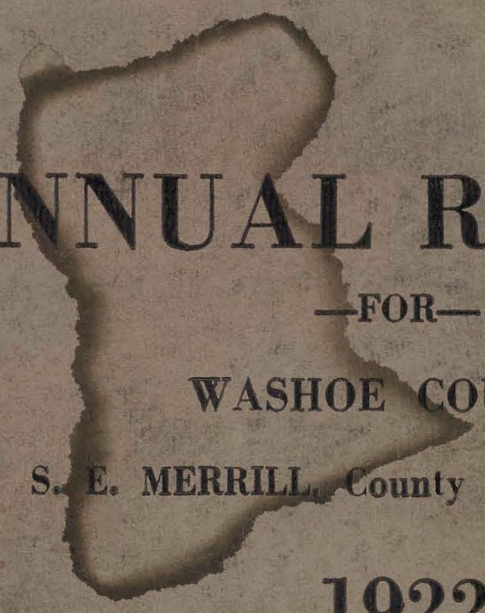
University of Nevada
Agricultural Extension Division

CECIL W. CREEL, Director



ANNUAL REPORT

—FOR—

WASHOE COUNTY

S. E. MERRILL, County Extension Agent

1922

AC 0089/1/6

Form 6.
Revised April, 1922.

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS.

U. S. Department of Agriculture.
State Agricultural College, and
County Extension Organization
Cooperating.

States Relations Service
Office of Extension Work
Washington, D. C.

ANNUAL REPORT OF COUNTY AGRICULTURAL AGENT.
(Due November 30, 1922).

State of Nevada County of Washoe

S. E. Merrill County Agricultural Agent.

From December 1, 1921 to November 30, 1922.

If agent has not been employed entire year, indicate exact period. Agents resigning during year should make out this report before quitting the service.

(For map of State showing location of county, photograph illustrating some phase of county agent work, or brief summary of outstanding features of the work).

Approved

Date _____ (Name) _____
President of Extension Organization.

(Address) _____

Approved and forwarded by:

Date _____ _____
State County Agent Leader.

106-SRS

Suggestions Relative to the Preparation of the County Agricultural Agent's Annual Report.

The annual report is a review, analysis, interpretation, and presentation to the people of the county, the State, and the Nation of the sum total of the activities of the county agricultural agent for the year. The making of such a report is of primary value to the county agricultural agent and the county extension organization.

The narrative report should be a statement in orderly fashion, and under appropriate subheadings, of the work done, methods used, and results secured under each project, as well as of the general work accomplished. Every statement should be clear-cut, concise, forceful, and, where possible, reinforced with ample data from the statistical summary. In the preparation of the part of the report relating to each project, the results reported in the statistical summary for the project should be analyzed, conclusion drawn, and recommendations made. The report may well be illustrated with photographs, maps, diagrams, blue prints or copies of charts and other forms used in demonstration work. 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 left. The statistical summary will grow naturally out of the field and office records.

The following plan is suggestive of how the report may be clearly and systematically outlined:

SUGGESTIVE OUTLINE OF ANNUAL NARRATIVE REPORT.

I. Cover and title page.
II. Table of contents.
III. Status of county extension organization.
    (1) Form of organization - distinctive features.
    (2) Function of local people, committees, or project leaders in developing the program of work.
    (3) General policies, including relationships to other organizations.

IV. Program of work - methods employed and results achieved.
    (1) Factors considered in determining program of work.
    (2) Project activities and results -
        (a) In the development of the county extension committees during the year.
        (b) In soil improvement.
        (c) In crop production.
        (d) In live stock production.
        (e) In farm economics.
        (f) In marketing (buying and selling).
        (g) In farm home betterment.
        (h) In boys' and girls' clubs.
        (i) In other project activities.
    (3) Character and scope of office and field service.
    (4) Analysis and interpretation of tabular summaries.

V. Outlook and recommendations, including suggestive program of work for next year.

VI. Summary of activities and accomplishments, preferably of one or two typewritten pages only placed at the beginning or end of the narrative report.

Statistical Summary.

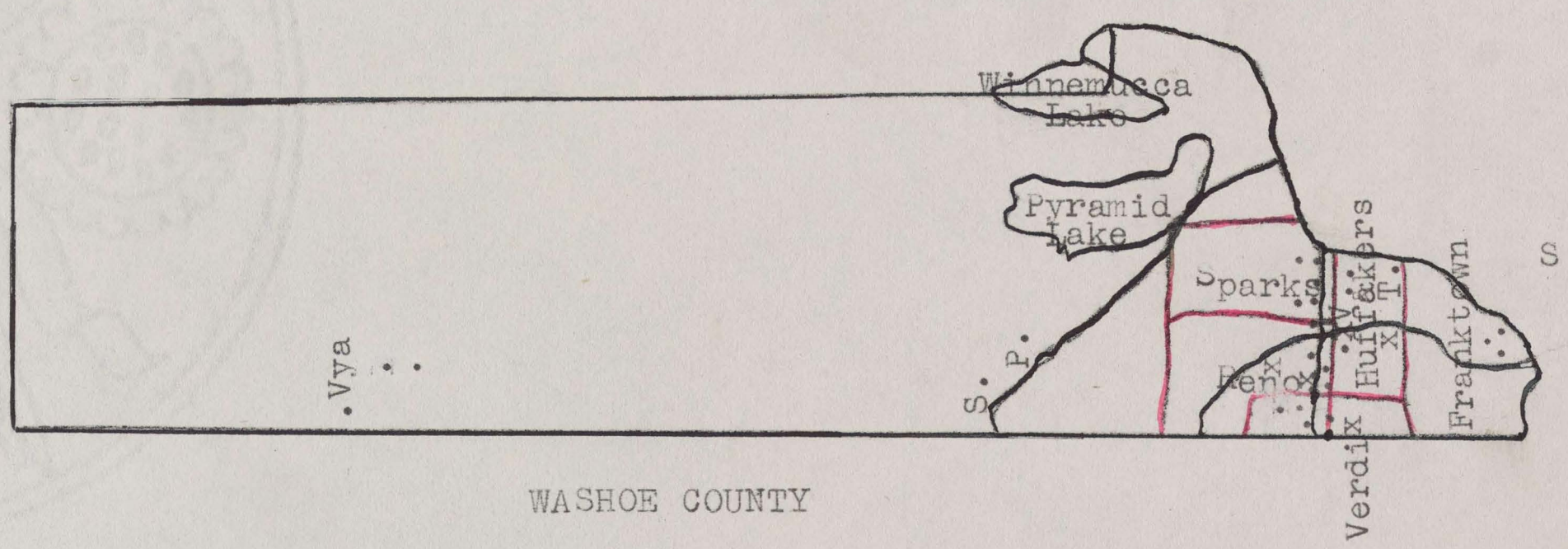
To supplement the narrative part of the report, and in order that comparable State and National summaries can be made, it is necessary that each agent include a statistical summary of the work in his county. The following form has been prepared to insure uniformity in reporting. In addition to the questions asked under each subdivision of the report, space is provided for the State to add other questions of State-wide importance. Additional room is also provided for each county agent to add other important statistical information not covered in the series of National and State questions. For the sake of clearness the questions are arranged in the same order as suggested for the narrative.

Extension Organization Map.

On this page draw or attach a map of your county, showing boundaries of communities or other local units organized for extension work.

Locate county extension committeemen with an X.

Locate community extension committeemen or project leaders with a dot.



WASHOE COUNTY

County Extension Organization.

1. County executive committee and county project leaders serving during 1922 (list below):

	Officers and county project leaders.	Name of project or activity of which leader has charge.	Address
1	H. F. Alps	Livestock	Box 851, Reno, Nevada
2	President J. L. Hash	Farm & Range	243 Granite St., Reno, Nev
3	Vice-President Mrs. F. Armbruster	Sanitation & Hygiene	Verdi, Nevada
4	Secretary Mrs. J.S. Lyons	Home & Community	Steamboat, Nevada
5	Treasurer V. F. Christensen	Welfare Agricultural Economics	Rt. 1, Box 28 A, Reno, Nev.
6	Director C. W. Brooks	Dairying	331 Moran St., Reno, Nev.
7	Mrs. E. Plumb	Poultry	Rt. 1, Box 80, Reno, Nevada
8	James Peckham	Potato Industry	P. O. Box 478, Reno, Nev.
9	A. P. Norton	Water Development	Vya, Nevada.
10	E. J. Sharp	Rodent Control	Vya, Nevada.

2. Does the extension organization provide for
   (a) Home economics work? Yes
   (b) Boys' and girls' club work? Yes

3. Does the county extension service publish an extension news or similar publication? No

4. Extent of community organization:

   (a) Number of communities or local units in the county recognized by the county extension service six community centers
   (b) Number of communities now having community committees six
   (c) Total number of community committeemen or community project leaders Thirty-five

5. Meetings relating to extension organization and attendance:

	Number.	Total attendance
(a) County extension committee meetings (County executive committee)	14	70
(b) Community committee meetings	201	626
(c) County project committee meetings	60	176
Total	275	872
(d) Number of above meetings not attended by agents	6	21

List below any additional work relative to county extension organization not covered by above questions:

_____

_____

_____

Soil-Improvement Projects.

In answering the following questions, report only results of the activities of the county agricultural agent that are supported by records. Answer every question. Use figures where work done can be supported by records for current year. Use "Unf." (unfinished) where work is unfinished or no record available; "N.A." (not applicable) where question does not apply; "0" (zero) where no work has been done.

Drainage and Irrigation.	Number.
6. Drainage systems planned and adopted	2 Unf.
7. Acres involved in Question 6	360
8. Irrigation systems planned and adopted	2 Comp. 3 Unf.
9. Acres involved in Question 8	720

Fertility.	
10. Farmers consulting agent regarding use of fertilizers	0
11. Tons of commercial fertilizer included in Question 10	0
12. Acres of clover or other legumes turned under for soil improvement	480
13. Farms on which soil was tested for acidity	0

Number.

14. Farms on which lime or limestone was used - - - - - - - - - - - - - - - - 0

15. Tons of lime or limestone included in Question 14 - - - - - - - - - - - 0

16. List below the organizations or associations relating to soils that the agent assisted in forming in 1922:

Type of organization	Organized in 1922.	
	Number.	Members.
Drainage associations or districts - - - - - - - - -		

Soil-Improvement Demonstrations*- 1922.

Kind of demonstrations	Number		Meetings at demonstrations		Units in demonstrations	Increase per acre or other unit	Resultant profit due to increase
	Started	Completed	Number	Total attendance			
Drainage	2	0					
Fertilizers							
Lime and limestone							
List others							
Irrigation	4	2	5	26	320	$10	$3,200.00

* A demonstration is an effort to show by example the practical application of an established fact. Demonstrations may be of methods or results.

Crop Projects.

In answering the following questions, report only results of the activities of the county agricultural agent that are supported by records. Answer every question. Use figures where work done can be supported by records for current year. Use "Unf." (unfinished) where work is unfinished or no record available; "N.A." (not applicable) where question does not apply; "0" (zero) where no work has been done.

Corn.

		Number.
17.	Farmers planting selected seed corn - - - - - - - - - - - - - - - - -	2
18.	Farmers selecting seed corn for next year's crop - - - - - - - - -	2
19.	Bushels seed corn selected -	30
20.	Farmers testing seed corn for germination - - - - - - - - - - - - -	0
21.	Bushels seed corn tested for germination - - - - - - - - - - - - - -	0
22.	Acres planted with tested seed - - - - - - - - - - - - - - - - - - -	20
23.	Other farms on which corn growing was introduced or farm practice relative to corn culture improved - - - - - - - - - - - - - - - - -	0
24.	Acres involved in Question 23 -	0

Wheat, Oats, Barley, and Rye.

