

GORDON H. TRUE, B. S.
PROFESSOR OF AGRICULTURE AND
ANIMAL HUSBANDRY

F. L. PETERSON, B. S.
ASSISTANT IN IRRIGATION

UNIVERSITY OF NEVADA
COLLEGE OF AGRICULTURE
AGRICULTURAL EXPERIMENT STATION

JOSEPH EDWARD STUBBS, PH. D.
PRESIDENT AND DIRECTOR

RENO, NEVADA,

April 20, 1918.

Dr. J. E. Church,
University of Nevada.
Reno.

Dear Sir:

Will you kindly hand me at your early convenience a detailed statement of the experimental work now in progress in your department, and of any new work you may desire to take up during the coming year. By the first of May I wish you to furnish me with a detailed estimate of the expenses of your department for the coming year, together with a statement of what ^{part} in your judgment, should be paid from the Hatch, Adams, State, or A. & M. Funds.

At the end of the fiscal year, June 30, I shall expect each department to furnish for file in this office a complete inventory of all station property now in its possession at that time, with valuation of each article.

I am

Very truly yours,

Gordon H. True

Director.

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RENO, NEVADA, U. S. A.,

Estimate of Department of Meteorology
and Climatology, for the Fiscal year 1912-1913

Salaries. (Technical Adams Fund)

Professor - one-half time	\$ 1200 or \$2100
Associate	2200
Assistant at Tahoe (6 months)	600
Observer at Truckee regular	600
Labor - probably student labor in shop and office temporary	100
On field work at Tahoe @\$2.50 per day temporary	100
	<u>\$4235 or \$5135</u>

~~Supplies and Expenses - Adams Fund,~~

temporary
Packing and assistance
on trips to Mt. Rose 30.00

~~Supplies for Mt. Rose
food and fuel etc~~ }

Publications:

- (1) Bulletin on Conservation of snow, probably
125 pages with 30 illustrations,
- (2) Bulletin on results of Mt. Rose work
Probably 30 pages 10 illustrations or less
- (3) Bulletin on Forecasting Frost 10 pages 3 illustrations

Postage and Stationery (Adams Fund)

Postage, Stamps and Post-cards	15.00
Telegrams & telephone messages	5.00

Tools and machinery

Lubricating oils for boat, distillate	15.00
and gasoline	60.00
shelter for kite reel	25.00
<u>Library</u> - books, periodicals and binding	40.00

Apparatus

Repairs for meteorographs and other instruments	15.00
Two new snow-samplers	12.00
Tubing for samplers	12.00
Parts for five special spring-balances	12.50
Parts for completing three meteorographs	25.00
Three large instrument shelters	60.00

Laboratory supplies

Electrical supplies	15.00
Photographic materials	20.00
Record sheets for instruments	100.00
Roll of paper for Met Rose instrument	10.00
Tubs & oils	5.00
<u>Express and freight</u> - including drayage	20.00

Expenses (Drankley)

winter trips to Tahoe	50.00
Inspection trips to Truckee & Fallon	20.00
Ten trips to Mt. Rose	35.00

For Fiscal Year 1912-1913, Estimate of Department of

Meteorology

- Projects in1. Mt. Rose Project
Operation 2. Conservation of Snow
 3. Frost Survey of the State

Administrative :

Salaries: Adams Fund

Professor (One half time)	\$1200 (or 2100)
Associate	2200
Assistant at Lake Tahoe (6 months)	600
Observer at Truckee	60
Assistance, probably student labor at University in shop and office	75
Assistance in work at Lake Tahoe at \$2.50 per day	100
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Adams Fund	\$4235 or 5135

Supplies : (Adams Fund)

	Ten trips to Mt. Rose (including assistance) . .	50.00
	Inspection trips to Truckee and Fallon	20.00
	Rent of room at ranch (Mt. Rose)	25.00
	Packing and supplies for Mt. Rose station	50.00
	Record sheets for large instruments	75.00
	Files for record sheets	20.00
	Roll of record paper for Mt. Rose instruments	10.00
2	Kite or balloon experiments	50.00
	Repairs for Meteorographs	15.00
3	Lubricating oils for boat, 200 gal. distillate for boat, 100 gals. gasoline for boat	60.00
3	Headquarters at Lake Tahoe	150.00
4	Share in cabin boat	150.00
	Sampler tubing	12.00
	Construction of two snow samplers	12.00
	Parts for five spring balances	12.50
	Parts for completing new meteorograph	25.00
	Three large instrument shelters	60.00
	Expenses of winter trips to Lake Tahoe	50.00
	Photographic supplies	20.00
	Library	20.00
	Postage	18.00
	Freight and Express	20.00
	Tools	10.00 --
	<hr/>	
	Total supplies Adams Fund	934.50
	" Salaries " "	4235.00
		<hr/>
	Total, Adams Fund	\$5169.00

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JOSEPH EDWARD STUBBS, PH. D.
PRESIDENT AND DIRECTOR

RENO, NEVADA,
August 10, 1912.

