REPORT ON THE ACTIVITIES

OF THE

JACKSON HOLE RESEARCH STATION

SUMMER 1968

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 to check differences which may exist in early summer as compared with later summer studies made previously.
- Douglas Flack, Department of Zoology, University of Wisconsin. Remeasuring some features of the eight study areas of his project located here. His project is on bird populations of the aspen forests of Western North America.
- Donald C. Lowrie, California State College at Los Angeles. Studying humidity and temperature preferences of two species of Pardosas spiders.
- Norman C. Negus, Tulane University. Was at the Station in the spring and in late summer doing work on his <u>Microtus</u> population density studies.
- Glenn A. Noble, California State Polytechnic College, San Luis Obispo. Continuing his study on effect of stress factors on parasitism in the Uinta ground squirrel.

Aelita J. Pinter, Tulane University. Was at the Station in the spring and in late summer. Her project is studying effects of environmental variables on endocrine states in Microtus montanus.

STUDENT CONSERVATION PROGRAM

Four students worked at the Research Station under the Student Conservation Program. These students were Elizabeth Baldwin, Margaret Drummond, Patsy Franta, and Judith L. Heider. 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 and heads of the various divisions outlining in some detail the activities and responsibilities of the National Park Service and specifically discussing problems peculiar to Grand Teton National Park.

2. Visit to the Federal Fish Hatchery in Jackson with explanation of its operation and significance by Ross Kientz and staff.

3. An explanation of the operation of the U.S. Reclamation Service with emphasis on the importance of the Jackson Lake Dam, by Supervisor Braman.

4. A two-day visit to Yellowstone National Park at Mammoth with an explanation of the operation of the interpretive program by Glen Cole, Park Biologist, and representatives of the Park's naturalist program.

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. 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.

8. Seminars by research workers at the Station, listed elsewhere in this Report.

Following are reports of these students' research projects. These are summaries of the reports which were submitted to the Park Service.

PHYSICAL FACILITIES

The major improvements to the physical facilities during the summer of 1968 involved oiling all the cabins and painting the trim and doors of all new units including the Library-Seminar building and the three new cabins completed in 1966. This was done to preserve all the buildings and, in the case of the new buildings, to also darken the color so they would blend in with the other buildings. This, together with painting the metal roofs on these buildings, has resulted in a general improvement of the appearance of the Station. The above improvements were made possible by a special budget appropriation by the University of Wyoming.

The other improvements at the Station were of a minor nature and primarily concerned with the upkeep of buildings and facilities. These included the replacement of the artesian well water pump, graveling the roads, eliminating dead timber, and continued attempts to grow a willow hedge to screen the Station from the main highway. Additional furniture and equipment were purchased for the Library-Seminar building and for the laboratories in order to improve their utilization.

The Library-Seminar room was in use almost continually day and night by research workers and visitors. In addition to the use of the various publications and books, it served for discussion groups, scientific conferences, and informal social hours. This facility has proven to be the most important addition to the Research Station in recent years.

COOPERATION WITH OTHER AGENCIES

The Station received national recognition as a result of inclusion of a description of the research activities of the Jackson Hole Research Station under the heading, NATURAL RESOURCES--A GROWING CONCERN, in the Congressional Record of the U.S. Senate (S2979, March 18, 1968) by Senator Clifford Hansen.

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.

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

- 3. The Research Station maintained a close cooperation with the Park Service, the Forest Service and the Game and Fish Department throughout the summer. As a result of the continued interests of Willard Dilley, Grand Teton National Park Naturalist, and Douglas Houston, Biologist with Grand Teton National Park, cooperation on research projects at the Station was excellent.
- A meeting was held September 2-6 by participants in W89-Regional Research Project--Characterization of Habitat Types of Sagebrush Ranges.
- 5. During the course of the summer a large number of scientists visited the Station.

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SEMINARS

The seminars held at the Station this summer were probably the best series of seminars we have ever had. Presentations by the investigators were excellent. Most of them included not only a discussion of the research project, but demonstrations and well designed illustrations of the project. The seminars stimulated critical discussion by those in attendance. All seminars were well attended by not only Station personnel but other scientists in the area. In fact, from 50-65 people attended, filling the Library-Seminar room almost to capacity for each seminar.

Following is a list of the seminars presented.

- July 2 David Love Geology of the Teton Region. (Guest speaker, Supervising Geologist for U.S.G.S. in Wyoming)
- July 11 Margaret Altmann The Impact of Disturbances on Big Game.
- July 18 Alan Beetle Plant Succession in Teton County.
- July 25 William Thurmond Production of Melanophore Stimulating Substances in Ambystoma.
- Aug. 1 William Calder Physiology of Diving in Small Birds and Mammals.
- Aug. 8 Edward Lonsdale Radio Tracking of Trout.
- Aug. 9 Micheal Erpino Ovarian Cycles in the Black-billed Magpie. (Guest speaker, Assistant Professor of Zoology at Chico State College)
- Aug. 15 Robert Bergstrom Parasites of Ungulates.
- Aug. 22 Kent McKnight Fleshy Fungi of Jackson Hole Area.
- Aug. 27 Charles McLaughlin Mammals of Grand Teton National Park.

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FINANCIAL REPORT 1967-68

November 1, 1967-June 30, 1968

			Carried Over To
Item	Budgeted	Expended	Next Year's Budget
Part-time Assistants	\$ 599.50	\$ 599.50	
Equipment	1,170.44	138.29	\$ 1,032.15
Supplies	478.38	168.00	310.38
Contractual	737.53	196.94	540.59
Travel	602.41	15.95	421.20
Fixed Charges	595.00	36.00	559.00
	\$ 4,183.26	\$ 1,154.68	\$ 2,863.32

July 1, 1968-December 10, 1968

Item	Budgeted*	Expended	Unexpended
Research Project	\$ 1,507.50	\$ 1,125.00	\$ 382.50
Part-time Assistants	2,199.50	1,800.00	399.50
Equipment	1,532.15		1,532.15
Supplies	1,349.38	624.92	724.46
Contractual	2,845.59	2,291.18	554.41
Travel	794.20	313.68	480.52
Fixed Charges	659.00		659.00
	\$10,887.32	\$ 6,154.78	\$ 4,732.54

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

Rent received in the amount of \$479.00 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 Kinker for academic year 1968-69 - \$3200.00. National Park Service support to Student Conservation Program - \$2000.00. Jackson Hole Research Station Annual Report, Vol. 1968 [1968], Art. 1