the standpoint of the possibilities of herd improvement, it is more interesting to examine into the possibilities of cash returns that such cows would have been able to make during the past twelve months at average prevailing butterfat prices based on San Francisco quotations. The average quotations for "extra" butter on the San Francisco market for the last twelve months period was 34.09 cents per pound. Adding to this an approximate 2 cents premium for butterfat, the Nevada dairy-



men received approximately 36.09 cents per pound for this period.

To convert this butterfat price into returns per ton of hay, by the above cows, the average butterfat price of 36.09 cents is divided by the pounds of hay required to produce one pound of butterfat, and the figure thus secured is then multiplied by 2000 to find out what the returns will be for one ton of hay. By this method of calculation the herd of twenty high and low producing cows, considered together, in the feeding experiment, producing an average of 258 pounds of butterfat, paid \$14.50 net in value of butter alone per ton of hay, if we balance the labor, interest, and depreciation against the skim milk, fertilizer and calf, which is considered a fair offset under general farming conditions.

By the same method of calculation the higher producing half of the herd would pay at the rate of \$16.40 for each ton of hay consumed, at the above butterfat prices, while the lower producing half of the herd would pay only \$13.36 per ton of hay consumed. This method of calculation showed also that the lowest producing cow in the group, producing 210 pounds of butterfat would have returned \$11.80 in butterfat per ton of hay, while the highest cow, with 342 pounds of butterfat would have paid \$17.60 in butterfat for ton of hay consumed.

#### Nevada Dairy Herd Records Shown

If the possibilities for high returns for alfalfa hay as shown in the foregoing examples with good cows seem overdrawn to the alfalfa grower who looks each year for a different cash market, perhaps the following actual

example will be more convincing.

The farm account records of the Nevada Experiment Station and Nevada Extension Service show that for a twelve month period recently closed, the R. L. Thomas of Fallon, herd of 15 Holsteins on hay alone, is reported as producing an average of 315 pounds of butterfat per cow and produced one pound of butterfat for 46 pounds of hay and returned at the rate of \$15.68 in value of butterfat for each ton of hay consumed during the past year.

No doubt many other Nevada dairyherds will approach these figures.

For example the Frank S. Bettelmeyer of Gardnerville, herd of 43 cows is reported in the same farm account studies as producing 304 pounds of butterfat on alfalfa hay and pasture, and would no doubt return in value of butterfat approximately the same for one ton of hay in dry lot feeding as the Thomas herd.

These figures illustrate two outstanding facts. First, that with even fair Nevada dairy cows, dairying probably paid more net cash for the past twelve months for alfalfa hay than the best net cash price otherwise available; and second, that a herd of good dairy cows on an alfalfa ranch will furnish the best possible long time market for hay, and at the same time provide employment for labor, and in addition pay overhead expense.

MARKETING NEVADA WOOL

1937 PRICE SITUATION

CHART SHOWING MONTHLY  
CHANGES, FOR LONG TIME  
FOR 1936 AND FOR 1937

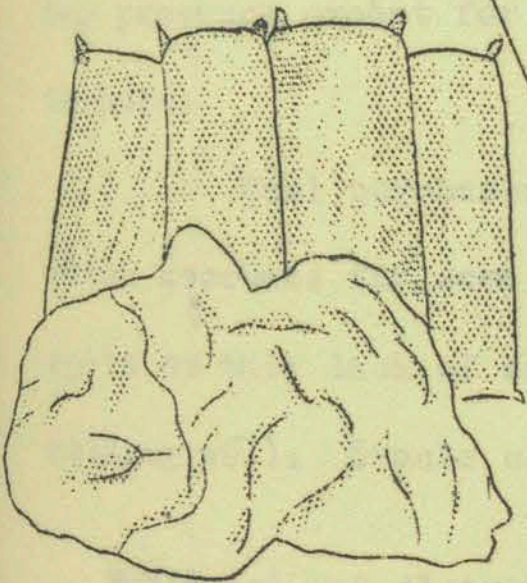
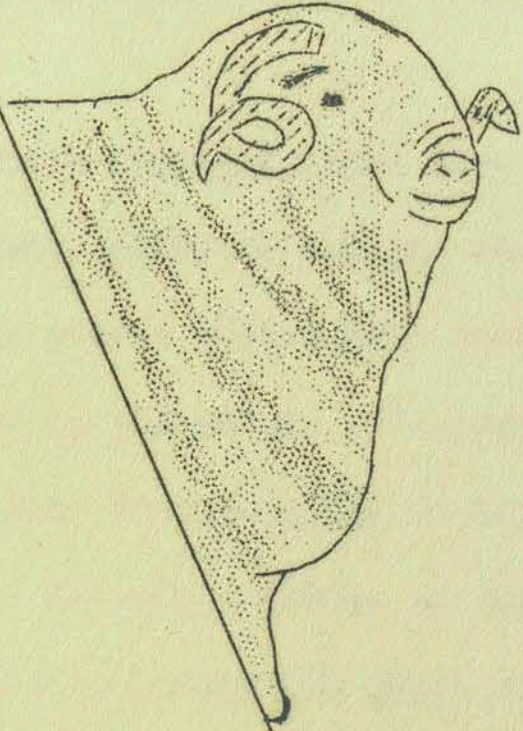
CHART SHOWING LONG TIME  
PRICE RANGE FOR THREE  
PRINCIPAL GRADES OF WOOL

SELLING WOOL ON ITS TRUE  
VALUE CHART SHOWING AV-  
ERAGE MONTHLY VARIATION IN  
PRICES OF THREE PRINCIPAL  
GRADES OF WOOL

GRADES AND SUB-GRADES OF WOOL

ESTIMATING LOCAL PRICE FROM  
BOSTON QUOTATION

L. E. CLINE  
AGRICULTURAL EXTENSION ECONOMIST  
UNIVERSITY OF NEVADA  
RENO, NEVADA



## 1937 PRICE SITUATION

Wool prices this year so far have been very encouraging as compared with last year's prices.

January prices as shown by the second chart averaged about 16.4 cents on the Boston scoured basis for 3/8 blood, territory, strictly combing wool above January of last year. This increase in this year's prices over last year's prices has gradually been reduced, as shown by the chart, to approximately 11.5 cents better for June this year over June last year and is 12.5 cents better than the long time average for June. The other grades of wool have held to their usual margin of difference above or below this grade during this period as may be seen by the last chart showing the long time range in prices of the three principal grades of wool.

While wool prices since February show a decided seasonal drop for the year, they are still at a higher point for June than at any time since 1929, according to reports from principal wool marketing centers. Most of the present wool holdings are in strong hands now with little indication of selling pressure except for an occasional sale in the country indicating inability to hold.

Wool purchases on preshearing contracts are still being delivered which accounts for some of the inactivity of the market at this time. In spite of this lack of activity on the wool market just now prices seem to be holding well. Stocks of raw wool in most of the southern hemisphere countries

on May 1 were 13 percent less than last year at the same time and 20 percent less than the past five year average. Exports from these areas for the new clip will not take place before next fall and winter months.

Stocks of wool in the United States May 1 were somewhat larger than last year at the same time due to the large amounts of foreign wool in this country, but were less than the past ten year average for May 1st.

Because of the large amount of unfilled orders in the hands of wool manufacturers at the present time the consumption of wool during the last half of the present year is expected to be well maintained during the late summer but is also expected to be somewhat less than for the same period in 1936. The present low world supply of wool will offset this to some extent.

DOMESTIC WOOL: MONTHLY AVERAGE PRICE PER POUND,  
 BOSTON MARKET, SCOURED BASIS  
 (3/8 Blood) Strictly Combing, Graded territory

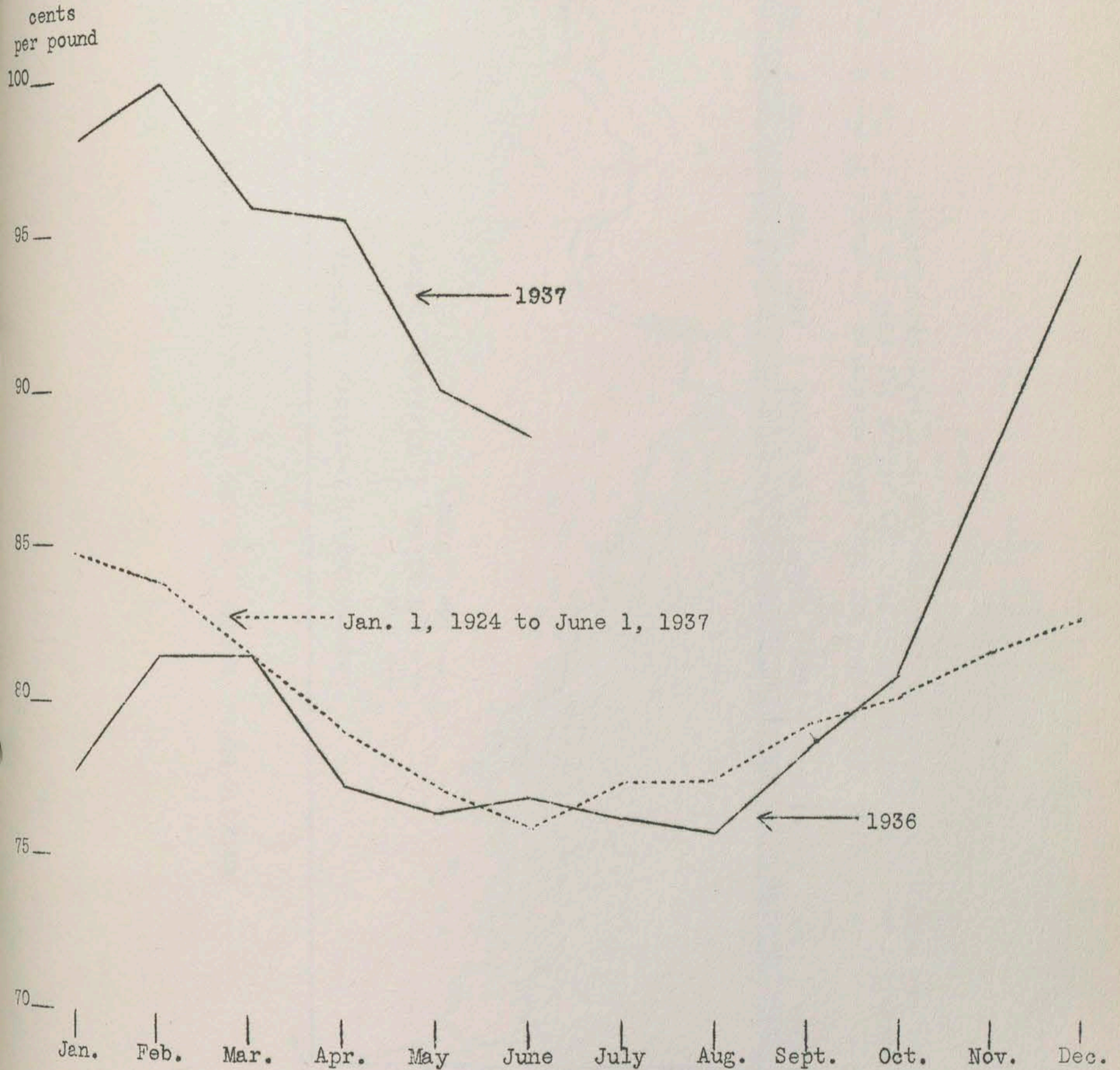
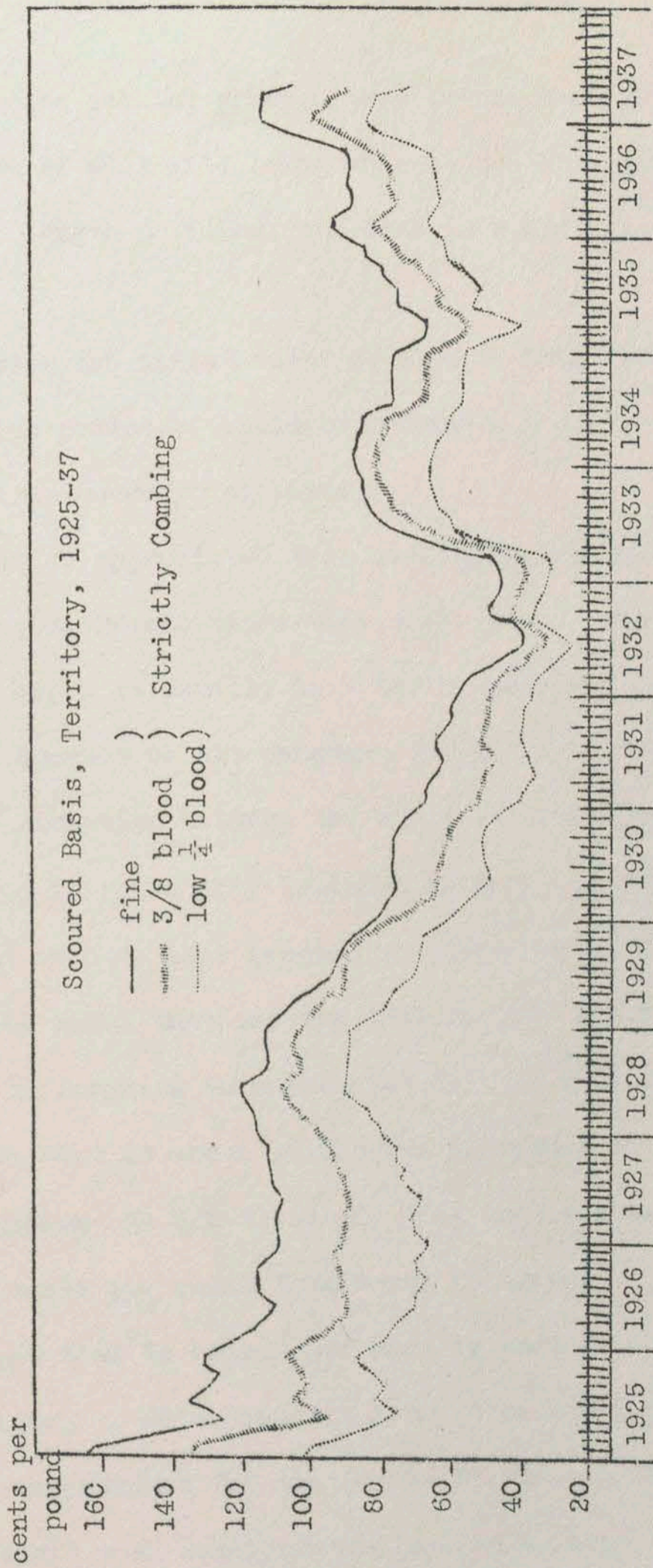


Chart showing differences in average monthly prices for 3/8 Blood, Strictly Combing, Graded territory wool on the Boston market for 1924 to 1937 monthly averages, the 1936 monthly average and the 1937 monthly average prices to July 1. Note the drop in prices during the summer months.

DOMESTIC WOOL: MONTHLY AVERAGE PRICE PER POUND, BOSTON MARKET



This chart illustrates the long time variation in prices of the three principal grades of wool. It will be noted that the prices for 1937 are now at the lowest point for the year so far which might be expected from past experiences.

## SELLING WOOL ON ITS TRUE GRADE

The ultimate selling price of any lot of wool is based upon what that particular lot of wool will bring when it has been graded as to condition, fineness of fiber, length of fiber, and loss in weight, from scouring, is determined.

Determining the actual value of wool is therefore a skilled procedure about which the producer should be informed if he is to match his wits with the well informed commercial buyer.

It should be appreciated that country buying of wool is based upon estimates as to the different items that make up the grade and value of the wool and that the buyer is usually in a better position to judge these values than the producer because of his constant contact with the market.

The big variation between the different principal grades of Nevada wool is illustrated in the charts included in this circular. The three grades represented include in a general way the bulk of the wool produced in Nevada. It will be noted that for the 1924 to 1937 period covered by the third chart, the differences in prices between the  $\frac{1}{4}$  blood and the  $\frac{3}{8}$  blood remained quite constant at about 16.8 cents per pound on the Boston market and the prices between the  $\frac{3}{8}$  blood and fine wool was maintained rather uniformly at 14.4 cents per pound from month to month.

The point that is emphasized here is that an accurate grading of the wool is necessary to determine its true value based on the Boston market where prices are established for the United States. A slight mistake in country grading might mean considerable loss on a large sale.

Wool Prices Normally Change Through the Year

The charts in this circular are prepared to show the average monthly



range in wool prices from January through December.

These charts show that for the long period covered, January showed the highest average prices on the Boston market and the month of June showed the lowest average prices. This chart shows that the summer months, May, June, and July, are poor times to sell or contract to sell wool.

It is only natural that prices should be lowest at this time because the greatest amounts of wool are available and offered for sale at this period.

The great importance of selling wool on its true grade at the most advantageous time and of avoiding speculative profits are the common arguments for marketing wool through a well established grower-owned, non-profit cooperative association such as the Pacific Wool Growers Association or the National Wool Marketing Corporation, operating through its state unit the Nevada Wool Marketing Association where the grower does not lose control of his wool until the final purchaser buys it.

It is also advantageous to have the wool stored at the market place where it can not deteriorate or be lost by fire and where with expert advice available it may be ordered sold when the price has reached the highest point.

The practice of selling wool at a fixed price far in advance of delivery indicates that both the buyer as well as the seller has a poor regard for the intelligence and judgment of the other party to the contract and that each expects to profit by the deal at the other's expense. It is generally not possible for both parties to the deal to profit at the same time and it might be expected that the one who is in closest touch with the market will profit oftener than the producer who has but one experience a year on the market through which to gain information himself.

DOMESTIC WOOL: MONTHLY AVERAGE PRICE PER POUND,  
 BOSTON MARKET, SCOURED BASIS  
 (Jan. 1, 1924 to June 1, 1937)

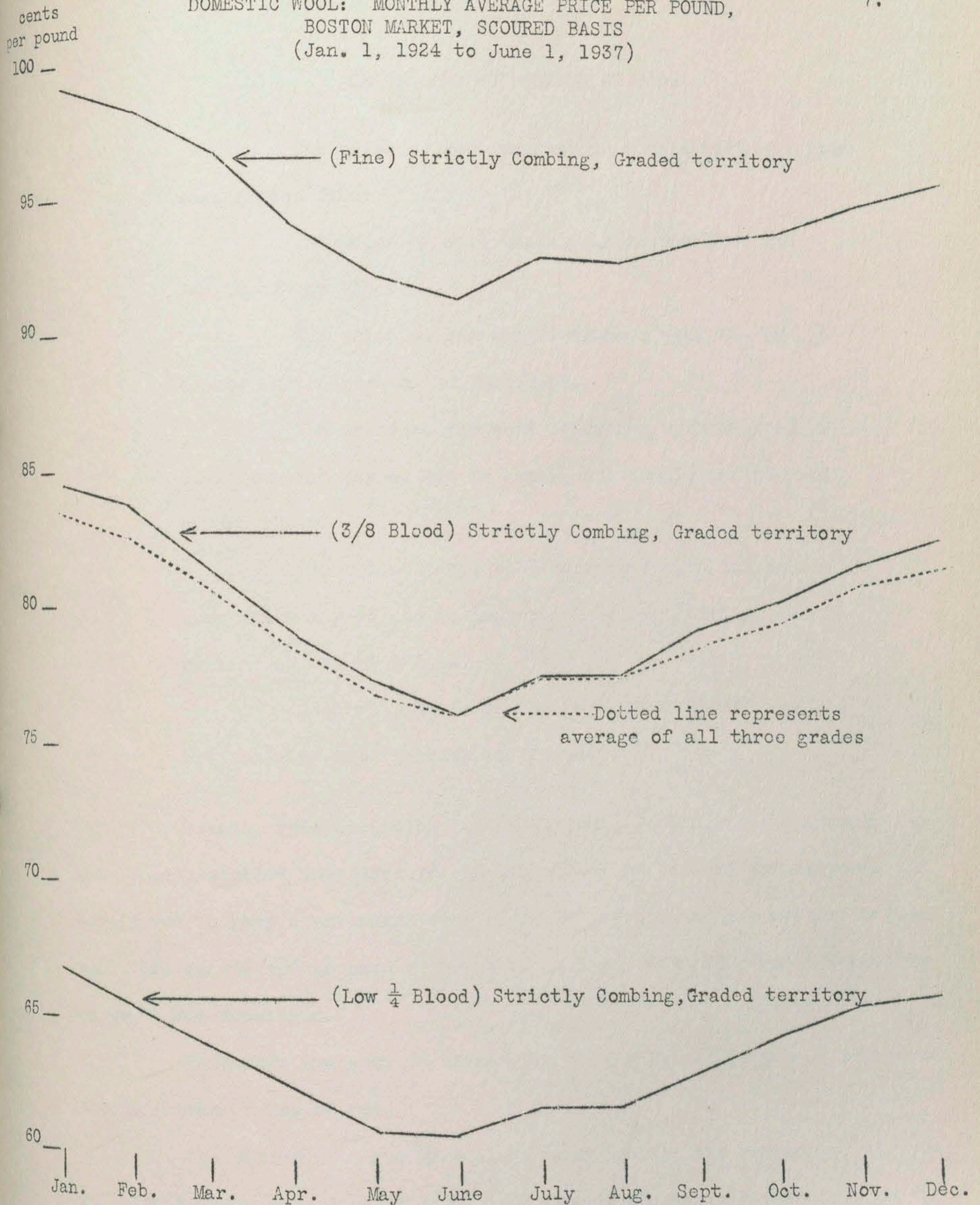


Chart showing relative differences in prices between the three principal grades of wool and the average monthly range of prices throughout the year.  
 Note the months of low prices.

## GRADES AND SUB-GRADES OF WOOL

The price of wool usually increases with the fineness of the fiber.

The price of wool usually increases with the length of the fiber.

The price of raw wool decreases with the increase in the percent of shrinkage.

The price of raw wool decreases with lack of quality which may be due to health and condition and feed of the sheep.

The price of raw wool decreases with its condition which may be due to improper handling, tying, and packing at shearing time.

Generally speaking the percent of shrink increases with the fineness of the wool.

Nevada wools according to the National Wool Marketing Association are broadly divided into eastern and western. The eastern Nevada wools are considered to have a shrinkage from 62 to 66 percent and the western Nevada wools are considered to have a shrinkage of from 64 to 70 percent depending on grade and condition.

There are two sets of terms used in the United States to designate the different grades of wool.

The different terms used for grades are for the purpose of distinguishing between the sizes of fiber. The grade therefore has to do with the

fineness of the fiber and one or two sets of terms may be used in this connection to mean the same thing. For example, the old terms (Fine), ( $\frac{1}{2}$  blood), ( $\frac{3}{8}$  blood), ( $\frac{1}{4}$  blood), (low  $\frac{1}{4}$  blood), (common), and (braid) may be used alone or in connection with what is known as the count system which means the number of hanks of yarn, each 560 yards in length, that can be spun from one pound of scoured wool. For example, a 70 count grade would mean 70 hanks of yarn to one pound of clean wool. Naturally the finer the wool the greater the number of hanks of yarn that can be spun from one pound of wool so that fine wools will have higher count or grade numerals than coarser wools. Since the old grade names, Fine,  $\frac{1}{2}$  Blood, etc., may include wool of more than one size of fiber the old terms may include more than one numeral. For example, the grade "Fine" includes all wools that fall under the counts 64's, 70's, and 80's which means that "Fine" wools may be made up of wool of three different sizes of fiber.

In addition to the grades above mentioned each grade is subdivided according to the length of the fiber into subgrades such as "Strictly Combing", or the longest length for the grade, "French Combing", which is next in length for the grade, and "Clothing" or the shortest length for the grade.

By this method of grading the following grades and subgrades have been formulated and are in common use at the present time.

#### WOOL GRADES AND GRADE SUB-DIVISIONS

Grade--64's, 70's, 80's (Fine)  
 Sub-grade--(Strictly combing--over 2 inches.  
                   (French combing-- $1\frac{1}{4}$  to 2 inches.  
                   (Clothing--under  $1\frac{1}{4}$  inches.

WOOL GRADES AND GRADE SUB-DIVISIONS  
(Continued)

- Grade--58's, 60's, ( $\frac{1}{2}$  blood)  
 Sub-grade--(Strictly combing--over  $2\frac{1}{4}$  inches.  
 (French combing-- $1\frac{1}{4}$  to  $2\frac{1}{4}$  inches.  
 (Clothing--under  $1\frac{1}{4}$  inches.
- Grade--56's ( $\frac{3}{8}$  blood)  
 Sub-grade--(Strictly combing--over  $2\frac{1}{2}$  inches.  
 (French combing-- $1\frac{1}{2}$  to  $2\frac{1}{2}$  inches.  
 (Clothing--under  $1\frac{1}{2}$  inches.
- Grade--48's, 50's, ( $\frac{1}{4}$  blood)  
 Sub-grade--(Strictly combing--over  $2\frac{3}{4}$  inches.  
 (French combing-- $1\frac{1}{2}$  to  $2\frac{3}{4}$  inches.  
 (Clothing--under  $1\frac{1}{2}$  inches.
- Grade--46's (low  $\frac{1}{4}$  blood)  
 Sub-grade--(Strictly combing--over 3 inches.  
 (French combing--2 to 3 inches.  
 (Clothing--under 2 inches.
- Grade--44's (common)  
 Sub-grade--(No subdivisions)
- Grade--36's, 40's (braid)  
 Sub-grade--(No subdivisions)

ESTIMATING LOCAL PRICE OF WOOL  
FROM BOSTON QUOTATIONS

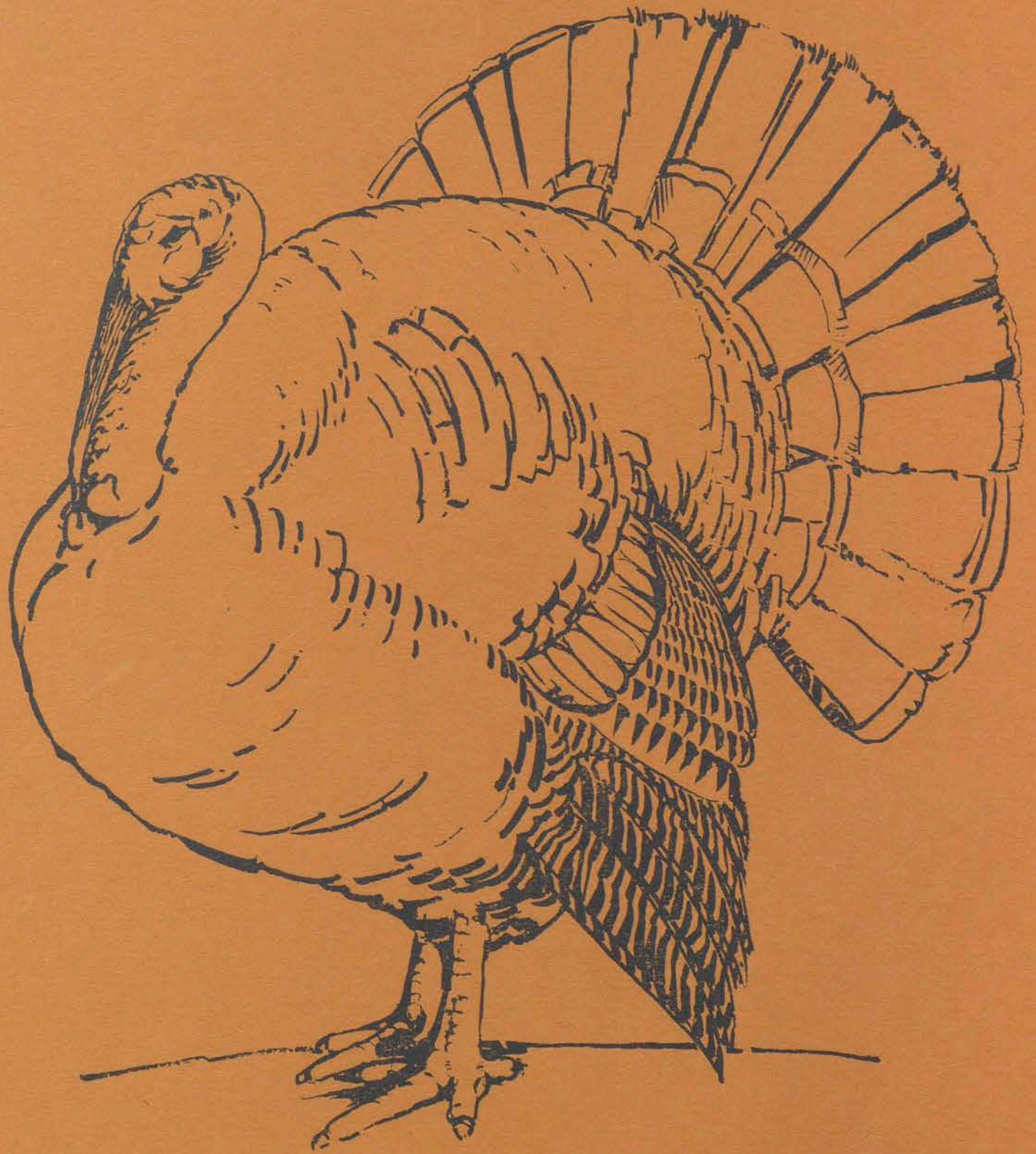
If from past sales of wool for a flock, the wool had been graded by a licensed grader and found, for example, to grade (64's to 70's) Fine and to be of French combing length ( $1\frac{1}{4}$  to 2 inches) and to have shown a 65 percent shrink, this information would provide a basis for estimating the current years value of the wool from the same flock of sheep, if the average breeding of the sheep had not changed and the general quality of the wool was the same as before.