Dr. J. E. Church,
Prof. S. P. Fergusson,
Department of Meteorology and Climatology,
University of Nevada, Reno.

My dear Sirs:

The finance committee of the Board of Regents at its meeting of August ninth have approved the budget of the Experiment Station including the following allowance for your department for the fiscal year ending June 30, 1913:

Adams Fund

Salary, S. P. Fergusson	\$2200.00	
Part salary, Dr. J. E. Church	600.00	
Supplies for maintenance of Mt. Rose Project	300.00	\$3100.00

(There is a balance of about \$200.00
in the State Fund for this work)

Yours very truly

Joseph E. Stubbs
Director.

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UNIVERSITY OF NEVADA
COLLEGE OF AGRICULTURE
AGRICULTURAL EXPERIMENT STATION

JOSEPH EDWARD STUBBS, PH. D., PRESIDENT
GORDON H. TRUE, B. S., DIRECTOR

RENO, NEVADA,

August 10, 1912.

Heads of Departments,
Experiment Station,
University.

Gentlemen:

I handing you a statement of the budget for your department for the coming fiscal year as passed by the Board of Control, I wish to express my regret that it has not been possible to more nearly meet your estimates of the needs of your departments.

I should like at this time, when you probably feel most keenly the lack of funds for your work for the coming year, to ask that you sit down and make an estimate of the needs which, in your opinion, might properly be met by a State appropriation at the coming session of the legislature, from which I may prepare a budget to present to the Board of Control for the consideration of the legislature. In making this estimate, I should like to have you state in detail the various articles of equipment, etc. that are desires and the purposes for which they are to be used, rather than general statements of amounts desired. I would appreciate having this statement at an early date.

Yours very truly,

Gordon H. True
Director.
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May 24, 1912.

All Concerned:

Will you kindly make your estimate of expenses in your Department under the Hatch and Adams investigations, for the fiscal year beginning July 1, 1912, conform to the classification given below. Every expense connected with your department directly or indirectly should be included in this report. The matter of Publications, for instance, although not paid from your department funds, is to be included in your estimate in order that funds may be set aside to cover this expense.

Kindly render separate report for each fund (Hatch and Adams) and in duplicate.

As a supplementary report kindly make an estimate of the income for your department for the fiscal year, together with a schedule of expenses that will be paid from such income. The schedule of expenses should conform to the same classification as the regular reports.

Very truly yours,

C.H. German

Comptroller.

Fund

- ✓ **SALARIES:** Administrative, Technical, Technical Assistants.
- ✓ **LABOR:** Regular, Temporary.
- ✓ **PUBLICATIONS:** Printing, Illustrations, Envelopes for mailing.
- ✓ **POSTAGE AND STATIONERY:** Including means of communication, such as telephone, telegraph; stationery for office and record purposes forms, index cards, etc.
- FREIGHT AND EXPRESS:** Including drayage or other charges for handling freight.
- HEAT, LIGHT, WATER and POWER.**
- CHEMICALS AND LABORATORY SUPPLIES** not to include apparatus of permanent character.
- SEEDS, PLANTS and SUNDRY SUPPLIES** not otherwise provided for.
- FERTILIZERS:** including water for irrigation.
- FEEDING STUFFS:** for work animals and those under experiment.
- LIBRARY:** Books, periodicals and binding, but not including equipment or general supplies.
- TOOLS, MACHINERY AND APPURTENANCES,** such as agricultural implements, and machines, motors, pumps, vehicles, harness and small movable structures like animal cages, brooders and shelters; including repairs for same.
- FURNITURE AND FIXTURES:** for offices and laboratories - desks, cases, typewriters and office appliances.
- SCIENTIFIC APPARATUS AND SPECIMENS:** includes mounted insects, fungi, etc.
- LIVE STOCK:** including purchase of animals of all kinds for experimental purposes, but not for their feeding and care.
- TRAVELING EXPENSES:** in supervision of station work or in connection with it.
- CONTINGENT EXPENSES:** to be itemized in detail.
- BUILDINGS AND LAND:** including all expenses for labor and material for the erection, alteration and repair of buildings, permanent structures built in place, purchase of permanent fixtures forming part of a building, purchase or rental of land (under Adams fund only) and improvements on land, such as roads, fences drainage or water systems, etc.