25.	Farmers treating seed wheat for smut - - - - - - - - - - - - - - - -	10
26.	Bushels seed wheat treated for smut - - - - - - - - - - - - - - - - -	400
27.	Acres sown with treated seed -	350
28.	Other farms on which wheat growing was introduced or farm practice relative to wheat culture improved - - - - - - - - - - - - - - - -	5
29.	Acres involved in Question 28 -	75
30.	Farmers treating seed oats for smut - - - - - - - - - - - - - - - - -	3
31.	Bushels seed oats treated for smut - - - - - - - - - - - - - - - - -	25
32.	Acres oats sown with treated seed - - - - - - - - - - - - - - - - - -	20
33.	Other farms on which oat growing was introduced or farm practice relative to oat culture improved - - - - - - - - - - - - - - - - -	0
34.	Acres involved in Question 33 -	0
35.	Farms on which barley growing was introduced or farm practice relative to barley culture improved - - - - - - - - - - - - - - - - -	0

		Number.
36.	Acres involved in Question 35 -	0
37.	Farms on which rye growing was introduced or farm practice relative to rye culture improved - - - - - - - - - - - - - - - - - -	12
38.	Acres involved in Question 37- - - - - - - - - - - - - - - - - - - -	120

Beans and Potatoes.

39.	Farms on which bean growing was introduced or farm practice relative to bean culture improved - - - - - - - - - - - - - - -	0
40.	Acres involved in Question 39 - - - - - - - - - - - - - - - - - - -	0
41.	Farmers treating seed potatoes for disease - - - - - - - - - - - -	17
42.	Acres involved in Question 41 - - - - - - - - - - - - - - - - - -	17
43.	Farmers spraying potatoes for disease - - - - - - - - - - - - - -	0
44.	Acres involved in Question 43 - - - - - - - - - - - - - - - - - -	0
45.	Other farms on which potato growing was introduced or farm practice relative to potato culture improved - - - - - - - - -	0
46.	Acres involved in Question 45 - - - - - - - - - - - - - - - - - -	0

Legumes, Other Hay, and Forage.

47.	Farms on which alfalfa growing was introduced or farm practice relative to alfalfa culture improved - - - - - - - - - - - - -	3
48.	Acres involved in Question 47 - - - - - - - - - - - - - - - - - - -	60
49.	Farms on which sweet clover growing was introduced or farm practice relative to sweet-clover culture improved - - - - - -	2
50.	Acres involved in Question 49 - - - - - - - - - - - - - - - - - - -	10
51.	Farms on which red, alsike, or white clover was introduced or farm practice relative to clover culture improved - - - - - -	0
52.	Acres involved in Question 51 - - - - - - - - - - - - - - - - - - -	0
53.	Farms on which soy bean growing was introduced or farm practice relative to soy-bean culture improved - - - - - - - - - -	0
54.	Acres involved in Question 53 - - - - - - - - - - - - - - - - - - -	0
55.	Farms on which sorghum, milo, kafir, or feterita growing was introduced or farm practice relative to their culture improved -	0
56.	Acres involved in Question 55 - - - - - - - - - - - - - - - - - - -	0

Improved Seed.

57. List in the following table work done in connection with seed improvement:

Crop	Improved seed secured		Improved seed for sale		Names of varieties being standardized
	No. of farms (a)	Bushels (b)	No. of farms (c)	Bushels (d)	
Corn - - - -					
Wheat - - -	1	1	1	600	Defiance
Oats - - - -					
Rye - - - -					
Potatoes - -	18	650	4	3000	Russet Burbank

Rodent and Insect Pest Control.

	Number.
58. Farms on which rodent-control methods were followed - - - - - - - -	22
59. Acres involved in Question 58 - - - - - - - - - - - - - - - - - - -	300
60. Pounds of poisoned bait involved in Question 58 - - - - - - - - - -	806
61. Farms on which insect-control methods were followed - - - - - - - -	3
62. Acres involved in Question 61 - - - - - - - - - - - - - - - - - - -	175
63. Pounds of poisoned bait involved in Question 61 - - - - - - - - - -	850

Fruit.

64. Farms on which orchards were planted (apples, peaches, pears, citrus fruits, etc.) -	0
65. Acres involved in Question 64 - - - - - - - - - - - - - - - - - - -	0

		Number.
66.	Farms on which fruit trees were pruned	8
67.	Acres involved in Question 66	36
68.	Farms on which fruit trees were sprayed	28
69.	Acres involved in Question 68	95
70.	Farms on which bush fruits were planted or farm practice relative to bush-fruit culture improved	21
71.	Number of acres involved in Question 70	20
72.	Boys' and girls' clubs incident to crop production agent assisted in organizing in 1922	0
73.	Members enrolled in above clubs	0
74.	Members in above clubs completing work	0

75. List below the organizations or associations relating to crops that the agent assisted in forming in 1922:

Type of organization	Organized in 1922.	
	Number	Members
Potato growers' associations		
Fruit growers' associations		

Record of Crop Demonstrations* - 1922.

Kind of Demonstrations	Number		Meetings at demonstrations		Units in demonstrations	Increase per acre or other unit	Resultant profit due to increase
	Started	Completed	Number	Total attendance			
Alfalfa - - - - - -	3	3			60 a	$ 10	$ 600
Clover - red, white, and alsike - - - -	0	0					
Corn, seed selection	0	0					
Corn, varieties - -	2	2	3	75	20 a		
Oat smut control -	3	3			20 a	5	100
Oat varieties - - -	0	0					
Orchard spraying -	28	28	26	115	95 a	60	5700
Orchard pruning -	8	8	8	30	36 a	25	900
Pasture seeding or renovation - - -	0	0					
Potato disease control	17	17	9	83	17 a	20	340
Rye varieties - - -	0	0					
Rodent control - -	22	22	1	8	300 a	20	6000
Soy beans - - - - -	0	0					
Sunflowers - - - -	1	1	1	25	2 a		
Sweet clover - - -	2	2			10 a	10	100
Wheat smut control	10	10	2	20	350 a	5	1750
Wheat varieties - -	1	1	2	20	1 a		
List others - - - -							
Grasshopper Poisoning	3	3	3	17	175 a	10	1750
Small Fruit Culture	21	21	6	19	6 a	25	150

* A demonstration is an effort to show by example the practical application of an established fact. Demonstrations may be of methods or results.

106-SRS

Live-Stock Projects.

In answering the following questions, report only results of the activities of the county agricultural agent that are supported by records. Answer every question. Use figures where work done can be supported by records forccurrent year. Use "Unf" (unfinished) where work is unfinished or no record available; "N.A." (not applicable) where question does not apply; "0" (zero) where no work has been ddone.

		Number.
76. Registered horses secured	(Stallions	0
	(Mares	0
77. Registered bulls secured	(Dairy	6
	(Beef	0
78. Registered cows secured	(Dairy	17
	(Beef	0
79. High-grade cows secured	(Dairy	8
	(Beef	0
80. Registered sheep secured	(Rams	0
	(Ewes	0
81. Registered hogs secured	(Boars	0
	(Sows	0
82. Cow-testing associations organized in 1922		1
83. Cow-testing associations in county (including Question 82 and those previously organized)		1
84. Number of members in above associations		25
85. Cows tested or under test in 1922 for milk production through all such associations organized in 1922 or previously		600
86. Cows tested for milk production by individuals		0
87. Cows discarded as result of test (Questions 85 and 86)		& 24
888. Farmers assisted in figuring balanced rations (all animals)		32
89. Silos constructed		0
90. Farms on which poultry practice was improved.		28

		Number.
91.	Animals tested for tuberculosis	697
92.	Animals treated for blackleg	2642
93.	Hogs vaccinated for cholera	633
94.	Hogs treated for hemorrhagic septicemia	0
95.	Farmers using self-feeders for hogs	0
96.	Farmers assisted in controlling contagious abortion	162
97.	Farms on which beekeeping was introduced or the handling of bees improved	0
98.	Number of hives involved in Question 97	0
99.	Boys' and girls' clubs incident to live-stock production agent assisted in organizing in 1922	1
100.	Members enrolled in above clubs	6
101.	Members in above clubs completing work	6

102. List below the orginizations or associations relating to live stock that the county agricultural agent assisted in forming in 1922:

Type	Organized in 1922	
	Number	Members
Bull Associations		
Breeders' Associations		
Poultry Associations		
Bee Associations		
Sheep Associations		

Record of Live Stock Demonstrations* - 1922.

Kind of Demonstrations	Number		Meetings at demonstrations		Units in demonstrations	Increase per unit	Resultant profit due to increase.
	Started	Completed	Number	Total attendance			
Beef cattle feeding							
Blackleg control	2642 animals treated						
Dairy feeding							
Hog cholera control							
Hog feeding							
Poultry culling	12	12	11	139	500 birds removed	$1 saved	$500.00
Poultry feeding	22	22	3	75	7000 hens	$1.20	$8400.00
List others							

State Supplement.

This space is left for each county agent leader to include supplemental questions relating to live stock applicable to his State:

Anthrax Immunization	2477 head
Red Water Immunization, Cattle	1
Red Water Serum treatment, Cattle	12
Contagious Epithelioma Vaccination, Poultry	68 birds
Calf Scours serum treatment	32
Calf Scour Immunization	43
Infectious Sheptococcic Mastitis treatment	24

* A demonstration is an effort to show by example the practical application of an established fact. Demonstrations may be of methods or results.

List below any additional work relative to live-stock projects not covered by above questions or in State Supplement:

Accredited Poultry flocks established	3
Poultrymen purchasing trapnested or bred-to-lay baby chicks	10
Caponizing demonstration	1
Poultry houses remodeled	3

Farm-Economics Projects.

In answering the following questions, report only results of the activities of the county agricultural agent that are supported by records. Answer every question. Use figures where work done can be supported by records for current year. Use "Unf." (unfinished) where work is unfinished or no record available; "N. A." (not applicable) where question does not apply; "0" (zero) where no work has been done.

Farm Management.

	Number.
103. Farm account books distributed	0
104. Farmers keeping records in such account books through the year	0
105. Farmers assisted in summarizing and interpreting their accounts	0
106. Farmers making changes in their business as result of keeping accounts	0
107. Other farmers adopting cropping, live-stock, or complete farming systems according to recommendations	0
108. Farms on which buildings other than homes were constructed or remodeled according to plans furnished	5
109. Farm leases drawn or modified	0
110. Farm Management and farm account schools held	0
111. Farmers assisted in keeping cost of production records (Cow Testing)	25

Labor.

112. Farm laborers supplied through county extension service	8
113. Farmers assisted in securing tractors, sprayers, ditching machines, or other machinery to economize labor	24

Credit.

		Number.
114.	Farm Loan Associations agent assisted in organizing - - - - - - - -	0
115.	Other credit associations agent assisted in organizing - - - - - - -	0
116.	Farmers involved in Questions 114 and 115 - - - - - - - - - - - - - -	0

State Supplement.

This space is left for each county agent leader to include supplemental questions relating to farm economics applicable to his State:

List below any additional work relative to farm-economics projects not covered by above questions:

Marketing Projects.

Buying and Selling.

In answering the following questions, report only results of the activities of the county agricultural agent that are supported by records. Answer every question. Use figures where work done can be supported by records for current year." Use"Unf." (unfinished) where work is unfinished or no record available; "N. A." (not applicable) where question does not apply; "0" (zero) where no work has been done.

117. In Table I list the cooperative associations which the county agent has helped to form in 1922, and amount of business done:

Survey made of farmers in county with the result that a majority voted against forming a cooperative marketing association.

Table I.

Name of association	Date formed	Number of members	Products handled	Value of: Saving or business profit
Illustrative entry Jonesville Fruit Association.	Aug. 1	150	Sell apples and peaches; buy supplies.	$120,000.00 $5,295

Number

118. Number of other cooperative associations organized by the agent or his predecessors previous to 1922 with which the county agent has cooperated during the year - 0

119. The value of business done by associations included in Question 118 0

120. Savings or profits made by associations included in Question 119 0

121. Number of farmers assisted by agent in buying or selling through other channels than cooperative associations - - - - - - - - - - 0

122. Value of business done by farmers in connection with Question 121 0

123. Savings or profits made by farmers in connection with Question 121 0

Farm Economics and Marketing Demonstrations* - 1921.

Kind of Demonstrations	Number	Meetings at demonstrations		Units in demonstrations	Results.
		Number	Total attendance		
Farm management and farm account schools					
Purchasing and marketing					
List others					

* A demonstration is an effort to show by example the practical application of an established fact. Demonstrations may be of methods or results.