If the present price for this kind of wool delivered Boston, scoured basis, was 96 cents per pound and the freight charge to Boston was 2.46 cents the method of figuring would be as follows. Multiply the Boston price (96 cents) by the percent of shrink (65 percent) and this gives the money loss per pound of the shrink or 61.44 cents. Take this amount from the Boston price ( 96 cents minus 61.44 cents equals 34.56 cents) which gives 34.56 cents as the gross price delivered at Boston.

From the Boston value of the wool must be deducted the freight cost which for example from Elko by all rail would be 2.46 cents per pound.

The marketing cost must also be deducted. This cost, through the National Wool Marketing Corporation, amounts to  $2\frac{1}{4}$  cents per pound in lots of five thousand pounds or over. If the wool is sold through private agencies the marketing costs will be indefinite.

The final net value of this particular lot of wool would then be the Boston value (34.56 cents) less the freight (2.46 cents) and less the marketing cost (2.25 cents) which would leave a final shipping point price based on Boston quotations of 29.85 cents per pound in this particular example.



# **TURKEY PRODUCTION STUDIES**

By L. E. CLINE

**AGRICULTURAL EXTENSION SERVICE  
UNIVERSITY OF NEVADA  
RENO, NEVADA**

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## YOUNG TURKEYS REQUIRE THE BEST OF FEED AND PAY WELL FOR IT

No class of farm animals pays better for intelligent care and feeding than does the young turkey flock.

Young turkeys make a phenomenal growth on a very small amount of feed if that feed is of the right kind and in ample quantity. A poult will double its weight during the first week of its life, during the first month its weight will increase seven or eight times and by the time the bird is 3 months old its weight will have been multiplied approximately forty five times if all conditions are favorable and the feed has been plentiful and of the proper composition.

While the turkey is young the rate of gain is the greatest and the amount of feed necessary per pound gain in weight is the least. Economical turkey production, therefore, depends on the proper handling and feeding of the young birds to get these fast, early and cheap gains.

### How Fast Should Turkeys Grow

It is important to know how fast a turkey flock should gain in weight under good conditions before a grower can judge whether or not his flock is doing its best and paying satisfactorily for the feed consumed. He must have some standards to go by, a measuring stick, so to speak, or else he may be too easily satisfied with his efforts. Such a guide is supplied in the table on page 16 of this bulletin.

Individual birds in a thrifty, well-fed flock of young turkeys should weigh approximately as follows during the first two months (ten birds, always the same ones if possible, five males and five females, should be weighed together as a sample of a flock, or double this number should be used as a sample if the same birds are not taken for all weighings): At the end of the first week ten birds should weigh a minimum of 2 pounds; at the end of the second week, 4 pounds; at the end of the third week at least 6 pounds; at the end of the fourth week, 8 pounds; at the end of the fifth week, 11 pounds; sixth week, 15 pounds; seventh week, 20 pounds; and by the end of the eighth week 25 pounds as a minimum. If twenty poults are weighed each time the above weights should be doubled.

These weights should be considered the minimum for a satisfactory growth of young turkeys; a faster rate of growth than this may be attained under the best conditions, and when starting with extra strong poults.

### How Much Feed Per Pound of Gain

It has been determined that when young turkeys are making growth at the rates just mentioned that the flock is making gains in weight for approximately the following feed consumption: the first month, 1.39 pounds of feed is required for 1 pound of increase in weight; during the second month 2.15 pounds of feed are required for 1 pound of gain in weight; third month approximately 3 pounds of feed are required for 1 pound increase in weight. The feed requirements per pound gain gradually increase with the age of the bird, approximately 6 pounds of feed being required per pound of gain during the 6th

month and just prior to the finishing period. The average feed consumption per pound gain live weight for the entire growing and fattening period should not exceed  $4\frac{1}{2}$  pounds under good operating conditions.

#### Proper Starting Ration Important

A maximum rate of growth throughout the season cannot be expected in a turkey flock unless it has been able to make a proper start. Among other essential requirements for a good start is a proper ration, and by proper ration is meant one that supplies all the needs for energy and normal growth for young birds.

#### Protein is an Important Constituent

An ample supply of protein is essential for the normal development of young turkeys. It has been found by recent experiments and experience with turkeys that they require a greater amount of protein for maximum growth than has been commonly thought necessary, also that it is equally important that the protein content of their ration be derived from a number of sources. Proteins are not all alike nor do they all supply the same need in a ration, hence one of the principle advantages of a mash mixture containing dried milk and meat products, legumes and a variety of grains or their by-products.

Nature makes sure of a supply of high protein nourishment for the baby turk for the first few days of its life in the egg yolk that is enclosed in the poults body just prior to the time it emerges from the shell. This egg yolk when dried contains approximately 32% of total protein of a sufficient variety for the poults first needs.

It has been demonstrated repeatedly that the young turkey needs to have the high protein, such as is supplied by the egg yolk, continued for some time for normal growth. A twenty eight per cent protein starting mash as shown on page 6 has given excellent results with the vitamin and ash needs properly supplied.

#### Maximum Rate of Feed Consumption May Mean Less Feed Cost

Young turkeys eat so little for the first two or three months in proportion to the growth they are able to make if properly fed that a little extra cost for a proper ration at this early period adds very little extra to the total cost of the finished turkey. The extra advantage, however, of the better ration in its ability to produce maximum growth over a poor ration may mean the difference between profits and no profits for the season's operations. Generally speaking a turkey that goes to market in prime condition in the minimum growing period will show least production cost and vice-versa. For example, 85 to 90 pounds of feed may be put into an average bird during a long growing season or a bird of the same weight and better quality can be grown on 65 pounds of feed in a shorter period of time. It all depends upon the kind of feed and the rate of consumption of the feed.

The reader is referred to the tables on page 16 for amounts of feed for turkeys and to page 6 for a discussion of turkey starting rations.

SUMMER GROWING PERIOD OF TURKEYS IS THE TIME  
FOR MAKING PROFITS

4.

Profits in the turkey business, in so far as feeding operations are concerned, are made or lost during the four to five summer months of the growing period. While the first six weeks of the brooding period is a very important and critical time, the actual gain in weight and profits for this period is relatively unimportant. Likewise the three or four weeks of the final feeding period, during which the birds are being finished for market, little or no actual profits can be expected in the gain in weight over the cost of such gains, although this finishing operation cannot be dispensed with.

It may be seen, therefore, that the turkey grower's opportunity for actual profit is limited to the interval between the brooding and finishing period of the bird. During this interval the rapidly growing turkey flock is capable of converting large amounts of relatively low priced feed into a high priced commodity.

By the time that the turkey is six weeks old, it should weigh a minimum of a pound and a half as an average for hens and toms, and for an average flock individual turkeys up to that age, if well fed, have consumed about  $2\frac{1}{3}$  pounds of feed each. From this time on the turkey increases its feed consumption at a rapid rate, and makes a very rapid growth, if the ration and management conditions are proper. This is the period when the turkey flock will turn large amounts of feed into potential profits if given a fair chance.

By the time the turkey is two months old, it should have reached a weight of at least 2.5 pounds with a feed consumption that should average not more than 2.15 pounds of feed per pound of gain. By the time the turkey is three months the average weight for toms and hens should reach a minimum of 5 pounds. At this age of three months the young turkey will be eating approximately 3 pounds of feed for each pound of gain in weight, if plenty green feed is provided in addition to a full mash and grain ration.

At the end of the fourth month the average weight of hens and toms in a well fed flock should have reached the minimum weight of 8.25 pounds and they should be putting on gains at a feed cost of approximately 3.5 pounds of grain and mash combined for one pound of gain under good feeding conditions.

According to the above figures, during this period from the time the turkey was six weeks old to the end of the sixteenth week, the young turkey has made a gain of 6.75 pounds at an average feed cost of 3.16 pounds of feed for one pound of gain.

After the sixteenth week the feed requirements for a pound of gain increase rapidly, but there is still a chance for a good margin of profit during the fifth month, when the turkey should be making gains at approximately four pounds of feed for one pound of gain.

By the end of the sixth month, however, the profits in the feeding operations are beginning to shrink rapidly, and two more weeks of feeding should be the maximum to send the birds to market well finished, in order to save excessive maintenance cost. A careful check up on the turkey flock at the end of the sixth month shows that the average turkey under good feeding conditions will show that it is eating approximately 7.6 pounds of feed for each pound of increase in

weight. The average for the sixth month, however, will show that approximately 5.6 pounds of feed is required to produce one pound of gain.

If turkeys are of a late maturing strain, or have not been given a ration of proper composition and liberal in amount during the earlier period of their growth, they may require seven months or longer to finish for market, and the feed cost of the seventh month may easily be in excess of the value of the gains during that period, thus adding materially to the final cost of the finished turkey.

To further emphasize this point, turkey production studies have shown, that an average flock of birds while under good feeding conditions will make one pound of gain for approximately 5.6 pounds of feed during the sixth month. It will require approximately 10.7 pounds of feed to make one pound of gain during the seventh month, and for any weekly period thereafter the cost of gain might be expected to be far in excess of any net selling price under present day feed prices.

The turkey grower has little to say about the price he will receive for his finished product, but his cost of production rests almost entirely in his own hands. Granting that health conditions and management of the turkey flock is satisfactory, the composition and amounts of feed provided will determine the rates of growth. It is within the turkey grower's power to produce at the minimum costs. Under ordinary feeding conditions the minimum costs of production are obtained when the turkey flock is making the greatest gains per pound of feed consumed.

During the growing period of the life of the turkey, there is a definite daily feed requirement for maintenance. The feed provided above this amount is used for growth. This extra feed above the needs for maintenance is available for growth and possible profits. The proportion of profit, then for each day is dependent upon the amount of feed eaten by the turkey flock in excess of what is needed for maintenance. As the bird increases in age, the greater is the proportion of feed that is used for maintenance and the less there is left for growth and for profits. This increasing maintenance requirement continues until maturity is reached, at which time all the feed consumed is used for maintenance and none is used for increase in weight.

In the above statements special stress has been placed upon quantities of feed consumed with the understanding that the rations provided have been of the proper composition. Very often, however, the turkey flock has suffered from a ration inadequate in composition while still adequate in quantity. A ration which does not provide all the essentials in the right proportion for maximum growth as well as maintenance, may be expected to be just as inefficient, in so far as producing growth and profits is concerned, as a ration insufficient in quantity.

The successful turkey grower will feed a ration up to the limit of a turkey's capacity to consume and of a composition suited to the changing needs of the flock from the brooding period to the time of maturity, taking advantage especially of the four or five summer months of the greatest and cheapest gains to hurry his flock along to prime condition in the minimum time.

The reader is referred to charts on pages 16 to 17 showing rates of gain and rates of feed consumption for different ages of turkeys.

Turkey Starting Mash Formulas

The following turkey mash formulas are suggested for those desiring to prepare their own mashes.

It is important for those who mix their own feed that they have available ample supplies of all ingredients, or proper substitutes, needed to compound the particular mash desired each time a mixture is made. A haphazard mixture may easily be disastrous to a flock of poults. Poults do not favor changes in their ration which is an added reason for uniformity in the mixture. These formulas suggested are well balanced and much care should be exercised in their use.

Fine ground mashes are not favored for turkeys and especially is this true when dried milk powder is used in the formula. Fine ground feed tends to pack in the crop and stick to the mouth. Turkeys often acquire the very bad habit of pulling feathers when cleaning their bills on other turkey's backs in an effort to free the bills of sticky feed.

Granular (hot roller process) dried milk is preferred to the milk powder for poultry mashes. Wherever dried milk is used to the extent of as much as ten per cent in a starting mash no additional milk of any kind, liquid or dried, should be allowed the poults because the ration will then be too laxative.

Vitamins A and D Important

A starting mash should contain at least three per cent of normal cod liver oil or its equivalent in more concentrated products to supply Vitamin D. Because of the very rapid growth of young turkeys they require more of the vitamins D and A than other poultry and it is essential that an ample supply be assured. Yellow corn, alfalfa leaf meal, and especially fresh greens are important sources of vitamins. The reader is referred in this connection to the chapter on vitamins.

It is suggested that for best results that the starting mash showing the highest percentage of protein be used. The efficiency of a starting mash, other things being equal, varies with the protein content. The 28% protein mash has been proven very satisfactory. Starting mashes should be used exclusively for the first six weeks following which, rations of lower protein content should be used as will be described under growing rations.

SUGGESTED TURKEY STARTING MASH FORMULAS

Ingredients	High Protein		Medium Protein		
	No. 1	No. 2	No. 3	No. 4	No. 5
	lbs.	lbs.	lbs.	lbs.	lbs.
Ground yellow corn (milo or kafir)	10	10	12	12	12
Ground barley	15	15	20	16	15
Ground wheat	18	15	20	15	15
Wheat bran	5	5	5	5	5
Wheat shorts (brown)	5	5	5	5	5
Corn gluten feed ( or soy bean meal)		16		20	24
Dried milk	15	10	5	5	5
Fish or meat meal, 65% protein	24	16	25	12	8
Alfalfa leaf meal	5	5	5	5	5
Cod liver oil	3	3	3	3	3
Bone meal (steamed)				2	3
Total lbs.	100	100	100	100	100
Approximate % of protein	28.0	27.5	26.0	25.5	24.5
Approximate total ash	8.3	8.4	7.8	6.7	6.6

The above starting mash formulas have been made up with the idea of compounding palatable mashes of varying percentages of protein content.

In the formula No. 1 in the high protein group and No. 3 in the medium protein group it will be noticed that fish or meat meal is depended upon for the principal source of protein while in the formulas Nos. 2, 4, and 5 the animal protein from the fish or meat meal is replaced partially with vegetable protein using corn gluten meal or soy bean meal as the principal source.

Substitutions such as are shown in those formulas may be advantageous if protein vegetable products are less in price per unit of protein than the high protein animal products.

It has not been demonstrated, however, that all sources of animal protein can be replaced to advantage with high protein vegetable products, but a partial substitution at least may be made to advantage depending on relative prices.

#### Proper Mineral Balance Important

An effort has been made in these suggested formulas to hold the mineral content of the mashes down below nine per cent of total ash and yet maintain sufficient minerals to support adequate bone building in the rapidly growing poults. Crushed lime stone or calcite grit should be used in separate troughs but no additional minerals should be added to the above starting formulas.

When an excess of total ash or of phosphorus is present in a ration there is great danger of skeleton deformities and slipped tendons (perosis or hock disease).

There are certain undescribed properties in brown wheat shorts, barley, oats and perhaps to the greatest extent in rice bran that are able to counteract the bad effect of excess of phosphorus or of total ash in a ration for young poults.

It is important therefore, in addition to holding down the total ash of the starting rations, to see that rations contain one or more of the above ingredients that protect against these very discouraging difficulties which often occur when proper precautions are not taken.

#### Substituting Sources of Protein

By consulting the feed composition table page 15 it will be seen that several of the high protein mill by-products have similar protein content, for example corn gluten feed, cotton seed meal, linseed meal, and soy bean meal are all very similar in their protein content and may almost be substituted pound for pound for each other in the ration with slight adjustment in some cases, providing variety and palatability and ash content are properly taken care of.

It is considered advantageous to have the protein come from a variety of sources because a greater variety of protein gives greater assurance that the various protein needs for normal nutrition will be supplied. This may not be the case with a limited source of protein.

In compounding turkey rations advantage should be taken of the lowest priced constituents of the kind needed. The common grains, wheat, barley corn, oats, milo, kafir, are all of similar composition and may be substituted one for the other with very slight adjustments in some cases. Some grains, however, are more palatable than others and two or more grains are generally to be preferred to a single grain. In this connection the reader is referred to the subject of substitution in feeds page 10.

It has been conclusively demonstrated that young turkeys utilize to advantage a very high protein ration and make their best development on a high protein ration when the ration is right otherwise.

A high per cent of protein is necessary to support the rapid growth which the young turkey is capable of making when muscle tissue and body organs are developing. As the young turkey increases in age its rate of growth gradually decreases. This decrease in rate of growth continues until maturity when the bird ceases to grow.

#### Protein Requirements Decrease with Age

Since the protein requirements of turkeys decrease with their ages and since the proteins in the ration are usually more expensive than any of the other ingredients it is important to reduce the protein content of the ration gradually but as fast as the larger amounts cannot be utilized to advantage.

In this way the cost of the ration per pound is reduced as the quantity of feed is increased, and the full needs of the birds are supplied.

Because of the fact that older turkeys cannot use to advantage the more concentrated starting rations, the growing mashes are made up with a lower percentage of protein and are eventually supplemented with cracked grains and finally with whole grains in increasing quantity in order to gradually reduce the protein content to the turkey's requirements as it approaches maturity.

Much of the subject matter covered under the heading of starting rations is applicable also to growing rations.

#### TURKEY GROWING MASH FORMULAS

Ingredients	High Protein		Medium Protein	
	No. 1:	No. 2 ::	No. 3 :	No. 4.:
	lbs.:	lbs. ::	lbs. :	lbs. :
Ground yellow corn (milo or kafer)	18 :	18 ::	18 :	18 :
Ground barley or oats	20 :	20 ::	25 :	20 :
Ground wheat	20 :	15 ::	20 :	20 :
Wheat midlings or rice bran	10 :	10 ::	10 :	10 :
Corn gluten or soy bean meal	0 :	20 ::	5 :	15 :
Dried milk	5 :	5 ::	5 :	5 :
Fish or meat meal 65% protein	20 :	5 ::	10 :	5 :
Alfalfa leaf meal	5 :	5 ::	5 :	5 :
Cod liver oil	2 :	2 ::	2 :	2 :
Total	100 :	100 ::	100 :	100 :
Total Approximate protein	23.0 :	22.0 ::	20.0 :	20.0 :

Add one pound of fine salt to each 100 pounds of growing mash

The four suggested turkey growing mash formulas have been prepared to show examples of high and medium protein mashes in which the animal protein or the vegetable protein may predominate in either case.

The four formulas represent approximately the outside range of protein content that is practical for growing rations. When the protein requirements of the turkeys are below that shown in the mash formulas as indicated by chart, page 13, the reduction is made most economically by supplementing the mash with grain as suggested in the tables on page 8.

In cases where an all mash ration is used, which means that the proportion of the ground grains such as corn, wheat, or barley is further increased, then the growing mash formulas are reduced in protein content as the birds increase in age. This method of feeding is not usually economical because it requires the grinding of all grains or the purchase of all ground grains which adds little if any to their value, but does add to the cost. Often whole grain for supplementing the higher protein mashes are available on the farm or can be purchased locally and thereby reduce the total cost of the ration.

The above turkey growing mash formulas have been compounded from the same feeds as were used in the starting mash formulas because the feeds mentioned are the most common over the country.

Substitutions, however, may be made in the ingredients used in the growing mashes the same as was suggested for the starting mashes.

#### Supplying Minerals with Growing Mash

In connection with the above mashes free access should be provided to troughs containing crushed lime stone, calcite, or oyster shell of the proper size to serve as grit and steamed bone meal in the proportion of two and one half parts of lime stone or calcite to one part of bone meal. This will guarantee ample lime and phosphorus with the least risk of an excess of ash in the ration.

#### Gradual Change from Starting to Growing Rations

It is preferable to use the above growing mash with the starting mash in order to reduce the protein content in the starting mash than to use grain during the seventh to the tenth week for this purpose. In this way the total composition of the feed will not be so greatly changed.

Reference is made to the table, page 14, showing rates of gain and feed consumption which suggests a suitable method of changing from starting mash to growing mash and finally to growing mash supplemented by grain.

This method of gradually changing from a high protein ration to a lower protein ration can be accomplished by using the amounts of feed shown in the tables for one bird per week and then multiplying this by the number of birds in the flock.

Provisions should always be made for ample green pasture and in addition if green colored fine leafy alfalfa hay is kept near the roosting places it will be a further assurance that all birds have this important and cheap source of feed.

Skim milk may be fed without limit in connection with the growing rations with very excellent results in saving of other feed and health of the flock. One gallon of skim milk will replace about one pound of mash in the ration.



Protein Feeds

In the case of high protein feeds, which are considered essential for best results in starting and growing mashes, it may be found possible to reduce the cost of the mashes by substitution of one high protein feed for another of less cost without seriously impairing the nutritional value of the ration. High protein feeds such as meat meal, fish meal, dried milk, soy bean meal, sesame meal, etc. may be substituted one for another in starting and growing rations if due allowance is made for differences in protein content without seriously changing the feeding value of the ration. However, for best results, it is still considered, though subject to verification, that the protein in a starting ration should be derived from vegetable as well as animal sources. The most desirable proportion of vegetable and animal protein for growing and finishing rations is still a subject of study. It is very evident, however, that vegetable protein can be liberally used to advantage if the source is cheaper.

With the exception of dried milk in starting rations, which can hardly be replaced because of its high content of the essential Vitamin G, the other protein concentrates may well be considered primarily from the standpoint of cost per pound of protein. A rough way of figuring the comparative cost of protein from the different protein concentrates is to divide the percentage of protein in the feed into the cost per hundred pounds of feed. Thus, dried milk having 36.5% protein and costing \$6.50 per hundred would show a cost per pound of protein of  $(\$6.50 \div 3.65) = 17.8$  cents per pound when considering protein only. Fish meal with a protein content of 65%, costing \$2.00 per hundred would show a cost per pound of  $(\$2.00 \div .65) = 3$  cents per pound. The carbohydrates can always be obtained cheaper from the grains or their by-products, but the proteins can generally be secured at less cost from the high protein animal or vegetable concentrates, however, a more detailed calculation should be made for exactness.

The Carbohydrates and Fats Must be Considered Also

In determining the actual preference of one source of protein over another the amounts of the ingredients in addition to protein, principally carbohydrates (starches and sugars) and fats, must be taken into consideration because often the high protein feeds also contain a large proportion of carbohydrate material and fats which are usually secured from the grains.

The following example will serve to show how to compare two high protein feeds with different selling prices and different compositions. Feed No. 1, soy bean meal, value \$2.10 per 100#; composition, protein 43.7, carbohydrates 32.0%, fats 6.0%. Feed No. 2, fish meal, value at same time \$2.70 per 100#; composition, protein 60%, carbohydrates 4%, fats 7.5%. Calculation;-- by dividing the per cent of protein in the soy bean meal (43.7% into the cost per 100#, \$2.10) we have  $\$2.10 \div 43.7 = 4.8\text{¢}$  per pound for the protein in the soy bean meal. For fish meal the calculation would be  $(\$2.70 \div 60) = 4.5\text{¢}$  per pound for the protein in the fish meal.

From the protein standpoint only, the fish meal is the cheapest source, but the relative values of the carbohydrates must also be considered. In this calculation the fats are valued at 2.25 times as much as the carbohydrates because the fats are 2.25 times as valuable in the diet as the carbohydrates.

The further calculations, therefore, would be as follows in the case of the soy bean meal;-- carbohydrates 32.0 plus (fat 6.0 x 2.25 = 13.5) = 45.5 pounds carbohydrate equivalent for 100 pounds soy bean meal.

Fish meal calculation will be as follows;-- carbohydrates 4 plus (fat 7.50 x 2.25 = 16.7) = 20.7 pounds carbohydrate equivalent for fish meal.

#### Protein May Cost More in the Highest Protein Feeds.

The comparison of total values is in favor of the soy bean meal at the prices given, since from the protein standpoint the soy bean meal provides protein at a cost of only .3¢ per pound more than in the fish meal, but 100 pounds of soy bean meal provides 45.5 pounds of carbohydrate equivalent whereas the fish meal provides only 20.7 pounds of carbohydrate equivalent or a difference of 24.8 pounds in favor of the soy bean meal which much more than offsets the larger extra cost of the protein in the soy bean meal.

It is very important to make these simple calculations in the case of high protein feeds because of their high costs and the great variation in composition.

#### Grains

The mash formulas in this circular were prepared on the assumption that the various ingredients mentioned, especially the grains, may be purchased at prices in keeping with their relative food values. Very often, however, this is not the case, and it is often advisable for the sake of economy to make substitutions, if this can be done without greatly changing the percentage composition of the formula, its digestibility, or palatability.

The grains, corn, wheat, oats, barley, milo, etc., may be used to replace one another in a ration so long as two or more of the grains are used at the same time. These grains do not have identical values as a feed, so that when substitution is considered, the feeding value as well as the current price should be taken into consideration when purchasing feeds.

Taking a suggestion from CALIFORNIA EXTENSION CIRCULAR NO. 58, and allowing an arbitrary value of 100% for dent corn because of its very high digestibility and value as a poultry feed, the following respective values should be given.

Dent Corn	100%	Rice bran	84%
Egyptian Corn	98%	Barley	82%
Kafir	98%	Wheat Middlings	78%
Milo	97%	Oats	75%
Rice	97%	Wheat Bran	57%
Wheat	93%		

When it is desired to compare the relative advantage of buying one kind of grain selling at a given price with another grain selling at the same or different price the method of determination is as follows: If corn with a rating of 100% is selling at \$1.50 per hundred pounds, barley with a rating of 82% would be worth  $.82 \times \$1.50$  or \$1.23 per hundred pounds to replace the corn. If the barley were selling for more than \$1.23, in this case, corn would be cheaper at \$1.50. If the barley were selling for less than \$1.23 then it would be cheaper feed than the corn at \$1.50 per hundred.

Very often prices of different locally grown grains, because of local supply, are out of line with their relative feed values, it is then advisable to determine which is the most economical at the time. For example, if barley is selling at \$1.23 per hundred, and corn is not obtainable locally at a reasonable price, but wheat is available, a comparative price for wheat may be determined as follows;-- dividing the price of the barley, \$1.23 by .82, its relative food value as compared with corn, the estimated value of corn will be \$1.50. With the comparative price of corn as a base established, the equivalent wheat price can be obtained by using the comparative wheat value .93 given above and multiplying \$1.50 by this figure, thus  $\$1.50 \times .93$  equals \$1.39 as the fair selling price for wheat when barley is \$1.23 per hundred. In like manner the current equivalent price may be established for the other feeds listed above for purposes of substitution.