Department of Meteorology.

Estimates for Mt. Rose stations 1912-1913
(Exclusive of salaries)
except labor

Ten trips to Mt. Rose (summit) including assistance	50.00
Inspection trips to Truckee and Falls	20.00
Rent of room at Mt. Rose Ranch	25.00
Food supplies for Mt. Rose	25.00
Packing supplies to summit	25.00
Record sheets for large instruments	60.00
Roll of paper for Mt. Rose instrument	10.00
Observer at Truckee	60.00
Files for record sheets	10.00
Library, stationery, etc.	25.00
Repairs for meteorographs	15.00
Kite or balloon experiments	50.00
Three large instrument shelters	60.00
Photographic materials	5.00
Postage	10.00
Freight and express	15.00
Tools	5.00
Labor (probably student labor in shop and office)	50.00
Total	\$480.00 520.00

One bulletin of about 30 octavo pages with ten illustrations is in preparation

Frost Survey of State:

Pay of Observer at \$1.00 per mo.	\$12.00
Freight and hauling shelters	50.00
Ten additional shelters	160.00
Ten thermographs	180.00
Ten Thermometers	30.00
Office equipment	15.00
Stationery, paper for mas and computing including drawing materials	10.00

(To be taken from balance of
appropriation made by legislature
for Mt. Rose Observatory)

Adams Fund \$5139.50

Total \$5626.50

Publications being Prepared

1. Bulletin on Conservation of Snow, probably of 125 pages with 30 illustrations
2. Bulletin on Results of Mt. Rose work, probably 30 pages, 10 illustrations

(Cost of bulletins should be provided from Hatch or other funds)

Remarks on Estimates.

1. Owing to the desirability of hastening the publication of the Snow Studies, it has been proposed to transfer me to the Experiment Station on seven-eights time during the coming year. This will necessitate a salary allowance of \$2100.00 from Experiment Station Funds. However, owing to the excess of services rendered to the department of Latin during the past year it would be entirely proper to divide the salary into \$1200 for each department. This moreover, would be in keeping with half service, which I would suggest as the best arrangement after the coming year- J. E. Church, Jr.

2. This item is to cover a part of the Mt. Rose work in which the influence of the mountain itself upon the weather conditions is determined by means of comparison of data on the mountain with similar data from instruments supported in the free air by means of kites.

Appropriations for this work have been made every year but lack of time has prevented actual work until the present. The data are very necessary in completing the relation of the mountain to valley conditions.

3. This item is for rough lumber for building boat house and workshop on land to be leased from the Government of the Power Company at Lake Tahoe. The work is to be done by Mr. A. L. Smith for the privilege of using the building during the summer months. In return he becomes caretaker of all boats and apparatus stored there during summer and performs any additional measurements of evaporation and run-off required. These headquarters are of prime importance in the protection of apparatus and the storage of boats.

4. This item is for one-third share in a cabin ^{boat,} 7 x 35 feet, which is absolutely essential to safety and regularity in the performance of the work around Lake Tahoe. The boat will ride through all storms and can be anchored off-shore with safety. Distillate can be used for fuel. Mr. Smith offers to build the boat and furnish the engine, with the understanding that he is to have the use of the boat from June 1 to November 1 each year. In case Mr. Smith leaves the service he offers to buy or sell the other share in the boat. The smaller motor boat now in use can be sold if necessary, although it is desirable to retain it in the service for quick trips in calm weather. An additional reason for the use of a larger boat is the fact that there are but two harbors on the lake that can be used and most of the snow fields are inaccessible from these.

The other items estimated for are for support of routine work of the different projects and, mostly, have appeared in estimates for previous years. A detailed report of the work being done is now being prepared.

J. E. Church, Jr.,
S. P. Fergusson,
In Charge Department of Meteorology.

May 2, 1912.