Farm-Home Projects.

In answering the following questions, report only results of the activities of the county agricultural agent that are supported by records. Answer every question. Use figures where work done can be supported by records for current year. Use "Unf." (unfinished) where work is unfinished or no record available; "N.A." (not applicable) where question does not apply; "0" (zero) where no work has been done.

		Number.
124.	Water-supply systems planned and installed - - - - - - - - - - - - -	0
125.	Sewage-disposal systems planned and installed - - - - - - - - - - -	3
126.	Lighting systems planned and installed - - - - - - - - - - - - - - -	0
127.	Farm homes constructed or remodeled according to plans furnished -	10
128.	Home grounds improved according to plans furnished - - - - - - - - -	0
129.	Homes in which labor-saving machinery or equipment were introduced	0
130.	Household laborers supplied through agent or farm bureau - - - - - -	26
131.	Homes improving practice relative to gardening - - - - - - - - - - -	0
132.	Boys' and girls' clubs incident to home making and gardening agent assisted in organizing in 1922 - - - - - - - - - - - - - - - - - - -	0
133.	Members enrolled in above clubs - - - - - - - - - - - - - - - - - - -	0
134.	Members in above clubs completing work - - - - - - - - - - - - - - -	0

Farm-Home Demonstrations* - 1922.

Kind of Demonstration	Number		Meetings at demonstrations		Units in demonstrations	Results
	Started:	Completed	Number	Total attendance		
Clothing - - - - - - -						
Food preservation - - -						
Home gardens - - - - - -	3	3			3 a	$375 profit
Home ground improvement	10	10			10 yards	good
Hot school lunch - - -						
Home water systems - -						
Labor saving machinery and equipment - - -						
Milkfeeding for increasing weight of children						
Septic tanks - - - - -	3	3	1	20		
List others - - - - - -						

*A demonstration is an effort to show by example the practical application of an established fact. Demonstrations may be of methods or results.

State Supplement.

This space is left for each county agent leader to include supplemental questions relating to farm-home projects applicable to his State:

List below any additional work relative to farm-home projects not covered by above questions or in State Supplement:

Character and Scope of Office and Field Service.

In answering the following questions, report only results of the activities of the county agricultural agent that are supported by records. Answer every question. Use figures where work done can be supported by records for current year. Use "Unf." (unfinished) where work is unfinished or no record available; "N.A." (not applicable) where question does not apply; "0" (zero) where no work has been done.

	Number
135. Different farmers visited on their farms	200
136. Total number of farm visits made	535
137. Office consultations relating to extension work (do not include telephone calls)	870
138. Days in field	232
139. Days in office	74
140. Farmers' Institutes held (not included under extension organization meetings, p.4, or demonstration meetings, pp.6,11,14,17,and 18,	0

		Number.
141.	Attendance at meetings involved in Question 140	0
142.	Extension schools or short courses held	0
143.	Attendance at meetings involved in Question 142	0
144.	Extension auto tours	5
145.	Attendance at meetings involved in Question 144	310
146.	Other agricultural meetings attended by agents not previously reported	6
147.	Attendance at meetings involved in Question 146	300
148.	Grand total all meetings held during year, including organization, p.4; meetings at demonstrations, farmers' institutes, and miscellaneous, involving Questions 140, 142, 144, and 146	364
149.	Grand total attendance all meetings involved in Question 148	2134
150.	Agricultural articles written by agent and published in local papers (do not include notices of meetings or similar brief news items)	12
151.	Agricultural articles written by agent and published in county extension news or similar publication	10
152.	Individual letters written and mailed	664
153.	Circular letters written	9170
154.	Total number of copies of circular letters mailed	52
155.	Number of questionnaires or tother requests for information handled by agent for U. S. Department of Agriculture or other Federal agencies	0
156.	Number of questionnaires or other requests for information handled by agent for agricultural college or other State institution or official	0

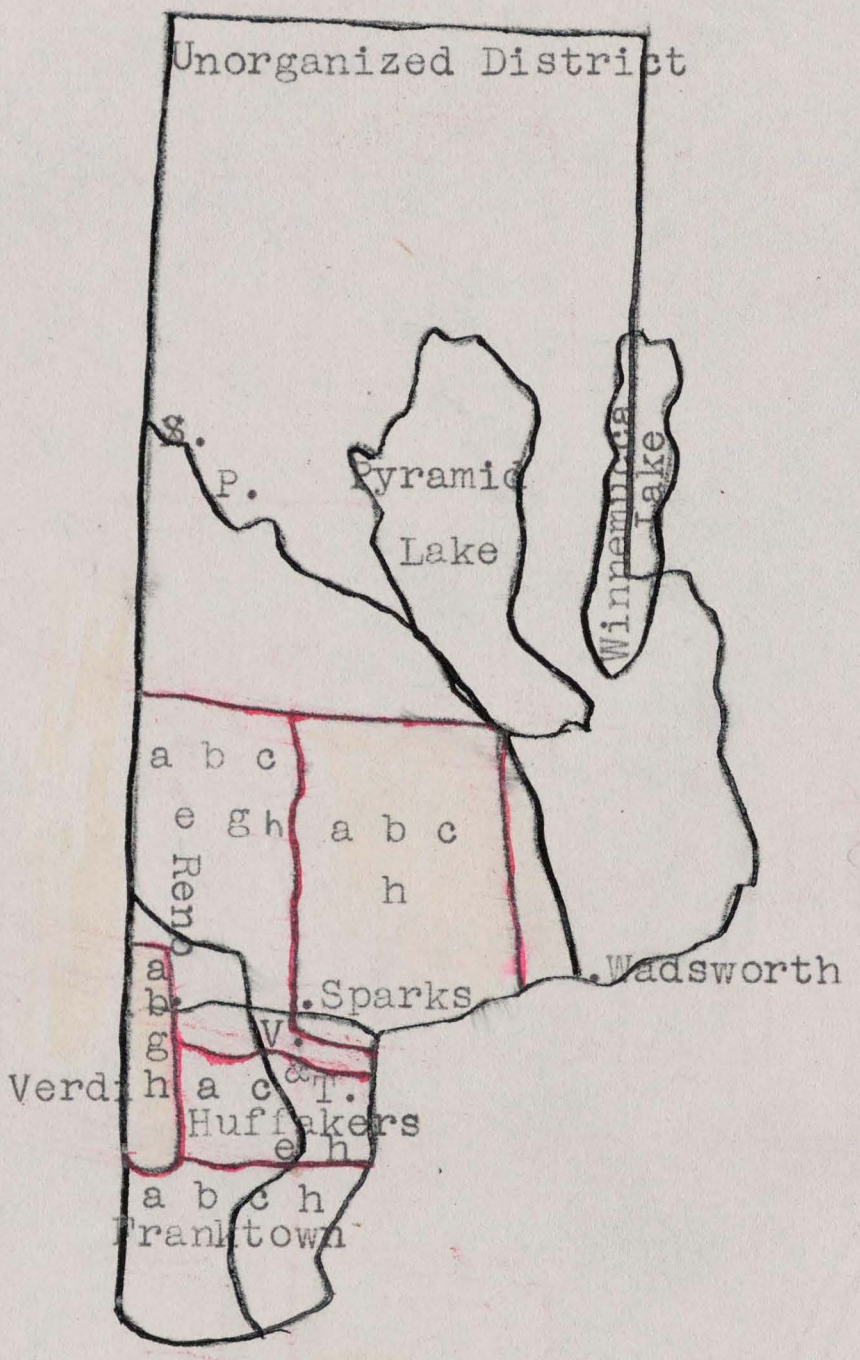
List below any other work relative to character and scope of office and field service not covered by above questions:

Map of Demonstrations.

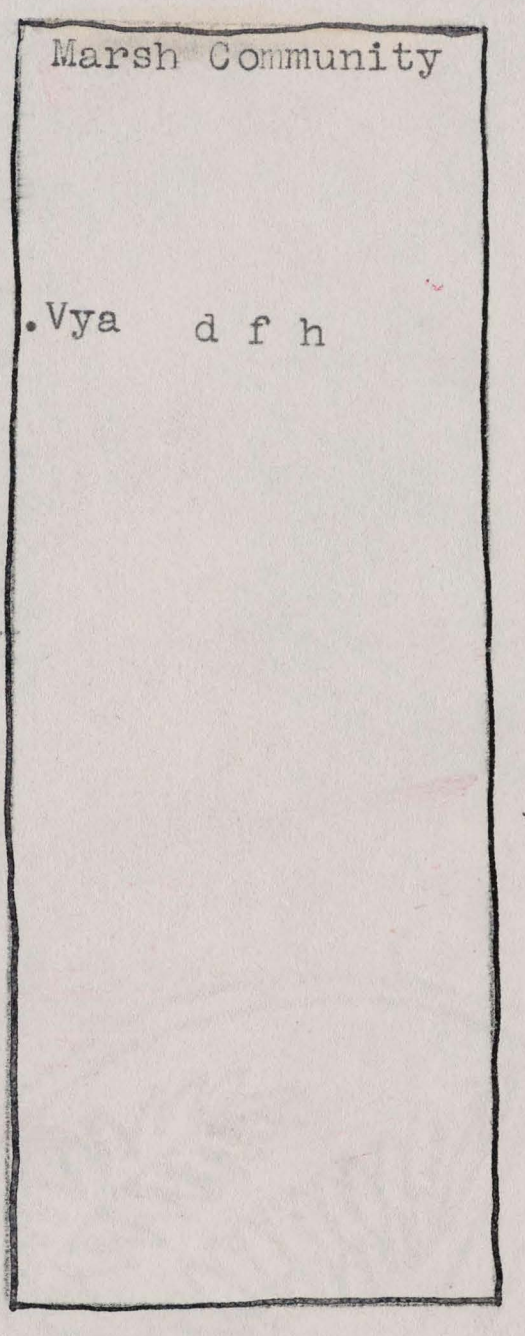
On this page draw or attach a map of your county, showing boundaries of communities or other local units recognized by the county extension service, and locate thereon demonstrations listed on pages 6, 11, 14, 17, and 18 of this report. In order to secure uniform mapping in each State, the county agent leader will indicate lines of work after characters. Insert extra maps if it seems desirable.

a Dairying b Poultry c Potato Industry d Underground Water Development

e Garden & Orchard f Rodent Control g Grain Production h Animal Disease Control



Southern Portion
Washoe County



Northern Portion
Washoe County

Tabular Summary of Projects.