Hens and Toms combined

Toms  
Hens

Age in Weeks  
Percent of Protein in Ration

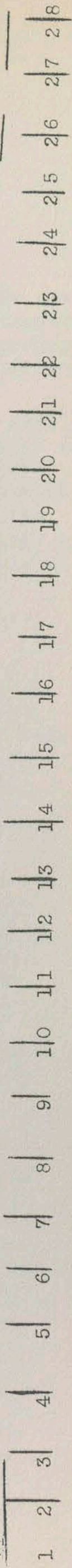
1	28.00
2	28.00
3	28.00
4	28.00
5	28.00
6	28.00
7	27.50
8	27.25
9	27.00
10	26.50
11	26.00
12	25.00
13	24.00
14	23.00
15	22.00
16	21.00
17	20.00
18	19.00
19	18.50
20	18.00
21	17.50
22	17.00
23	16.50
24	16.00
26 - 28	14.00

Percent of Protein in Feed

This diagram illustrates, according to the author's observations, the most advantageous percent of protein for the concentrated ration (mash and grain together) for growing turkeys on green pastures. If the hens could be fed separately, the broken line would represent the percentage used to best advantage for hens. Turkey hens grow at a slower rate than toms, mature earlier and require a lower percentage of protein for maximum development.

Perhaps the most advantageous protein percentage in a ration for a mixed tom and hen flock is that indicated for toms since the toms make up about two-thirds of the flock weight.

Age in Weeks



28  
27  
26  
25  
24  
23  
22  
21  
20  
19  
18  
17  
16  
15  
14

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 26 27 28

The following poultry feed composition table has been arranged for the convenience of poultrymen and turkey growers who wish to acquaint themselves with the nature of the different grains, their products and the by-products from the processing of other agricultural commodities, used in the industries.

The list of grains and other products used as poultry feeds vary greatly as to their composition and cost and the uses to which they can be best put. The costs also of the different items are not always in line with their value as poultry feeds. For this reason it is a good practice to consult the tables of feed composition and to also compare current costs of the different feeds each time a new supply of feed is purchased or a change in ration is made. In this way it will be possible to compound the desired ration at the minimum cost for feeds available.

#### Method of Compounding Rations

In order to compound a ration of a definite protein content, viz. a 20% protein mash. A preliminary list of feeds most available with the pounds of each is set down as shown in the suggested formulas, pages 6-8. The pounds of each feed taken is then multiplied by the per cent of protein shown for that particular feed in the feed composition table and the result set down opposite the feed item. After which the various amounts of protein for all the feeds taken are added up to determine the total protein in the preliminary ration.

If the total pounds of all the protein for the different ingredients taken amounts to more or to less than the desired amount, the amounts of some of the feeds will need to be changed and the ration recalculated as before and the process repeated with varying amounts of the different feeds until a formula containing the desired percent of protein is obtained. As a general rule the principal adjustments will need to be made in the high protein concentrates as these items have the greatest proportionate influence on the protein content of the ration as well as on the price.

In regulating the ash content of a ration it is important to take into consideration the ash content of the various feeds to be used. It will be noticed that the high protein animal by-products are especially high in minerals or ash, while the high protein vegetable products are much lower in minerals. A high protein mash with the proper ash content can thus be made by using the proper proportion of these two sources of protein. A ration containing eight to nine per cent of total ash has been found to be very satisfactory, higher percentages of ash in a mash may result in deformities.

## AVERAGE COMPOSITION OF COMMON POULTRY FEEDS

	PROTEIN	CARBO- HYDRATES			A S H		
	%	Fiber %	Starches Sugars %	Fats %	Total Ash %	Calcium %	Phosphorous %
Alfalfa Leaf Meal	20.0	18.0	40.0	2.5	12.0	1.60	0.20
Barley	10.0	5.6	69.8	2.1	2.7	0.04	0.37
Corn No. 2	9.3	1.9	67.6	4.6	1.4	0.01	0.30
Cocoanut Oil Meal	21.0	9.0	45.0	8.0	6.4	0.20	0.60
Corn Gluten Meal	42.0	2.3	46.0	2.2	1.5	0.03	0.37
Cotton Seed Meal	41.5	11.5	28.0	6.0	5.7	0.22	1.20
Fish Meal	60.0	1.2	4.0	7.5	20.0	5.07	3.00
Linseed Meal O.P.	35.0	8.0	36.0	6.0	5.6	0.37	0.73
Meat Meal	55.0	3.0	2.0	9.6	24.0	8.72	4.35
Milk Dried Skin	36.5	0.0	48.9	2.5	8.0	1.28	1.00
Buttermilk Dried	34.0	0.0	42.0	5.4	10.0	1.35	0.76
Milo or Kafir	11.0	2.5	70.0	2.5	1.7	0.04	0.35
Millet (Hog)	12.0	8.0	65.0	3.2	3.5	0.02	0.34
Oats	11.0	11.0	60.0	4.0	3.5	0.10	0.32
Peanut Oil Meal O.P.	41.0	9.0	27.5	8.4	6.0	0.18	0.57
Rice Grain	8.0	8.6	65.0	2.0	5.1	0.00	0.20
Rice Bran	12.5	13.0	42.0	13.0	10.0	0.09	1.35
Rice Polish	12.6	2.9	57.0	11.6	6.0	0.05	1.12
Rye	11.8	1.8	73.2	1.8	2.0	0.05	0.36
Soy Bean Meal O.P.	43.7	6.0	32.0	6.0	5.5	0.29	0.68
Sunflower Seed	16.0	28.0	22.0	25.0	3.2	0.00	0.60
Sesame Meal	39.0	6.0	23.1	13.0	11.5	2.00	1.60
Wheat (Winter)	13.2	2.5	70.0	2.0	2.0	0.04	0.45
Wheat (Spring)	10.0	2.7	73.0	2.0	2.0	0.04	0.44
Wheat Bran	16.0	9.5	53.7	4.4	6.3	0.13	1.36
Wheat Shorts (Brown)	17.7	6.3	56.6	4.6	4.5	0.02	1.30
Wheat Shorts (Gray)	17.4	5.7	58.0	4.5	4.2	0.02	1.30
Wheat Shorts and Bran Mixed	16.0	7.6	55.7	4.6	5.8	0.14	1.20
Bone Meal	7.0	0.7	4.0	3.0	81.0	32.00	16.00
Dried Brewers Grains	25.0	14.3	43.0	6.6	3.6	0.26	0.48
Pumpkins	1.8	1.7	5.3	1.0	1.0	0.00	0.05
Carrots	1.3	1.2	8.3	0.3	1.1	0.05	0.06
Green Alfalfa	3.0	12.5	12.0	0.6	2.3	0.40	0.07
Blue Grass	4.1	8.8	15.0	1.3	3.0	0.17	0.07
White Clover	4.0	3.1	7.0	0.5	2.0	0.24	0.06

## AVERAGE COMPOSITION OF COMMON POULTRY FEEDS

	PROTEIN	CARBO- HYDRATES			A S H		
	%	Fiber %	Starches Sugars %	Fats %	Total Ash %	Calcium %	Phosphorous %
Alfalfa Leaf Meal	20.0	18.0	40.0	2.5	12.0	1.60	0.20
Barley	10.0	5.6	69.8	2.1	2.7	0.04	0.37
Corn No. 2	9.3	1.9	67.6	4.6	1.4	0.01	0.30
Cocconut Oil Meal	21.0	9.0	45.0	8.0	6.4	0.20	0.60
Corn Gluten Meal	42.0	2.3	46.0	2.2	1.5	0.03	0.37
Cotton Seed Meal	41.5	11.5	28.0	6.0	5.7	0.22	1.20
Fish Meal	60.0	1.2	4.0	7.5	20.0	5.07	3.00
Linseed Meal O.P.	35.0	8.0	36.0	6.0	5.6	0.37	0.73
Meat Meal	55.0	3.0	2.0	9.6	24.0	8.72	4.35
Milk Dried Skin	36.5	0.0	48.9	2.5	8.0	1.28	1.00
Buttermilk Dried	34.0	0.0	42.0	5.4	10.0	1.35	0.76
Milo or Kafir	11.0	2.5	70.0	2.5	1.7	0.04	0.35
Millet (Hog)	12.0	8.0	65.0	3.2	3.5	0.02	0.34
Oats	11.0	11.0	60.0	4.0	3.5	0.10	0.32
Peanut Oil Meal O.P.	41.0	9.0	27.5	8.4	6.0	0.18	0.57
Rice Grain	8.0	8.6	65.0	2.0	5.1	0.00	0.20
Rice Bran	12.5	13.0	42.0	13.0	10.0	0.09	1.35
Rice Polish	12.6	2.9	57.0	11.6	6.0	0.05	1.12
Rye	11.8	1.8	73.2	1.8	2.0	0.05	0.36
Soy Bean Meal O.P.	43.7	6.0	32.0	6.0	5.5	0.29	0.68
Sunflower Seed	16.0	28.0	22.0	25.0	3.2	0.00	0.60
Sesame Meal	39.0	6.0	23.1	13.0	11.5	2.00	1.60
Wheat (Winter)	13.2	2.5	70.0	2.0	2.0	0.04	0.45
Wheat (Spring)	10.0	2.7	73.0	2.0	2.0	0.04	0.44
Wheat Bran	16.0	9.5	53.7	4.4	6.3	0.13	1.36
Wheat Shorts (Brown)	17.7	6.3	56.6	4.6	4.5	0.02	1.30
Wheat Shorts (Gray)	17.4	5.7	58.0	4.5	4.2	0.02	1.30
Wheat Shorts and Bran Mixed	16.0	7.6	55.7	4.6	5.8	0.14	1.20
Bone Meal	7.0	0.7	4.0	3.0	81.0	32.00	16.00
Dried Brewers Grains	25.0	14.3	43.0	6.6	3.6	0.26	0.48
Pumpkins	1.8	1.7	5.3	1.0	1.0	0.00	0.05
Carrots	1.3	1.2	8.3	0.3	1.1	0.05	0.06
Green Alfalfa	3.0	12.5	12.0	0.6	2.3	0.40	0.07
Blue Grass	4.1	8.8	15.0	1.3	3.0	0.17	0.07
White Clover	4.0	3.1	7.0	0.5	2.0	0.24	0.06

The following table has been prepared from actual large scale farm turkey flock operations and experimental studies, for the purpose of showing the average minimum rates for growth of turkeys that should be expected under good growing conditions on an adequate ration of starting mash, growing mash, mixed grains, and green feeds. The average amounts of the different kinds of feed needed at successive weekly and monthly periods, are also shown. The feed requirements for a pound gain in weight as the turkeys increase in age are given in the last column. These figures are all based on the live weights of turkeys.

Age of Turkeys Months	Weeks	Average Wt. of toms and hens in lbs.	Lbs. gain in wt. for each week.	Lbs. of feed con- sumed for each week			Total feed for each week	Cumulative feed requirements for each successive week & at end of each month	Lbs. of feed required to produce one lb. of gain in wt. for each week.
				Start. Mash	Grow. Mash	Grain			
(Initial Wt.)									
	1st.	.12	.08	.08			.08		1.00
	2nd.	.20	.20	.24			.24	.32	1.20
	3rd.	.40	.21	.30			.30	.62	1.42
	4th.	.85	.24	.40			.40	1.02	1.67
1st. MONTH	TOTAL	.85	.73	1.02			1.02	1.02	Av. 1.39
	5th.	1.15	.30	.56			.56	1.58	1.87
	6th.	1.53	.38	.76			.76	2.34	2.00
	7th.	1.99	.46	.76	.25		1.01	3.35	2.19
	8th.	2.51	.52	.94	.30		1.24	4.59	2.38
2nd. MONTH	TOTAL	2.51	1.66	3.02	.55		3.57	4.59	" 2.15
	9th.	3.06	.55	.95	.58		1.53	6.12	2.78
	10th.	3.66	.60	.92	.65	.15	1.72	7.84	2.87
	11th.	4.31	.65	.88	.89	.20	1.97	9.81	3.03
	12th.	5.01	.70	.91	1.13	.22	2.26	12.07	3.23
3rd. MONTH	TOTAL	5.01	2.50	3.66	3.25	.57	7.48	12.07	" 2.99
	13th.	5.77	.76	.65	1.62	.25	2.52	14.59	3.31
	14th.	6.57	.80	.30	2.18	.30	2.78	17.37	3.47
	15th.	7.40	.83	.30	2.70	.35	3.05	20.42	3.67
	16th.	8.27	.87	.30	2.85	.40	3.25	23.67	3.73
4th. MONTH	TOTAL	8.27	3.26	.95	9.35	1.30	11.60	23.67	" 3.55
	17th.	9.17	.90		2.72	.70	3.42	27.09	3.80
	18th.	10.10	.93		2.52	1.08	3.60	30.69	3.87
	19th.	11.05	.95		2.28	1.52	3.80	34.49	4.00
	20th.	12.01	.96		2.00	2.00	4.00	38.49	4.17



HOW FAST DO TURKEYS GROW?  
HOW MUCH DO THEY EAT?

HOW MUCH FEED IS REQUIRED  
TO PRODUCE ONE POUND OF LIVE TURKEY?

(CONTINUED)

5th.	MONTH	TOTAL	12.01	3.74	9.52	5.30	14.82	38.49	Av.	3.96
	21st.	12.91	.90	1.68	2.52	4.20	42.69	4.67		
	22nd.	13.76	.85	1.76	2.64	4.40	47.09	5.18		
	23rd.	14.56	.80	1.84	2.76	4.60	51.69	5.75		
	24th.	15.19	.63	1.92	2.88	4.80	56.49	7.62		
6th.	MONTH	TOTAL	15.19	3.18	7.20	10.80	18.00	56.49	"	5.66
	25th.	15.74	.55	2.00	2.95	4.95	61.44	9.00		
	26th.	16.24	.50	2.00	3.10	5.10	66.54	10.20		
	27th.	16.69	.45	2.00	3.15	5.15	71.69	11.44		
	28th.	17.09	.40	2.00	3.20	5.20	76.89	13.00		
7th.	MONTH	TOTAL	17.09	1.90	8.00	12.40	20.40	76.89	"	10.73
TOTAL FOR 7 MONTHS		17.09		8.65	37.87	30.37	76.89	76.89	Av.	4.34

Summarizing the above table it will be seen that there is required, as shown, 8.65 pounds starting mash, 37.87 pounds growing mash, and 30.37 pounds mixed grains, in addition to green feed or other roughage, to mature one turkey.

Turkeys do not consume feed at a uniformly increasing rate, nor do they make uniform gains in weight as they increase in age, such as shown in these tables, but may show considerable variations in both from week to week, although on a full ration, and otherwise good average conditions. Fluctuations for the average, from week to week, that naturally occur, have been equalized in the above table.

Clear, cool or cold weather is more conducive to heavy feed consumption and rapid growth than extra warm or stormy weather. Hence, actual operations may result in figures fluctuating above or below these given, but the average for a given period should not vary greatly from the figures given above.

It may be expected that turkeys hatched early and carried through a long warm summer season will mature at a larger size, take more time and require more feed to reach maturity than turkeys hatched later in the season.

The above tables are based on the assumption that alfalfa pasture or other green feed will always be available. Without fresh green pasture, the amount of feed required to produce a pound of gain in weight, as shown, will need to be increased approximately 25%.

HOW FAST SHOULD TURKEYS GROW WHEN GIVEN SATISFACTORY FEEDING CONDITIONS

Figures were obtained from large commercial and experimental flocks

Age in Weeks      Approximate Average Weights for Hens and Toms, combined

1      14.56  
 2      15.19  
 3      15.74  
 4      16.24  
 5      16.69  
 6      17.09

Age in Weeks      Approximate Average Weights for Hens and Toms, combined

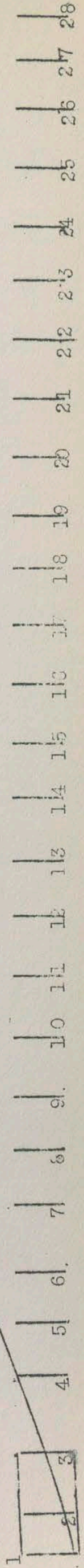
1      1.15  
 2      1.53  
 3      1.99  
 4      2.51  
 5      3.06  
 6      3.66  
 7      4.31  
 8      5.01  
 9      5.77  
 10      6.57  
 11      7.40  
 12      8.27  
 13      9.17  
 14      10.10  
 15      11.05  
 16      12.01  
 17      12.91  
 18      13.76

The curved line illustrates the figures shown, which gives the minimum live weights of turkeys that should be expected at the end of each successive week when on an adequate ration.

This curved line represents the average growth rate of toms and hens, combined. Tom turkeys normally increase in weight about 50% faster than do hen turkeys under the same conditions.

Weights are per turkey

Age in Weeks



WHAT ARE THE TOTAL FEED REQUIREMENTS PER TURKEY  
BY THE END OF EACH SUCCESSIVE WEEKLY PERIOD AS THE BIRDS GROW OLDER.

Period of Determination By Weeks	Pounds of Feed Consumed	Period of Determination By Weeks	Pounds of Feed Consumed
1	.08	20	4.00
2	.24	21	4.20
3	.30	22	4.40
4	.40	23	4.60
5	.56	24	4.80
6	.76	25	4.95
7	1.01	26	5.10
8	1.24	27	5.15
9	1.53	28	5.20
10	1.72	Total	76.89
11	1.97		
12	2.26		
13	2.52		
14	2.78		
15	3.05		
16	3.25		
17	3.42		
18	3.60		
19	3.80		
20			
21			

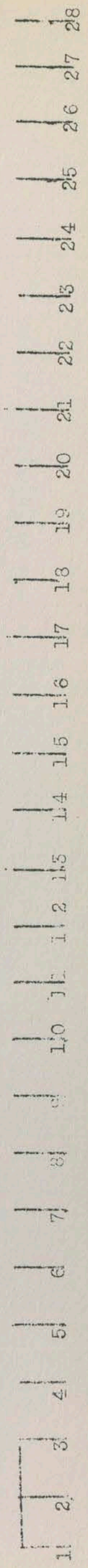
Pounds of feed consumed each week

Diagram illustrating the increasing feed needs of turkeys each successive week throughout the growing period. The figures shown represent weekly averages per turkey.

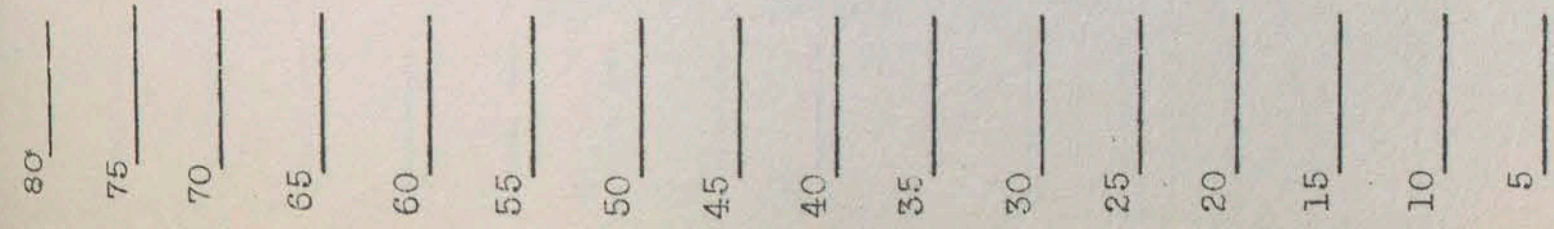
Individual flocks may show slight variations above and below these figures occasionally during the growing period, due to variations in climatic conditions and methods of handling, but the average should approximate the figures shown if the turkeys are to make a profitable growth.

Figures are per turkey.

Age in Weeks



HOW MUCH MASH AND GRAIN DO TURKEYS NEED WHEN GIVEN, IN ADDITION,  
FREE ACCESS TO GREEN FEED OR ALFALFA HAY



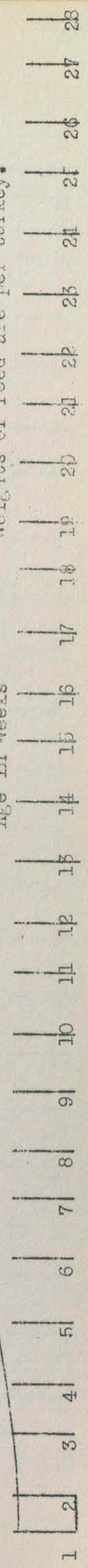
Age in Weeks  
Total Feed Required at end of each Successive Week

Age in Weeks	Total Feed Required at end of each Successive Week
1	.32
2	.62
3	1.02
4	1.58
5	2.34
6	3.35
7	4.59
8	6.12
9	7.84
10	9.81
11	12.07
12	14.59
13	17.37
14	20.42
15	23.67
16	27.09
17	30.69
18	34.49
19	38.49
20	42.69
21	47.09
22	51.69
23	56.49
24	61.44
25	66.54
26	71.69
27	76.89
28	

Pounds of Feed Consumed

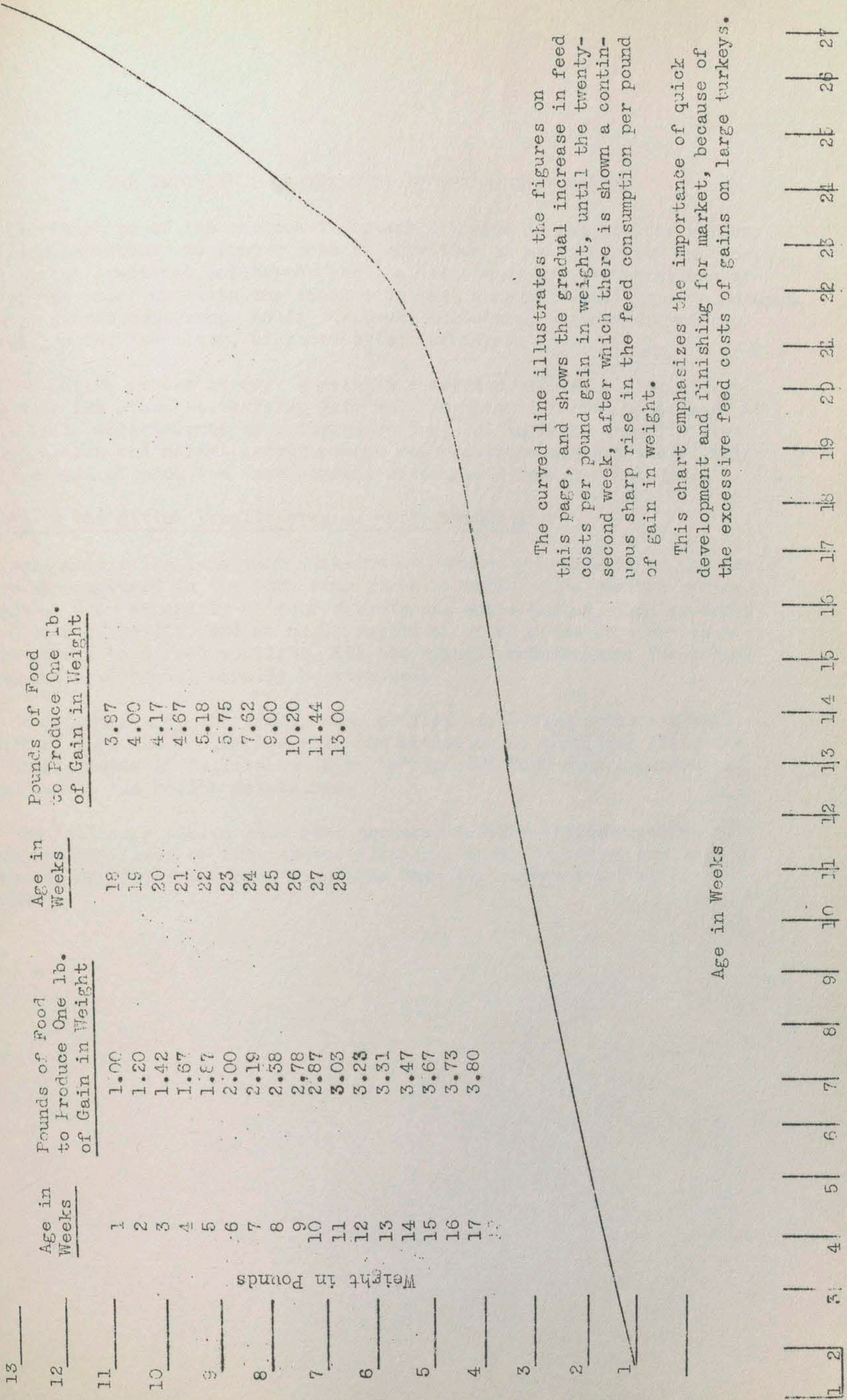
Weights of feed are per turkey.

Age in Weeks



The curved line on this page, illustrating the figures, shows the increase in feed needs of turkeys as they increase in age. A less rapidly increasing rate of feed consumption than shown here would be expected to result in sub-normal growth and a higher feed requirement per pound of increase in weight, and less margin of profit in the finished product.

TURKEYS REQUIRE INCREASING AMOUNTS OF FEED PER POUND GAIN AS THEY ADVANCE IN AGE



The curved line illustrates the figures on this page, and shows the gradual increase in feed costs per pound gain in weight, until the twenty-second week, after which there is shown a continuous sharp rise in the feed consumption per pound of gain in weight.

This chart emphasizes the importance of quick development and finishing for market, because of the excessive feed costs of gains on large turkeys.

## THE IMPORTANCE OF VITAMINS IN THE POULTRY RATION

The function of the various important vitamins in the poultry ration and their importance to proper poultry nutrition is not generally appreciated by the practical poultryman until a deficiency or absence of one or more of the important vitamins results in such abnormal conditions as paralysis, rickets, nutritional roup, colds, deformed skeletons, nervous disorders, stunted growth, sterility, or general loss of vigor.

The turkey grower is more generally concerned with supplying his birds with the starches, sugars, fats and the mineral matter considered to be the basic constituents of a turkey ration, but in fact, the life processes, health and normal growth are no more possible without the vitamins than they are without the more commonly recognized food constituents.

### Variety in the Ration Usually Assures Ample Vitamins

Fortunately the important vitamins are commonly available in the feeds or are manufactured in the body from certain feeds. If a poultry ration is made up from a variety of sources including whole grains, milk products in the case of poults, and an ample supply of fresh green feed and in addition access to direct sunlight, all the vitamin requirements for normal growth and health will usually be supplied.

It is important, therefore, when poultry is handled under confined conditions that the poultrymen give due attention to providing amply for the vitamin needs if full value is to be expected for money expended and normal growth and health maintained.

The following tables have been prepared to show the occurrence in common poultry feeds of the various vitamins, their functions and the effects on nutrition and body functions when the vitamins are absent or deficient.

