REPORT ON THE ACTIVITIES

OF THE

JACKSON HOLE BIOLOGICAL RESEARCH STATION

SUMMER 1970

L. Floyd Clarke, Director

UNIVERSITY OF WYOMING Laramie, Wyoming

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#### STUDENT CONSERVATION PROGRAM

Two students worked at the Research Station under the Student Conservation Program. These students were Marion Klaus and Janice Speas. 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. An orientation program with Grand Teton National Park Superintendent Chapman, Chief Naturalist Charles McCurdy, and Biologist Peter Hayden, and other personnel and division heads outlining in some detail the activities and responsibilities of the National Park Service, and specifically discussion problems peculiar to Grand Teton National Park.
- 2. An explanation of the operation of the U.S. Reclamation Service with emphasis on the importance of the Jackson Lake Dam, by Supervisor Braman.
- 3. Explanation of administration and operation of Teton National Forest by Forest Supervisor Safran.
- 4. A visit to the Fish and Wildlife Service Elk Refuge. Mr. Blanchard and others discussed the functions of the Refuge including the winter elk feeding program.
- 5. Explanation of the operation of the Wyoming State Game and Fish Department and its importance in the Jackson Hole area, by personnel of the Wyoming Game and Fish Department in Jackson.
- 6. The students had the opportunity to visit the Federal Fish Hatchery near Jackson.
- 7. Each of the students was given an opportunity to observe and participate in the research activities of the investigators at the Station.
- 8. Attend seminars by research workers at the Station, listed elsewhere in this report.

The usual annual visit to Yellowstone National Park Headquarters at Mammoth was not included in the activities this summer, since both students had visited there on numerous occasions individually.

Following are reports of these students' research projects.

### COOPERATION WITH OTHER AGENCIES AND INDIVIDUALS

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

- 1. Wyoming State 4-H Field Program.
  Station facilities were made available for the high school students participating in the 4-H Field Program of the University of Wyoming.
- 2. Teton Sciences Field Biology School.

  High school students under the supervision of Mr. Ted Major, science instructor at Jackson-Wilson High School, visited the Research Station on two occasions. In addition to an explanation of the 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. This group of students also participated in a large number of the seminars at the Station.

Other high school and university groups also made use of the Station facilities and attended seminars.

- 3. The Research Station cooperated extensively with the Park Service on problems of mutual concern. Grand Teton National Park biologists, Hayden, Loop, and Wood were all very helpful in making suggestions and rendering assistance to the investigators, and likewise, Station personnel cooperated extensively with the Park Service employees.
  - Also, contacts were maintained with the Forest Service and Wyoming Game and Fish Department personnel.
- 4. During the course of the summer a large number of scientists visited the Station. President William D. Carlson and other University of Wyoming scientists visited the Station for short periods. We very much appreciated the visit of President Carlson who gave considerable advice and encouragement to the research workers.
- 5. Personnel at the Station on numerous occasions served as consultants concerning biological problems of interest and importance to other individuals and agencies in the area. For example, an instructor at the Teton Valley Ranch, which operates a youth school, came for advice on instruction programs for the students.

#### SEMINARS

The Station continued to present a fine series of seminars during 1970. The investigators at the Station reported on their research activities, and in addition one visitor presented a seminar. The discussions which followed each seminar were also very highly informative and stimulating. The seminars were very well attended by both Station personnel and other scientists in the area. In fact, our seating capacity of about 65 people was exceeded on several occasions, and people sat on the floor and even listened from outside the building.

Following is a list of the seminars presented.

- June 25 Dr. Margaret Altmann University of Colorado. The role of fear in the life of big game.
- July 2 Dr. William A. Calder University of Arizona.

  Temperature regulation in birds--a case of convergent evolution.
- July 9 Dr. Robert W. Lichtwardt University of Kansas.
  Morphology and ecology of Trichomycetes.
- July 16 Mr. Jeff Foott Visitor from San Jose State College. Sea otters and other things.
- July 23 Dr. Ellis G. MacLeod University of Illinois.

  Reproductive behavior of the insect family Chrysopidae.
- July 30 Dr. Aelita Pinter Touro Research Institute and Louisiana
  State University in New Orleans
  Environmental control of seasonal pelage changes in Microtus.
- Aug. 6 Dr. Michael Parker University of Wyoming. Algae, apple pie, and pollution.
- Aug. 13 Dr. Jack States University of Wyoming.
  Populations of microfungi in seleniferous soils.
  - Mr. Darold Sabinske University of Wyoming. Ecology of sagebrush community on glacial outwash plains in Jackson Hole.
- Aug. 20 Mr. Franz Camenzind University of Wyoming.
  Coyote ecology, population dynamics, and behavior.
  - Mr. Brenton Costain University of Wyoming. Ecology of the Uinta ground squirrel in Jackson Hole.

Refreshments were served at each seminar. Other activities at the Station included picnics and the entertainment of guests. Mrs. Nina Clarke continued to serve effectively as hostess, cook, and entertainer on numerous occasions.

The Library-Seminar building was used extensively by investigators not only as a library and for regular seminars, but for showing of films and holding other meetings related to the research investigations at the Station.

## FINANCIAL REPORT 1969-70

November 1, 1969-June 30, 1970

<u>Item</u>	Budgeted	Expended	Carried Over To Next Year's Budget
Research Projects	\$ 25.00	\$	\$
Part-time Assistants	300.00	300.00	
Equipment	1,853.47	54.75	1,798.00
Supplies	692.71	239.11	451.75
Contractual	740.26	86.74	651.00
Trave1	468.39		210.60
Fixed Charges	423.00		423.00
	\$4,502.83	\$ 680.60	\$3,534.35

July 1, 1970-November 12, 1970

	Obligated		
Item	Budgeted*	or Expended	Unexpended
Research Projects	\$ 4,065.00	\$4,040.00	\$ 25.00
Part-time Assistants	2,500.00	2,078.40	421.60
Equipment	3,063.00	50.00	3,013.00
Supplies	1,741.75	940.88	800.87
Contractual	1,617.00	1,004.70	612.30
Trave1	583.60	140.40	443.20
Fixed Charges	523.00	36.00	487.00
	\$14,093.35	\$8,290.38	\$5,802.97

Rent received in the amount of \$450.00 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 \$3,000.00 were given to investigators by the New York Zoological Society.

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