Title of Project	Number of communities adopting	Days project leader helped	Days specialists helped	Approximate distribution of agents'[1] time in office and field on projects and miscellaneous work for 1922												
				Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct	Nov.	Dec.	Total
Illustrative entry				Da.	Da.	Da.	Da.	Da.	Da.	Da.	Da.	Da.	Da.	Da.	Da.	Da.	Days
Poultry	6	5	2		1	2		2	1	1	3	3	3	4	2		22
Dairying	5	15	30	10	5					1	1½		½		1½		19½
Poultry	4	7	30	4	6		4	3			1½		5	2	3½		29
Potatoes	4	12	10	4	5	1	7	1	2½	3	4	4	6	6	6		49½
Marketing	3	0	5		1		1	1		1	1		1	1			7
Underground Water Development	3	6	7				½	2	9½	5	1½	10	1	1			30½
Garden & Orchard	6	4	20	2	2		5	6	8	2	9	9	8	16	5		72
Rodent Control	1	3	7		1		½	2	1		1½				½		6½
Fly Control	2	4	3				½	1									1½
Grain Production	1	1	1		½	1									½		2½
Farm Wage Scale	1	2			2					1							3
Alfalfa Weevil	5	10	7	1		2				3					½		6½
Organization		50		5							5	4	2		4½		20½
Septic Tanks	1	5	2				½	2	4½	1							8
Boys'&Girls' Clubs								1	½				½				2
Horticulture Specialist Work						20	8	6		3							37
Miscellaneous[2]					1					6			1		2½		10½
Animal Disease Control															½		½
Days leave																	
Total	36	119	122	26	24	24	27	25	26	26	25	27	25	26	25		306

1. Time includes both agent and assistants.
2. Miscellaneous includes unexpected and emergency service which cannot be anticipated in advance

STATISTICAL REPORT
of
S. E. MERRILL
for
HORTICULTURAL SPECIALIST WORK
Done in Nevada Outside of Washoe County

Kind of Demonstrations	Number Started	Number Completed	Meetings at demonstrations: Number	Meetings at demonstrations: Total Attendance	Units in demonstrations	Increase per acre or other unit	Resultant profit due to increase
Orchard Spraying	26	26	17	115	130 a	$60	$ 7,800
Orchard Pruning	84	84	58	424	420 a	$25	$10,500
Orchard Planting	1	1	1		1 a		
Orchard Management			9	130			
Small Fruits	18	18	1	8	1 a	$125	$ 2,450

BOYS AND GIRLS CLUB WORK

ORGANIZATION AND COOPERATION

1. What is the local unit for the county extension organization_____
(community, township, farm center)_____
2. Number of units in the county_____
3. Number of units having "family plan" extension programs_____
4. Number of community committeemen or community project leaders in the county extension organization_____
5. Number of unpaid local club leaders beginning the project_____
6. Number of unpaid or volunteer local club leaders completing the project year_____
7. Number of these leaders considered as community project leaders_____
8. Number of specialists, except those in club section, doing club work in the county

Specialist	Days in county	Nature of assistance rendered

9. Do club members hold membership in your county extension organization (individually or as a club)?_____
10. Office work:
(a) Number of calls at office relating to boys' and girls' club work_____
(b) Number of telephone calls_____
(c) Number of letters written_____
(d) Number of articles written for local press_____
(e) Number of bulletins, leaflets, and other material distributed_____
11. Number of club plats and homes visited_____
12. Number of club meetings attended_____(a) Attendance_____
13. Number of training conferences held for local leaders___(a)Attendance____
14. Number of club talks and lectures given_____(a) Attendance_____
15. Number of club tours conducted_____(a) Attendance_____
16. Number of achievement day meetings_____(a) Attendance_____
17. Number of club encampments_____(a) Attendance_____
18. Number of fairs at which club members exhibited (a) State fairs_____
(b) County and district fairs_____(c) Community fairs_____
19. Number of club members exhibiting_____
20. Number of club members that attended short courses at agricultural colleges during the year_____
21. Number of active and former club members receiving home economics instruction at agricultural colleges_____
22. Amount of money loaned by banks to members_____
23. Amount of money used for
(a) Expenses of club members for trips to short courses, fairs, expositions etc._____
(b) Prizes, premiums, awards, etc._____

PIG CLUB DEMONSTRATION

1. Number of clubs organized _____
2. Number of boys enrolled (a) rural _____ (b) urban _____ (c) total _____
3. Number of girls enrolled (a) rural _____ (b) urban _____ (c) total _____
4. Total enrollment _____
5. Number of members completing demonstrations and reporting _____
6. Number of pigs raised for pork production and breeding _____

Pork Production

7. Number of market pigs raised by members reporting _____
8. Number of days covered by demonstration _____
9. Number of pounds of pork produced during demonstrations _____
10. Average daily gain per pig _____
11. Value of pork produced by members reporting _____ $ _____
12. Total costs (purchase price, feeds, labor) _____ $ _____
13. Value above costs _____ $ _____

Breeding

14. Number of pigs raised for breeding purposes _____
15. Number of days covered by demonstration _____
16. Value of breeding animals _____ $ _____
17. Total costs (purchase price, feeds, labor) _____ $ _____
18. Value above costs _____ $ _____
19. Extent and Effect of Demonstration

Number of members known to demonstrate, and number of farmers known to adopt each of the following practices:

Practice	No. of members	No. of animals	No. of farmers	No. of animals
Raising pure-bred stock				
Pasturage with grain				
Use of protein supplements				
Proper housing and fencing				
Home killing and curing of pork				

SUMMARY OF CLUB DEMONSTRATIONS OR PROJECTS

(Fill in and check carefully from previous sections)

Club demonstration (project)	Organized clubs	Groups becoming standard	Enrollment	Members reporting	Value of products	Total costs	Value above costs

A N N U A L R E P O R T

for

WASHOE COUNTY

S. E. MERRILL, COUNTY EXTENSION AGENT

1922.

Photos: See UNRA-PL749

CONTENTS

STATUS OF COUNTY EXTENSION ORGANIZATION

The Washoe County Farm Bureau was organized during the fall of 1919 and cooperative agents were placed in the county in March, 1920. The county is settled mostly by farmers who have been here since the beginning of agriculture in this district - about fifty years ago - or who are descendants of such farmers. There are very few beginners in agriculture and but very little land has been recently brought under cultivation. Most of the rural people are very well satisfied with their own methods of crop production with the exception that they will all tell you that the price of farm products is too low and the price of labor and commodities that they have to purchase is too high.

There is a large percentage of foreigh born and first generation Italians in the county and they are, as a whole, comparatively well to do. They have made theirmmoney largely on increase of land values rather than in developing and following an efficient system of agriculture. The cooperation that the farm bureau and extension organization gets from this Italian group is poor. They are suspicious of and unfavorable towards organizations cooperating with federal or state institutions, and in fact do not particularly care to organize in cooperation with the farmers of other nationalities in their community. The farm bureau is doing effective work in getting some of these people out to meetings particularly those of a social nature where some of the misunderstandings are cleared away and closer friendships developed; also in the matter of demonstrations on the farms of individuals there has been some progress. A number of these farmers, while not consenting to join any organization to cooperate with their neighbors have consented to have demonstration plots on their farm where improved practices in agriculture have been brought to their attention and these methods have been finally adopted.

FORM OF ORGANIZATION - DISTINCTIVE FEATURES

Extension work in this county is done through cooperation with the Washoe County Farm Bureau, an organization with five county directors elected from at large and with six community centers. The farm bureau directors, under the present arrangement, have cooperative jurisdiction in the direction of the work of the county extension agents. Part of the salaries and all of the expense monies of these extension agents are paid from farm bureau funds derived from taxation. The county agent's office is located in the farm bureau office in the county court house.

FUNCTION OF LOCAL PEOPLE, COMMITTEES, OR PROJECT LEADERS IN DEVELOPING THE PROGRAM OF WORK

The county program of work is evolved from the community programs developed at community center meetings held in November

of each year. Two years ago several principal lines of work were decided upon, after close study and consultation with farmers and agriculture leaders in the district. This program was developed by giving consideration to the different types of agriculture now being followed; to the problems confronting them and their possible remedies. This work was done in committee and community center meetings. Succeeding years programs have been built around the original lines of work started, the process of program building being for the county agents to meet with local committees first to work out a general plan of procedure then to bring this outline to a larger group for consideration and adoption. Nothing is placed on the program that is not either asked for by the farmers themselves or given their vote of approval.

Each succeeding year of extension work in this county has developed an additional number of active, wide awake project leaders and committeemen taking a leading part in the developing of the program. During the past year practically all of the project leaders were active in furthering the cause of extension work in their communities or in their line of endeavor and have succeeded in carrying their projects to a successful conclusion. I feel that, in this county, we have a fine group of directors, project leaders and committeemen, but that we have not been successful in securing the active interest and cooperation of a large enough group of farmers as I believe should be cooperating in such work.

PROGRAM OF WORK

Most of the extension work in Washoe County during the year of 1922 was organized under eleven projects, which were quite definitely outlined at the beginning of the year, with assignment of duties to the various project leaders, committeemen, demonstrators and cooperators. In addition a twelfth group would include miscellaneous work in the county and a thirteenth group would include extension work in horticulture done by the county extension agent outside of Washoe County. These projects and lines of work are as follows:

1. Dairy Herd Improvement
2. Development of the Poultry Industry
3. Development of the Potato Industry
4. Improvement of Marketing Conditions
5. Underground Water Development
6. Rodent Control
7. Improvement in Garden and Orchard Culture
8. To Increase Grain Production
9. Establishment of a Farm Wage Scale
10. Alfalfa Management and Alfalfa Weevil Control
11. Animal Disease Control
12. Miscellaneous Work
13. Specialist Work in Horticulture in other counties of the state.

PROJECT ACTIVITIES AND RESULTS

DAIRY HERD IMPROVEMENT. The object and reasons for adopting this project were well outlined in the project agreement as adopted at the beginning of the year and are as follows:

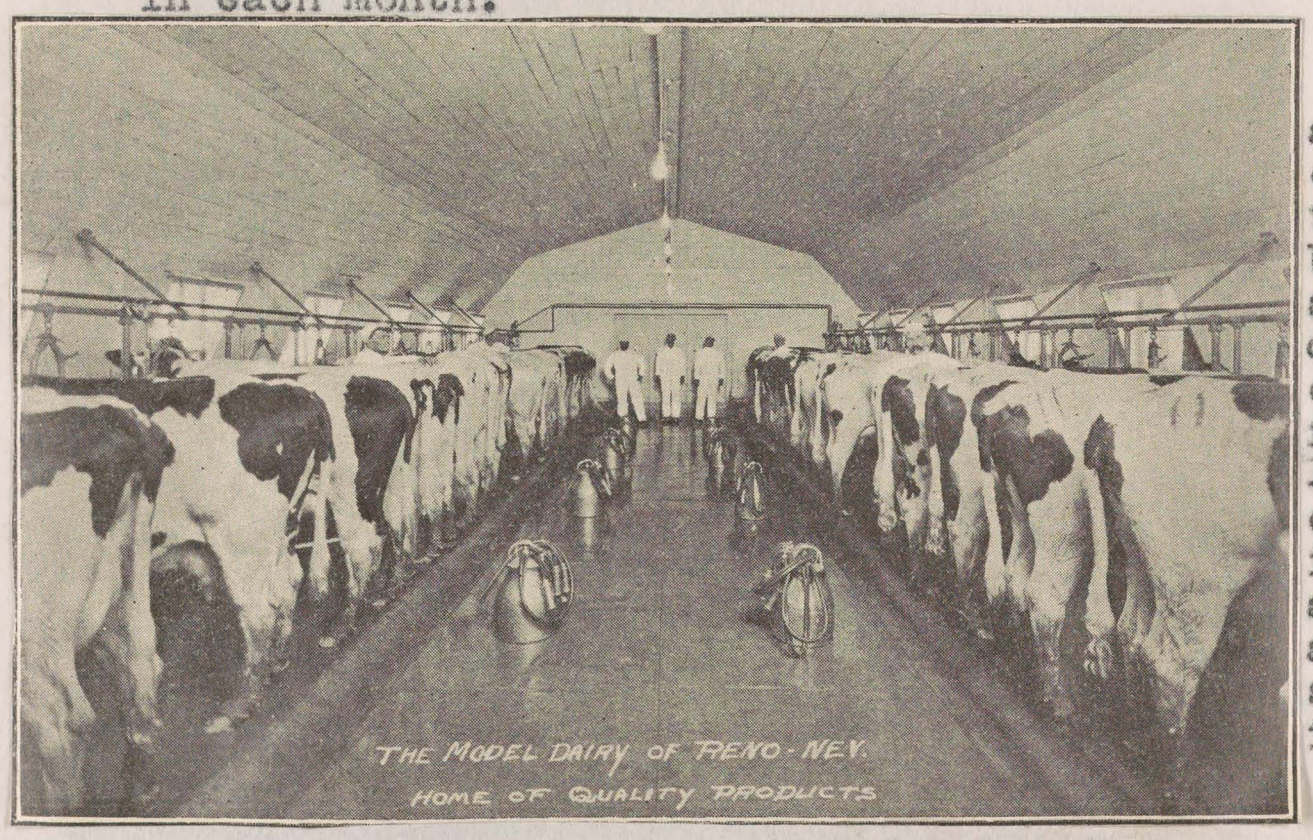
Object: - To build up the dairy industry in Washoe County by eliminating all boarder cows, that is all cows producing less than 5,000 pounds of milk or 175 pounds of butterfat per year.

Goal: - To organize a Cow Testing Association with a minimum of 600 cows.