A Comparison of the Common Poultry Feeds as Sources  
of the Various Vitamins

	: Vitamin : A :	: Vitamin : B :	: Vitamin : C :	: Vitamin : D :	: Vitamin : E :	: Vitamin : G :
Alfalfa Leaf meal (green color)	:Excellent	:Poor	:Absent	:Absent	:Good	:Good
Alfalfa fresh (green)	:Excellent	:Poor	:Good	:Absent	:Good	:Fair
Barley (grain)	:Absent	:Fair	:Absent	:Absent	:Fair	:Poor
Blue grass (green)	:Good	:Poor	:Good	:Absent	:Good	:Fair
Carrots (yellow)	:Good	:Poor	:Fair	:Absent	:Absent	:Absent
Corn yellow (No. 2)	:Fair	:Good	:Absent	:Absent	:Fair	:Poor
Corn white (No. 2)	:Absent	:Good	:Absent	:Absent	:Fair	:Poor
Cotton Seed meal (O.P.)	:Absent	:Absent	:Absent	:Absent	:Absent	:Absent
Corn gluten meal	:Good	:Absent	:Absent	:Absent	:Absent	:Absent
Clover white (green)	:Good	:Poor	:Good	:Absent	:Good	:Fair
Whole Eggs	:Fair	:Poor	:Absent	:Fair	:Fair	:Good
Fish meal	:Poor	:Absent	:Absent	:Poor	:Absent	:Poor
Kale or green cabbage	:Fair	:Poor	:Good	:Absent	:Absent	:Poor
Linseed meal (O.P.)	:Absent	:Absent	:Absent	:Absent	:Poor	:Absent
Meat meal	:Absent	:Absent	:Absent	:Absent	:Absent	:Poor
Milk, dried skim	:Absent	:Poor	:Poor	:Absent	:Poor	:Good
Milk, Buttermilk dried	:Poor	:Poor	:Poor	:Absent	:Poor	:Good
Milk whole	:Fair	:Poor	:Poor	:Absent	:Poor	:Fair
Milk whey	:Absent	:Poor	:Poor	:Absent	:Poor	:Good
Millet seed (Hog)	:Poor	:Fair	:Absent	:Absent	:Absent	:Absent
Oats	:Absent	:Fair	:Absent	:Absent	:Fair	:Poor
Oil (cod liver)	:Excellent	:Absent	:Absent	:Excellent	:Absent	:Absent
Peanut Oil Meal (O.P.)	:Absent	:Fair	:Absent	:Absent	:Fair	:Absent
Rice grain	:Absent	:Fair	:Absent	:Absent	:Fair	:Absent
Rice Bran	:Absent	:Good	:Absent	:Absent	:Good	:Absent
Rice polish	:Absent	:Good	:Absent	:Absent	:Fair	:Absent
Rye	:Absent	:Fair	:Absent	:Absent	:Fair	:Poor
Soy bean meal (O.P.)	:Absent	:Fair	:Absent	:Absent	:Absent	:Poor
Wheat	:Absent	:Fair	:Absent	:Absent	:Fair	:Poor
Wheat bran	:Absent	:Fair	:Absent	:Absent	:Fair	:Poor
Wheat shorts (brown)	:Absent	:Good	:Absent	:Absent	:Good	:Poor
Yeast	:Absent	:Excellent	:Absent	:Absent	:Absent	:Good
Sprouted grain (green)	:Poor	:Fair	:Fair	:Poor	:Absent	:Good

Direct sunlight is one of the most valuable means of producing Vitamin A.

The word "Absent" is used when the vitamin is lacking or there is no information available.

(See next page for important functions of the Vitamins.)

## Their Functions

Effects when deficient  
or absent

## VITAMIN A

Promotes good health and growth.  
Stimulates appetite and digestion.  
Protects against infections of eye,  
nose, throat and lungs. Assists in  
disease resistance, aids reproduction.

Deficiency of Vitamin A results in  
nutritional roup. Slows up growth.  
Decreases appetite and retards di-  
gestion. Causes small white pat-  
ches on lining of throat, may cause  
blindness. May result in colds.

## VITAMIN B

Increases appetite, aids digestion.  
Stimulates growth. Aids hatchability.  
Protects against nervous disorders.

Deficiency or lack of Vitamin B  
results in loss of appetite, weight,  
vigor, results in constipation,  
nervous disorders, increase in size  
of body glands, paralysis, Beri-  
Beri, slows up growth.

## VITAMIN C

Prevents scurvy. Protects against  
infectious diseases. Promotes growth  
and appetite.

Deficiency or absence of Vitamin C  
results in impaired growth, poor  
appetite, and scurvy.

## VITAMIN D

Regulates mineral utilization, pre-  
vents rickets, promotes growth,  
health, reproduction, vitality. Aids  
in growth of body organs and muscle  
tissue.

Deficiency or lack of Vitamin D  
results in rickets, deformed  
skeleton, and death.

## VITAMIN E

Promotes fertility and hatchability

Deficiency or lack of Vitamin E  
results in sterility.

## VITAMIN G

Essential to growth and body maintenance.  
Aids digestion, prevents pellagra.

Deficiency or lack of Vitamin G  
results in paralysis, loss of  
feathers, stops growth, retards  
body functions, results in pellagra,  
causes death.



The subject of fishy flavor in turkey meat has received considerable attention during the past two or three years. While complaints have not been extensive the cases that have occurred have caused much concern because one experience by a family or a hotel with a bad case of fishy flavor at a dinner or banquet is apt to take away the appetites of the participants for turkey for sometime.

The adverse advertising also that turkeys will receive under such circumstances will offset much of the propaganda by the turkey industry for increased consumption if the trouble is allowed to continue or increase.

The exact cause of fishy flavor in dressed turkeys is still obscure and it is hoped that research studies may soon solve the problem so that producers may be protected against this hazard and consumers may be saved disappointments.

Fishy flavor in turkey meat has been generally attributed to the presence of fish meal or fish oil in the ration. However, it is conceivable that there may be other causes such as the turkeys eating refuse, viz. decaying animal or vegetable matter, drinking stagnate water, insufficient fasting before dressing for market, too slow cooling, or too quick freezing before precooling, holding at too high temperatures or the absorption of foreign odors in storage or in transit.

The strongest evidence, however, to date points to the feeding of fish or meat meal of any kind, or fish oil, just prior to killing, together with insufficient fasting as the most probable factors contributing to fishy flavor in turkey meat.

Fish by-products are commonly fed to turkeys on the west coast and fishy flavor has only been reported occasionally. The condition is becoming more prevalent, however, and the cases have usually been traced so far to some association with fish products so that it is evident that the quality of the fish meal used, the amount of meal or oil fed, the length of interval between the use of fish in the ration and killing of the birds and the item of proper fasting are all important factors to keep in mind at this time.

The fishy flavor appears to be associated more with the fat of the carcass than with the muscle tissue. The feeding of fish oil near the killing time is looked upon especially with suspicion.

Until more definite information is available on the subject the turkey grower can only act in accordance with the present information, and take due precautions. Fish by-products are a valuable and important source of poultry feed and if fishy flavor in poultry meat is definitely traced to the use of fish by-products in poultry feed it is very important to the poultry industry to know to what extent, when, and how, they may be used with safety.

COCCIDIOSIS IN TURKEYS  
AND  
METHODS OF CONTROL

26

The turkey grower with a limited experience with diseases, common to turkeys, is always finding something which he thinks must be entirely new, and unfortunately in many cases he arrives at the wrong conclusion as to the cause of his trouble and wastes valuable time with remedies that are not applicable to the case, and which may even add to the difficulties.

Coccidiosis is one of the turkey diseases that so often takes the turkey grower unawares. He has perhaps passed through one or more seasons' successful operations with no serious losses from coccidiosis, but accumulated infection on the premises results in a sudden outburst of the disease, which threatens the life of the poults in a way that is discouraging, indeed. The first two months is the period in the life of the turkey flocks when coccidiosis is most apt to strike, and growers should be on the alert.

Turkey growers who have not had experience with coccidiosis, and who may not be familiar with the occurrence, symptoms, lesions and methods of handling outbreaks are most apt to be taken unawares and suffer losses. The greatest safeguard is to know the disease and to avoid the infection as much as possible and then to be on the lookout for the first appearance of the disease. The grower must be prepared with adequate information to defend himself against the ravages of this disease, which in the writer's opinion is the most serious and most common of all turkey diseases.

Coccidiosis symptoms usually put in their appearance when the turkeys are about three weeks old, if infection is general. A few turkeys seem listless and their feathers look rough, showing the characteristic turning up of the feathers on the back. To the uninitiated these first characteristic appearances mean little, and to some, even, who have had experience they too often go unheeded. These first indications of the presence of coccidiosis are followed in a very short time, perhaps in one or two days, by sudden losses and a little later by a general dejected look of a large part of the flock with a general rough appearance of feathers of the whole flock and more losses. The sudden losses will usually bring the grower to attention. It is now that he begins to seek information and very often gets misinformation and loses precious time in treating his flock and correcting the trouble. Often by this time serious damage has been done that cannot be repaired even though the sick birds live.

Bloody droppings are often characteristic of coccidiosis, but this symptom cannot always be relied upon as an indication. Very young turkeys may die suddenly without any definite outward symptoms or very pronounced lesions internally. Older turkeys, which resist the ravages of the disease longer, show the more pronounced lesions, such as severe hemorrhage in, and thickened walls of the duodenum, that U shaped portion of the small intestines attached to the gizzard. This condition is most pronounced in the duodenum, but may be present in a more or less degree throughout the intestinal tract. It is necessary to open the intestine the full length to properly look for this condition which is characteristic of coccidiosis. The blind pouches will invariably be normal with the characteristic brown, soft contents.

When coccidiosis once gets thoroughly entrenched in a flock of young turkeys, it requires a thorough knowledge of the disease, a constant cleanup of the premises, treatment and nursing of the flock to bring about recovery. Often cases require special treatment to overcome or counteract damage done to the birds. The routine methods of treatment ordinarily prescribed will not always suffice.

#### Cause

Coccidiosis is caused by the invasion of the intestinal walls of the affected fowl by a microscopic protozoan organism. The organism is taken into the body of the fowl with contaminated feed or water. It pierces the cell walls of the lining of the intestines and multiplies, breaking down the cells and small blood capillaries, causing the inflamed and hemorrhaged condition of the intestines, and allows blood to escape into the intestines. In addition to the damage done to the intestinal walls, which interferes with digestion, toxins are produced which poison the bird's systems and impairs their general health.

In the completion of its life cycle the coccidiosis organism passes through several stages of development and at the same time greatly multiplying in number.

After the organism has done its damage and has undergone certain development in its life history it passes out of the intestinal tract with the droppings, when under moist and warm atmospheric conditions for a few days it undergoes further development; after which if picked up again by the same bird or other birds the damage to the flock is repeated and increased in the sick birds or spread to the well birds. Reinfection of the birds intensifies the damage until the affected birds succumb from the disease. The surest treatment consists in preventing reinfection.

It is easy to see that any method of treatment or handling that does not prevent reinfection is valueless. Treatment of the sick birds should be looked upon as the last resort. The greatest reliance must be placed upon the prevention and this means keeping the young birds away from infection by whatever means available. Move the birds to new clean quarters as often as possible, every four or five days at least. Give more range, do not feed on old poultry grounds, protect feed and water from contamination, and allow no feed to reach the ground. If the birds must be confined, then scrape away the surface of ground twice a week and replace with clean sand.

#### Treatment

If sufficient thoroughness is exercised in the way of sanitation right from the start, there will be no occasion for treatment. One ounce of prevention is worth pounds of the best of cures in coccidiosis. Unless great diligence is exercised in the way of sanitation, during and after treatments of sick birds the treatments will prove valueless because the sick birds will be reinfected and then will be in worse shape than before because of their weakened condition.

The treatment consists of removing the organisms that are free in the intestines together with the toxic materials, mucus, and blood that has accum-

ulated. This may be accomplished by a physic of Epsom salts or by what is known as coccidiosis mash, as follows:

#### Epsom Salts Method

Allow the birds free access to a solution of one pound of Epsom salts to five gallons of water or milk for two to three hours with no other liquids to drink; after which return to the regular food and drink. Repeat once each week for two weeks. Birds that are already weak from the disease may not survive the purge. Give this treatment in a pen that can be thoroughly cleaned after the treatment. It is well to spread extra litter on the ground or floor before treatment so as to absorb the moisture and to facilitate cleaning out.

#### Coccidiosis Mash Method

Any mash made up of coarse ground grain 60% and dried milk 40% will serve. The mash should be given for four or five days at a time or up to eight days, if the birds are strong enough to stand the purging effect of the high milk mash. This mash acts as a stimulating food, as well as a physic, and excellent results are usually secured if the cases are taken early. Use a heavy layer of litter and clean out often.

Young birds must be nursed carefully and kept warm while being treated in order to save them, and special care must be taken to prevent more infection and a continuation of the disease in the flock.

A constant supply of the best of mashes that will promote rapid growth is essential in combatting coccidiosis. Keep the birds warm when treating them, and keep the floors and litter dry.

BLACKHEAD IN TURKEYS  
AND  
METHODS OF PREVENTION

29.

Few turkey growers have been spared at least the dread of the blackhead disease. Some with new premises and equipment and commercially hatched poults have been spared the experience of losses from this cause and some with longer experience have not had serious losses to date, but the disease is just as capable of producing destruction to a flock of turkeys and of rendering the premises untenable as at any time in the past when blackhead was considered the one disease to be feared.

In many cases no doubt losses from blackhead have been attributed to other causes. Don't depend entirely on outward appearances. All sick turkeys look much alike. Rely only on internal examination of the dead bird to determine the cause of death. Brooder turkeys may show heavy losses from blackhead.

Blackhead is a disease to be shunned by every turkey grower, for it is capable of bringing great destruction to any turkey flock in short order, or losses may be slower and continued during the season, if preventative measures are not continually carried out where infection is present.

Without a knowledge of the disease, from experience and study, precautionary measures may seem somewhat like shadow boxing. The disease must be combated before it shows up. Blackhead in turkeys cannot be cured though birds may mature and go to market and not die on account of the disease. It should be remembered that prevention, and not cures, must be relied upon to save a turkey flock from blackhead losses.

Turkeys that have the blackhead disease will eventually die of the disease if kept long enough, regardless of any treatment. A post-mortem examination of a bird that has died of blackhead will show anyone the great damage that has been done to the liver and the blind pouches, and it will readily be realized that the probabilities of restoring these organs to normal health and functioning with cures are remote indeed. Examine carefully the liver of every turkey that dies for large greenish yellow spots and the blind pouches for ulcers of the walls. These are evidences of blackhead.

Sources of Contamination

Turkey and chicken breeding stock are natural hosts of blackhead organisms as well as cecum worms and are common sources of infection to other turkeys. Old turkey and chicken pens are also probable sources of infection of both blackhead organisms and cecum worms. Sanitary precautions are essential but cannot be relied upon alone especially where there has been a previous history of the disease present. Since it is not safe to depend altogether on preventing contamination, the additional practical precaution consists in a preventative measure that will remove the organisms that enter the young turkeys body, before they get in their work in case contamination has taken place.

Scientific investigation has shown us how the threadlike cecum worms which commonly infest the blind pouches of turkeys and chickens, are closely associated with the blackhead disease, and that the perpetuation of this disease in poultry yards and in poultry flocks is facilitated by the cecum worm acting as an intermediate host, and protecting the organism from destruction by the elements when they are passed out with the droppings. In fact, we know that when a turkey flock is kept free from cecum worms that blackhead troubles are no longer serious. The practical prevention of blackhead, therefore, consists in keeping the turkey flock free of cecum worms and blackhead organisms. This means strict cleaning of yards and houses along with suitable medication of the turkey flock where there has been any previous experience with the disease on the premises or with the breeding stock to be used.

#### Powdered Tobacco Method of Prevention

Nicotine sulphate is useful in eliminating caeca worms and the crude product in the form of powdered tobacco, carrying a guaranteed nicotine content of  $1\frac{1}{2}\%$  to 2% is easy and safe to use and very inexpensive. Other vermifuges for removing cecum worms will also answer the purpose if properly used.

Begin with the young birds three to four weeks old. Treatment is as follows: Add 2 pounds of powdered tobacco to each 100 pounds of starting mash. This tobacco can be purchased from your feed or poultry supply dealer. Use only fresh products and those that are kept in sealed containers. Feed the tobacco and feed mixture exclusively, except for the usual supply of green feed, water or milk, two full days for each treatment and on the morning of the third day give the flock a physic consisting of water or milk with one pound of epsom salts to each 5 gallons of water or milk. Force the birds to drink the salts solution for about two hours. This concludes the treatment after which the turkeys are returned to their regular ration and fresh water or milk.

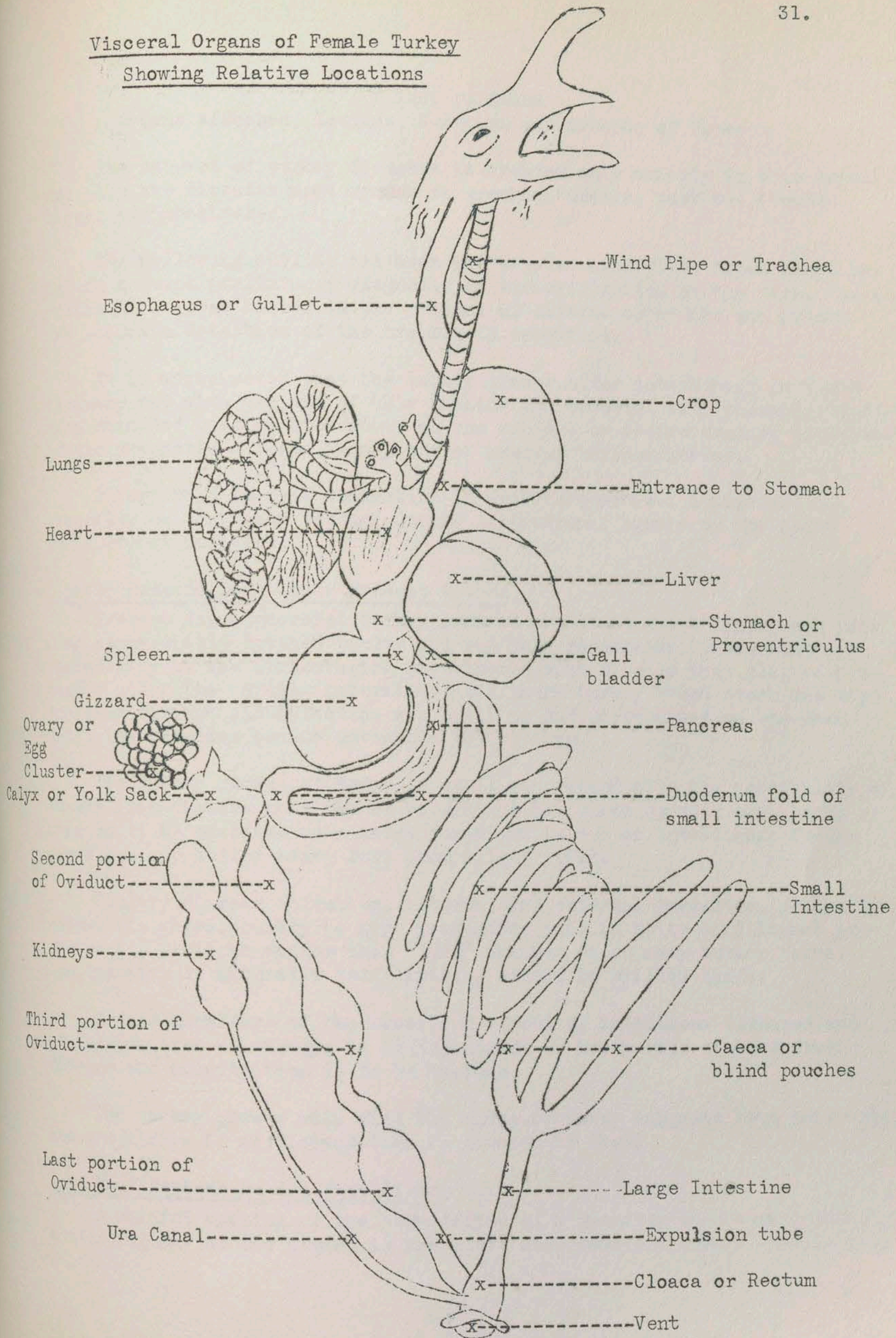
The above treatment should be repeated once each month until the turkeys are at least four or five months of age. Turkeys three or more months of age may be given a stronger tobacco mixture up to three or four per cent tobacco, and kept on the salts solution three to four hours each time, instead of two hours as suggested for small turkeys.

While the young birds are being purged, and for the entire day following the purge, precaution should be taken to keep the young birds warm to prevent colds and piling up. Immediately following the treatment all pens and houses should be thoroughly cleaned to minimize reinfection. This treatment does not destroy the infection but assists the birds in its elimination. In severe cases of blackhead in commercial flocks, it is especially advantageous to take the entire flock to new clean quarters, preferably a green pasture, after each treatment to avoid reinfection.

The moving of the turkeys to entirely new quarters every week or ten days will help greatly to prevent reinfection.

Turkey poults should be kept away from old poultry feeding grounds while they are being brooded. Many cases of blackhead infection starts at this time. Attendants going from old poultry yards, or on other premises where blackhead has been present, to brooder houses and clean yards can quickly spread the disease. Old feed or water troughs or blowing dust or litter may also serve to spread the disease.

Visceral Organs of Female Turkey  
Showing Relative Locations



## TURKEY DISEASES

## Organs Affected, Lesions, Symptoms and Methods of Control

The subject of turkey diseases is treated only briefly in this circular and only the diseases most common to growing turkeys, past the brooder stage, are considered.

The following outline has been prepared to assist the flock owner in making a quick preliminary diagnosis of turkey diseases on the farm. Quick action is a great factor in the control of disease outbreaks and prompt and accurate detection of the trouble is essential.

It is anticipated that the turkey grower, after determining in a preliminary way with the aid of this outline the trouble, will promptly consult more detailed special literature on the subject or secure trained assistance if the suspected disease is capable of causing serious losses.

Expert help in this connection is available without charge and can generally be contacted through County Agricultural Agents or the State Agricultural Colleges.

Disease Hazards Less Under Present Method

Present day commercial turkey growers who start a new flock each year with commercially hatched poults and who take reasonable precautions are spared many of the discouraging experiences with disease that plagued producers under the earlier natural methods where turkey brood stock was kept the year through and infection was built up and perpetuated on the farm until the premises became untenable for poultry.

The turkey grower of today is still confronted with the possibility of losses from disease that may be brought to his place by visitors, birds or dogs or if he operates on a large scale and is not an intelligent feeder his flock may suffer heavy loss from malnutrition.

Poultry disease infection, internal and external parasites, gradually accumulate where poultry is kept year after year in spite of diligent precautions. It is no wonder that "luck" changes on so many turkey farms. The industry is naturally self limiting except in skilled hands.

A fair knowledge of the cause and effect of infectious diseases and of malnutrition of turkeys is indispensable if heavy risk of loss from disease and malnutrition is to be avoided.

The turkey grower will find the study of these subjects both interesting and profitable if sufficient time is devoted to them.

Hold Post Mortems On All Dead Birds

A careful opening of the body cavity of a recently dead turkey without mutilating any of the organs is the first step toward a proper examination.



The diagram on page 31 has been prepared to show the internal organs of a turkey and to help to show the location of some of the more common and important turkey diseases to be discussed later.

The internal organs should be exposed intact by cutting the skin at the point of the breast bone, inserting the two first fingers of each hand and pulling both ways until the breast and abdomen has the skin removed. Then by cutting forward on each side of the breast through the ribs, the breast bone can be torn back and the internal organs exposed without disturbing or mutilating them. The organs can then be separated out for examination much as shown in diagram on page 31.

The usual procedure of post mortem examination begins with the head and proceeds towards the rear, examining each organ first on the outside then inside or by cutting through sections until all parts have been examined.

The head and wattles of a turkey are good indicators of the general health of the bird. They are the location of the visible indications of Chicken Pox, Colds, Nutritional Disease, Botulism, Cholera and external parasites.

One of the first symptoms of sickness in a turkey, except when quick death occurs, is the sinking away of the tissues of the head and neck, sunken eye sockets, and a caved in appearance of the chest giving the bird a dejected look with sharp features and apparently longer beak. At the same time the color of the skin over the head and the wattles will show lack of tone, and a dark bluish red color except in cases of cholera and botulism when congestion occurs.

#### Location and Description of Diseases

Where to Look  
For Indications

Name of Disease, etc.

HEAD AND NECK

CHICKEN POX

In cases of chicken pox, yellowish brown scabs of varying size appear over the head and neck, sometimes involving the eye. Similar scabs, more yellow in color, are usually found in the mouth, on the tongue, and often at the opening of the windpipe causing symptoms of suffocation.

Local treatment of these scabs consists of removing the scabs when they interfere with sight, swallowing or breathing and painting the spots with tincture of iodine.

The head lesions are rapidly spread by contact, fighting, etc.

If only a few cases show up, prompt isolation and local treatment may save further spread. Preventative vaccination, which is now rather simple,

HEAD AND NECK  
(Continued)

CHICKEN POX (Continued)

is recommended where there is danger of spread or where chicken pox is prevalent on the farm or in the vicinity. Birds are recognized as common carriers of chicken pox and should be kept away from feed boxes as much as possible.

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NUTRITIONAL DISEASE (See page 22)

In the case of nutritional disease the skin of the head and neck will appear pale and dried, the eyes and nostrils watery, with the feathers of neck and shoulders soiled, often the eye socket, cleft of mouth, and sinuses of face are filled with thick mucus or cheesy matter which must be removed. The mucous membranes of the mouth and throat usually show very small pin head size white spots which are better revealed if exposed to direct rays of the sun.

This condition can be prevented or relieved by a proper vitamin A balance in the feed. Colds are much easier controlled also if the vitamin A is ample in the ration and the birds have access to direct sunlight.

-----  
BOTULISM (Limberneck)

A congested head and neck with neck limber and general paralysis of the body indicates botulism or food poisoning. The source of the trouble is the food. Spoiled animal or vegetable food should be hunted down and buried. If affected birds have eaten sufficient of the poisonous food they will die, otherwise they will eventually get well after a day or so. Sick birds should be placed in a cool place and left alone. Little relief can be given by treatment. The premises should be looked over continuously for dead animals or decaying vegetable matter.

-----  
PARASITES

Internal and external parasites result in a pale shrunken appearance of the head and neck. Definite evidences of parasites are easily determined on examination of the intestines for worms and under the feathers for lice and mites. The proper treatment for worms, lice and mites and strict sanitary precautions is the only remedy in these cases. Remedies for combatting parasites are generally available at poultry supply houses with directions for their use.

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(If the various internal organs are examined in their natural order as they appear on the diagram, page 31, no part of the viscera will be overlooked. A pair of sharp scissors should be used to open the full length of the wind pipe and bronchi or branches to the lungs and the alimentary canal from the esophagus to the vent. This examination should be done as soon as the bird dies or a better job can be done if the sick bird is bled to death. In this way the hemorrhaged or blood shot areas can be more readily noticed.)

## WINDPIPE

## INFECTIOUS BRONCHITIS

Upon opening the windpipe, if a growth appears at the upper end obstructing passage causing suffocation and bloody mucus is found on the inside walls of the windpipe and extending into the lungs, the trouble is probably due to infectious bronchitis or tracheitis. This is a very serious and fatal contagious disease and spreads through a flock very fast if the birds are closely confined. Vaccination against the disease is the only method of protection except precautions against infection. Treatments of sick birds are useless.

## BRONCHI AND LUNGS

## PNEUMONIA

If in addition the appearance of bloody foamy mucus in the windpipe as above, the lungs or a portion of them show a solid condition and dark bluish red color instead of bright pink color, then pneumonia is indicated. Treatment of ailing birds is useless except through improving the general feeding and housing conditions.

## ESOPHAGUS AND CROP

## MYCOSIS

Upon opening the esophagus, crop, and stomach the appearance of bright yellow wort like growths varying from pin head size to large clusters is due to mycosis.

The growths are caused by a fungus infection picked up with the feed, grain fields or unthrashed grain are common sources. The trouble is not contagious, but may become very general in a flock and cause heavy losses. Treatments so far have not yielded very satisfactory results. Mycosis growths in the esophagus and crop often interfere with passage of food and water resulting in enlarged crop and starvation. The feeding of fresh green pasture and thrashed grain or milled feed is a good precautionary measure.

## LIVER

## BLACKHEAD

A full discussion of blackhead will be found under that heading on page 29.

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## FOWL TYPHOID

A mottled, light colored, greatly enlarged, and easily torn liver indicates fowl typhoid when accompanied with enlarged and congested spleen and kidneys, gray spots are usually found on the heart.

Death may be sudden or the birds may linger for several days or may get well. Sick birds become weak rapidly, lose color about the head, and usually show greenish yellow droppings.

This disease is spread in the same way as cholera and is controlled by the same rigid sanitary precautions.

