

REPORT ON THE ACTIVITIES  
OF THE  
JACKSON HOLE BIOLOGICAL RESEARCH STATION  
SUMMER 1954

L. Floyd Clarke, Director

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## PHYSICAL FACILITIES

The physical facilities at the Station were greatly improved during the past summer. A summary of these improvements is as follows:

1. The Osborn house was moved from the Park Station a distance of four and one half miles to its present location at the Research Station.
2. The Grimmacy house was moved one fourth mile to the Station.
3. All cabins plus the houses mentioned above were wired for electricity. Previously only power house and laboratory were furnished with electricity.
4. Plumbing was installed in the Osborn house. This included running a pipeline from the laboratory and the installation of a sewer system consisting of a septic tank with overflow drain.
5. Combination wood heating and cooking stoves were installed in the living units. These were four-plate stoves with oven and proved most satisfactory.
6. A shower was installed in the east end of the power house. This required setting up a hot water tank heated by propane fuel and remodeling of east end of power house.
7. Propane was connected into the Osborn house.
8. Additional storage space was built in the power house and library.
9. All equipment including that of the laboratory, shop and the living quarters was rearranged systematically. Necessary supplemental equipment was purchased.
10. Steps were constructed for the Osborn house and cabins.
11. Litter and debris were removed from the area and the dead trees were sawed for fire wood.
12. The pole fence enclosing the area was repaired.

The following are plans for improvement of the physical facilities for the summer of 1955:

1. Install cinder block foundations under the Osborn house and cabins. These blocks have already been purchased and are now at the Station ready for installation.
2. Connect all living units with REA. This will require some

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additional wiring. REA will be brought into the Station sometime before January.

3. Since the power plant will no longer be used regularly, it will be moved into the shop and connected up to the power lines for emergency use in case of REA failure.

4. Install floor and partition in power house and do other remodeling necessary to use it as an additional living unit. It will be provided with a stove of the type described above.

5. Construct book shelves along south wall in living room of Osborn house and transfer library from present location in library building to these shelves. This living room will then be used in part for a library and books will be checked out for use in the laboratory.

6. Remodel present library building for living quarter and install stove of type described above.

7. Install large heating stove in laboratory. Stove has already been purchased.

8. We hope to be able to install a 500 gallon propane tank. This will eliminate the necessity of frequent trips to Jackson to get propane bottles refilled. Propane will be delivered for this tank. The cost of propane will be reduced from 32 to 17 cents per gallon.

9. An attempt is being made to obtain a house of frame construction which was built by the Paramount Studio near the cattle bridge. If this building can be obtained it will be moved to the Research Station and utilized for living quarters.

Lumber and other materials needed for the above remodeling have been purchased. Since more research workers are applying than can be accommodated with present facilities, the above described increase in accommodations is being made.

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Mr. Morton May - Continue study on elk range.  
Dr. Reed W. Fautin - Succession on burned areas.  
Dr. L. Floyd Clarke - Effects of pollution on Swan Lake.  
Dr. George Baxter - Effects of pollution on Swan Lake.  
Dr. W. G. Solheim - Effects of pollution on Swan Lake.

#### SEMINARS

A regular schedule of seminars was held at the Station in which papers were presented either on research work underway by the investigator or subject matter related to the research project. The seminars proved most interesting and educational to all who participated. Because of informal discussion the investigators profited by the suggestions and criticisms of others. The interested personnel of both the Forest Service and Teton National Park Service were invited to participate in the seminars.

Seminars were held on the following subjects:

Patterns of Social Behavior in Elk - Margaret Altmann.  
Plants of Jackson Hole and Adjacent Areas - Harry Truman.  
Life History and Behavior of the Black Rosy Finch - Norman French.  
Avifaunal Structure in the Teton Mountains - George Salt.  
Parental Care in Cliff Swallows - Arnold Petersen.  
Evaluation of Elk Summer Range - Alan Beetle and Morton May.  
Ecology of Red-backed Mouse - James Opsahl.  
Amphibian Regeneration Experiments - Charles Thornton.  
Studies on the Variation and Distribution of Certain Drosophila  
Species - Dwight Miller

Several additional informal sessions were held for the purpose of showing slides and general discussion. The congenial atmosphere at the Station was enhanced by picnics and other social gatherings in which refreshments were served and in which everyone at the Station participated.