Project Data: - The present average butterfat production in the county is about 175 pounds per cow. The average production per cow in a few of the best herds is over 300 pounds. If the average production per cow for the county can be increased to the 300 pound mark, it will mean, based on the present number of 4,000 cows in the county, an increase in net income to Washoe County dairymen of over $250,000 per year.

A number of dairymen in the county are complaining of milking at a loss, which undoubtedly, they are. The members of another group believe that they are milking at a profit, but have no figures to substantiate their claim. It is believed that a cow testing association will greatly assist in putting dairying on a business basis.

Brief plan of the association:- Plan to have 600 cows at $3.00 per cow making an income of $1800; to employ a cow tester at about $1500, the tester to furnish testing apparatus. In herds of less than fifteen cows, the owner to take the samples every other month. The minimum charge to be for fifteen cow herd. Accurate name, number and markings of each cow to be taken and no substituting of other cows in herd allowed. New cows brought into the herd to be charged for by the month. Contracts to be made for a period of twelve months. Collection to be made monthly through creameries where possible. Collection to be made from the payment on first checks to come in each month.

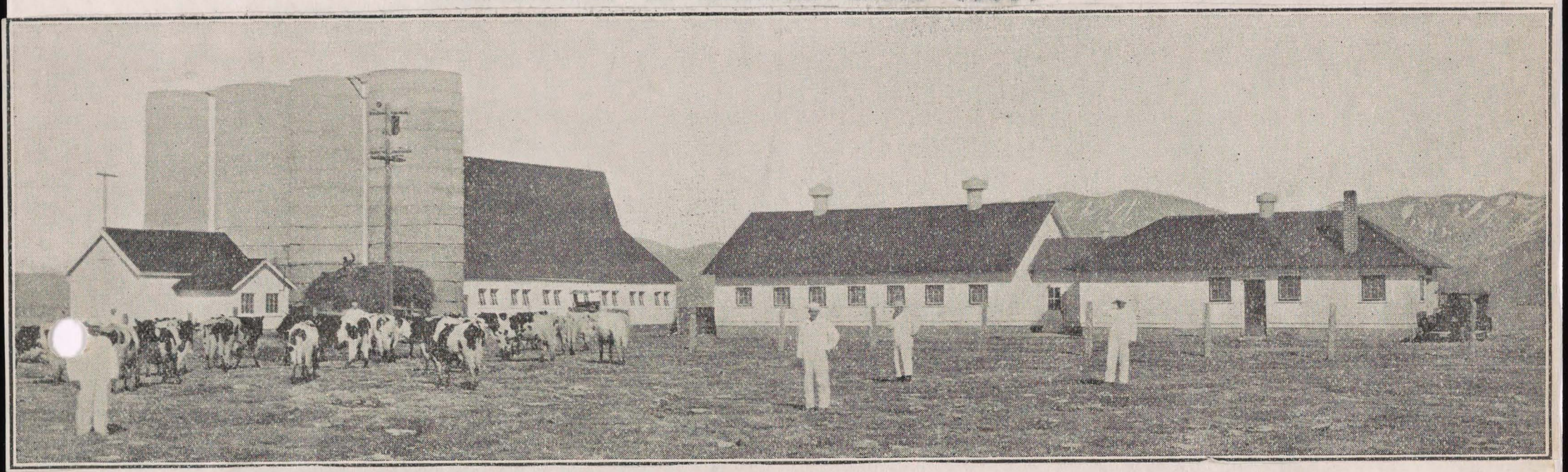


Following an an educational campaign through the newspapers and by circular letters an intensive two day drive was put on for membership for the association. In this drive the county was divided into districts with a committee in each and resulted in the signing of 719 cows in thirty herds for

for the association.

When the organization was completed and the work was started the number in the association was reduced to 624. The association continued under the plan as outlined in the beginning until the middle of May when the number of cows in the association was reduced to 400 and a new plan had to be adopted. At this time a part time tester was employed. This tester to receive his pay twenty out of every twenty-five cents collected on the per cow per month basis. The requirements being that the minimum herd shall be twenty cows. At the present time only 230 cows are actually being tested. The reduction in the number of cows in the association has been attributed to two causes:

1. A number went in to the association purely for advertising and when their cows failed to make records that would place them near the head of the list, they quit.
2. Many of the cows proved to be boarders from the beginning and have since been disposed of, a thing to be desired, but, nevertheless reducing the number of animals under test.



This type of dairy equipment is the goal set before the dairymen of Washoe County

The benefits to be derived from the cow testing association have been permanently established in the county and those now in the association are strongly in favor of continuing with the association.

The county program of work for next year includes plans for conducting another cow testing association membership drive to bring the association back to its original size with 600 cows and a full time tester.

Other dairy work has been done in the county in cooperation with the State Dairy Specialist includes the bringing in and placing in local dairy herds of six registered dairy bulls, seventeen registered dairy cows and eight high grade dairy cows. Definite reports were made to the office of 24 cows being sold for beef as a result of testing.

DEVELOPMENT OF THE POULTRY INDUSTRY. The county project outline included the following:

Object: - To increase egg production in the county and to put the poultry industry on a more profitable basis by the adoption of efficient methods of poultry culture.

Goal: - Adopt the five year program of the State Farm Bureau which is:

1. To adopt the accredited and the recommended flock plan with a goal of five such flocks in the county each year.
2. That an effort be made to place a standard bred-to-lay flock on every farm in each county where there are 25 or more chickens kept thoughout the year.
3. That at least five poultry houses in each county be remodeled under a farm bureau plan each year.
4. That a goal of five persons each year be induced to feed a farm bureau egg laying ration.
5. That lectures be offered in each organized community regarding the production of the infertile egg and the grading of eggs.

Project Data: - At one of the farm bureau meetings figures were presented by Mr. M. D. Collins, Poultry Specialist of the University, showing that more than $30,000 worth of poultry products are produced in Washoe County monthly, and that this furnishes only a small proportion of the poultry products consumed in this district.

With the exception of the larger poultry plants within the immediate vicinity of Reno the poultry industry is not on a very efficient basis at the present time there being a need of bred-to-lay stock, modern poultry houses and the use of balanced rations. The Nevada climate has proven to be excellent for the poultry industry.

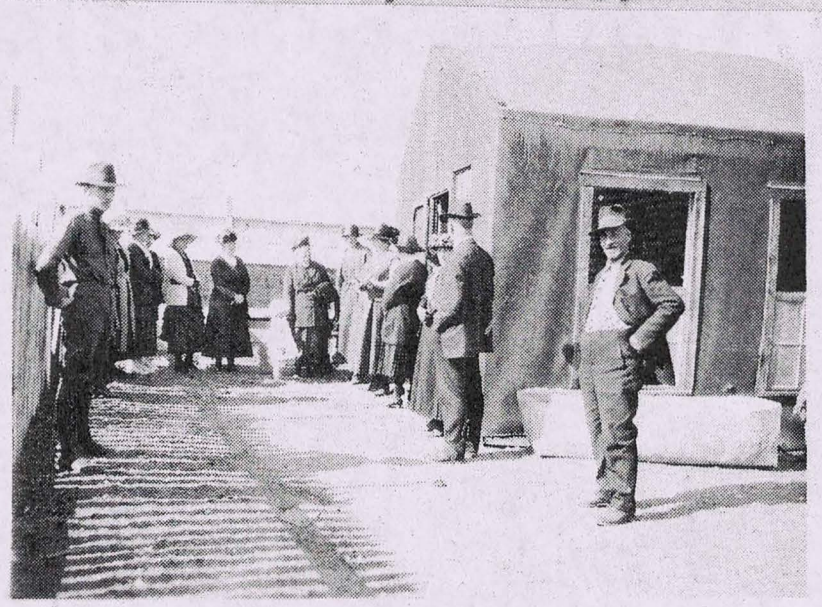
This project resulted in cooperative demonstration work in poultry being conducted on 28 farms. There were twelve culling demonstrations carried through to completion with eleven meetings with an attendance of 139 at these demonstrations. Five hundred cull birds were removed from flocks and every demonstrator reported that the removal of these culls made no difference in their egg yield. Figuring that these cull birds would be fed on an average of four months without producing any eggs and that the food consumed by each of them would be worth $1.00, ~~we have a resultant profit due to this saving to~~ of $500. Twenty-two poultrymen fed balanced rations in accordance with directions furnished. There were three meetings at

Refreshments were served at the close of the poultry tour.

Demonstrating the Oat Sprouter.

these poultry feeding demonstrations with an attendance of 75. Seven thousand hens were fed balanced rations. The average farm flock in this county is only producing at the rate of six eggs per month during the fall and winter months of high prices while reports from several of those poultrymen feeding balanced rations show that they are getting a production of 60% or eighteen eggs per month. This can be easily estimated at a profit of $1.20 per hen for the season and resulting in net profit to the poultrymen of $8,400 as a result of feeding balanced rations to these 7,000 hens.

In addition tb the culling and feeding demonstrations there were three poultry flocks examined and placed on the accredited list, ten demonstrations in the purchasing and growing of trapnested or bred-to-lay baby chicks, one caponizing demonstration and three poultry houses remodelled in accordance with plans furnished. The results of these poultry demonstrations have been quite far reaching. Three poultry tours with an attendance of ninety interested poultrymen from this and adjoining counties visiting a number of these demonstrations. On each of these tours the demonstrators told of the methods they were following and the results being secured and the poultry specialist gave lectures on poultry management. One of these tours included sixteen representatives from the Lyon County Farm Bureau and another one included thirty representatives of the Lassen County Farm Bureau. These tours we consider as being a very importatt phase.



Demonstrator tells how she feeds her chickens

DEVELOPMENT OF THE POTATO INDUSTRY. Object: - To develop the potato industry of Washoe County.

Goal: - 1. To establish 14 demonstration plots in different parts of the county showing the value of sulphur for disease control.

2. Get as many farmers as possible to grow their own seed using selected seed which shall be treated and planted on clean ground.

3. Furnish a man to inspect potatoes, grade outgoing shipments, apply proper labels to containers.

Project Data: - One hundred and fifty car loads of potatoes are shipped from the county annualy. Potato diseases such as eel worm, fusarium wilt, rhizoctonia and scab are universally prevalent over the potato growing area. This has resulted in a decreased yield and a grade of product that is difficult to market. Demonstrations conducted by the farm bureau last year proved that sulphur can be used effectively for the control of scab and that it might be of value for the control of eel worm.

Investigation indicated that the marketing of the crop can be greatly facilitated if a proper system of grading is inaugurated. Legislative action giving specific authority and machinery for inspection and grading of all out-going shipments of potatoes is needed.

demonstrations in sub-soiling with dynamite have proven profitable on certain soils in the county.

There were fifteen demonstration plots in which sulphur was used to control scab and six of these plots were also infected with eel worm so that the plot was used as an experiment to find out whether sulphur could be used successfully to control eelworm. The results from these plots confirmed the demonstrations of last year by showing that wherever the soil was quite badly infected with scab organisms sulphur, if applied correctly in the right amounts would effectively control it. The best results were secured where the sulphur was sprinkled around the potatoes in the furrow while planting. Where sulphur was broadcasted on the surface of the ground before plowing the results were not so good. The use of 500 pounds of uninoculated sulphur close to the seed has so far given the best results in the limited amount of experiments conducted. Data available from local plots does show that there is any advantage in using inoculated sulphur.

Beneficial results in the control of scab were had from the use of 300 pounds of inoculated sulphur but the control was

not as complete as where the larger quantity of un-inoculated sulphur had been used. Further work needs to be done on this project to determine the best kind and amount of sulphur to be used most efficiently on the different types and conditions of soil and seed.

Experiments in the use of sulphur for the control of eelworm tend to show that eelworm can not be controlled by the application of sulphur to the soil. There were two plots where less eelworm was found on the sulphur treated area as on that not treated, but in both cases small grains had preceded potatoes on the areas treated while the untreated area had been previously planted to potatoes and the whole plot had grown potatoes badly infected with eelworm two years before. All other plots showed as much eelworm on the treated area as they did on the untreated land.