The vaccination of the flock promptly with the proper biological products now available, changing to a new location, and a thorough cleaning are the methods of treatment prescribed.

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## CROP

## CROP BOUND (Big Crop)

Enlarged crop or crop bound may be due to improper vitamin balance or to insufficient protein supply according to the author's experience. Such trouble may also be the result of forcing the birds to consume an excess of coarse fodder along with a limited amount of water. Investigations indicate that turkeys may also inherit a tendency to big crop.

Excess drinking of water in warm weather may also result in enlarged crops. Enlarged crop condition interferes with the normal passage of food out of the crop. The accumulated food and water becomes putrid and poisons the bird.

Remove the cause and many cases will right themselves if they are not of too long standing. Bad cases may be relieved by emptying the contents of the crop out through the mouth by holding the bird up by the feet and massaging the crop. Then lay the bird on its back, pull the skin away from the lower side of the crop, and then with heavy thread or twine sew off a dulp of the skin over the crop, thus holding the crop walls up in position for emptying. The stitches may be taken out at dressing time.

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## DUODENUM

## COCCIDIOSIS

Reference is made to page 26 of this bulletin for a full discussion of coccidiosis.

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LOWER SMALL  
INTESTINES

## CHOLERA

If upon opening the small intestine the inside walls show a hemorrhaged condition, the blood vessels congested, some mucus present which may be streaked with blood, also accompanied by blood shot areas on the breast muscle, heart muscles, and through the body in general, cholera is indicated. In cases where the birds do not die quickly the respiratory system may show a condition similar to colds and pneumonia.

Affected birds may die suddenly without knowledge of their sickness, other cases may linger several days and some may not die, but the disease is considered very fatal. Sick birds have high temperatures, drink water frequently and rapidly grow weak, and show yellowish green diarrhea.

Cholera is very contagious. The infection is taken in with the feed or water that has been contaminated with saliva or manure of sick birds.

Infection may be carried on the feet of attendants, in running water or equipment. Destroy all sick and dead birds by burning and disinfect equipment and clean up premises. Consult your state poultry pathologist about protective measures. Vaccination as a protective measure is recommended.

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## WORMS

When the interior of the small intestines are being examined observation should be made for tape worms and round worms of various sizes and lengths.

The round worms or white may be as long as four or more inches and float free in the intestinal contents.

The tape worms are white when large, segmented, may be so small as to be almost invisible to the naked eye or may be several inches long. Sometimes the worms almost fill the intestines, blocking passage of food material. Tape worms attach themselves to the walls of the intestines. All intestinal

LOWER SMALL  
INTESTINES  
(Continued)

WORMS (Continued)

worms propagate by means of eggs. These eggs are passed out of the bird free in the case of round worms and in the separated segments that are passed out in the case of the tape worms. Other poultry take these eggs in with the feed or water after which the eggs hatch in the turkey. Worms damage the birds by producing toxins and by using food material thus both poisoning and starving the affected bird at the same time. Strict sanitation and plenty of range is recommended. Protection of poultry manure piles from the turkeys is an important preventative.

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INTERNAL ORGANS

TUBERCULOSIS

Tuberculosis in turkeys is characterized by small hard modular like growths on the inner surface of the body cavity or organs or imbedded in the organs. The modules which are grayish yellow when cut open and are more apt to be found in the lungs or liver first. Affected birds grow very thin and pale and are spreaders of the disease. Fortunately when commercial flocks are raised from purchased poults and old stock is not kept on the place this disease is not a serious problem. Any suspicion of the disease, however, should receive prompt attention before the premises become contaminated.

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CECA OR  
BLIND POUCHES

BLACKHEAD

If upon opening the blind pouches, ulcers appear on the inside, blackhead is indicated. The reader is referred again to page 29 on blackhead.

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LEGS

PARALYSIS

Paralysis may be due to intestinal parasites, botulism, lack of vitamin D, all of which have been covered in detail under these separate headings.

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JUDGING DRESSED TURKEYS  
AT  
DRESSED TURKEY SHOWS

A SUGGESTED SCORE CARD FOR JUDGING DRESSED TURKEYS

The dressed turkey show is one of the rather new developments in the rapidly expanding turkey industry, and one that is fast growing in importance.

The increase in the number of shows and the increase in size and quality of exhibits is largely a result of increased interest on part of turkey breeders who have always in the past been interested in exhibiting the results of their skill as breeders and competing for honors in the show ring with the results of their efforts. They are willing to enter the contest now on a meat quality basis as well as on a live bird show basis.

The dressed turkey show is welcomed as a valuable aid in stimulating a greater interest in developing the most desirable type of market turkey on the part of turkey breeders and of establishing in the minds of commercial producers and the consuming public a proper appreciation of all the qualifications that go to make the most desirable market bird.

The score card herewith presented is planned to appeal especially to breeders who are making a special effort to develop a type of bird that will furnish the largest proportion of the most desirable meat to carcass and the greatest net return for feed consumed.

In this connection it will be observed that forty four points is allotted to conformation which makes it possible for judges to give due credit to breeder accomplishments, since the requirements for entry eliminates most defects for which drastic cuts may be made.

This score card has been prepared after comparing notes with a number of the most experienced and best qualified judges of dressed turkeys, and represents a composite of the opinions on the most important items. It is suggested for use in connection with dressed turkey shows for the sake of greater uniformity in the emphasis placed by different judges upon the various items that are considered important when judging turkeys, and for the purpose of acquainting prospective exhibitors with the relative importance of the different items to be considered in making awards when the birds are being selected for competition.

It is not anticipated that this score card will be used in scoring all individual birds at any dressed turkey exhibit but that it may serve as a common basis of judging.

After eliminations have been made down to the last few birds on exhibit, and where the contest is close, the contestants should have the privilege, if they so desire, to have the birds scored according to some definite standard if such is provided for in the regulations of the show.

It will be especially helpful also if the prospective exhibitors can have some common guide in selecting their exhibit birds that will be recognized in placing the birds at the show.

It is generally considered now that patrons of dressed turkey shows are sufficiently acquainted with the requirements for recognition that a minimum requirement equivalent to the specifications for U. S. Prime market turkeys as shown on the last page of the score card may be established for entry.

This score card is offered for the consideration of managers and judges of dressed turkey shows.



DRESSED TURKEY SCORE CARD

Name of Show \_\_\_\_\_

All turkeys are considered ineligible for scoring that show evidences of disease of any kind, crooked or badly notched breast bones, deformed back, crooked legs, emaciation or other abnormalities, or that will not qualify for U. S. Prime grade according to U. S. specifications listed at bottom of page 2.

Entry No. \_\_\_\_\_ Variety \_\_\_\_\_  
 Sex \_\_\_\_\_ Age \_\_\_\_\_ Weight Class \_\_\_\_\_  
 Dressing Method: Dry picked \_\_\_\_\_ Semiscald \_\_\_\_\_ Wax method \_\_\_\_\_

	Total Points Allowed	Deductions to be made for defects including those indicated below according to opinion of judge up to total points allowed for each section.	Deductions made	Final Score
<b>GENERAL APPEARANCE AND CONDITION</b>				
Body, feet and legs clean and smooth	2	Body soiled, vent dirty, feet and legs not washed clean, scaley leg, bumble foot, claws not clean.		
Skin, With natural bloom, smooth, free from old blemishes, color white or light cream.	6	Skin rough, scaley, roost marks, scabs. Lacking natural bloom due to washing, sweating or rubbing. Blue back, sunburn, color dark yellow or greenish yellow not desirable.		
Flesh. Firm, precooled, free from old bruises or discolorations.	4	Flesh and joints flabby, evidences of insufficient precooling, old flesh bruises. Green struck back or ribs due to green feed in intestines.		
Sub-total	12			
<b>DRESSING</b>				
Bleeding. Thorough and neatly done.	6	Red discoloration of skin or red pin marks or flesh dark due to poor bleeding. Mutilated head or neck, head not washed clean, blood in mouth or throat.		
Picking. Thorough and neatly done.		Skin tears, scald damage, scuffing, fresh bruises, pin feathers, quills. Wing, hock or neck feathers left, Feather follicles left.		
Fasting.	4	Crop contains evidences of feed or liquids, other evidences of insufficient fasting, crop removal improperly done.		
Legs and wings intact.	2	Broken wing tips or disjointed wings or legs, bruised flesh or hemorrhage at joints.		
Head wrap.	1	Not appropriate, durable, attractive or well fitted.		
Sub-total	19			

## DRESSED TURKEY SCORE CARD (Con't.)

MEAT QUALITY				
Finish (fat)	14	Entire carcass not properly covered, fat lacking on back, hips, breast or breast between feather tracts, fat in patches not desirable.		
Flesh. Texture soft, pliable. Not blue in color.	7	Flesh lacking sufficient fatty tissue. Muscle tissue too firm to touch, not soft meated, showing blue through skin.		
Maturity.	4	Feathers not fully developed, too young or too old for best meat quality or market purpose, staggy, pouchy. Hairy condition of skin.		
Sub-total	25			
CONFORMATION				
Body. Well balanced. Symetrical and thickly fleshed. Back proportionately wide, body deep	14	Length, width, depth of body not well proportioned. Entire carcass not uniformly thick fleshed. Back not straight. Hips narrow, ribs not well sprung for sex, width not carried well forward, too wedge shaped, body lacks depth.		
Breast. Wide and long.	24	Breast not broad, sloping. Keel bone short, not straight, dented, dished, nobbed end, not well covered, too prominent.		
Legs. Straight, thick fleshed, well set, moderate length.	6	Legs not straight, too long, set too close together, too spindly, length not in proportion to body, shanks too long, toes not straight. Thighs not thick fleshed.		
Sub-total	44			
GRAND TOTAL	100			

U. S. Prime Specifications. Young, soft-meated turkey with well-fleshed breast, and with entire carcass well covered with fat. Must be well bled, well dressed with breast practically free of pinfeathers and only few scattered pinfeathers over remainder of carcass. Crop must be empty. Only very slight flesh or skin bruises, abrasions, or discolorations permitted, with breast practically free of such defects. Slightly dented breast bones (not to exceed  $\frac{1}{2}$  inch) permitted, but no crooked breasts that would interfere with the slicing of the meat, or other deformities, allowed. Broken wings above the wing tips or broken legs not permitted. A disjointed leg or wing permitted if only slightly bruised. Birds with crops properly removed and sewn up may be included in this grade. Must be dry picked or semi-scalded and must be dry packed.

UNIVERSITY OF NEVADA  
AGRICULTURAL EXTENSION DIVISION  
CECIL W. CREEL  
DIRECTOR

ANNUAL REPORT OF EXTENSION WORK IN AGRICULTURAL ECONOMICS  
( Project No. 6 )  
for  
1 9 3 7

Verner E. Scott  
Extension Agricultural Economist

ANNUAL REPORT OF EXTENSION AGRICULTURAL ECONOMIST

V. E. SCOTT

1 9 3 7

PROJECT VI Extension Work in Agricultural Economics

SUB-PROJECT D Farm Management

I. Names of Specialists and Divisions of Work.

1. Names. - V. E. Scott, L. E. Cline, J. W. Wilson
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II. Changes in Extension Organization.

1. J. W. Wilson finished the project on which he was working and reassumed the duties of county extension agent.

III. Summary of Work Done by Sub-Project Phases.

1. Sub-project phase - Poultry Efficiency Studies.
  - a. Factors which determined inclusion in year's program.  
Changing costs of feed, prices of poultry products and

ANNUAL REPORT OF EXTENSION AGRICULTURAL ECONOMIST

V. E. SCOTT

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PROJECT VI                      Extension Work in Agricultural Economics

SUB-PROJECT D                  Farm Management

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II. Changes in Extension Organization.

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III. Summary of Work Done by Sub-Project Phases.

1. Sub-project phase - Poultry Efficiency Studies.
  - a. Factors which determined inclusion in year's program.  
Changing costs of feed, prices of poultry products and

methods of management make it desirable for poultrymen to keep some form of record of the enterprise. From an extension standpoint it is desirable to keep up a series of efficiency studies from year to year in order to show trends of production and costs.

b. Goals for 1937. Eighteen chicken flocks and fifteen turkey flocks.

c. Methods and Accomplishments.

(1) How the Work Was Done.

Poultry records were obtained by two methods. Standard poultry efficiency monthly report cards were sent out by the county extension office to interested poultrymen who returned their production and feed cards at the end of each month. Another source of poultry records was the poultry phase of general farm accounts. The poultry record was a part of the general record but special emphasis was made on poultry problems at the time of visiting the cooperator. The two types of record will be combined in a poultry efficiency study which will be mimeographed early in 1938.

(2) Results Obtained.

Summaries were made of 12 turkey records and 16 chicken records for the year 1936. During 1937 records have been kept of 14 turkey flocks and 18 chicken flocks.

d. Future Activities in this Phase of Economic Work.

About the same number of turkey and chicken flocks is expected in 1938. During the fall of 1937 county agents are

making a special attempt to increase the enrollment of cooperators in the farm management project. These efforts are expected to result in some increase in the new cooperators in the poultry efficiency study.

2. Sub-project phase - Dairy Efficiency Studies.

a. Factors which determined inclusion in this year's program.

Dairying is a very important part of the farming enterprise on 80 percent of the farms in western and southern Nevada. Efficiency of production varies from an average butterfat production of 180 pounds to 330 pounds and dairy incomes vary from very low to fairly good. Experience has shown that farmers who make use of the knowledge obtained from records make more money. This year the promotion of Dairy Herd Improvement associations was made a part of this sub-project phase because it has been noted from surveys that average production in western Nevada has decreased in the last 5 years during which time no active production project was in effect.

b. Goals - 46 cooperative dairy accounts. Promotion of testing and of Farm Bureau dairy departments in Churchill, Douglas, and Lyon counties.

c. Methods and Accomplishments.

(1) How the Work Was Done.

Inventories, questions regarding dairy accounts was carried on in connection with general farm account field work.

Promotion of dairying through special meetings in Churchill, Douglas and Lyon counties.

(2) Results Obtained.

- (a) Summaries were made of 21 dairy farm records kept in 1936. During 1937 records have been kept of 47 dairy herds.
- (b) Dairy departments of the county Farm Bureaus have been promoted and programs of work planned in Churchill, Douglas, and Lyon counties.
- (c) Dairy Herd Improvement associations have been organized with 18 members and 420 cows in Churchill county, 10 members and 240 cows in Lyon county, and 11 members and 300 cows in Douglas county. Testing will start about December 1st.

d. Future Activities in this Phase of Economic Work.

It is expected that in addition to recording weight and test of milk and keeping up the dairy herd book, testers will be required to assist farmers monthly with their farm record book. By this means about 30 new dairy accounts will be added.

3. Sub-Project Phase - General Farm Accounts.

a. Factors which determined inclusion in this year's program.

Due to the fact that the majority of farms in Nevada are diversified, general farm accounts with special reference to certain important enterprises seem to be the best type of farm management extension work. The Nevada Experiment Station is carrying on beef cattle and sheep cost accounts in Elko, Humboldt, Eureka and White Pine counties. Hence these enterprises are not made a part of the Extension farm management project except on diversified farms.



As farm incomes increase, farm accounts become more necessary for the purpose of making out income statements. Financial statements are of value in securing credit and banks and other credit agencies find that the farm account book is a great assistance in judging the ability of a farmer to meet his payments.

b. Goals.

- (1) Ultimate - Some form of accounting on the majority of farms in the state.
- (2) Goal for 1937 - 75 completed farm accounts.

c. Methods and Accomplishments.

- (1) How the Work was Done.

Promotion of the project and securing new cooperators was done by county and district extension agents. The agent reported prospects to the extension economist who with the help of a station field man set up the account.

The details of book work, inventories, etc., were supervised by station and extension field men and the accounts summarized in the station and extension offices. Mimeographed news bulletins were prepared and delivered to cooperators in which not only the average data was given for all farms and special groups of farms, but also the cooperators own farm.

- (2) Results Obtained.

(2) There were 64 completed records which were summarized

ANNUAL REPORT OF EXTENSION AGRICULTURAL ECONOMIST of agricul-  
ture desirable V. E. SCOTT. In addition to its relation-  
ship to the Agricultural Conservation Program, the County  
Committee makes up an excellent advisory board for other  
activities such as Dairy Herd Improvement, Soil Conservation,

PROJECT VI and Extension Work in Agricultural Economics

SUB-PROJECT I County Agricultural Program Planning

(1) Ultimate - To have a well informed body or committee of

I. Names of Specialists and Divisions of Work.

persons in each county who are interested in promoting

1. Names. - V. E. Scott, L. E. Cline, J. W. Wilson.

the best interests of agriculture in the county.

2. Division of Work. - The general plan for work under Project VI

(2) Goals for 1937.

in 1937 is as follows: L. E. Cline was responsible for Sub-

(a) To correct any errors made in the 1936 statistical

Projects A, Marketing; B, Credit; C, Agricultural Outlook; and

estimates, to consider statistical goals for 1938.

was available for consultation and assistance for all other

and to consider the future Agricultural Conservation

sub-projects under Project VI. V. E. Scott was responsible

Program.

for Sub-Project D, Farm Management; I, Economic Planning; K,

(b) To analyze agricultural problems and set up or re-

Extension Work in Agricultural Adjustment; and was available

wise goals in each county.

for consultation and assistance for all other sub-projects under

(c) To study economic phases that might influence action

Project VI. J. W. Wilson was responsible for work on Sub-

program.

Project I, County Program Planning.

(d) To analyze effectiveness of various programs.

II. Changes in Extension Organization.

(e) To make a detailed analysis of the 1936-37 agricul-

1. J. W. Wilson finished the project on which he was working and

tural conservation Program in at least two counties

reassumed the duties of county extension agent.

In regard to participation and results.

III. Summary of Work Done by Sub-Project Phases.

(f) To set up special experimental program in one or

1. Sub-project phase - County Agricultural Planning.

two counties.

a. Factors which determined inclusion in this year's program.

(g) To help identify in at least one county areas that

County Agricultural Program Planning is an essential

are significant in application of development and

part of the Agricultural Conservation Program since the plans

Soil Conservation Program.

pects for starting several new accounts at the beginning of the next farm account year.

4. Sub-Project Phase - AAA Farm Accounts.

a. Factors which determined inclusion in this year's program.

There are some farmers who wish to start farm accounts but who are more or less afraid of the details in an account kept in cooperation with the Extension Service. The books made available through the AAA have been used for this group of farmers.

b. Goals. Promotion of the use of 250 AAA books.

c. Methods and Accomplishments.

(1) How the Work Was Done.

Extension agents were supplied with AAA books.

Upon request books were given out to interested parties. A list of names was kept by the Extension secretary and visits made by a field man to those who had expressed an interest.

(2) Results Obtained.

About 40 books were given out but none were completed. There was very little effort made to promote this sub-project phase due to the fact that a more complete book is available to those who really mean to keep the account.

d. Future Activities in this Phase of Economic Work.

We have a supply of about 700 AAA books, hence we will continue to give them out to those who inquire, but there is not likely to be enough work done to warrant writing up a project.

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PROJECT VI Extension Work in Agricultural Economics

SUB-PROJECT I County Agricultural Program Planning

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II. Changes in Extension Organization.

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III. Summary of Work Done by Sub-Project Phases.

1. Sub-project phase - County Agricultural Planning.
  - a. Factors which determined inclusion in this year's program.

County Agricultural Program Planning is an essential part of the Agricultural Conservation Program since the plans

formulated by the County Committee show the type of agriculture desirable for the county. In addition to its relationship to the Agricultural Conservation Program, the County Committee makes up an excellent advisory board for other activities such as Dairy Herd Improvement, Soil Conservation, and the Extension programs.

b. Goals.

- (1) Ultimate - To have a well informed body or committee of persons in each county who are interested in promoting the best interests of agriculture in the county.
- (2) Goals for 1937.
  - (a) To correct any errors made in the 1936 statistical estimates, to consider statistical goals for 1938, and to consider the future Agricultural Conservation Program.
  - (b) To analyze agricultural problems and set up or revise goals in each county.
  - (c) To study economic phases that might influence action programs.
  - (d) To analyze effectiveness of action programs.
  - (e) To make a detailed analysis of the 1936-37 Agricultural Conservation Program in at least two counties in regard to participation and results.
  - (f) To set up special experimental programs in one or two counties.
  - (g) To help identify in at least one county areas that are significant in application of Resettlement and Soil Conservation Programs.

c. Methods and Accomplishments.

(1) How the Work Was Done.

- (a) A summary of the 1936 and 1937 statistical and narrative county planning reports was made.
- (b) Held county meetings at which the work already done was reviewed, discussed, and revised.
- (c) Assembly of revised county data.
- (d) Assembly of state data, coordinating the county data.

(2) Results.

Twenty-five county planning meetings were held at which statistical data and longtime goals were reached and goals for 1938 established.

Due to pressure of other activities, the study of the effectiveness of action programs was pushed into next year's program of work. A meeting of representatives of B.A.E., Forest Service, Taylor Grazing Service, Farm Credit Administration, Experiment Station, and Extension Service at Elko resulted in plans for a progress report of the Economic Survey of Elko county, now partially completed. The survey is expected to be completed in 1938. The progress report is now in process of preparation.

Office conferences were held with Mr. Mumford of the AAA, Mr. Hardman of the Soil Conservation Service, Mr. Venstrom of the Resettlement Administration and Mr. Clawson from the B.A.E., regarding the planning program,

application of Resettlement and Soil Conservation Programs, and special planning surveys. The county planning work resulting from these conferences will go over into 1938. No experimental A.C.P. counties were set up in 1937.

- d. Future activities in regard to this sub-project phase.
  - (1) Statistical results will be checked as in 1937.
  - (2) County Extension programs will be built on projects planned by the County Planning Committees and Farm Bureau Boards.
  - (3) Continued County Planning Committee meetings for the purpose of maintaining interest and individual responsibility for the success of the program.

2. Sub-project phase - Discussion Groups.

- a. Factors which determined inclusion in year's program.

Discussion is a phase of education. It has been a part of all Extension presentation, but has never been stressed. All people enjoy discussion, but the tendency to wander from the subject makes this method of presentation slow. The specialist feels that he can put over his project in less time by means of a lecture followed by questions. It is apparent that small groups who are willing to do a little studying can use this method to good advantage as a means of self-entertainment and self-education.

- b. Goals.

- (1) Ultimate - To assist and promote discussion of subjects of local and national interest.

- (2) Goal for 1937 - To carry on group discussions in connection with Farm Center meetings, local established groups such as church, school, etc., and to organize 3 groups especially for discussion.

b. Methods and Accomplishments.

- (1) How the Work Was Done.

- (a) There were two personal conferences with Mr. John Brewster, Western Representative of the Planning Division, on methods and plans; a regional conference at Salt Lake City on methods; and a national conference at Chicago at which the program itself was a demonstration in discussion.

- (b) Pamphlet materials were prepared in Washington, D. C. and these were sent out to groups, together with suggestions and questions prepared in the state office.

- (2) Results.

Pamphlet material was sent to 9 church groups who signified a desire to use them. Two demonstrations were given for women agents at the annual Extension conference. Five discussions were carried on at Farm Center meetings by the state leader as demonstrations of the method.

Three groups were organized for the express purpose of discussing local and national subjects. A group of 8 young farmers in Churchill county selected "The Importance of Tenancy". A similar group in Douglas county selected "Noxious Weeds" for their first discussion meeting, and a



similar group in Washoe county selected "Taxation" as the first subject. A "list of activities in which you would like to take part", adapted from a similar list used in Iowa, was sent out to agents, some of whom decided to use it at Center meetings. Suggestions and questions were prepared by the state office for the use of three groups.

d. Future activities in this sub-project phase.

A questionnaire has been prepared which asks for a summary of discussion in the various counties.

It is felt that discussion as a sub-project phase can best be carried on by groups organized for the purpose of self-improvement and that Extension efforts in this program should be directed along this line.

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PROJECT VI            Extension Work in Agricultural Economics

SUB-PROJECT K        Agricultural Adjustment

(No formal plan was written for this sub-project)

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II. Changes in Extension Organization.

1. J. W. Wilson finished the project on which he was working and reassumed the duties of county extension agent.

III. Summary of Work Done by Sub-Project Phases.

1. Sub-project phase - Cooperation with the State Management of the Soil Conservation and Domestic Allotment Act.
  - a. Factors which determined inclusion in year's program.

(1) While the executive features of the Agricultural Conser-

vation Program were taken out of the hands of the state Extension force, it is still necessary to assist in educational work and to assist the Executive Secretary in interpreting the program and adapting it to state conditions. Since Program Planning is a part of the same Federal project, it is logical that the State Extension program be organized along the same lines.

b. Goals - No goals were set up except in connection with the County Program Planning Sub-Project.

c. Methods and Accomplishments.

(1) How the Work Was Done.

Features of the 1937 Conservation Program were explained at county meetings early in the year. The general philosophy of conservation was discussed in connection with planning meetings. As a member of the State Technical Committee, the farm management specialist assisted in interpreting the 1937 program and worked out preliminary county bases and goals for the 1938 program.

(2) Results.

The 1937 Conservation Program was analyzed and presented at meetings in White Pine, Washoe, Clark, Elko, and Lincoln counties. Prepared tentative 1938 bases and goals for all counties. Attended state conference on 1938 conservation practices.

2. Sub-project phase - Clean up of old AAA contracts.

a. Factors which determined inclusion in year's program.

(1) The state extension economist in charge of farm management

projects was Director of Compliance for the old AAA contracts, hence the follow up and completion of these contracts were carried on into 1937.

b. Goals - No goals were established but it was hoped that all of the old contracts would be cleaned up.

c. Methods and Accomplishments.

(1) Results.

All of the necessary documents for completion of claims have been prepared and sent to the proper department in Washington, D. C.

All corn-hog payments have been made. All wheat payments have been made except:

Churchill County - 88-001. #84 R. J. Swope, #76 Arthur Thompson, and #35 C. B. Staup (1936 Application)

Elko County - 88-004. #137 Joseph Jeanney.

Lyon County - 88-010. #221 Mrs. Neidt.

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EXHIBITS (In separate envelope)

PROJECT VI, SUB-PROJECT D - Farm Management

News Bulletins. - Volume XI

- No. 1 - Financial Condition of Farms by Type of Farm.
- No. 2 - Summary of Family Classification, Farm Privilege and Cash Cost of Living by Type of Farm.
- No. 3 - What Factors Make Farms Profitable.
- No. 4 - Summary of Family Classification, Farm Privilege and Cash Cost of Living by Size of Groups.
- No. 5 - Summary of Family Classification, Farm Privilege and Cash Cost of Living by Income Groups.

PROJECT VI, SUB-PROJECT I - County Agricultural Program Planning

Nevada's Agriculture and County Planning

List of Activities.

MISCELLANEOUS

Press Releases

- Changes in Production and Marketing in the Nevada Dairy Industry.
- Efficiency in Production.