Estimates, Department of Meteorology 1912-1913

Purpose	Adams Fund	State Fund	Total
<u>Salaries (Technical)</u>			
(See note) Professor one ^{one} half time	\$1200.		
Associate full time	2200		
Assistant at Tahoe (6 months)	600		
<u>Observer at Truckee</u>	60		\$4060.
<u>Labor</u>			
Student labor in office and shop (temporary)	100.		
Packing and assistance during trips to Mt. Rose stations	30		
In field work at Tahoe at \$2.50 a day	100		
Pay of our observer on Frost Survey at \$1.00 a month	12	12	242
<u>Publications</u>			
(1) Bulletin on " <u>Conservation of Snow</u> ", Probably 125 pages, 30 illustrations			
(2) Bulletin on Results of Mt Rose work 30 pages 10 illustrations			
(3) Bulletin on Forecasting Frost 10 pages 3 illustrations			
Carried over	4290	12	4302

Articles and purchase	Admns Fund	State Fund	Total
Amount brought over	4290 00	12	4302
<u>Postage and stationery</u>			
Stamps, postcards	15 00		
Telegraph and telephone	5 00		20
<u>Freight and Express</u>			
Freight and express	20 00		
Freight and drayage		50 00	70
<u>Apparatus</u>			
Repairs for meteorographs and other instruments	15 00	5 00	20
Two snow-samplers	12 00		12
Extra tubes for samplers	12 00		12
Parts for 5 spring balances	12 50		12.50
Three large instrument shelters	60 00		60.00
<u>Laboratory Supplies</u>			
Electrical supplies	15 00		15
Photographic materials	20 00		20
Record sheets for meteorographs	60 00		60
Record sheets for instruments		20 00	20
Roll paper for Mt. Rose	10 00		10
Inks, oils, etc	5 00		5
Carried over	4551 50	87 00	4638.50

Articles and purpose	Adams Fund	State Fund	Total
Amount Brought over	4290 00	12 00	4302 00
<u>Postage and Stationery</u> Stamps, postcards	12 00	5 00	17 00
Telegraph and Telephone	3 00	2 00	5 00
<u>Freight and express</u> Freight and Express	20 00		20 00
Freight and drayage		50 00	50 00
<u>Apparatus.</u>			
Repairs to meteorographs etc	15 00	5 00	20 00
Two snow samplers	12 00		12 00
Extra tube for samplers	12 00		12 00
Parts for 5 special balances	12 50		12 50
Three large instrument shelters	60 00		60 00
Parts for completing new meteorographs	25 00		25 00
(Forest survey) Ten small instrument shelters	160 00	160 00	160 00
Ten thermographs	180 00	180 00	180 00
Ten thermometers	30 00	30 00	30 00
<u>Laboratory supplies</u> Electrical supplies	15 00		15 00
Photographic materials	20 00	5 00	25 00
Record sheets for meteorographs etc	60 00		60 00
Record sheets for thermographs etc	15 00	25 00	15 00
Roll paper for Mt. Rose	10 00		10 00
Licks oils etc	5 00	2 00	7 00
Drawing materials } paper for U.S. etc }	10 00	5 00	15 00
<u>Tools and Machinery</u> Tools	10 00	5 00	15 00
Lubricating oils, distillate and gasoline	60 00		60 00
<u>Buildings and Land</u> Rent of Mt Rose Ranch ^{room.}	25 00		25 00
Headquarters house Lake Tahoe	150 00		150 00
Sheet for kite reel and accessories	30 00		30 00
Carried over	4856 50	486 00	5342 50

Articles and purpae	Arkanss Fund	State Fund	Total
Amount brought over	4290 00	12	4302
<u>Postage and stationery</u>			
Stamps, postcards	15 00		
Telegraph and telephone	5 00		20
<u>Freight and Express</u>			
Freight and express	20 00		
Freight and drayage		50 00	70
<u>Apparatus</u>			
Repairs for meteorographs and other instruments	15 00	5 00	20
Two snow-samplers	12 00		12
Extra tubes for samplers	12 00		12
Parts for 5 spring balances	12 50		12.50
Three large instrument shelters	60 00		60.00
<u>Laboratory Supplies</u>			
Electrical supplies	15 00		15
Photographic materials	20 00		20
Record sheets for meteorographs	60 00		60
Record sheets for instruments		20 00	20
Roll paper for Mt. Rose	10 00		10
Inks, oils, etc	5 00		5
Carried over	4557 50	87 00	4638.50