A number of reports that have come in from farmers who have rotated potatoes with small grains with beneficial results in controling eelworm and the data available seems to indicate that a system of rotation with alfalfa to build up the soil followed by two years in grain immediately preceding potatoes will be a good practice to follow in the eelworm infested potato growing areas.

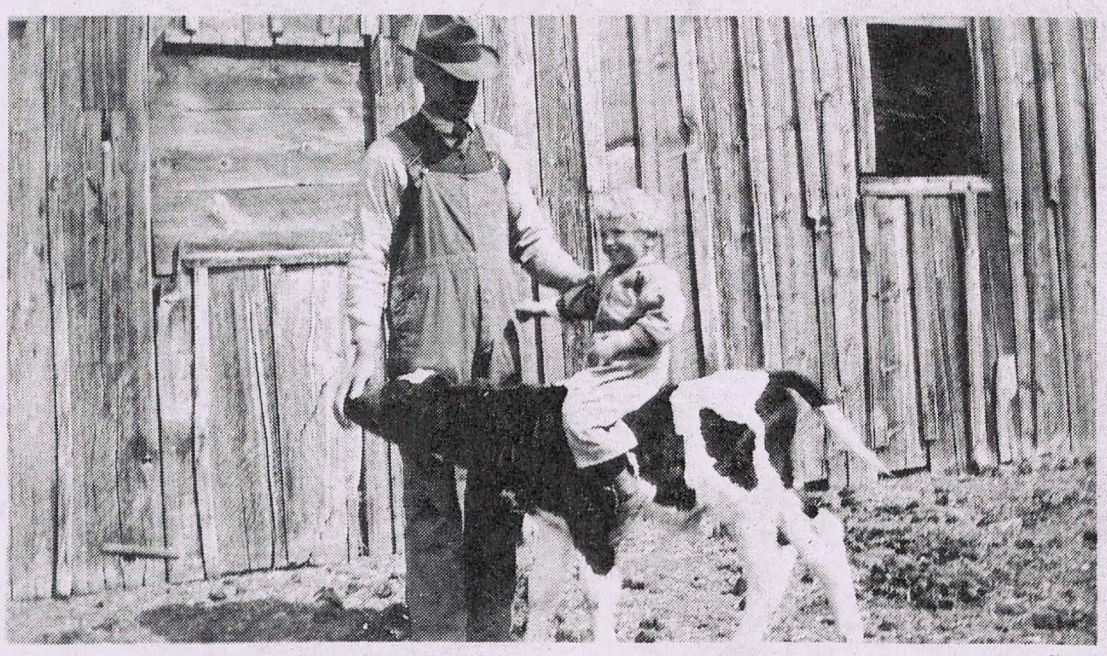
Another important phase of potato improvement work in this county is ten demonstrations in growing "a seed potato plot" planted to selected or certified seed during the latter part of June or the early part of July. The potatoes from these plots have been of a healthy vigorous type and free from all signs of the common potato diseases. The size is also more suitable for uncut seed than is secured from the earlier planted ground. Four growers of these demonstration plots report 3,000 bushels of this selected Russet Burbank variety seed for sale. Three of this number have had their fields examined and passed for certification by the State College of Agriculture. This is the beginning of the growing of certified seed in certain disease free areas in the county and promises to develop into a profitable industry for a limited number of those favorably situated.

There were two demonstrations in the treatment of seed with corrosive sublimate for scab and rhizoctonia, both of which showed favorable results in the control of these diseases.

The immediate monetary results of these potato demonstrations are reported as follows: 17 acres treated for scab and rhizoctonia with an estimated increase of one ton of marketable potatoes per acre valued at $20 with a resultant profit of $340; 90 tons of high grade seed potatoes free from disease valued at $30 per ton, which is $10 above the price for market potatoes, would give a net profit for growing this type of potato of $900. No money estimate will be placed on the increased value of the clean, vigorous seed which each of these growers will have to use on his own farm.

The results of the potato demonstrational work were brought to the attention of the other farmers of the district by means of two potato field inspection tours. On one of these trips Eugene H. Grubb, Potato Expert of the Southern Pacific Line, gave a field demonstration in the selection of seed and cultural methods and on the other tour a delegation of farmers from Lassen County, California attended the demonstrations along with the local farmers.

In the matter of grading the subject was presented to the State Farm Bureau at their annual meeting in January and at that time a committee was appointed representing the three potato producing counties of Western Nevada to formulate and draft suitable laws and regulations providing for grading, and standardization and inspection by state authorities of all potatoes to be shipped out of the state. This committee has had two meetings and decided to adopt a law similar to that under which the potato growers of Idaho operate. It would provide for a new department in the public service division which department would have authority to formulate such rules and regulations as it saw fit for the grading and standardization of farm products particularly potatoes and cantaloupes at the present time. It is contemplated that this department would be practically self sustaining from fees collected for inspection service, ~~and it is planned~~ that the same men who now act as inspectors for alfalfa weevil control on outgoing shipments would act as inspectors under the grading law, thus reducing the number of new men required for this work.



MARKETYNG. In this project no results were secured towards organizing an association. Last fall a preliminary organization was formed with over one hundred members and at that time it was thought that the sentiment among the farmers was for a cooperative marketing association.

Last spring a meeting was called for forming a permanent organization and to start a membership drive. This time very little active interest was shown by the farmers and,after a canvass of the farmers of the county, it was decided to postpone indefinitely the organization of such an association.

Three meetings were held during the summer for the purpose of fixing prices on hay. At the last of these meetings grades for hay were adopted and prices fixed for each county. The price established for Washoe County for first class alfalfa hay in the stack was $10 per ton. The announcement of this quotation had considerable influence in establishing the price of hay in this county and resulted in very little hay being sold below that figure.

UNDERGROUND WATER DEVELOPMENT.

Object: - To increase the profitable agricultural area in Washoe County by developing underground water including artesian, pumping and springs, also to drain land where needed using the drainage water for irrigation of additional land.

Project Data: - Marsh community in Long Valley is a dry farming settlement situated in a large,fertile valley surrounded by mountains covered with snow a good part of the year. Surface indications show favorably for the development of underground water for irrigation. On a number of farms around the rim of the valley the house and garden water supply is secured from springs. Last year the Assistant State Engineer was taken into the valley, made an examination and reported favorably on the prospects for developing either pumping or artesian water.

Lemon Valley, in this county, is another district where the advancement of framing must depend upon securing a water supply from below the surface. There are springs in the Truckee Meadows that mgy be developed and there are other areas that can profitably be drained.

Developing a Spring in Long Valley

Two trips were made to the Marsh Community center in Long Valley, One with Thomas King, Irrigation Engineer, to study the possibilities for the development of underground water and with an object in view of getting some active work started in that direction. A place was selected for putting down a well and a committee was started to work on digging the same. The work progressed to a depth of twelve feet after which the water rose to within seven feet of the surface faster than could be removed with hand pumps. Digging had to cease until such time as a centrifugal pump could be secured for keeping the water out. Two old pumps borrowed from Surprise

Valley were each tried for this purpose, but on account of their condition were of no value. It was planned to take a new pump from Reno up to the Vya district, which is 225 miles north, for the purposeof pumping this water out and going down deeper with the well, but on account of other projects that occupied the County Agent's time he was unable to go into that community with the pumping plant, and as a result the project was not completed. The indications there are very favorable for the development of underground water at a comparatively shallow depth and in sufficient quantities for pumping for irrigation.

Other work done on the water development project was as follows:

Examinations made of springs on hills above homes revealed the possibilities of three excellent home water and electric power plants. Brief instructions were furnished to each of the owners and promises secured that as soon as money was available they would install these plants.

Three large springs in Long Valley were examined by the engineer and found to be capable of further development. Directions were given to each owner as to how tp proceed and the work is to be done during the summer between planting and harvesting. On one spring on the E. J. Sharp ranch the water was measuredby a weir constructed on the place. This weir was left in position so as to measure further development.

Several large springs were examined on the W. C. Short ranch in the Huffakers community. A weir will be installed by the County Agent ~~this summer~~ after which the owner will trench into the spring to lower the water level and decrease the pressure, after which further measurements will be taken. Indications are favorable for considerable water development in this section.

The matter of drainage was taken up with B. F. Howard in the Huffakers community and an outline of procedure given him. This man has several hundred acres that he wishes to drain and use the water developed in irrigating other land. Information was furnished him on types of engines and pumping plants.

The ranch of S. E. Slutman, where he is putting down a well, was visited. Plans were furnished him for putting down a series of wells to be connected to one pumping plant. He is now proceeding with such plans and is reporting favorable results.

Three demonstrations in the Red Rock Valley on underground water development and pumping are in progress. One man developed a crooked well. Directions for straightening this so as to go down deeper were furnished him. On another place a

horse power pumping plant was designed and is being tested out. This man has two flowing wells that he wants to increase. The third demonstrator is now drilling a well with a hand power machine and is trying for an artesian flow.

Captain Johnson in the east part of Long Valley is co-operating in drilling for artesian water. He is now down five hundred feet and expects to continue to two thousand feet unless artesian water is struck at a shallower depth.

Dry farming is some times successful in Vya.

RODENT CONTROL. The object of this survey was to cooperate with the U. S. Biological Survey in the poisoning of squirrels on infested area. The plan of procedure was to cooperate with the U. S. Biological Survey

1. To get an appropriation from the County Commissioners so that poisoned grain may be secured for ranchers of this county at ten cents a pound instead of thirteen cents per pound the regular U. S. Biological Survey price.

2. To get the Biological Survey to furnish poison grain to the farmers at ten cents per pound for distribution on their own land and to furnish it free and also furnish a trapper to distribute it on the Government land immediately surrounding privately owned treated area.

A committee composed of farm bureau members to canvass the community to determine the amount of poison grain wanted, to order the same and to arrange for its delivery when all farmers will cooperate in distributing the poison.

The plan was followed out with the results that twenty-two farmers cooperated by purchasing and spreading poison grain on three hundred acres of land. Eight hundred and forty-six pounds of poison grain were used in these demonstrations on privately owned land and seven hundred and seventy pounds of grain was furnished free by the Federal department and distributed by Government trappers and farm bureau committeemen on Government land adjoining treated fields of privately owned land.

The manager of the Fly ranch belonging to the Gerlach Land and Livestock Company had to employ two extra men to keep the irrigation ditches cleaned of dead squirrels. The dead squirrels were clogging up the ditches and interfering with irrigation. This was a very effective demonstration on the value of poison grain for exterminating these rodents. The owners of this ranch used two hundred pounds of poison grain this year and report that they will use one thousand pounds next year.

A rat poisoning demonstration on a dairy farm near Reno in which five pounds of specially prepared grain was used was very effective. This grain was prepared by soaking it in a strychnine sulfate solution for several hours before receiving an outer coating of saccharine and starch. The poison grain for squirrels is treated with the alkaloid strychnine.

Two demonstrations in gopher poisoning by putting poisoned carrots in their runways were given - one in Washoe County and one in Pershing County.

On the 300 acres poisoned for squirrels, all of which was agricultural land planted to grain and alfalfa, the crop would have been completely destroyed had the squirrels not been exterminated. It is estimated that the saving was equal to $20 per acre which would make a total saving from this demonstration of $6,000.

IMPROVEMENT IN GARDEN AND ORCHARD CULTURE. The object of this project is to increase the production and use of first quality fruits and vegetables in Washoe County. The goal to be the same as that adopted by the Nevada State Farm Bureau which is as follows:

1. To encourage the growing of enough fruit and vegetables on each farm to supply the family needs for the kinds and varieties that can be successfully grown.

2. That in furtherance of the above, the goal for the first year be: To establish one demonstration in each organized county showing the best type of home fruits and vegetables garden and proper care and management.