STATISTICAL REPORT OF EXTENSION AGRICULTURAL ECONOMIST

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No. days in office	130
No. days in field	154
No. miles traveled	11,674
No. extension agent visits	43
No. of leaders interviewed	39
No. result demonstrations visited	143
No. other farms or homes visited	18
No. Farm Bureau meetings attended	7
No. leader training meetings attended	
Adult	5
Attendance	38
4-H Club	1
Attendance	32
No. method demonstrations	26
Attendance	64
No. of meetings at result demonstrations	3
Attendance	46
No. other meetings attended	37
Attendance	545
No. of individual letters	135
No. circular letters prepared	6
No. news articles prepared	7
No. conferences with agents by phone	3

No. of days:

Program determination and project planning	49
Relations with cooperating organizations and agencies	17
Preparation of teaching materials	56
Assisting agents with teaching methods	4
Keeping extension workers posted on subject matter	3
Training local leaders.	8
Other direct teaching of rural people	71
Determining project accomplishments	12
Making studies to determine more effec- tive methods of conducting project	23
Reports and miscellaneous	41

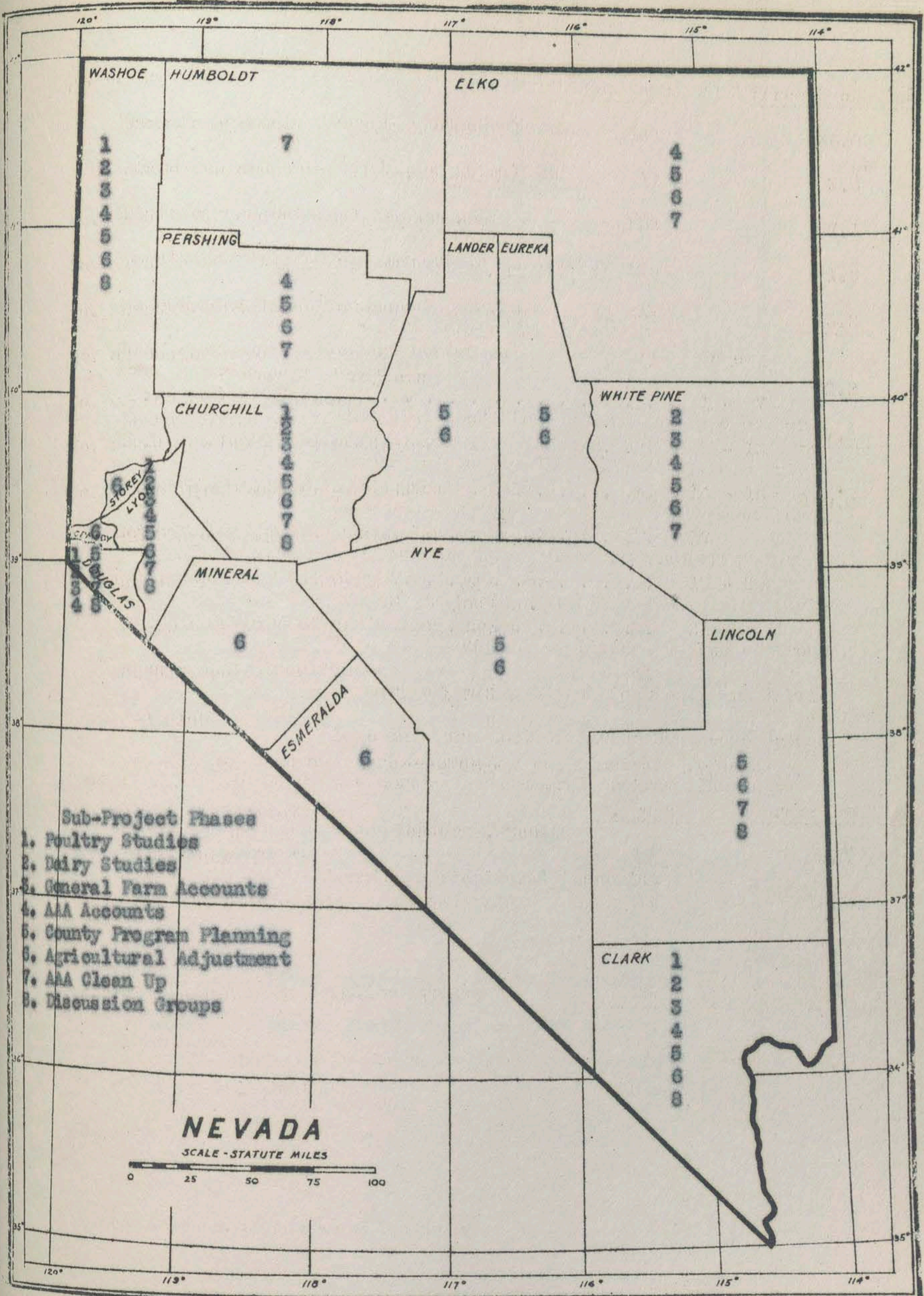
No. of Days and Percent of Time on Principal Projects

	<u>No. Days</u>	<u>Percent of Time</u>
Discussion Groups	18	5.8
Program Planning	50	16.3
AAA Clean Up	3	1.0
Agricultural Conservation Program	<u>23</u>	<u>7.5</u>
Sub-Total AAA	94	30.6

	<u>No. Days</u>	<u>Percent of Time</u>
Farm Management	111	36.0
State Conferences	11	3.6
District and National Conferences	22	7.1
Boys' and Girls' Club Work	5	1.6
Reports and Miscellaneous	<u>41</u>	<u>13.3</u>
Sub-Total All Projects	284	92.2
Annual Leave	<u>24</u>	<u>7.8</u>
Total Days	308	100.0



### SUB-PROJECT PHASES IN COUNTIES



NEWS BULLETIN

Volume XI No. 1

May 20, 1937

UNIVERSITY OF NEVADA  
AGRICULTURAL EXPERIMENT STATION  
Department of Farm Development  
and  
AGRICULTURAL EXTENSION SERVICE  
Cooperating

Reno, Nevada

.....

Note: The results presented in this bulletin are derived from accounts kept in cooperation with Nevada farmers. As fast as the results are compiled they are presented in the form of bulletins for the benefit of cooperating farmers. These results are preliminary and subject to revision later when the final summarization is made for formal publication.

.....

THE FINANCIAL CONDITION  
OF THE SEVERAL TYPES OF FARMS COOPERATING IN FARM ACCOUNT WORK  
IN 1936

By

Louis Titus, Assistant in Farm Development  
and  
Mabel L. Connor, Statistician in Farm Development

This report is a summary of the accounts kept on 56 private farms in Nevada during the year 1936. Accounts have been obtained from seven other farms, four poultry and three truck farms, which are not included in this report.

The cooperating farmers keep a record in a farm account book of their cash transactions, of feeds fed to livestock, of the production of crops and livestock, and other necessary data.

Representatives of the Experiment Station and Extension staff assist in taking the farm inventories once a year and they inspect the accounts at intervals of 3 or 4 months during the year in order to keep the records up to date. At the end of the year the books are closed, checked in the field to see that the necessary information is complete, and sent in to the University for compilation and analysis.

The 56 farm records included in this report were classified into types of farming as follows: 9 crop farms, 17 dairy farms, 17 general farms, 7 livestock farms, and 6 livestock-dairy farms.

The type of farm is determined by the percentage of income derived from different enterprises as explained below.

#### Classification of Farms

Crop - Farms which derive 60 percent or more of their incomes from the sale of crops.

Dairy - Farms which derive 60 percent or more of their incomes from the sale of dairy products and dairy stock.

General - Farms which derive less than 60 percent of their incomes from any one source.

Livestock - Farms which derive 60 percent or more of their income from cattle, sheep, and hogs.

Livestock-Dairy - Farms which derive 75 percent of their income from any combination of cattle, sheep, hogs, and dairy, except that the income from the dairy may not be less than 20 nor more than 60 percent of the total income.

#### Definition of Terms

Total Receipts and Expenses include both cash transactions and inventory changes.

Net Cash Income is the difference between cash income and cash expenses.

Return to Capital and Family Labor is the amount remaining after deducting total expenses from total receipts. It may also be called Net Farm Income.

Family Labor Income is obtained by deducting 6% interest on the total investment from the Net Farm Income.

Operator's Labor and Management Wage is obtained by subtracting the value of unpaid family labor from the Family Labor Income. This balance represents the amount left to pay the operator for his labor and management.

In Table I is shown the average Total Assets, Liabilities, and Net Worth of the different types of farms. The total investment and the net worth of the livestock farms is greater than that of the other types, the livestock-dairy farms are next in order while the other three types of farms have no significant difference.

Table I. Total Assets, Liabilities, and Net Worth  
56 Nevada Farms 1936  
Average per Farm

	Crop	Dairy	General	Livestock	Livestock Dairy	Your Farm
No. of farms in group	9	17	17	7	6	
Real Estate						
Land	\$11,369	\$10,414	\$10,900	\$30,302	\$15,026	
Farm improvements	951	891	1,476	3,438	4,105	
Total	12,320	11,305	12,376	33,740	19,131	
Productive Livestock						
Hogs	65	72	131	455	182	
Beef or other cattle	211	588	863	7,339	2,572	
Dairy cows	212	1,209	713	807	1,046	
Sheep	6	12	94	115	135	
Turkeys	14	40	217	1	9	
Poultry	34	61	119	101	131	
Bees	30	0	0	0	38	
Total	572	1,982	2,137	8,818	4,113	
Feeds and supplies	1,031	555	879	2,599	1,192	
Horses	401	306	307	664	680	
Machinery & equipment	1,488	1,371	1,585	2,216	1,456	
TOTAL FARM INVESTMENT	15,812	15,519	17,284	48,037	26,572	
Other Assets						
Farm home	2,190	1,656	1,849	4,999	3,399	
Furniture	323	214	228	766	383	
Cash on hand	530	167	164	275	98	
Notes & Accts. Rec.	1,459	282	250	321	329	
Shares of stock & other	239	250	18	171	917	
Personal share of car	133	186	143	248	176	
Total	4,874	2,755	2,652	6,780	5,302	
TOTAL ASSETS	20,686	18,274	19,936	54,817	31,874	
Liabilities						
Fixed notes, mortgages	5,442	4,366	7,580	15,541	9,981	
Accounts payable	244	273	682	635	629	
Total Indebtedness	5,686	4,639	8,262	16,176	10,610	
NET WORTH	15,000	13,635	11,674	38,641	21,264	

Page 3.

In Table II is shown the average total assets in terms of percentage of the total values. As would be expected the crop farms have the highest percentage of investment in land and the livestock-dairy farms have least.

Table II. Farm Investment Expressed in Percent  
Average per Farm

No. of Farms in group	Crop	Dairy	General	Livestock	Livestock Dairy	Your Farm
	9	17	17	7	6	
	%	%	%	%	%	%
Real Estate						
Land	71.9	67.1	63.1	63.1	56.6	
Farm improvements	6.0	5.7	8.5	7.2	15.4	
Total	77.9	72.8	71.6	70.3	72.0	
Productive Livestock						
Hogs	.4	.5	.7	.9	.7	
Beef or other cattle	1.3	3.8	5.0	15.3	9.7	
Dairy cows	1.3	7.8	4.1	1.7	3.9	
Sheep	.1	.1	.5	.2	.5	
Turkeys	.1	.2	1.3	0	0	
Poultry	.2	.4	.7	.2	.5	
Bees	.2	0	0	0	.1	
Total	3.6	12.8	12.3	18.3	15.4	
Feeds and supplies	6.5	3.6	5.1	5.4	4.5	
Horses	2.6	2.0	1.8	1.4	2.6	
Machinery and equipment	9.4	8.8	9.2	4.6	5.5	
TOTAL FARM INVESTMENT	100	100	100	100	100	

In Table III is shown the variation in Assets, Liabilities and Net Worth. The assets and net worth of the livestock farms were greater than in the other groups but the variations between individual farms were so great that it would not be safe to say that any other differences between groups are significant.

Table III. Variation in Assets, Liabilities, and Net Worth

	Assets	Liabilities	Net Worth
<u>9 Crop farms</u>			
High	\$39,316	\$12,611	\$35,946
Low	5,635	233	- 3,559
Average	20,686	5,686	15,000
<u>17 Dairy Farms</u>			
High	45,841	10,500	35,341
Low	7,093	989	4,546
Average	18,274	4,639	13,635
<u>17 General Farms</u>			
High	73,759	57,430	20,139
Low	4,319	260	4,059
Average	19,936	8,262	11,674
<u>7 Livestock Farms</u>			
High	120,615	40,814	81,915
Low	16,292	2,120	14,172
Average	54,817	16,176	38,641
<u>6 Livestock-Dairy Farms</u>			
High	57,452	18,086	39,366
Low	9,675	753	8,922
Average	31,874	10,610	21,264

### Ratio Between Total Assets and Liabilities

A method in common use to determine the soundness of any business is to find the ratio between liabilities and assets. It is usual to consider that a firm is sound when the indebtedness is less than 50 percent of the assets. This is a measure of long-time solvency which can be applied to farming in the same way as it is to any other business.

In Table IV the relation of total liabilities to total assets is shown in the first line. The greatest indebtedness in relation to assets was found on the general farms which had an average of \$41 total liabilities for every \$100 total assets. The averages of all groups were well within the limit which is considered sound, although there were 6 individual farms within the groups with liabilities equal to more than half the assets.

### Ratio Between Quick Assets and Liabilities

A measure of short time or immediate solvency is obtained by finding the ratio between those assets which are liquid, or readily salable, and the short term liabilities. The liquid assets are cash on hand and those goods which may be readily sold in the cash market, such as livestock, feeds, and grain. Short term liabilities include running accounts payable and short term notes.

Here again the minimum for financial safety requires that there be \$2 of liquid assets for every dollar of short term liabilities. A sudden slump in prices might make it difficult to meet those short term obligations if liabilities are more than 50 percent of the assets.

In the second line of Table IV is given the amount of current liabilities per \$100 of quick assets. It will be seen that all, except the general farm group were within the limit of safety. There are farms within these groups which should closely scrutinize their financial set-up and be very cautious about a further increase in indebtedness. Among the 56 farms there were 18 farms with current liabilities exceeding 50 percent of the quick assets.

### Relation of Cash Receipts to Cash Operating Expenses

An indication of financial efficiency is found in the ratio of cash income to cash operating expense. It is indicated by the amount of cash expended for farm operations for every \$100 of income as shown in line three of Table IV.

If a large proportion of every dollar of income is used up in operating costs, little will be left with which to meet living expenses and principal and interest payments on indebtedness. No set ratio is possible here but it should be kept as low as is consistent with efficient operation. According to this, the general farms had the highest ratio and the crop farms the lowest ratio.

The objection may be legitimately raised that cash expense may be expended in increasing inventories, by the purchase of crops or livestock which are yet unsold and which, therefore, are not included in the cash income. This is corrected by using the ratio of gross expense to gross income.

Relation of Gross Expense to Gross Income

This may be designated, briefly, as the Gross Ratio. In it the faults of the cash operating ratio are avoided since this includes changes in inventory.

The gross ratio is given in line four of Table IV. The general and livestock farms have the highest and the other three groups have the lowest ratios.

Interest and Principal Payments

While all credit is expensive, short term is usually more expensive than long term credit, and involves the extra risk that payment may be demanded at an inconvenient time, forcing liquidation of assets, such as breeding stock which may impair the earning power of the farm. Farmers should strive to put their financing on a safe basis and where large amounts are involved, obtain long term credit if possible.

In the last three lines of Table IV is shown the actual interest and principal payments and borrowings reported on these farms in 1936. The largest amounts were paid by the livestock groups in interest, principal, and borrowings, because these are usually large farms with heavy investments, and cattle feeding operations are usually financed by borrowings.

Table IV. Measures of Financial Condition of Farms

	Crop	Dairy	General	Livestock	Livestock Dairy	Your Farm
No. of farms in group	9	17	17	7	6	
Total liabilities per \$100 total assets	\$ 25	\$ 25	\$ 41	\$ 27	\$ 33	
Current liabilities per \$100 quick assets	41	37	53	22	41	
Operating expenses per \$100 cash receipts	58	69	76	61	69	
Gross expense per \$100 gross income	56	59	64	65	57	
Interest paid per farm	156	236	304	723	415	
Principal paid per farm	1088	1047	879	2634	820	
Total money borrowed per farm	61	1072	1328	1901	738	

Income of Farms

The determination of profit made on farms is a difficult matter because there is no general agreement as to what is meant by the term "profit". It is necessary to use several other terms to show the measure of financial success of farms.

The Return to Capital and Family Labor is a commonly used term that is substituted for the word "profit". This is the amount of capital available in any one year for the use of the family and the payment of interest on investment. It will be seen in Table V that with this measure the livestock farms had the highest average income and the dairy farms the lowest, although there is so much variation between the individual farms of each group that it cannot be said that any one type of farm has a significant advantage.

Another substitute for the word "profit" is the Family Labor Income which is the Return to Capital and Family Labor with interest on the investment deducted. It represents the amount of money available for the family to live on. When this is done the crop farms had the highest average income and the livestock farms, which had the highest capital and family labor income, dropped to lowest place and had the smallest family labor income. The reason is that the average amount invested in livestock farms was greater than in farms of any other type and therefore the amount deducted, representing the interest on investment, was greater.

A third substitute for "profit" is called the Operator's Labor and Management Wage. It is the Family Labor Income with deductions made for the value of the unpaid family labor. It is the amount the operator receives for his work and management for the year. In 1936 the highest wage was paid by the crop farms with an average of \$845 and the lowest by the livestock farms which, on the average, lacked \$371 of paying any wage.

Table V. Summary of Income to Different Types of Farms

	Crop	Dairy	General	Livestock	Livestock Dairy	Your Farm
No. of farms in group	9	17	17	7	6	
Return to Capital and Family Labor						
Average	\$1863	\$1770	\$1778	\$2822	\$2465	
Highest	4285	3038	5353	8285	3634	
Lowest	106	420	- 395	- 31	858	
Family Labor Income						
Average	915	836	742	- 51	871	
Highest	3423	2191	2683	2049	2086	
Lowest	- 681	-1061	-1228	- 1157	- 473	
Operator's Labor and Management Wage						
Average	845	624	415	- 371	573	
Highest	3423	2191	2034	1409	1869	
Lowest	- 681	-1541	-1433	-1269	- 991	



Table VI.

## Expenses, Income, and Returns in 1936

	Crop	Dairy	General	Livestock	Livestock Dairy	Your Farm
No. of farms in group	9	17	17	7	6	
<b>CASH EXPENSES</b>						
Livestock bought	\$123	\$ 257	\$ 224	\$1547	\$789	
Feed purchased	36	551	620	411	445	
Hired labor	730	362	497	1152	764	
Crop expense	221	140	165	135	180	
Misc. livestock expense	12	16	37	123	36	
Machinery upkeep & repair	154	143	134	222	175	
Machinery, new	430	504	680	356	209	
Improvements, new & repair	62	126	125	455	149	
Taxes	161	142	144	483	241	
Water	252	161	138	55	39	
Cash or crop rent	6	17	69	0	53	
Miscellaneous	19	40	84	61	30	
Electricity, farm share	7	2	16	12	12	
Gas and oil	109	94	158	166	105	
Total Cash Expense	2322	2555	3091	5178	3227	
<b>CASH RECEIPTS</b>						
Livestock sales	388	543	1012	5919	2418	
Dairy product sales	173	2149	758	1460	1308	
Turkey sales	107	201	369	28	73	
Poultry sales	16	99	84	79	65	
Egg sales	20	85	266	181	236	
Crop sales	3066	319	1171	569	345	
Machinery & equip. sales	40	49	118	6	47	
Labor off farm	167	178	184	16	35	
Miscellaneous income	51	82	98	139	125	
Honey sales	9	0	0	0	0	
Cash rent	0	0	0	0	0	
Wool sales	0	2	30	32	31	
Total Cash Income	4037	3707	4090	8429	4683	
Less Cash Expense	2322	2555	3091	5178	3227	
NET CASH INCOME	1715	1152	999	3251	1456	
Inventory change (plus or minus)	+148	+ 618	+ 779	- 429	+ 1009	
NET FARM INCOME (RETURN TO CAPITAL AND FAMILY LABOR)	1863	1770	1778	2822	2465	
Less int. @6% on investment	948	934	1036	2873	1594	
FAMILY LABOR INCOME	915	836	742	- 51	871	
Less unpaid family labor	70	212	327	320	298	
OPERATOR'S LABOR AND MANAGEMENT WAGE	845	624	415	- 371	573	

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AGRICULTURAL EXPERIMENT STATION  
Department of Farm Development  
and  
AGRICULTURAL EXTENSION SERVICE  
Cooperating

Reno, Nevada

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Note: The results presented in this bulletin are derived from accounts kept in cooperation with Nevada farmers. As fast as the results are compiled they are presented in the form of bulletins for the benefit of cooperating farmers. These results are preliminary and subject to revision later when the final summarization is made for formal publication.

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SUMMARY OF FAMILY CLASSIFICATION, FARM PRIVILEGE,  
AND CASH COST OF LIVING

By

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### Introduction

Farm and home records were completed on 66 Nevada farms in 1936. Of these 66 accounts 61 household records were kept in sufficient detail to use in the summaries. One farm in the group supported two families and two farms supported three families each. Data are discussed in this summary on the basis of families and individual persons and not on the basis of farms.

In 1934 and 1935 comparisons were made on the basis of areas, giving an opportunity for farmers of one part of the state to compare living expenses with farmers in other parts of the state. In the 1936 summary farms are classified according to type, crop, general, dairy, livestock-dairy, poultry, and livestock, (Sec News Bulletin Vol. XI, No. 1) and an attempt is made to compare household expense according to this classification.

### Family Classification

As shown in Table I the average family in this study consisted of 2.1 adults, .8 of one child over 16, 1.8 under 16 years of age, .5 of one person hired farm labor, insufficient hired household labor to tabulate, and an average of 5.2 persons per family. While the study in 1936 includes 20 families not included in 1935 there is no change in the average number of persons per family and very little change in the distribution.

Where members of the family receive a definite wage they are classified as hired farm labor and that portion of time for which they are hired is deducted from any other classification.

TABLE I. CLASSIFICATION OF FAMILIES  
By Type of Farm According to Age and Labor Groups

Type of Farm	Number of Families	Adults	No. of Children		Hired Farm Labor	Total No. of Persons in Family
			over 16 years	under 16 years		
Crop	13	1.9	.5	1.6	.4	4.4
General	19	2.2	.8	1.8	.2	5.0
Dairy	17	2.0	1.1	2.3	.3	5.7
Livestock-Dairy	6	2.0	1.7	1.0	.5	5.2
Poultry	3	2.7	.7	2.3	.1	5.8
Livestock	8	2.3	.4	1.4	1.3	5.4
Average - All Groups		2.1	.8	1.8	.5	5.2

Cash Expended for Living, Furniture, Housing and Automobiles

Household and personal expense as used in Table II includes expenditures for food, operating expenses and supplies, health, development and recreation, personal, clothing, and life insurance and savings.

No new houses were built during 1936 but house repairs was \$39 per family which was an increase of \$4 over the amount spent for the same item in 1935.

The average amount expended per family in 1936 was \$987 for household and personal expense, \$85 for furniture, \$39 for house repairs, and \$102 for new automobiles.

These items are slightly greater than in 1935, especially the item "New Automobiles", but the total cash farm home expense was slightly less in 1936. No conclusion can be drawn regarding economies made in 1936 since the 20 families added to the group might account for the small difference in average expense. The fact that no new houses were built in 1936 appeared to have the effect of leaving more funds available for other expenditures.

TABLE II. DISTRIBUTION OF CASH FARM HOME EXPENSES, 1936  
Average Per Family

Type of Farm	Number of Families	Household & personal Expense	Furniture	House Repairs	New Autos	Total
Crop	13	\$ 793	\$ 94	\$46	\$189	\$1,122
General	19	1,008	74	45	23	1,150
Dairy	17	983	72	17	115	1,187
Livestock-Dairy	6	1,019	118	13	75	1,225
Poultry	3	939	59	59	270	1,327
Livestock	8	1,252	106	69	81	1,508
Average - All Groups		987	85	39	102	1,213

Living Expense and Total Income per Family

The total living expense of a farm family as used in this study includes the cash expended for living expenses (after deducting cost of new automobiles), the value of the farm produce used in the home and the rental value of the house. The value of farm produce and the rental value of the house taken together are referred to as farm privilege. The charge made for farm produce is based on the value of the produce if sold at the farm. Rent for the house is calculated at 10 percent of the inventory value on January 1, 1936.

Gross income from the farm as used in this study consists of the cash income from farm products sold, plus income from labor off the farm, plus net increase in inventory values, plus the items of farm privilege. It does not include other income off the farm such as income from outside investments.

Percent of income used for living increases and decreases directly with the gross income. There seems to be no correlation between percent of income used for living and type of farm except as type of farm influences income.

The average gross income of 46 families in 1935 was \$4,885 and the average gross income of 66 families in 1936 was \$5,539 or \$654 greater. In 1935 living expense amounted to 30.2 percent of the gross income and in 1936 living expense amounted to 29.4 percent of the gross income with variations in the groups from 22.9 percent on crop farms to 35.5 percent on poultry farms.

TABLE III. LIVING EXPENSE PER FAMILY  
For the Year 1936

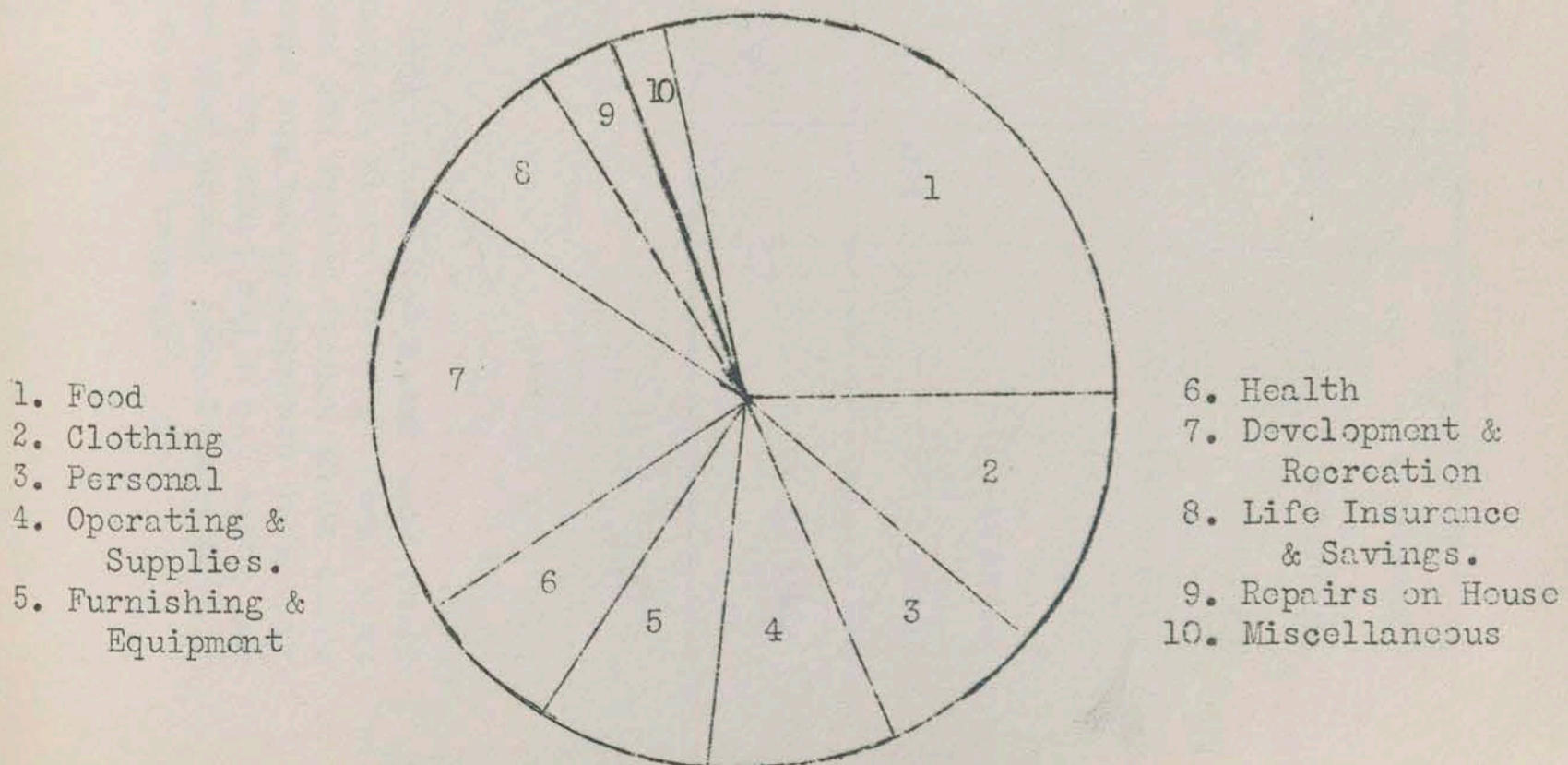
Type of Farm	Number of Families	Cash Expenses	Rent of Dwelling	Farm Produce	Total Living Expense	Gross Income	Percent of Income Used For Living
Crop	13	\$ 933	\$238	\$273	\$1,444	\$6,311	22.9
General	19	1,127	120	245	1,492	4,736	31.5
Dairy	17	1,072	168	266	1,506	4,702	32.0
Livestock-Dairy	6	1,150	344	340	1,834	6,126	29.9
Poultry	3	1,057	189	326	1,572	4,426	35.5
Livestock	8	1,428	437	510	2,375	7,947	29.9
Average - All Groups		1,110	218	300	1,628	5,539	29.4

Average Amounts Expended for Farm Home Expense

The total farm home expense per family in 1936 was \$1,110, an increase of \$107 over the average for 1935. Food cost was \$28 per family more but bears nearly the same ratio to the total expense. In 1935 clothing was included with personal and the combination accounted for 23 percent of the total expenses. In 1936 the two items were separate but their combined value represented only 18.7 percent of the total. The increase in total cost and in cost of food over 1935 was 10 percent. Both of these increases can be accounted for by the general rise in price levels and by increased gross income.