Articles and Purpose	Adams Fund	State Fund	Total
Amount brought over	4551 50	87 00	4638 50
<u>Tools and Machinery</u>			
Tools	15 00	5 00	
Lubricating oils distillate and gasoline	60 00		

Articles and Purpose	Adams Fund	State Fund	Total
<u>Tools and Machinery</u> Amount brought over	4551 50	87 00	4638 50
Tools	1500	5 00	
Lubricating oils distillate and gasoline	60 00		

Estimates, Department of Meteorology 1912-1913

Purpose	Adams Fund	State Fund	Total
<u>Salaries (Technical)</u>			
(see note) Professor 1 one half time	\$1200.		
Associate full time	2200		
Assistant at Tahoe (6 months)	600		
Observer at Truckee	60		\$4060.
<u>Labor</u>			
Student labor in office and shop (temporary)	100.		
Packing and assistance during trips to Mt. Rose stations	30		
In field work at Tahoe at \$2.50 a day	100		
Pay of one observer on Frost Survey at \$1.00 a month	12	12	242
<u>Publications</u>			
(1) Bulletin on "Conservation of Snow", Probably, 125 pages, 30 illustrations			
(2) Bulletin on Results of Mt Rose work 30 pages 10 illustrations			
(3) Bulletin on Forecasting Frost 10 pages 3 illustrations			
Carried over	4290	12	4302

Article and purpose	Adams Fund	State Fund	Totals
^{Amount Brought over} Library Books periodicals and binding	20 00	20 00	
<u>Traveling Expenses</u>			
Winter trips to Tahoe	50 00		
Inspection trips, Truckee Falls	20 00		
Trips to Mt. Rose	35 00		
Inspection of foot stations		25 00	

Article and purpose	Adams Fund	State Fund	Total
<u>Library</u> ^{Amount Brought over} Books periodicals and binding	20 00	20 00	
<u>Traveling Expenses</u>			
Winter trips to Tahoe	50 00		
Inspection trips, Truckee & Fallon	20 00		
Trips to Mt. Rose	35 00		
Inspection of frost stations		25 00	

Articles and purpose	Adams Fund	State Fund	Total
Amount Brought over	4290 00	12 00	4302 00
<u>Postage and Stationery</u> Stamps, postcards	12 00	5 00	17 00
Telegraph and Telephone	3 00	2 00	5 00
<u>Freight and express</u> Freight and Express	20 00		20 00
Freight and drayage		50 00	50 00
<u>Apparatus.</u> Repairs to meteorographs etc	15 00	5 00	20 00
Two snow samplers	12 00		12 00
Extra Tube for samplers	12 00		12 00
Parts for 5 special balances	12 50		12 50
Three large instrument shelters	60 00		60 00
Parts for completing new meteorographs	25 00		25 00
(Forest survey) Ten small instrument shelters	150 00	160 00	160 00
Ten thermographs	180 00	180 00	180 00
Ten thermometers	30 00	30 00	30 00
<u>Laboratory supplies</u> Electrical supplies	15 00		15 00
Photographic materials	20 00	5 00	25 00
Record sheets for meteorographs etc	60 00		60 00
Record sheets for thermographs etc	15 00	25 00	15 00
Roll paper for Mt. Rose	10 00		10 00
Licks oils etc	5 00	2 00	7 00
Drawing materials } paper for U.S. etc }	10 00	5 00	15 00
<u>Tools and Machinery</u> Tools	10 00	5 00	15 00
Lubricating oils, distillate and gasoline	60 00		60 00
<u>Buildings and Land.</u> Rent of Mt Rose ^{room,} _{Room,} Ranch	25 00		25 00
Headquarters house Lake Tahoe	150 00		150 00
Shed for kite reel and accessories	30 00		30 00
Carried over	4856 50	486 00	5342 50
	4856 50		5342 50

Books

100 volumes Sig. Service & W.B. Annual Reports	1.50
100 " technical works	1.00
500 pamphlets technical	2.00
2 sets Monthly Weather Review 1881-today 32 yrs	\$ 1.00
2 set Am Met Journal	30
300 Experiment Station pamphlets approx.	
1 set Dept Station Report 1908-6/1912	
12 vols Annals W.C.O.	15
5 years records from Mt Rose	1.50
3 " " " base stations	1.00
Weather maps (bound) 2 years	
photographic negatives	
Photographs	

~~1 Curket camera complete~~

Arctic Catalog

Article

value

Remarks
Condition