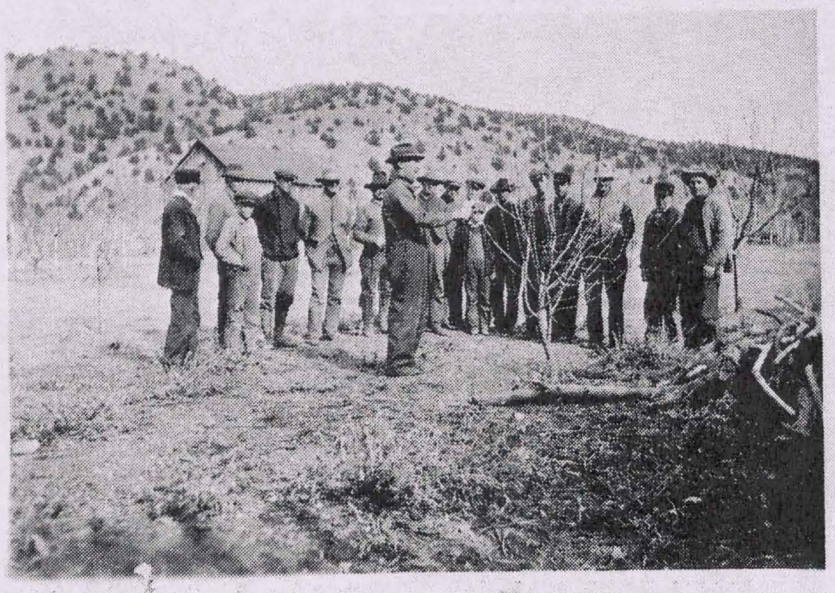
3. That the final goal be: To get a fruit and vegetable garden or home orchard established on not less than 20% of the farms in each demonstration county by the end of a five year period.

Project Date: - At the present time a large proportion of the fruit and vegetables used in Reno and many of the farms in Washoe County is shipped in from without the state. Particularaly in the case of the farms situated some distance from the city the amount of fruit and vegetables available for family use is very much limited. It has been proven that a great variety of orchard and bush fruits and vegetables can be grown in this climate. Many of the orchard fruits now grown are sadly neglected needing pruning, spraying and cultivation and it will be the object of this project to stimulate the growing of more and better fruits and vegetables.

Spraying destroyed more than 95% of the codling moth.

The most striking results in this project were obtained from the demonstrations which were conducted in twenty-five small orchards. The reports sent in by these demonstrators show that the results were very satisfactory and that a considerable interest has been created all over the county in spraying, in particular, and in better orchard management in general.

In the codling moth control work only the one calyx spray was given. It was applied very throughly with a power sprayer under 200 pounds of pressure. immediatoly after the petals had fallen. The results showed from sixty to one hundred per cent wormy apples on trees not sprayed and from seventy-five to one hundred per cent freeness from worms on the trees that were sprayed. The orchards averaged better than ninety-five per cent freeness from worms. In every report the demonstrator stated that he would spray his trees again next year. This is a practice that has never been followed to any extent in this county before and will mean considerable to the development of the apple industry.



Demonstration in Lincoln County
- Before -

Per cent of wormy apples in orchard during previous years without spraying-----100%
Do you consider spraying beneficial and will you spray for codling moth next year -- Yes
Remarks: Most apples have only one worm. Heretofore have had two or three.

There were two spraying demonstrations with lime sulphur solution for San Jose scale. The reports from these two two hundred tree orchards show that the lime sulphur solution was effective in controlling that insect.

Two applications of nicotine sulfate as a demonstration in the control of apple aphis in a one hundred tree orchard was effective.

The twenty-eight spraying demonstrations were on 2,850 trees covering an area of 95 acres. It was estimated by the growers that the net gain was not less than two additional boxes of marketable apples per tree which at $1.00 per box, a conservative figure, would show a profit from this spraying of $60 per acre or a total of $5,700.

- After -

There were eight demonstrations in orchard pruning on a total of 36 acres of orchard. The estimated increase in the value of their crop by these demonstrators is $25 per acre during the first season. This would amount to a total of $900. The principal benefit from these demonstrations, as with most effective demonstrations is to come from the renewed active interest in the growing of better fruit. When the growers are producing apples that are not all wormy they will take interest in following other approved practices

There was one codling moth control demonstration which was an exception to the above statements. This spraying demonstration was at the Nevada Hospital for Mental Diseases and was done by the foreman in charge with a small barrel outfit which was not equipped with the proper nozzles and had no agitator. His report is as follows:

Per cent of wormy apples on sprayed trees -- 100%

in orchard culture and the increased returns will stimulate the planting and growing of more fruit.

Three demonstrations in the growing of home fruit and vegetable gardens showed profits as follows. One garden on seven lots produced $151.65 of fruit and vegetables at a cost of $27.00 making a net profit of $124.65. Another garden of one acre produced $50 worth of vegetables for the family table during the summer, $100 worth sold and $25 worth put in storage for the winter at a cost of production of $50 leaving a net profit of $125. This demonstrator closes her report by saying - "The fact that we can always have fresh, choice products is also a great pleasure." A third garden size 140 x 100 contained peas 3 rows, corn 3 rows, beans 3 rows, tomatoes 2 rows, parsnips ½ row, beets 2 rows, cabbage 1 row, cantaloupes 1 row, strawberries 4 rows, raspberries 2 rows, sugar beets 5 rows, lettuce, radishes, onions and squash 1 row. Total value of crop $250.00, cost of growing garden $50,-net profit from the garden $200.

Other work along this line includes 21 demonstrations on methods of management and small fruit culture. These included planting, pruning and soil management.

Ten owners were given assistance and plans for improving their home grounds.

Mr Pruner, what are you going to do with this one?

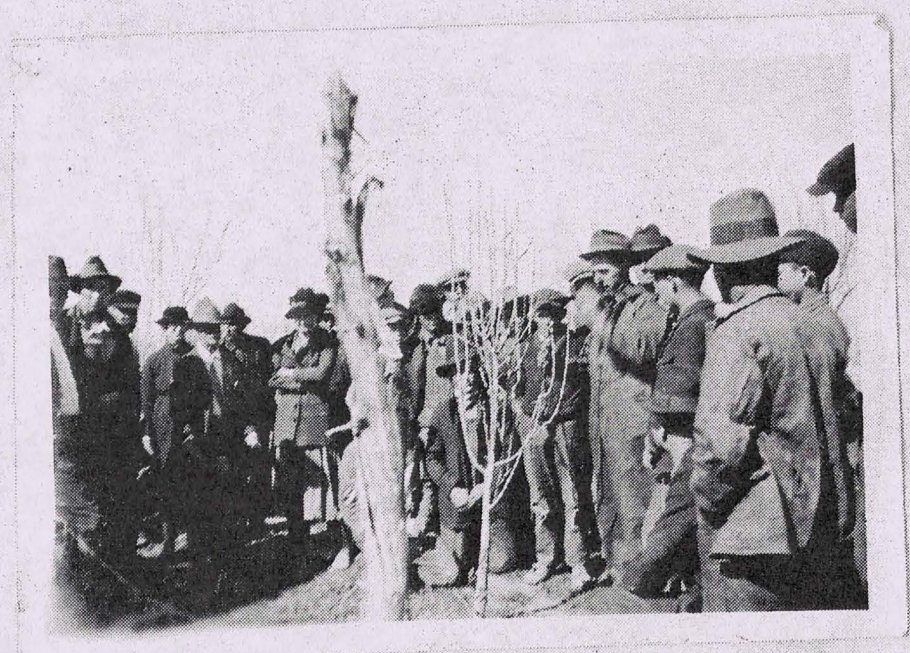
Before

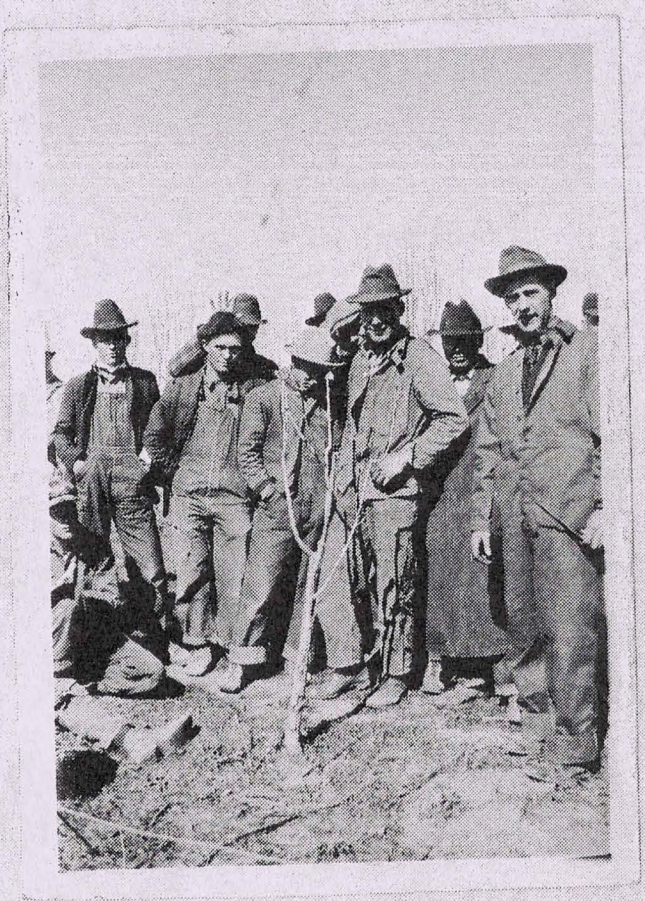
After

INCREASE OF GRAIN PRODUCTION. The object of this demonstration was to increase the production of a better grade of grain in the county. There has been a great difference of opinion among grain growers as to the varieties of grain best adapted to this locality. There is also considerable smut in certain areas where the seed is not treated.

A small quantity of pure selected Defiance seed wheat was obtained from the Agricultural Experiment Station and was planted on a demonstration plot by Mr. James Peckham. There was also another plot on this same ranch planted to seed secured by spite selection in the field. These two plots have given a source of supply for pure seed of this variety in the county. A pure strain of Marquis seed wheat is now being ordered for planting next spring.

There were ten farmers who treated their wheat for smut with blue stone according to directions furnished by the farm bureau and as per demonstrations in seed treatment given during last year. About 350 acres was included in these treated areas and it is estimated that the increased value of the crop as a result of treating for smut amounted to not less than $5.00 per acre which would mean a profit on these ten ranches of $1750.





Demonstration in Clark County.

Severe treatment, but sometimes necessary
in badly neglected orchards.

ESTABLISHMENT OF A FARM WAGE SCALE. The reason for establishing this project was to improve the labor situation in the county. During previous years, there has been a considerable scarcity of labor and farmers have bid against each other increasing wages to an unreasonable degree and causing the labor to be restless and uncertain because of the fact that the nearby rancher might pay him a few cents more than what was now being paid.

A brief survey was made of the situation when the planting season came, and it was found that labor was comparatively plentiful,although not all of the best kind, and that there was no need of establishing a uniform wage in the county. Therefore, the project was droped.

Pruning trees in Elko County.

Forty years old and never touched with a pruning saw.

When they are too tall we cut them back.

ALFALFA MANAGEMENT AND ALFALFA WEEVIL CONTROL. The alfalfa weevil control project was put on the program so that there would be a farm bureau committee to cooperate with the State Veterinary Control Service, the Extension Service and Federal agencies in measures working towards the control of this insect. Another phase of the project was to be an educational campaign among the farmers to acquaint them with the habits and life history of the alfalfa weevil and with the latest improved methods for its control.

The production of the finest quality alfalfa hay will always be an important local industry.

On the first of June Eldon Wittwer, a graduate of the University, was employed by the State Extension Service and the State Quarantine office to make a survey of the alfalfa weevil in Washoe County. This survey showed that the weevil was on the increase, but one or two fields were so badly infested that the crop was being very materially damaged, and that the weevil was spreading to a considerable distance from the point of its discovery. Mr. K. M. Pack, of the U. S. Bureau of Entomology, the entomologist who discovered the weevil in this county in June of 1920, made an inspection trip in June, exactly two years after his first discovery of the weevil. The County Agent and Mr. Wittwer spent three days with him in making a further survey. It was found that the weevil was forty-four times as numerous at the point of its original discovery, that is, when the first discovery was made Mr. Pack secured one weevil to each twenty-five sweeps of his net while at this time he secured forty-four weevils in the same number of sweeps. In a nearby field north of the race track approximately three hundred weevils were secured in twenty-five sweeps of the net. In this latter field the alfalfa was practically ruined for hay - all of the leaves being skeletonized.