TABLE IV. AVERAGE AMOUNTS EXPENDED  
FOR FARM HOME EXPENSE PER FAMILY

	1935		1936		Your Farm-1936	
	Amount	Percent of Total Expense	Amount	Percent of Total Expense	Amount	Percent of Total Expense
Groceries	\$284	28.3	\$312	28.1	\$	
Clothing	) 232	23.0	129	11.6		
Personal			78	7.1		
Operating & Supplies	81	8.1	96	8.6		
Furnishing & Equipment	74	7.4	85	7.7		
Health	94	9.4	72	6.5		
Development & Recreation	130	13.0	201	18.1		
Life Insurance & Savings	70	7.0	72	6.5		
Repairs on House	32	3.2	39	3.5		
Miscellaneous	6	.6	26	2.3		
Totals	1003	100.0	1110	100.0		



Cash Household Expenses Per Person

The variation in costs per person is less between classes of farms than it is between farms within each group. Hence most of the variations seem to be for the individual rather than the group, but there are a few items in which group differences seem to stand out. Livestock-dairy, poultry, and livestock are much above the other groups in life insurance and savings; general farms and livestock farms spent nearly double the amount of any other class on personal expense. All groups spent a pretty fair share of their money in development and recreation which includes education. The livestock group spent more money per person than any other group.

TABLE V. HOUSEHOLD CASH EXPENSES  
Average Per Person Per Year

Type of Farm	Food	Cloth- ing	Opera- ting & Supplies	Furnish- ings & Equip- ment	Health	Develop- ment & Recre- ation	Person- al	Life Ins. & Sav- ings	Hous- ing	Misc.	Total
Crop	\$60	\$27	\$23	\$21	\$15	\$34	\$9	\$10	\$11	\$3	\$213
General	67	27	17	15	16	39	24	7	9	4	225
Dairy	56	23	16	12	10	43	12	9	3	3	187
Livestock-Dairy	73	21	13	23	11	34	5	31	3	9	223
Poultry	49	14	19	10	15	25	4	26	10	11	183
Livestock	52	29	26	20	20	46	21	28	13	8	263
Average - All Groups	60	25	18	16	14	39	15	14	8	5	214

Farm Produce Used

There was an increase in all types of farm produce used except honey, wheat products, and fruit. Such small amounts of farm produced honey and flour were used that they were not included in Tables VI and VII, although their value is included in Table III.

Every family with the exception of one produced its own butterfat. Each person consumed 48 pounds of home produced butterfat. Most of this was in the form of milk and cream. In addition to this 9 pounds of butterfat per person was purchased at wholesale rates from the creameries to which the product was sold, making a total consumption of 57 pounds of butterfat per person or an equivalent of 188 gallons of milk per person per year and of 3 pints of milk per person per day. Crop farms used 70 pounds of home produced butterfat per person. All of the other groups except livestock used about 44 pounds per person and the livestock group used 38 pounds per person. Most of the families in the crop group kept cows for home use only, hence made more of their own butter than the other groups. Where butterfat or milk is sold it is more convenient and about as economical to purchase butter at wholesale rates.

TABLE VI. FARM PRODUCE USED  
Average Per Family Per Year

Type of Farm	Butter fat lbs.	Eggs doz.	Chickens lbs.	Other Poultry lbs.	Beef lbs.	Pork lbs.	Mutton lbs.	Potatoes lbs.	Other Vegetables Value	Fruit Value
Crop	307	208	63	7	112	190	22	396	\$29	\$ 7
General	224	152	87	11	180	294	68	608	39	9
Dairy	257	213	51	23	96	240	17	272	28	6
Livestock-Dairy	236	288	96	34	145	663	54	1338	38	7
Poultry	254	154	262	24	20	230	--	533	67	17
Livestock	204	350	129	13	1406	895	160	1800	53	5
Average - All Groups	249	217	87	16	283	363	53	687	37	8



Home produced eggs amounted to 217 dozen per family and 42 dozen per person. Five families produced no eggs, hence the number of eggs used among the 61 families which produced eggs was 47 dozen per person.

Ninety-two percent of the families in this study produced their own chicken meat, 42 percent produced other poultry such as turkeys and ducks for their own table, 39 percent produced their own beef, 62 percent produced their own pork, 24 percent produced mutton for their own use and since some persons like one kind of meat and some another, it is quite safe to say that 42 percent of the families in this study produced from 90 to 100 percent of their meat.

Fifty-four percent of the families produced their own potatoes, 65 percent produced their own vegetables and garden truck, and 30 percent produced much of their own fruit.

Three families report the production of practically all of their needs of wood, butterfat, eggs, chicken meat, other poultry meat, beef, pork, mutton, potatoes, vegetables, fruit and honey and one other family reports the production of all of these items with the exception of from one to three items. Five of them did not raise fruit, 3 did not produce beef, 7 did not produce mutton, and 2 did not produce potatoes.

TABLE VII. FARM PRODUCE USED  
Average Per Person Per Year

Type of Farm	Butter	Eggs	Chickens	Other	Beef	Pork	Mutton	Potatoes	Other	Fruit
	fat lbs.	doz.	lbs.	Poultry lbs.	lbs.	lbs.	lbs.	lbs.	Value	Value
Crop	70	47	14	2	26	43	5	90	\$ 7	\$ 2
General	45	30	17	2	36	59	14	121	8	2
Dairy	45	37	9	4	17	42	3	48	5	1
Livestock-Dairy	46	56	19	6	28	129	11	260	7	1
Poultry	44	27	45	4	4	40	--	93	12	3
Livestock	38	64	24	2	259	165	29	331	10	1
Average - All Groups	48	42	17	3	65	80	10	133	7	1

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WHAT FACTORS MAKE FARMS PROFITABLE?

By

Louis Titus, Assistant in Farm Accounting

## Introduction

In studying the efficiency of farms it is necessary to analyze the results in such a way as to determine what things combine to make them successful or unsuccessful. In this study those factors which might have some influence on profits have been considered. Farms were classified as "profitable" or "unprofitable" on the basis of the "Operator's Labor and Management Wage" which is determined by subtracting from the "Net Farm Income" (total income less total expense) an interest charge of 6 percent on the capital investment and a charge for unpaid family labor at going wages. The 20 most profitable and the 20 least profitable farms, out of a total of 62 farms of miscellaneous types, were compared.

## Factors Influencing Profits

Physical factors are compared in the upper part of Table I and the financial values in the lower part. It will be seen that among the physical factors which appear to make farms profitable are the following:

1. More total acres
2. More crop acres
3. More productive man work units
4. More days of work per worker
5. More livestock
6. More butterfat per cow
7. Better yields of crops per acre

Among the financial factors which appear to be associated with the more successful farms are the following:

1. Greater capital investment
2. Greater return over feed cost per cow
3. Greater return per \$100 of feed fed to productive livestock
4. Greater cash income
5. Greater cash expense
6. Less cash expense per \$100 cash income
7. Greater gross income
8. Greater gross expense
9. Less expense per \$100 gross income
10. Greater gross income per \$100 invested
11. A positive increase in inventory

However, averages cannot always be trusted in making comparisons such as this, and further analysis is necessary to determine which of these factors are significant in influencing profits.

The fact that the farms represent miscellaneous types has a tendency to minimize some of the differences and to accentuate others. The influence of some of the various factors will be more carefully analyzed below.

Table I.

Comparison of Most Profitable  
With Least Profitable Farms  
As measured by Operator's Labor & Management Wage

	Average of 62 Farms	20 Most Profitable Farms Avg. per Farm	20 Least Profitable Farms Avg. per Farm	Your Farm
<u>Physical Factors</u>				
Size of farm, acres	193	248	160	
Crop acres	82	87	75	
Size of business, P.M.W.U.	692	788	589	
Days prod. work per worker	276	287	268	
Livestock, animal units	52.0	53.5	48.1	
Number of dairy cows	12.9	12.2	11.3	
Butterfat per cow, lbs.	243	250	236	
Crop index	87.5	92.5	75.0	
Alfalfa, yield per acre, tons	3.4	3.6	3.1	
<u>Financial Factors</u>				
Capital invested	\$20,400.	\$21,029.	\$19,557.	
Dairy sales per cow	89.	86.	90.	
Return over feed cost per cow	74.	80.	66.	
Return per \$100 fed to prod. livestock	167.	184.	144.	
Bldg., power & equip. cost per crop acre	13.	11.	13.	
Machinery cost per crop acre	7.	6.	7.	
Machinery investment per crop acre	19.	17.	20.	
Cash income	4,904.	6,010.	3,885.	
Cash expense	3,230.	3,309.	2,735.	
Cash expense per \$100 cash income	66.	55.	70.	
Gross income	5,287.	6,344.	3,495.	
Gross expense	3,230.	3,309.	2,560.	
Expense per \$100 gross income	61.	52.	73.	
Gross income per \$100 invested	26.	30.	19.	
Inventory change	+ 383	+ 334	- 178	

### Total Size of Farm

The average total number of acres in farms of the high income group was 248 and in the low income group it was 160 acres. In the more profitable group there is a single farm containing nearly 2,000 acres. When this is excluded, the average for the group drops from 248 to 158 acres which is very close to that of the low income group. Furthermore, when the farms in the two groups are arranged according to size, the farms in the middle half, or middle class range\*, of the high income group range in size from 80 to 219 acres while the middle class range of the low income group ranges from 90 to 218 acres. Size of farms as indicated by total acres can hardly be looked upon as a significant factor in influencing profits.

### Acres in Crops

The average area in crops is 87 in the high income group and 75 in the low income group. This appears to be significant because the middle class range for the two groups is from 52 to 133 acres in the high income group and from 43 to 92 acres in the low income group. It may be accepted as a fact that on irrigated farms in Nevada there is a significant relation between the number of acres in crops and the labor income.\*\*

### Productive Man Work Units

The amount of productive work performed on the farm also appears to be a significant factor. The average for the high income group is 788 and for the low income group 589, while the middle class range is from 562 to 802 in the former and from 357 to 741 in the latter. One would, of course, expect to find that profits would be proportional to the amount of productive work done.

### Productive Work per Worker

The average number of days of productive work performed per worker was 287 by the high income group and 268 by the low income group. The middle class range of the former group was from 254 to 386 and of the latter group from 231 to 305. This indicates that the number of days of productive work per worker is a significant factor in securing high labor incomes.

### Butterfat Production per Cow

The average butterfat production per cow was 250 pounds in the high income group and 236 in the low income group. Considering only those farms which had 5 or more cows, the middle class range was from 232 to 287 pounds in the former group and from 210 to 242 pounds in the latter group. It, therefore, appears to be a significant fact that the high income group had the higher producing cows.

\* The term "middle class range" is used several times in this report. It is determined as follows: If there were 8 farms having 43, 75, 26, 82, 62, 48, 50 and 38 acres, they would be arranged in order of size as follows: 26, 38, 43, 48, 50, 62, 75, 82. Then the middle class range is the middle half of these numbers, namely from 43 to 62 acres, inclusive. They represent the most typical farm sizes in the group. For some purposes the "middle class range" gives a better picture of values than do simple averages.

\*\* The term "labor income" will be used, hereafter, in place of "Operator's Labor and Management Wage".

### Livestock Animal Units

The averages indicate that the most profitable farms had the greatest amount of livestock as shown by the number of animal units, the average for the high income group being 53.5 and for the low income group 48. However, when the individual farms are arranged according to the number of animal units it is found that the middle class range was from 23 to 40 on the most profitable farms and from 28 to 57 on the least profitable farms which would indicate that on the bulk of the farms the low income group had the most livestock. Judging from these results it must be concluded that there was no significant difference.

### Returns per \$100 Worth of Feed Fed

The average given in Table I shows that the return per \$100 worth of productive livestock was \$184 for the high income group and \$144 for the low income group. The middle class range was from \$156 to \$222 and from \$139 to \$167, respectively, for the two groups indicating that the averages are significant. The high income group did not make money by having more livestock but by getting a greater return from the feed fed.

### Crop Index

The term "crop index" is used to measure the yields of crops in relation to a standard. All the crops grown on each farm are scored according to the standard and these scores are then combined into a crop index. The crop index is a measure of the quantity performance of crops and to the extent to which yields are the result of management it is a measure of efficiency. Low crop yields result in greater expense for each unit of crop grown and in lowered net income because of high unit costs. The cost of irrigating, mowing, and raking a light hay crop is approximately the same as for a heavy crop but the cost per ton is much greater.

The average crop index was 92.5 for the high income group of farms and 75 for the low income group, indicating that this is an important factor in determining profits. The middle class range of the high group was from 84 to 100 and of the low group from 55 to 106. There were as many farms in the low income group scoring above 100 as there were in the high income group, but when the farms scoring under 100 were compared it was found that those of the low group had a very much lower score than those in the high group. Low crop index was evidently a decisive factor in reducing the labor income of a considerable portion of the farms in the low income group.

Out of the 62 farms there were 21 having a crop index below 80 and 17 farms having an index exceeding 100. The average labor income of the former group was only \$175 and of the latter \$810.

### Capital Invested

The average capital invested was \$21,029 by the most profitable and \$19,557 by the least profitable farms. This difference is not significant for the reason that there was one farm included in the high group having a capital investment of over \$100,000, while the next highest in the same group was less than \$37,000. The middle class range of the high group was from \$10,673 to \$24,806, and of the low group from \$11,880 to \$24,663, which indicates that there was no significant difference in the amount invested by the high and low groups.

Average Crop Yields

The average yields of the more common crops grown on the cooperating farms of the state are given in Table II. The acreage is reported in order to give an idea of the relative importance of these crops. Some other crops were grown but they were not in sufficient amount to obtain reliable averages.

Table II. Crop Yields for Selected Crops

Crops	Total Acres	Total Yield	Yield per Acre
Alfalfa	3,331.3	11,256 Tons	3.4 Tons
Wheat	792	1,225,779 Lbs.	1,550 Lbs.
Barley	480	813,431 Lbs.	1,690 Lbs.
Potatoes	57	430 Tons	7.6 Tons
Cantaloupes	64	9,470 Crates	148 Crates
Beet seed (cleaned)	69.5	96,087 Lbs.	1,385 Lbs.

Table III shows the average yield of alfalfa reported in the different districts of the state. Southern Nevada shows the highest yield per acre, due to climatic advantage over other districts of 2 to 3 cuttings, but the yield per cutting is somewhat smaller.

Table III. Yield of Alfalfa by Districts - 1936

District	Total Acres	Total Yield	Yield per Acre
Eastern	291	1,011	3.48
Southern	148	599	4.05
Walker River	779	2,291	2.9
Newlands	1,091	3,752	3.4
Carson Valley	768	2,864	3.7

Judging the Efficiency of Your Own Farm Business

Note: - This part of the bulletin is of particular interest to cooperators who completed farm account records in 1936

In order to afford a means by which these farmers can see the relation between their efficiency of operation and their returns, and perhaps suggest to them where improvement would be desirable, the following rating chart has been constructed.

Ten factors indicating efficiency were chosen as having a direct bearing on earnings, and which are, to a large extent, under the control of the operator, as follows:

1. Butterfat per cow
2. Return over feed cost per cow
3. Return per \$100 worth of feed fed to productive livestock
4. Crop index
5. Power, building, and machinery expense per crop acre
6. Investment in machinery per crop acre
7. Size and volume of business, as measured by days of productive work on the farm
8. Labor efficiency, as measured by days of productive work per worker
9. Financial safety as indicated by the ratio of current indebtedness to liquid or readily salable assets
10. Eggs per hen on those farms having 50 or more hens

Chart I is arranged in such a manner that each cooperator may see at a glance his position on the scales representing the 10 indicators of efficiency mentioned above.

The ratings are obtained from the records kept on the farms during 1936. Those for your farm are indicated, for each factor, by red lines drawn between the figures on the chart. The position of the red line in each column of figures indicates your standing in relation to the average. Lines drawn above the center indicate better than average rating and when drawn below the center they indicate poorer than the average rating.

In using this Chart it should be understood that if a farmer finds his red mark down among the minus figures of the first column, (Operator's Labor and Management Wage) it does not necessarily mean that he suffered financial loss. It does mean that the net income was so low that the amount deducted from the net farm income for unpaid family labor and for interest on the investment leaves nothing with which to pay the operator for his labor and management. It might be said that he is paying for the privilege of farming. The good farmer with no debts can often live comfortably on the interest charge alone.

Every farm is a distinct organization in itself and all factors may not apply with equal importance on all farms but it is hoped that the ratings will indicate some points of strength and weakness on each farm.



Chart I.

Chart for Studying the Efficiency of Various Parts of Your Business

Operator's Labor and Mgt. Wage	B.F. per Cow	Ret. over Feed Cost per Dairy Cow	Return per \$100 Feed Fed	Crop Index	Power, Bldg., and Equip. Exp. per Crop Acre	Machinery Investmt. per Crop Acre	Days Pro- ductive Work	Days Pro- ductive Work per Worker	Current Ratio*	Eggs per Hen
\$	Lbs.	\$	\$		\$	\$	No.	No.	\$	No.
5000	340	155	300	150	2	65	1950	475	0	230
4000	320	140	275	140	4	55	1700	435	5	210
3000	300	125	250	130	6	45	1450	395	10	190
2000	280	110	225	120	8	35	1200	355	15	170
1000	260	95	200	110	10	25	950	315	20	150
Avg. 612	243	74	167	100	13	19	692	276	37	130 Avg.
100	220	65	150	85	25	15	550	240	60	110
-400	200	55	135	70	35	12	450	205	85	95
-900	180	45	120	55	45	9	350	170	110	80
-1400	160	35	105	40	55	6	250	135	135	65
-1900	140	25	90	25	65	3	150	100	160	50

\* Short term indebtedness per \$100 easily convertible assets.

Summary and Conclusions

1. There was a significant relationship between "Operator's Labor and Management Wage"; or labor income, and:

- a. The number of acres in crops
- b. Labor efficiency as measured by days of productive work per worker
- c. High butterfat production per cow
- d. Income from livestock per \$100 worth of feed fed
- e. The crop index

2. There was no significant relationship between "Operator's Labor and Management Wage", or labor income, and:

- a. Total acres in farms
- b. Total number of animal units per farm
- c. Capital investment

3. The returns from some of the farms were so low that when a charge was deducted for unpaid family labor, and an interest charge on the capital invested, little or nothing remained as pay to the operator for his labor and management.

The best returns are gained from all around efficiency. A high rating in one phase of the farm business may be nullified by neglect of other parts of the business. Some farmers may show a poor rating for any one year, due to circumstances peculiar to that year, and which are not normal. But it can be definitely stated that those farmers who show consistently high production from crops and animals, who operate efficiently in the use of labor, and machinery, and who watch their financial situation closely, will also show consistently higher returns from the operation of the farm.

The keeping of a farm record is by no means a guarantee of profit, but it is one of the best ways of finding out the "whys" of the farm business. The University through the Experiment Station and the Extension Service wish to lend encouragement to any Nevada farmers who are interested.

N E W S   B U L L E T I N

Volume XI No. 4

July 27, 1937

UNIVERSITY OF NEVADA  
AGRICULTURAL EXPERIMENT STATION  
Department of Farm Development  
and  
AGRICULTURAL EXTENSION SERVICE  
Cooperating

Reno, Nevada

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Note: The results presented in this bulletin are derived from accounts kept in cooperation with Nevada farmers. As fast as the results are compiled they are presented in the form of bulletins for the benefit of cooperating farmers. These results are preliminary and subject to revision later when the final summarization is made for formal publication.

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SUMMARY OF FAMILY CLASSIFICATION, FARM PRIVILEGE,  
AND CASH COST OF LIVING  
By Family Size Groups

By

V. E. Scott and Thella Wood  
Agricultural Extension Service

## Introduction

News Bulletin Vol. XI, No. 2 was prepared on the basis of type of farming groups. That bulletin showed that it is quite evident that type of farming in itself bears little relationship to the cost of family living. With this thought in mind two news bulletins have been prepared, Vol. XI, No. 4 which classifies families on the basis of "family size" and Vol. XI, No. 5 which classifies families on the basis of "family income".

## Family Classification

Family classification as used in this bulletin includes all of the immediate members of the family whether they were at home all of the time or not. If there were visitors or hired laborers they were classified according to the time they were boarded. The number of visitors and hired laborers affects the cost of food but has very little effect on the other items of family living.

In 1936 there were no families containing only the operator and home-maker. The smallest family used in this study consisted of 2.1 persons. Since the addition of laborers and visitors created a fractional number of persons, the families were divided into groups according to the number of persons from 2.1 to 3, 3.1 to 4, etc.

The average size of families in this study was 5.3 persons. Seven and eight-tenths percent of the families contained less than 3 persons, 44 percent of the families were in the two groups nearest to the average, and 4.7 percent of the families contained over 8 persons. There was no significant relationship between the size of the families and the number of hired laborers.

TABLE I. CLASSIFICATION OF FAMILIES  
By Size of Family According to Age and Labor Groups

Group	Size of Family	Number of Families	Adults	No. of Children		Hired Farm Labor	Total No. of Persons in Family
				over 16 years	under 16 years		
I	2.1 - 3	5	1.8	---	---	.6	2.4
II	3.1 - 4	11	2.0	.3	.8	.3	3.4
III	4.1 - 5	8	2.0	.6	1.6	.6	4.8
IV	5.1 - 6	18	2.3	.7	2.1	.4	5.5
V	6.1 - 7	11	2.3	1.4	2.4	.4	6.5
VI	7.1 - 8	6	2.0	2.2	3.3	.1	7.6
VII	Over 8	3	2.0	1.3	3.7	1.4	8.4
	Average - All Groups		2.1	.8	1.9	.5	5.3

The percent of adult members, considering all hired labor as adults, was as follows: Group I - 100 percent, Group II -  $67\frac{1}{2}$  percent, Group III - 54 percent, Group IV - 49 percent, Group V -  $41\frac{1}{2}$  percent, Group VI - 27 percent, and Group VII - 40 percent.

Cash Expended for Living, Furniture, Housing and Automobiles

Household and personal expenses as used in Table II included expenditures for food, clothing, operating and supplies, health, development and recreation, personal, life insurance and savings, and miscellaneous.

In household and personal expenditures it may be said that the costs increase with the size of the family although there are some irregularities in Groups IV, V, and VI.

In furniture and house repairs there does not appear to be a consistent relationship between size of family and expense. The \$147 per family for this purpose is from an average of only 3 families and may have easily resulted from chance purchases by one or two families which would not recur another year.

In the purchase of automobiles there was a somewhat irregular but probably consistent relationship between the number of people per family and the amount expended for automobiles. The purchase price of new automobiles was divided between farm and family according to the estimated use.

In total expenses there is undoubtedly a very significant relationship between size of family and expenditures.

TABLE II. DISTRIBUTION OF CASH FARM HOME EXPENSES, 1936  
Average Per Family

Group	Size of Family	Number of Families	Household & Personal Expense	Furniture	House Repairs	New Autos	Total
I	2.1 - 3	5	\$ 574	\$ 66	\$ 1	\$ 45	\$ 686
II	3.1 - 4	11	777	64	36	83	960
III	4.1 - 5	8	957	107	41	68	1,173
IV	5.1 - 6	18	1,175	100	44	46	1,365
V	6.1 - 7	11	996	112	17	88	1,213
VI	7.1 - 8	6	1,131	68	33	242	1,474
VII	Over 8	3	1,629	50	147	559	2,385
	Average - All Groups		1,014	88	38	107	1,247

Living Expense and Gross Family Income per Family

In Table II it was shown that total cash farm home expenses tended to increase as the size of the families increased. In Table III the relation between the size of the families and the living expense per family is shown.

Cash living expenses were found to be \$641 by the smallest families and \$1826 by the largest families containing more than 8 persons. These expenses increased quite consistently between these two extremes.

Rent of dwelling is obtained by taking 10 percent of the inventory value of the house. If the first family size group is omitted it will be noted that there is no consistent relationship between family size and rent. Houses built for large families are frequently only partly used and small houses are often overcrowded.

As would be expected, farm produce used increased with family size. Total living expense tended to increase, although not always consistently, with family size.

TABLE III. LIVING EXPENSE PER FAMILY  
For the Year 1936

Group	Size of Family	Number of Families	Cash Expenses	Rent of Dwelling	Farm Produce	Total Living Expense	Gross Family Income
I	2.1 - 3	5	\$ 641	\$ 84	\$165	\$ 890	\$ 835
II	3.1 - 4	11	876	182	220	1,278	2,361
III	4.1 - 5	8	1,105	347	276	1,728	4,475
IV	5.1 - 6	18	1,319	203	306	1,828	2,630
V	6.1 - 7	11	1,125	245	344	1,714	3,041
VI	7.1 - 8	6	1,233	241	430	1,904	3,985
VII	Over 8	3	1,826	263	578	2,667	5,954
	Average - All Groups		1,140	222	307	1,669	3,040

Distribution of Cash Household Expenses

The average expenditure for food for all families in this study was \$327, ranging from an average of \$167 in the group containing from 2 to 3 persons per family to \$519 in the group containing over 8 persons per family. Development and recreation was the next highest item of expense, ranging from \$126 per family to \$365, with an average of \$200. Clothing was the next highest item, ranging from \$60 to \$194. Home operating expense which includes such items as soap, fuel, ice, laundry, power, light, ran as low as \$37 in the group of small families and as high as \$202 in the group containing the largest size families. Doctor bills and medicines seemed to visit all families nearly alike, if we exclude the group having very few children. Personal expense and life insurance required about the same amounts of money and these items were larger in the larger families. The table indicates that size of family has no influence on housing and miscellaneous expenses, both items being rather small in all groups.

TABLE IV. HOUSEHOLD CASH EXPENSES PER FAMILY

Group	Size of Family	Food	Clothing	Operating & Supplies	Furnishings & Equipment	Health	Development & Recreation	Personal	Life Ins. & Savings	Housing	Misc.	Total
I	2.1 - 3	\$165	\$60	\$37	\$66	\$57	\$126	\$44	\$32	\$1	\$53	\$641
II	3.1 - 4	280	104	81	64	78	139	47	37	36	10	876
III	4.1 - 5	206	127	135	107	64	223	54	93	41	55	1,105
IV	5.1 - 6	394	149	99	100	83	243	119	73	44	15	1,519
V	6.1 - 7	366	153	84	112	65	133	71	96	17	28	1,125
VI	7.1 - 8	341	163	104	68	68	254	68	117	33	17	1,233
VII	Over 8	519	194	202	50	89	365	123	122	147	15	1,826
	Average - All Groups	327	136	98	88	73	200	79	76	38	25	1,140

Farm Produce Used

As stated in Bulletin No. 2, most of the families included in the study produced practically all of their needs of milk, eggs, and chickens.