#### LIBRARY

The books and journals were organized into a more convenient arrangement to make them more readily accessible to the investigators. Subscriptions were renewed through the University of Wyoming Library for all journals previously received. New subscriptions for journals were entered and new books were purchased. We expect a member of the University of Wyoming Library staff to catalogue all books and periodicals and give them accession numbers.

An attempt was made to contact all who have carried out research at the Station in the past and to obtain reprints of articles from them pertaining to that research. A number of reprints have been received and will be placed in the library.

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#### COOPERATION WITH OTHER AGENCIES AND OFFICIAL VISITS

Mr. Arthur Buckingham, supervisor of the Forest Service, as well as other Forest Service personnel continued to be most cooperative and helpful in all ways including helping in carrying out research projects underway and granting to research workers the privileges necessary to carry out research activities in forest areas.

Mr. Frank Oberhansley, superintendent of Teton National Park and Dr. Adolph Murie, biologist with National Park Service, Mr. Jepson, chief naturalist, and other Park Service personnel cooperated in every possible way including granting of permits and help and advice in carrying out projects.

Without the cooperation of those mentioned above, effective research at the Station would be impossible.

Mr. George Sprugel, field representative of the National Science Foundation, paid an official visit to the Station. The purpose of this visit was to observe the facilities at the Station, to obtain information on research work which has been or is now being carried out, and to obtain first-hand information on the potentialities of the Station for carrying out biological research. He expressed himself as being very favorably impressed with the work accomplished and the potentialities offered.

Mr. Don Besst, property and inventory supervisor of the University of Wyoming, spent several days taking inventory of equipment at the Station.

The visit of Dr. Fairfield Osborn, president of the New York Zoological Society, to the Station is very greatly appreciated. His visits, as well as visits of other members of the New York Zoological Society, are always welcome and appreciated. They furnish tangible evidence of the continued interest in the work at the Station.

Short visits by several biologists were appreciated. These biologists furnished valuable suggestions to those carrying out investigations at the Station.

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## FINANCIAL REPORT

1953-1954

Item	Budgeted Amount	Expended Amount	Unexpended Amount
Part-time Assistants .....	\$ 550.00	\$ 550.00	\$
Equipment .....	184.50	184.26	.24
Stoves, blankets, septic tank, and miscellaneous items.			
Supplies .....	100.00	99.97	.03
Fuel and miscellaneous items.			
Contractual .....	1311.50	1311.50	
Includes moving buildings, auto repair, general construction and repair, and circulars.			
Fixed Charges .....	4.00	4.00	
Travel .....	100.00	68.00	32.00
Total .....	<u>\$2250.00</u>	<u>\$2217.73</u>	<u>\$ 32.27</u>

1954-1955  
(To November 1, 1954)

Part-time Assistants .....	800.00	400.00	400.00
Equipment .....	350.00	120.33	229.67
Stoves and miscellaneous items.			
Supplies .....	700.00	266.28	433.72
Fuel for automobiles, heat, power plant; miscellaneous.			
Contractual .....	454.23*	28.86	425.37
Auto repair, telephone, laundry, plumbing.			
Materials .....	289.00**	174.32	114.68
Cinder blocks for foundation and lumber for floors.			
Travel .....	300.00	137.60	162.40
Total .....	<u>\$2893.23</u>	<u>\$1127.39</u>	<u>\$1765.84</u>

\*\$4.23 of this amount received for personal telephone calls by investigators.

\*\*This amount was received in payment for lodging by research workers at the Station.

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SUMMARY OF EXPENDITURES FOR 1954 OPERATIONS  
(Funds from 1953-54 and 1954-55 budgets)

Personnel	
Caretaker .....	\$ 750.00
Student Assistant .....	200.00
Travel .....	316.39
Auto Repair .....	394.85
Titles and licenses for automobiles ..	4.00
Equipment .....	304.59
Moving of buildings to Station .....	775.00
Building construction and repairs ....	134.91
Building materials .....	174.32
Fuel .....	151.50
Miscellaneous supplies .....	103.96
Circulars .....	35.60
Total .....	<u>\$3345.12</u>

Grants-in-aid by the New York Zoological Society amounted to \$2390.00.

An honorarium of \$500.00 to the Director of the Biological Research Station received from the New York Zoological Society was applied on the salary of the Director. As a result of the University of Wyoming taking over the administration of the Station, the person appointed as Director was changed from 9-month to 11-month salary.