A trip was made down the river eastward towards Wadsworth and the weevil was discovered on a ranch twenty miles east of Reno. An examination made of the Indian Reservation at Pyramid and also examinations made at Wadsworth disclosed no weevil infestation. Going south the weevil was found about one and one-half miles west of the city.

This survey shows that the weevil has been travelling at about the same rate as it has been found to travel in other states and that it is only a matter of time before the whole alfalfa producing area of the state will be effected.

At the present time there are no fields in this county on which a spraying demonstration could be given with promise of successful results. The indications are that next year several fields will be in such a condition that spraying will prove beneficial.

The Farm Bureau organization is in favor of state legislation that will provide machinery and funds for handling this problem and will back a movement for this purpose.

In the Verdi and Huffakers communities a petition to the County Commissioners was circulated for signatures among the farmers. This petition requested the County Commissioners to supply funds for the purchase of necessary spraying apparatus and materials to control the alfalfa weevil infested area. The signatures of most of the farmers in these communities were secured and the petition was presented to the County Commissioners but no favorable action was taken.

Lectures on alfalfa weevil and methods of control have been given in all of the community centers, and a number of tours have been made to the most badly infected fields at which the farmers were given an opportunity to study the nature, habits and ravages of the weevil.

A successful poultry and dairy tour. At noon the party stopped for lunch served by the Home-Makers.

ANIMAL DISEASE CONTROL. Animal disease control work is carried on throughout the state by the State Veterinary Control Service. The Washoe County Farm Bureau has been cooperating in this project by reporting all outbreaks of contagious or infectious diseases to the head office of this service. The fact that this service is available and free has been brought to the attention of the farmers at the meetings of the various community centers.

The outstanding features of disease control work in this county included 3,042 animals treated for blackleg; 2,477 head treated for anthrax, 43 calves immunized against scours, 68 birds vaccinated for contagious epitheliosis of poultry.

The Rural Engineer tells them how.

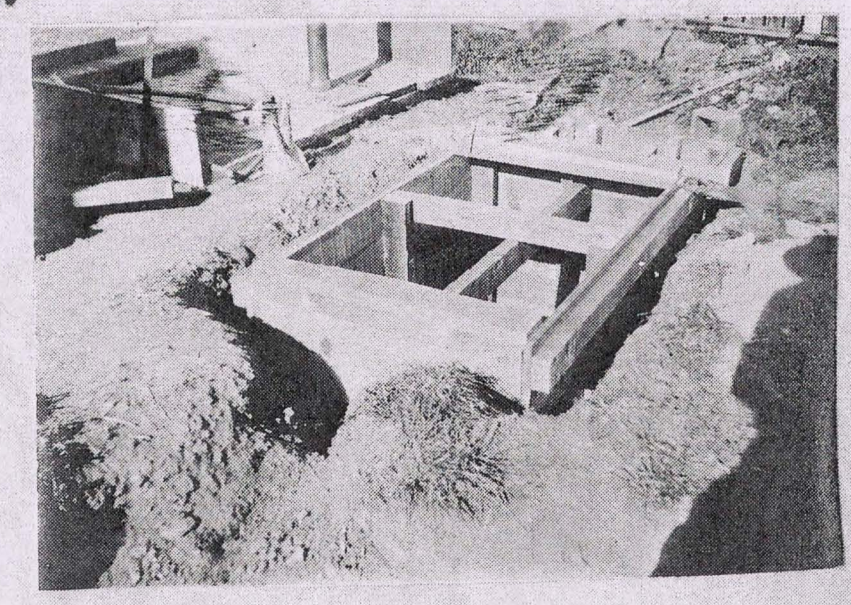
Lincoln County people are interested in fruit trees.

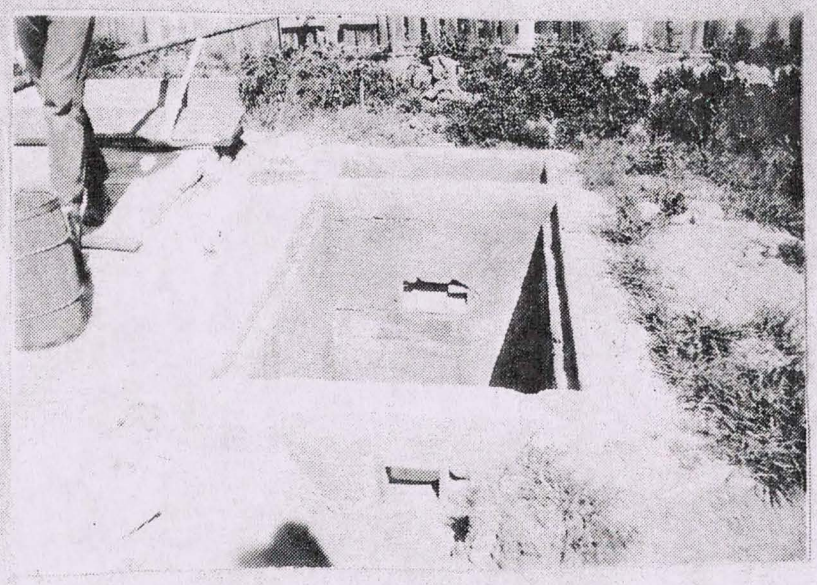
MISCELLANEOUS WORK. Included in the considerable amount of miscellaneous work that has been done in the county are the following:

1. Septic Tank Construction Demonstrations.
2. Fly Control Campaign.
3. Grasshopper Control Work.

Septic Tank Demonstrations. When the rural engineer, of the State Farm Bureau, Mr. Thos. King, was in this county during the first two weeks in May a demonstration in the construction of a septic tank was put on at the home of Mr. E. Plumb in the Reno community. The blue print of forms and list of material was prepared by the engineer. The Washoe County Farm Bureau furnished the forms and Mr. Plumb furnished the balance of the material. The work of building forms, making excavations and pouring of concrete was done by the owner, the project leader and the county agent under the supervision of Mr. King.

When the forms were in place a demonstration meeting was held with 20 in attendance. As a result of this demonstration two other septic tanks have been constructed according to plans furnished.





Demonstration in the construction of fly traps

Painting the fly traps.

Completed Work.

Fly Control. In the fly control work the boys and girls in the Huffakers community met with the County Agent and under his supervision constructed twenty fly traps which they sold in the community. The boys cleared ten dollars, which they invested in base ball equipment so that the project was of value along two lines - community recreation and sanitation.

Vineyard pruning in Lincoln County.

Adding the ingredients for grasshopper poisoning in demonstration near Lake Tahoe.

GRASSHOPPER CONTROL.

Two demonstration meetings and three demonstrations were held in this project. As a result of calls due to the outbreak of a large number of grasshoppers along the southwestern slopes of the Truckee Meadows. Poison bran mash was used as per the following formula:

Bran - 100 pounds
Molasses - 1 gallon
Banana Oil - 3 oz.
Salt - 1½ pounds.
Crude arsenic - 5 pounds

with enough water to make a crumbly damp mash. This was broadcasted on the land at the rate of from five to eight pounds per acre. In every case the results reported were favorable. One of the demonstrators reports as follows:

"The mixture has been a success as I heard from Ed, the man at the ranch, that there were thousands of the hoppers dead where we had spread the small quantity of the poison bran."

Approved method of mixing the ingredients on a canvas.

Fruit trees do well along the East slope of the Sierras.

SPECIALIST WORK. Acting as Horticultural Specialist, the County Agent started on a tour of the state on February 10th spending from two or three days to a week in each of the counties of Clark, Lincoln, White Pine, Lyon, Elko and Humboldt returning to Reno on March 3rd. Later in March and April four days were spent in Churchill County, one day in Humboldt County and two days in Pershing County.

- Before -

In the nine counties, including Washoe County, in which specialist work in horticulture has been done, there have been a total of ninety-six pruning and spraying demonstrations with a total attendance of six hundred and four. Nine meetings on orchard management with a total attendance of one hundred and thirty held which resulted in the establishing of ninety-two pruning demonstrations, forty-eight spraying demonstrations and eighteen small fruit garden demonstrations in these counties. Spraying outfits were introduced and started to work in Clark, Lincoln, Humboldt, Pershing and Washoe Counties. In Pershing County a spray ring was started with C. A. Ernst of Unionville in charge of the outfit. In Lincoln, Clark, Humboldt and Washoe counties the spraying outfits are owned by individuals with the other fruit growers in the communities cooperating in their use.

Pruning above four feet of snow in Elko County - After -

The survey of the state by the agent brought out the fact that in every county there are wonderful undeveloped possibilities for fruit growing particularly of apples and small fruits. In Elko County a careful survey indicated that there was twelve hundred acres in a practically frost free belt near the mountains in which apples can be successfully grown. In most of the other counties similar conditions existed. In all of the counties small plantings of berries particularly raspberries, blackberries and strawberries have proven successful indicating that a wonderful development can be made along this line. The southern part of the state, Clark, Lincoln and Nye counties, are primarily fruit growing districts. Peaches and grapes probably being the most profitable crops for this section.

The Mesquite farmers hold a demonstration meeting -Before - in Clark County expects to increase the size of his orchard by planting forty acres of peaches. A grower in Churchill County will plant twenty acres of pears and another man in the same county will plant ten acres to peaches.

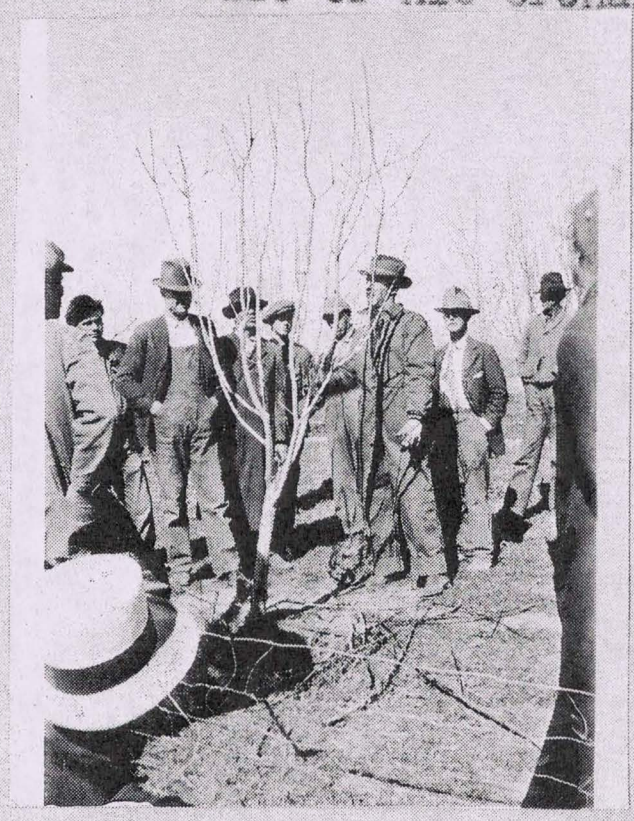
Quite a stimulus was given the strawberry growing by a couple of articles in the Farm Bureau paper and addresses at farmers' meetings in every county. As a result one strawberry plant grower in Reno sold nearly 200,000 of the Progressive Everbearing variety. Other growers also sold plants as a result of this work

In every county a number of farmers have become interested in fruit growing and will set out orchards next spring. One grower

Considerable correspondence has come in from the various counties of the state and has been answered in regard to fruit culture.

Two days were spent by tye County Agent in the capacity of Horticultural Specialist at the Western Plant Quarantine Board conference at Sacramento.

Spraying trees at Overton.



After

The County Agent now has in his office written reports of demonstrators all over the state commenting favorably on the work done in the pruning and spraying demonstrations and asking that similar work be conducted next year. There were 130 acres in the orchards that were sprayed with a very conservative estimated increase of good, marketable fruit free from worms of 60 boxes per acre valued at $1.00 per box with a resultant profit of $7,800. There were 420 acres in the orchards pruned with an estimated increase in the value of fruit obtained of $25 per acre.(Most demonstrators have reported a higher value than this.) This gives a total profit of $10,500. The 18 demonstrations in small fruit culture netted a profit of $2,250.