

REPORT ON THE ACTIVITIES  
OF THE  
JACKSON HOLE RESEARCH STATION  
SUMMER 1966

L. Floyd Clarke, Director



## PHYSICAL FACILITIES

The new facilities planned during 1965 were completed and utilized during the 1966 summer season. The new construction consisted of a Library-Seminar building, three new living units, and a pole fence enclosure adjacent to the Station area to be used for research projects. These major improvements were made possible by a \$10,000 grant from the New York Zoological Society which was matched by University of Wyoming funds. The Library-Seminar building proved to be extremely valuable, not only for use as a library and for the weekly seminars, but for many additional activities including conferences by visiting scientists and Park and University personnel. This building was also used on occasion for social functions, when not in use otherwise.

The willow hedge planted the previous year developed well during the summer, water being supplied by a pump from an adjacent creek. Plumbing, wiring and furnishing of the Library-Seminar building and the three new cabins was completed.

As a result of a special appropriation by the University of Wyoming Board of Trustees, the metal roofs on all the buildings were painted a brown color. This eliminates the glare from the roofs and makes the Station buildings blend in with the environment, making the entire Station much less conspicuous. Work continued on improvement of roadways, landscaping the area, removing dead trees and other activities to improve the general utility and appearance of the Station.

During the past summer there was an increase in the emphasis on aquatic and fisheries biology studies. Among plans under consideration for improvement of the Station is development of a fisheries research unit, possibly on Jackson Lake.

Plans are also underway for enlargement of the bathroom facilities of the Station.

The long term lease under which we are working makes it possible for us to plan ahead for improvement of research facilities. The Station has already become an important inland research facility as a result of the cooperation of the New York Zoological Society, the University of Wyoming and Grand Teton National Park. We hope the Station can be continually improved.

## SEMINARS

Seminars were held at 7:30 P.M. on Thursdays. Everyone appreciated the nice new building we now have for seminars. These seminars proved to be stimulating to the research workers as well as many interested visitors. The following is a list of the seminars presented during the summer.

- July 2 Margaret Altmann - Bonanza in animal behavior.
- July 7 Alan Beetle - Ecology of plant communities in Jackson Hole.
- July 14 William Thurmond - Melanophore stimulating substances in salamanders.
- July 21 Dale Taylor - Biotic succession in lodgepole pine communities.
- July 28 Hermann Rahn - Diving women of Korea. (Guest speaker)
- Aug. 4 Elizabeth McClain - Effect of altitude and oxygen tension on insects.
- Aug. 11 Douglas Flack - Relation of the bird fauna to structure in aspen communities.
- Aug. 18 Martin Cody - Effect of habitat diversity on bird communities.
- Aug. 25 Richard Kroger - Bottom fauna of the Snake River.
- " Douglas Houston - Ecology of moose in Jackson Hole.

## LIBRARY

The books and periodicals in the library were used almost continuously during the summer as a result of the improved accessibility and study conditions provided by the new Library-Seminar building.

Periodicals previously subscribed were continued, and current issues were made available to the research workers before being filed in the stacks. We continue to receive reprints from research workers of previous years. The total number of titles of published data resulting from work at the Station is now well in excess of 100. A list of the reprints of publications which we have available on research conducted at the Station is included as an appendix to this Report. Current National Park Service and Forest Service publications and information were made available to investigators. Reports on research projects, Annual Reports and other information related to the Station operation were made available, also.

The files of reprints of research workers and card indices were all moved into the Library-Seminar building, which made them more readily accessible.



## IMPORTANT VISITORS TO STATION

A large number of eminent scientists, as in past years, visited the Station. The visitors had important contributions to make to the research workers and in addition, no doubt, benefited from their visit. Visitors included representatives of foreign countries. Among the visitors this summer was Dr. Stanley Cain, Assistant to the Secretary of the Interior. He, together with several of the Park personnel, met with the Director and made important suggestions for the improved cooperation of the Park Service with the Research Station.

Among other visitors for scientific study who were at the Station for only a short time and were not asked to submit summaries of research activities were:

Dr. Lloyd Ayres, Assistant Dean, College of Agriculture and Dr. Morton May, Division of Plant Science, both from University of Wyoming - in connection with Dr. Alan Beetle's study.

Dr. George Baxter, Department of Zoology, University of Wyoming - taxonomy of Wyoming fishes, and to consult with Richard Kroger on his project.

Dr. Reed W. Fautin, Department of Zoology, University of Wyoming - to consult with Dale Taylor on his project on plant succession.

Dr. Norman Negus, Department of Zoology, Tulane University - *Microtus* population studies.

Dr. Aelita Pinter, working with Dr. Negus.

Dr. Michael A. Poirier, Department of Zoology, Louisiana State University - fresh water sponges.