The average family of 5.3 persons used 248 pounds of butterfat in the form of milk, cream, and home-made butter supplied by the farm and 47.7 pounds of butterfat in the form of butter purchased at wholesale prices.

The average family used 201 dozen eggs, ranging more or less according to size of family from 74 dozen to 550 dozen.

There was quite a large selectivity in type of meats used. The average amount of meat furnished by the farm was 830 pounds. The variations shown in Table V are due to types of farms rather than numbers in families. Livestock and dairy-livestock farms supplied more of their own meat than other types of farms. The whole group produced about 40 percent of its meat needs.

TABLE V. FARM PRODUCE USED  
Average Per Family For Year

Group	Size of Family	Butter fat lbs.	Eggs Doz.	Chickens lbs.	Other Poultry lbs.	Beef lbs.	Pork lbs.	Mutton lbs.	Potatoes lbs.	Other Vegetables Value	Other Produce Value
I	2.1 - 3	51	103	29	15	364	348	16	140	12	22
II	3.1 - 4	176	74	129	18	90	228	62	123	24	16
III	4.1 - 5	415	148	59	23	278	254	--	875	44	3
IV	5.1 - 6	236	216	100	13	322	404	46	897	53	18
V	6.1 - 7	193	220	96	18	190	541	54	720	22	22
VI	7.1 - 8	446	331	162	7	91	59	42	900	73	30
VII	Over 8	344	550	146	12	1787	760	293	1673	25	52
	Average - All Groups	248	201	102	16	302	357	53	702	38	20



Introduction

News Bulletin Vol. 11, No. 5 was prepared on the basis of type of farming groups. This bulletin, however, was prepared in itself bears little relationship to NEWS BULLETIN for this reason, but news bulletins using the same data on different classifications have been prepared, Vol. 11, No. 4 on the basis of "Family size" and this news bulletin, Vol. 11, No. 5, which classifies families on the basis of "family income".

Volume XI No. 5  
August 23, 1937

UNIVERSITY OF NEVADA  
AGRICULTURAL EXPERIMENT STATION  
Department of Farm Development  
and  
AGRICULTURAL EXTENSION SERVICE  
Cooperating

Reno, Nevada

Note: The results presented in this bulletin are derived from accounts kept in cooperation with Nevada farmers. As fast as the results are compiled they are presented in the form of bulletins for the benefit of cooperating farmers. These results are preliminary and subject to revision later when the final summarization is made for formal publication.

Group	Size of Income	Number of Families	Adults	15 years or over	10 years or over	Male Labor	Female Labor
I	Under \$1000	7	2.1	1.0	1.0	1.0	1.0
II	\$1000-1499	7	2.1	1.0	1.0	1.0	1.0
III	\$1500-1999	28	2.1	1.0	1.0	1.0	1.0
IV	\$2000-2499	5	2.1	1.0	1.0	1.0	1.0
V	\$2500-2999	8	2.1	1.0	1.0	1.0	1.0
VI	\$3000-3499	10	2.1	1.0	1.0	1.0	1.0
VII	\$4000-4999	5	2.1	1.0	1.0	1.0	1.0
VIII	Over \$5000	8	2.1	1.0	1.0	1.0	1.0
	Average - (all groups)		2.1	1.0	1.0	1.0	1.0

SUMMARY OF FAMILY CLASSIFICATION, FARM PRIVILEGE,  
AND CASH COST OF LIVING  
By Size of Income Groups

By  
V. E. Scott and Thella Wood  
Agricultural Extension Service

## Introduction

News Bulletin Vol. XI, No. 2 was prepared on the basis of type of farming groups. That bulletin indicates that type of farming in itself bears little relationship to the cost of family living. For this reason, two news bulletins using the same data but based on different classifications have been prepared, Vol. XI, No. 4 which classifies families on the basis of "family size" and this news bulletin, Vol. XI, No. 5 which classifies families on the basis of "family income".

## Family Classification

Family classification as used in this bulletin includes all of the immediate members of the family, whether they were at home all of the time or not. The number of visitors and hired laborers were calculated according to the number of days they were boarded.

The families are grouped according to net family income. Since there was only one family having a net income less than \$500 the first group includes those families having incomes of less than \$1000. Even on this basis there are only 4 families in the low group. Groups II, III, IV, and V are arranged in periods of \$500 and the groups having incomes over \$3000 are arranged in periods of \$1000.

TABLE I. CLASSIFICATION OF FAMILIES  
By Size of Income According to Age and Labor Groups

Group	Size of Income	Number of Families	Adults	No. of Children		Hired Farm Labor	Total No. of Persons in Family
				over 16 years	under 16 years		
I	Under \$1000	4	1.8	---	.5	.5	2.8
II	\$1000-1499	7	1.9	1.1	1.0	.3	4.3
III	\$1500-1999	13	2.1	.8	1.8	.2	4.9
IV	\$2000-2499	8	2.0	.9	2.8	.2	5.9
V	\$2500-2999	8	2.6	1.0	1.7	.4	5.7
VI	\$3000-3999	10	2.1	.8	2.6	.4	5.9
VII	\$4000-4999	5	2.0	.8	1.4	.5	4.7
VIII	Over \$5000	8	2.3	.9	2.0	1.3	6.5
	Average - All Groups		2.1	.8	1.9	.5	5.3

Cash Expended for Living, Furniture, Housing and Automobiles

Household and personal expenses increased irregularly as the incomes increased. By referring to Table I it will be seen that size of family as shown in bulletin No. 4 probably has some bearing on this trend.

Expenditures for furniture and house repairs had little relation to family income. The personal share of new automobiles was higher in the higher income groups and total farm house repairs increased as the cash incomes increased.

TABLE II. DISTRIBUTION OF CASH FARM HOME EXPENSES, 1936  
Average Per Family

Group	Size of Income	Number of Families	Household & Personal Expense	Furniture	House Repairs	New Autos	Total
I	Under \$1000	4	\$ 426	\$104	\$32	\$ 56	\$ 618
II	\$1000-1499	7	740	46	2	37	825
III	\$1500-1999	13	923	77	48	120	1,168
IV	\$2000-2499	8	901	80	17	39	1,037
V	\$2500-2999	8	1,249	114	23	8	1,394
VI	\$3000-3999	10	1,062	122	35	209	1,428
VII	\$4000-4999	5	720	88	30	194	1,032
VIII	Over \$5000	8	1,645	70	94	161	1,970
	Average - All Groups		1,007	87	37	108	1,239

Living Expense and Total Family Income

Cash expense as used in Tables III and IV is composed of the items, Household and Personal, Furniture, and House Repairs, shown in Table II. These items are considered as living expense but the item "new automobiles" is omitted from Tables III and IV because it is an item of "investment" rather than living expense.

Total living expense is obtained by adding to cash expense, rent of dwelling and the value of farm produce. Rent of dwelling is estimated at 10 percent of the beginning inventory value of the house. The value of farm produce is the wholesale value that could be obtained if produce were sold.

As shown in Table II, cash expenses increased as the net family income increased.

Rent of dwelling increased as the net family income increased, the value of farm produce used increased with the net family income, and the total living expense had the same general trend.

### III. LIVING EXPENSE PER FAMILY

Group	Size of Income	Number of Families	Cash Expenses	Rent of Dwelling	Farm Produce	Total Living Expense	Gross Family Income
I	Under \$1000	4	\$ 562	\$ 73	\$146	\$ 781	\$ 651
II	\$1000-1499	7	789	96	217	1,102	1,197
III	\$1500-1999	13	1,049	96	222	1,367	1,781
IV	\$2000-2499	8	998	128	293	1,419	2,162
V	\$2500-2999	8	1,386	259	366	2,011	2,749
VI	\$3000-3999	10	1,219	396	324	1,939	3,366
VII	\$4000-4999	5	839	231	324	1,394	4,331
VIII	Over \$5000	8	1,809	441	513	2,763	7,614
	Average - All Groups		1,132	222	305	1,659	3,010

#### Household Cash Expense

In the farm and home account book, household cash expense is distributed among the items of food, clothing, operating, furniture, health, development and recreation, personal, life insurance and savings, housing, and miscellaneous.

News Bulletin No. 2, Table IV shows as an average of all families, that food accounted for 28.1 percent of the total cash expense, development and recreation 18.1 percent, clothing 11.6 percent and the other items each under 9

percent. Table IV below indicates that food varied from 21.5 percent of the total expense to 36.7 percent, clothing from 6.5 percent to 14.6 percent, the lowest percent used for clothing being in the groups of lowest income, and that development and recreation varied from 11.1 percent of the total expense to 24.3 percent.

The average of all families showed an expenditure of \$75 per family for life insurance, varying from \$14 to \$143. As would be expected, the families having larger incomes spent more money on life insurance but it is gratifying to note that there was a considerable amount spent for this item in all groups.

TABLE IV. HOUSEHOLD CASH EXPENSES  
Average Per Family Per Year

Group	Size of Income	Food	Clothing	Operating & Supplies	Furnishings & Equipment	Health	Development & Recreation	Personal	Life Ins. & Savings	Housing	Misc.	Total
I	Under \$1000	\$121	\$ 42	\$ 30	\$104	\$ 15	\$126	\$ 47	\$ 45	\$32	\$ 2	\$ 562
II	\$1000-1499	266	128	51	46	56	132	28	28	2	52	789
III	\$1500-1999	325	153	85	77	111	136	49	55	48	10	1949
IV	\$2000-2499	366	106	66	80	81	161	94	14	17	13	998
V	\$2500-2999	364	120	151	114	65	337	92	105	23	35	1386
VI	\$3000-3999	301	114	132	122	49	255	95	88	35	28	1219
VII	\$4000-4999	276	86	63	68	41	93	20	135	30	7	839
VIII	Over \$5000	457	252	177	70	99	297	174	143	94	46	1809
	Average - All Groups	525	154	99	87	72	200	79	75	27	24	1132

Farm Produce Used

Rent of dwelling and farm produce used are considered income from the farm and they are also charged against the cost of family living. Therefore, the income and the living costs increase together as the amount of farm produce and rent of dwelling increased.

TABLE V. FARM PRODUCE USED  
Average Per Family Per Year

Group	Size of Income	Butter fat lbs	Eggs doz.	Chickens lbs.	Other Poultry lbs.	Beef lbs.	Pork lbs.	Mutton lbs.	Potatoes lbs.	Other Vegetables Value	Other Produce Value
I	Under \$1000	99	67	87	12	168	233	20	---	\$ 6	\$18
II	\$1000-1499	222	205	54	21	164	143	---	186	24	13
III	\$1500-1999	189	144	114	14	105	112	18	292	22	10
IV	\$2000-2499	299	197	78	31	179	376	36	503	28	21
V	\$2500-2999	265	218	151	10	335	401	85	675	82	21
VI	\$3000-3999	261	194	64	3	150	376	24	380	26	25
VII	\$4000-4999	379	259	113	46	123	778	15	705	34	31
VIII	Over \$5000	322	418	141	8	1079	698	214	2588	75	29
	Average - All Groups	254	214	101	16	286	362	53	659	38	18

Farm Produce Used Per Person

A comparison of Table VI with "Nevada's Live At Home Plan" shows that while this group of 63 families produced much of their own living, they might have done much better. The "Live At Home Plan" states that each person should have one quart of milk per day and  $\frac{1}{2}$  pound of butter per week which is an annual consumption of 50 pounds of butterfat. The average person in this study consumed 48 pounds of butterfat in the form of milk and cream and 9 pounds of butterfat in the form of butter purchased at wholesale from creameries to which their produce was sold.

The "Live At Home Plan" recommends that each person should consume 30  $\frac{1}{3}$  dozen eggs per year.

TABLE VI. FARM PRODUCE USED  
Average Per Person Per Year

Group	Size of Income	Butter fat lbs.	Eggs doz.	Chickens lbs.	Other Poultry lbs.	Beef lbs.	Pork lbs.	Mutton lbs.	Potatoes lbs.	Other Vegetables Value	Other Produce Value
I	Under \$1000	36	24	31	4	61	35	7	--	\$ 2	\$ 7
II	\$1000-1499	52	48	13	5	38	33	--	43	6	3
III	\$1500-1999	39	30	23	3	22	23	4	60	5	2
IV	\$2000-2499	51	34	13	5	31	64	6	86	5	4
V	\$2500-2999	47	38	26	2	59	70	15	118	14	4
VI	\$3000-3999	44	33	11	(.4)	25	63	4	64	4	4
VII	\$4000-4999	80	55	24	10	26	165	3	149	7	7
VIII	Over \$5000	50	65	22	1	21	14	4	50	12	5
	Average - All Groups	48	41	19	3	54	69	10	125	7	3

The families in this study obtained on their own farms 41 dozen eggs per person in 1936. The "Live At Home Plan" recommends that each person should be served with chicken once a week or about 30 pounds of chicken per year. This group secured from the farm 19 pounds of chicken per person or about 63 percent of the amount recommended.

The standard recommends that each person should have about 174 pounds of other meat distributed about as follows: 136 pounds of beef and veal, 20 pounds of pork, 12 pounds of lamb, 6 pounds of fish. Table VI shows that the average of all families produced on the farm about 78 percent of the amount recommended, Group I produced 90 percent of the standard, Group II produced 44 percent, Group III produced 30 percent, Group IV produced 61 percent, Group V produced 84 percent, Group VI produced 53 percent, Group VII produced 112 percent and Group VIII produced 23 percent. Some families produce considerably more than the recommendation and all groups show a much higher use of pork than the standard recommendation.

The actual saving made by using home produced meat is two fold. The farm is credited with the top wholesale price for the meat and the charge for farm produced meat used in the home is at wholesale instead of at retail prices as is the case when butcher's meat is purchased, a difference of from 10 cents to 25 cents per pound.

The families included in this study were quite thrifty in the production of their own butterfat, eggs, and meat but it cannot be said that they did so well in the matter of potatoes, vegetables, and fruit.

A few families produced all of the potatoes needed, the average production being about 52 percent of the amount needed and the groups varying from 0 percent to 62 percent.

The standard recommends the use of vegetables amounting to about \$12 at wholesale farm prices and about \$30 when purchased at retail prices. Comparing the families in this study with the standard at wholesale farm prices, these families produced 58 percent of their needs, varying from 16.5 percent to 112 percent. The standard indicates about the same values in fruit as in vegetables and the families in this study produced about 8 percent of the fruit recommended.

Other items produced by families in this study were wood, honey, and flour. The value of these items combined with fruit are listed in the last column and amount to from \$2 to \$7 per person per year.



"What do folks want?"  
 Recreation Check List  
 Adopted from Owen M. Geer  
Adventures in Recreation  
 Board of Education, M. E. Church

Nevada Extension Service  
 DS-1

INDICATE ACTIVITIES IN WHICH YOU WOULD LIKE TO TAKE PART

(M) means much, (s) means some, (N) means none, (D) means dislike. Check each activity.

	Interest'				Skill		
	M	S	N	D	M	S	N
Being in plays -----							
Making souvenirs -----							
Soap carving -----							
Story telling -----							
Stamp collecting -----							
Reading -----							
Quartette singing -----							
Chorus singing -----							
Folk songs -----							
Folk games -----							
Attending movies -----							
News reporting -----							
Listening to radio -----							
Playing musical instruments -----							
Music appreciation -----							
Poster making -----							
Planning parties -----							
Scrapbook making -----							
Taking and developing pictures -----							
Leather craft -----							
Wood carving -----							
Sketching or painting -----							
Clay modeling -----							
Furniture making -----							
Basket weaving -----							
Collecting nature specimens -----							
Fishing -----							
Horseshoe -----							
Archery -----							
Volley ball -----							
Picnic games -----							
Vacation travel -----							
Swimming -----							
Tennis -----							
Hiking -----							
Golfing -----							
Canoeing and rowing -----							
Horseback riding -----							
Baseball -----							
Diamond ball -----							
Visiting -----							
Listening to Radio -----							
Informal Argument -----							
-----							
-----							
-----							

(Add in spaces above other things you would like to do)

CHANGES IN PRODUCTION AND MARKETING IN THE NEVADA DAIRY INDUSTRY  
V. E. Scott

A discussion of changes very appropriately may begin with a statement of basic conditions. In 1926 a careful study of Nevada's dairy set up was made, hence I will quote from that study some of its facts and conclusions in order to give a background with which to compare our present dairy set up.

"Keeping in mind the difference in definition in the last four census years, a study of the counties in which the dairy cows are concentrated at the present time and the trend in numbers will help to indicate where the possible future expansion is likely to take place. It appears from these tables that Churchill, Douglas, Lyon, Washoe and Pershing counties are the counties where dairying is most dense and are also the counties where dairying is likely to expand. Although Elko county is showing a tendency to develop dairying, the expansions in this area in the past have not been as rapid as the counties just mentioned. Consideration should be given to the fact that it has less than a ton of hay per animal unit, and that this hay is largely wild hay. Whether this county can compete with others having a larger supply of better quality hay should be given thorough study. It has, however, some of the characteristics which may enable it to hold a more important place in the dairy production of Nevada.

"In southern Nevada there are a number of small irrigated areas where dairying has an important place, but their volume is not sufficiently large to affect the general picture."

In 1926 Churchill county was our banner dairy county with 4,068 milking cows. It is still the banner county but the census shows a gain of only 248 cows in 10 years. The number went up for a few years, 1930 to 1933, to above 5,000 and then dropped back to the present number as shown in the table.

Clark county, which was not very high in the dairy picture in 1926, has increased in numbers nearly 79 percent and in production per cow nearly 27 percent. Lyon and Douglas counties have both increased in numbers and in production per cow.

In 1926 it was thought that Elko county, which had about 10 percent of the total cows in the State, might increase its dairying. A more intensive study of Elko county shows that the comparatively high number of dairy cows is not due to dairying as an industry for there are very few commercial dairies in the county. But practically every rancher milks from 5 to 7 cows to supply milk and butter for his own table.

The western part of the state is still the only part which produces a surplus. Churchill, Douglas, Lyon, and Washoe counties, ten years ago had 12,634 cows producing 2,691,000 pounds of fat. Now the same counties have 13,222 cows producing 2,693,000 pounds of fat. Ten years ago the production in these four dairy counties was 206 pounds of fat per cow and today it is 203 pounds of fat per cow. Why is it, or perhaps you will say the census is wrong. At the same time that the whole group of about 1198 dairymen plan a slight decrease in production per cow, there are individuals who are maintaining high production. Farm accounts show two farms in Churchill county whose herds produced over 315 pounds of fat per cow in 1936. Douglas county shows one herd that has produced 320 pounds of fat per cow for several years.

There is the same incentive for increased numbers and increased production today that there was 10 years ago. Then, 60 percent of all milk produced was sold to manufacturing plants (90 percent of this was manufactured into butter), 20 percent sold for consumption as whole milk, 10 percent consumed as whole milk on farms, and 10 percent consumed on farms in the form of butter and fed to calves. About the same conditions exist today with perhaps somewhat more milk sold as whole milk.

The competition for the coast markets is no greater than it was 10 years ago, but a market has been developed for Nevada cows. Many of the best cows have been sold to California buyers. Perhaps it is the sale of these good cows that has kept our average production down for in Clark county where no cows are exported, the production per cow has steadily increased. This seems to be born out in the western part of the State. Churchill and Washoe counties have sold many more cows than have Lyon and Douglas counties and the production per cow as well as the number of cows has decreased in Churchill and Washoe while increasing in Lyon and Douglas.

EFFICIENCY IN PRODUCTION  
As Shown by 1935 Farm Accounts.

By V. E. Scott

(For the Pacific Rural Press, November, 1936)

Many factors enter into the management of a farm. The farmer who has a definite plan and knows what to expect from each major enterprise will manage his crops and livestock in such a way as to secure the greatest net return. Efficiency in crop production is indicated by yield per acre or by a percent of the average production. In the dairy enterprise the number of pounds of butterfat produced per cow and the number of tons of hay required to produce one hundred pounds of butterfat measure efficiency. Each enterprise has its own measure of efficiency. The efficiency of labor and management may be shown by the number of productive work units (P.W.U.) per worker.

In the following discussion average yields and average indexes of efficiency are compared with basic yields in each area. The index is a percent compared with an index base of 100 percent which was computed from average yields over a period of years.

Major Field Crops

The index base for alfalfa varies from 2.58 tons to 3.76 tons per acre in the northern and eastern part of Nevada where the season will permit not more than three cuttings. In Southern Nevada where 5 to 7 cuttings are possible the base yield of alfalfa is 4.53 tons. In 1935 the yield of alfalfa was better than for several years as shown by the following indexes: Southern Nevada 100%, Newlands Area 107%, Carson Valley 109%, Eastern Nevada 111% and Walker River Area 122%.

Due to the fact that grains are used as a nurse crop for alfalfa new seedings, both the average basic yields and the average yields for 1935, are lower than they would have been had only straight grain plantings been used.

The usual practice is to plant less grain when it is used for a nurse crop in order to give the young alfalfa a better start.

The following yields per acre represent 100 percent production under average conditions, part of the fields seeded straight and part used as a nurse crop for alfalfa: In Southern Nevada wheat 1446 pounds, barley 1452 pounds, oats 575 pounds; Newlands Irrigation Project, wheat 1292 pounds and barley 1340 pounds; Carson Valley, wheat 1650 pounds, barley 2903 pounds, and oats 1514 pounds; Walker River Area, wheat 1235 pounds, barley 1765 pounds, and oats 1000 pounds; Eastern Nevada, wheat 1623 pounds, barley 1792 pounds, and oats 1043 pounds.

In 1935 Southern Nevada's yields of grain were 100 percent of the base; in Newlands Project, wheat was 100 percent and barley 74 percent; in Carson Valley, wheat yielded 102 percent, barley 90 percent, and oats 131 percent; in Walker River Area, wheat yielded 109 percent, barley 108 percent, and oats 100 percent; and in Eastern Nevada, wheat yielded 159 percent, barley 88 percent, and oats 87 percent.

#### Intensive Cash Crops

The commercial production of potatoes in Nevada is practiced only in Carson Valley, Walker River, Eastern Nevada and in Washoe Valley. No cooperating farms reported potato production in Washoe Valley. Eastern Nevada had an early freeze in 1935 which reduced the potato yield to 3.1 tons per acre, 58 percent of its base. Carson Valley yield was 10.3 tons per acre which gave them an index of 122 percent. Walker River Area where the base yield is 7.8 tons per acre had a bumper crop of 9.75 tons per acre.

Sugar beet seed, tomato plants, radishes, and asparagus are grown only in Southern Nevada. The yield of cleaned beet seed in 1935 was 1566 pounds per acre which is about 88 percent of normal. Reports for tomato plants,

radishes, asparagus, and cantaloupes show sales rather than production. Since price may be a factor partially governing the amount sold, only the 1935 average sales are quoted: Tomato plants 224,700 per acre, radishes 1112 dozen bunches per acre, asparagus 45.5 crates per acre, cantaloupes 116 crates per acre in Southern Nevada and 73 crates per acre in the Newlands area.

When all crops were considered, most of the areas were above 100 percent and the whole group of 58 farms had an average farm index of 106. In Southern Nevada the index of 88 for sugar beet seed pulled the average down to 97. In all of the northern areas the large acreage of alfalfa combined with increased yields of alfalfa in 1935 forced the farm crop index to 101 percent in Carson Valley, 107 percent in Newlands Area, 108 percent in Eastern Nevada and 118 percent in Walker River Area.

#### Efficiency of Animal Enterprises

CHICKENS. Chickens were of no commercial importance on 37 of the farms reporting chickens. These flocks contained from 8 to 70 hens per flock, consumed 80 pounds of grain and 22 pounds of mash equivalent per hen, and produced 95 eggs per hen. On 14 farms the sale of eggs as well as their use in the home was an important income factor. The average size of these 14 flocks was 262 hens. They consumed 56 pounds of grain and 19 pounds of mash equivalent per hen, and produced 119 eggs per hen. In the small flocks it required 13 pounds of feed to produce a dozen eggs and in the larger flocks it required 7.6 pounds of feed to produce a dozen eggs.

TURKEYS. It probably takes the same amount of feed to finish a turkey which is hatched on the farm as it does to finish one which is purchased as a poult, but where birds are hatched on the farm it is necessary to feed the breeders for a year. The usual custom is to save breeder hens from the young birds each year, selling these hens in June after the breeding season or else holding them until the following October or November. Therefore more feed is required per finished bird when the poults are hatched on the farm.

Farm accounts for 1935 show 4 turkey flocks for which the poults were purchased and 6 flocks in which the poults were hatched on the farm. The average weight of finished birds was about the same in both groups of turkeys, averaging 14.9 pounds. It required 77 pounds of feed per finished bird and 5.8 pounds of feed per pound of finished turkey where poults were purchased and 105 pounds of feed per bird and 7.1 pounds of feed per pound of finished turkey where the poults were hatched on the farm. With the average feed mixture costing \$1.88 per 100 pounds, the extra feed cost where poults were hatched on the farm, when charged to the finished turkeys, amounted to 52 cents per bird. In 1935 the average price of poults on the farms which purchased them was 31 cents each and this cost allocated to the finished turkey amounted to 35 cents each.

DAIRY COWS. Average production of butterfat per cow varied in the different areas from 206 pounds per cow in Eastern Nevada to 264 pounds per cow in Southern Nevada, with an average of 234 pounds for the whole group. It is interesting to note that the groups of farms classed as livestock-dairy and dairy, owning 73 percent of all the dairy cows, show a production of 242 pounds of fat per cow while the groups classed as crop, general, and poultry farms, owning 27 percent of all the dairy cows, show an average production of 207 pounds of fat per cow.

Seven hundred and ninety-one cows were fed an equivalent of 5392 tons of hay and produced 184,947 pounds of butterfat. About three-fourths of the cows were Holstein or Shorthorns, weighing 1200 pounds to 1500 pounds.

In computing the alfalfa equivalent the following values were used: 60 a.u. days good pasture equivalent to 1 ton of alfalfa; 2.5 tons silage equivalent to 1 ton alfalfa; .5 tons grain equivalent to 1 ton alfalfa; and 3 tons melons, pumpkins, or squash equivalent to 1 ton alfalfa.



In the Newlands area no grain was fed, the ration consisting of about three-fourths alfalfa hay and one-fourth pasture. In Southern Nevada the ration consisted of alfalfa 55 percent, pasture 15 percent, grain 7 percent, and silage 13 percent. This type of feeding required 2.7 tons of hay equivalent to produce 100 pounds of butterfat. In Carson Valley, Walker River and Eastern Nevada areas a larger amount of pasture was included in the ration, but no grain or silage was fed and it required from 2.8 to 3.14 tons of hay equivalent to produce 100 pounds of butterfat.

HOGS. There were 150 litters of pigs farrowed on farms keeping records. The average number of pigs saved per litter was 6.3, the largest being 9 and the smallest 2. The majority of cooperating farmers sell their pigs as feeders, hence the number of pounds of pork per litter is low, the average being 891 pounds.

Hogs were fed corn, wheat, barley, milo, potatoes, skim milk, stock melons, and cantaloupes. The average energy value of these feeds were used to reduce the total feed to a grain equivalent. The following list of feeds indicates the energy values given to each kind of feed in terms of grain: 2 pounds alfalfa equivalent to 1 pound grain; 1 a.u. day of pasture equivalent to 16.5 pounds grain; 5 pounds melons equivalent to 1 pound of grain; 1 gallon skim milk equivalent to 1.3 pounds grain; and 4.5 pounds of potatoes equivalent to 1 pound of grain mixture.

It required from 4.2 pounds to 6.6 pounds of grain equivalent to produce a pound of pork.