

REPORT ON THE ACTIVITIES
OF THE
JACKSON HOLE RESEARCH STATION
SUMMER 1967

L. Floyd Clarke, Director

Investigators Who Spent Short Periods At the Research Station

George T. Baxter, Zoology Department, University of Wyoming
To check on aquatic studies on Snake River and collect fish.

Martin L. Cody, Department of Zoology, University of California, Los Angeles
Revisited avian communities in grass, sage and willow study areas in order to check differences which may exist in early summer as compared with later summer studies made previously.

Morton May, Division of Plant Sciences, University of Wyoming
Study of range improvement in aspens.

C. Robert Shoop, Department of Biological Sciences, Wellesley College
Study of salamander distribution in area.

Wilbur M. Tidd, Department of Zoology and Entomology, Ohio State University
Study of fish parasites, especially copepods on gills.

STUDENT CONSERVATION PROGRAM

Four students worked at the Research Station under the Student Conservation Program. These students were W. Brenton Costain, Marilee Hylant, Susan Jane Noble, and Cleo C. Pierre. Their program of activities was divided into two major parts, (1) to become acquainted with the various Federal and State agencies concerned with conservation in the area, and (2) to carry out an individual research project. The schedule of activities included the following:

1. A two-day orientation program with Grand Teton National Park Service in Moose. Participating were Mr. Jack Anderson, Superintendent and the heads of various divisions.
2. A Forest Recreational Activities Program conducted by Mr. Bill Jackson.
3. A visit to the Federal Fish Hatchery with explanation of its operation and significance by Ross Kientz and Marvin Tygum.
4. Explanation of operation of Wyoming State Game and Fish Department and its importance in the Jackson Hole area by Kenny Martin, District Warden.
5. Explanation of administration and operation of Teton National Forest by Forest Supervisor Safran.
6. A visit to the Fish and Wildlife Service Elk Refuge. Manager Redfearn discussed the functions of the Refuge including the winter elk feeding program.
7. A two-day visit to Yellowstone National Park at Mammoth with an explanation of the operation of the interpretive program by Stan Cantor, Assistant Naturalist.
8. An explanation of the operation of the U.S. Reclamation Service with emphasis on the importance of the Jackson Lake Dam, by Supervisor Braman.
9. An illustrated lecture and explanation of wildlife in Jackson Hole by John Turner.
10. Seminars by research workers at the Station, listed elsewhere in this Report.

Following are summaries of the reports of these students' research projects:

Biotic Succession in Lodgepole Pine Communities of Fire Origin
in Yellowstone National Park
W. Brenton Costain

Instruments were set up in six burned areas of Yellowstone National Park that were 7, 13, 25, 57, 90, and 260± years old, and analyses were made to measure the variation in physical factors, soil characteristics, plant cover, and animal

COOPERATION WITH OTHER AGENCIES

Among the most important cooperative activities with other agencies were the following.

1. Wyoming State 4-H Field Program.

The director and other investigators at the Research Station explained the functions of the Station and the nature of the research projects under way.

2. Field Biology Program for High School Students.

High school students under the supervision of Mr. Ted Major, science instructor at Jackson-Wilson High School, spent one day at the Research Station. In addition to an explanation of the Research Station and its operation, students were given an opportunity to visit with research workers and learn of the various research activities being carried out at the Station.

3. Cooperation with Grand Teton National Park Service in connection with the Third International Short Course in the Administration of National Parks and Equivalent Reserves held August 28.

Forty park administrators from 24 foreign countries and the United States came to the Station. Foreign countries represented include the following: Turkey, East Pakistan, Indonesia, Canada, Argentina, West Caroline Islands, England, India, Jordan, Puerto Rico, Botswana, Uruguay, Ecuador, Brazil, Peru, Columbia, Thailand, New Zealand, Kenya, Bolivia, Switzerland, So. Africa, Paraguay and Venezuela.

The discussion centered around the major considerations of the significance of a research station located in a national park. The ways in which such a station can contribute to the interpretive program of the park and ways in which the park can provide opportunities for pursuit of significant research.

4. The Research Station maintained a close cooperation with the Park Service, the Forest Service and the Game and Fish Department throughout the summer.

5. During the course of the summer a large number of scientists visited the Station.

SEMINARS

Seminars were held at 8:00 P.M. on Thursdays. All seminars presented were excellent, stimulating extensive discussion and interchange of ideas. Following is a list of seminars presented.

- July 6 Douglas Houston - Ecology of the Shiras Moose in Jackson Hole.
- July 13 Joseph T. Bagnara - Changes in pigments of amphibian xanthophores during larval development.
- July 20 William J. L. Sladen - Penguins of Cape Crozier. (Film and slides)
- July 27 William A. Calder - Respiration and evaporative cooling in birds.
- Aug. 3 Martin A. Piehl - Studies of semi-parasitic flowering plants.
- Aug. 10 Howard E. Evans - A study of an insect community.
- Aug. 17 Kent H. McKnight - Taxonomy and ecology of the fleshy fungi.
- Aug. 24 Dale L. Taylor - Biotic succession in lodgepole pine communities.

LIBRARY

The books and periodicals were used almost continuously during the summer partly because of the improved accessibility and study conditions provided by the new Library-Seminar building. This building was used extensively for showing slides and films in addition to the regular library and seminar use.

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.

FINANCIAL REPORT
1966-67
December 16, 1966-June 30, 1967

<u>Item</u>	<u>Budgeted</u>	<u>Expended</u>	<u>Carried Over To Next Year's Budget</u>
Part-time Assistants	\$ 609.00	\$ 609.00	\$ ---
Equipment	844.30	102.76	741.54
Supplies	708.54	386.09	322.25
Contractual	985.40	114.20	871.20
Travel	389.23	18.90	370.26
Fixed Charges	531.00	36.00	495.00
	\$ 4,067.47	\$ 1,266.95	\$ 2,800.25

July 1, 1967-October 31, 1967

<u>Item</u>	<u>Budgeted*</u>	<u>Expended</u>	<u>Unexpended</u>
Research Project	\$ 1,312.50	\$ 1,312.50	\$ ---
Part-time Assistants	2,199.50	1,600.00	599.50
Equipment	1,761.54	591.10	1,170.44
Supplies	1,253.25	774.87	478.38
Contractual	1,676.20	938.67	737.53
Travel	743.26	140.85	602.41
Fixed Charges	595.00	---	595.00
	\$ 9,541.25	\$ 5,357.99	\$ 4,183.26

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

Rent received in the amount of \$745.00 was placed in the General Fund of the University.

The New York Zoological Society contributed \$500.00 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 Good for academic year 1967-68 - \$3200.00.

National Park Service support to Student Conservation Program - \$2000.00.

Goelet-Manice Gift received - \$2000.00.