Dr. Donald Lowrie, Department of Zoology, Los Angeles State College - spider study.

Dr. John Rumely, Department of Botany, Montana State University, and his assistant - to make plans for continuance of ecological study conducted during previous two years by Edward Oswald. Mr. Oswald completed his study and as a result obtained the PhD degree from Montana State University.

Dr. G. Richard Marzolf, Kansas State University - Ecology, above timberline. He came to determine feasibility of an extensive study.

## COOPERATION WITH OTHER AGENCIES AND INDIVIDUALS

The Station received excellent cooperation from Grand Teton National Park including Superintendent Anderson, Assistant Superintendent Peterson, Chief Naturalist Dilley, and Park Biologist Cole. The continued cooperation of the Forest Service was greatly appreciated. Mr. Dilley served as a member of the Advisory Board of the Research Station again this year and assisted in the selection of the various research projects. The Research Station and the University assisted, when requested, in recommending individuals for employment by the Park Service.

The working agreements between the Park Service and the Research Station as formulated in 1963 have worked out very effectively. Three research projects in cooperation with Grand Teton National Park were undertaken during the past year: (1) An ecological-physiological study of moose by Douglas Houston, (2) Preliminary investigation for continuing the plant ecology study initiated two years ago by Dr. John Rumely, and (3) Insect fauna of Snake River by Richard Kroger.

Cooperation with the Park Service on elk management, range and waterfowl studies was continued. The Wyoming Game and Fish Department supported a study on ecology of cutthroat trout in the area by Peter Hayden, graduate student at the University of Wyoming. Station personnel served as consultants to various individuals and agencies on several occasions.

## STUDENT CONSERVATION PROGRAM

Four students worked on research projects at the Station under the Student Conservation Program. These students were Elizabeth McClain, Jane A. Peterson, Ann Scott, and Jeanne H. Williams. See pages 16-19 for summaries of their research projects.

In addition to the research activities on the individual projects, the Station provided opportunities for their observation and cooperation with other investigators, and provided for trips to various federal and state agencies operating in the area. Trips were arranged and conducted to Yellowstone National Park, Grand Teton National Park Headquarters, Federal Game Refuge, Reclamation Service, Wyoming Game and Fish Department, Federal Fish Hatchery, and Teton National Forest Service. The end result of this program for these students would indicate a very stimulating experience in which they learned firsthand about research techniques and basic problems of conservation as administered by various state and federal agencies.



FINANCIAL REPORT  
1965-66  
November 21, 1965-June 30, 1966

<u>Item</u>	<u>Budgeted</u>	<u>Expended</u>	<u>Carried Over To Next Year's Budget</u>
Part-time Assistants	\$ 409.00	\$ 400.00	\$ ---
Equipment	857.00	854.81	---
Supplies	833.55	258.47	575.00
Contractual	1,106.63	299.23	805.87
Travel	309.15	140.82	168.30
Fixed Charges	392.00	36.00	356.00
Capital Outlay	993.95	666.69	327.26
	<u>\$ 4,901.28</u>	<u>\$ 2,656.02</u>	<u>\$ 2,232.43</u>

July 1, 1966-December 15, 1966

<u>Item</u>	<u>Budgeted*</u>	<u>Expended</u>	<u>Unexpended</u>
Research Project	\$1,303.50	\$1,303.50	---
Part-time Assistants	2,209.00	1,600.00	609.00
Equipment	3,077.00	2,232.70	844.30
Supplies	1,506.00	797.46	708.54
Contractual	3,055.87**	2,070.47	985.40
Travel	541.30	159.49	381.81
Fixed Charges	556.00	25.00	531.00
Capital Outlay	327.26	327.26	---
	<u>\$12,575.93</u>	<u>\$8,515.88</u>	<u>\$4,060.05</u>

\*Includes money carried over from previous year, therefore, does not indicate amounts appropriated for one year.

\*\*Includes special appropriation of \$1145.00 by University of Wyoming Board of Trustees for painting of roofs of buildings.

Rent received in the amount of \$627.00 was placed in the General Fund of the University.

The New York Zoological Society contributed \$500 toward the Director's salary in the form of an honorarium.

Grants-in-aid in the amount of \$1800.00 were given to investigators by the New York Zoological Society.

National Park Service Grant to Kroger for academic year 1966-67 - \$3200.

National Park Service Grant to Dale Taylor, summer - \$1000.

National Park Service Grant to Douglas Houston.

National Park Service support to Student Conservation Program - \$2,000. Of this amount the Station received \$523.81 for rent, travel and miscellaneous expenses, and the four students received the remainder.

Source of financial support of other projects has been indicated at the conclusion of summaries appearing in this Report.