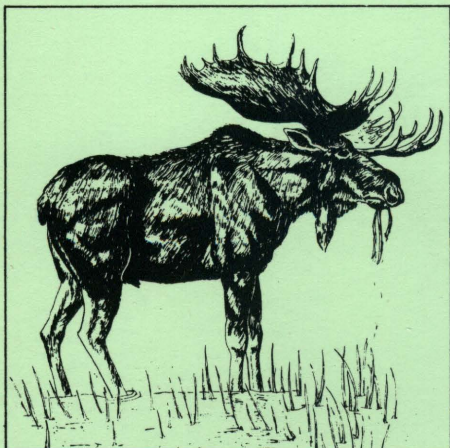
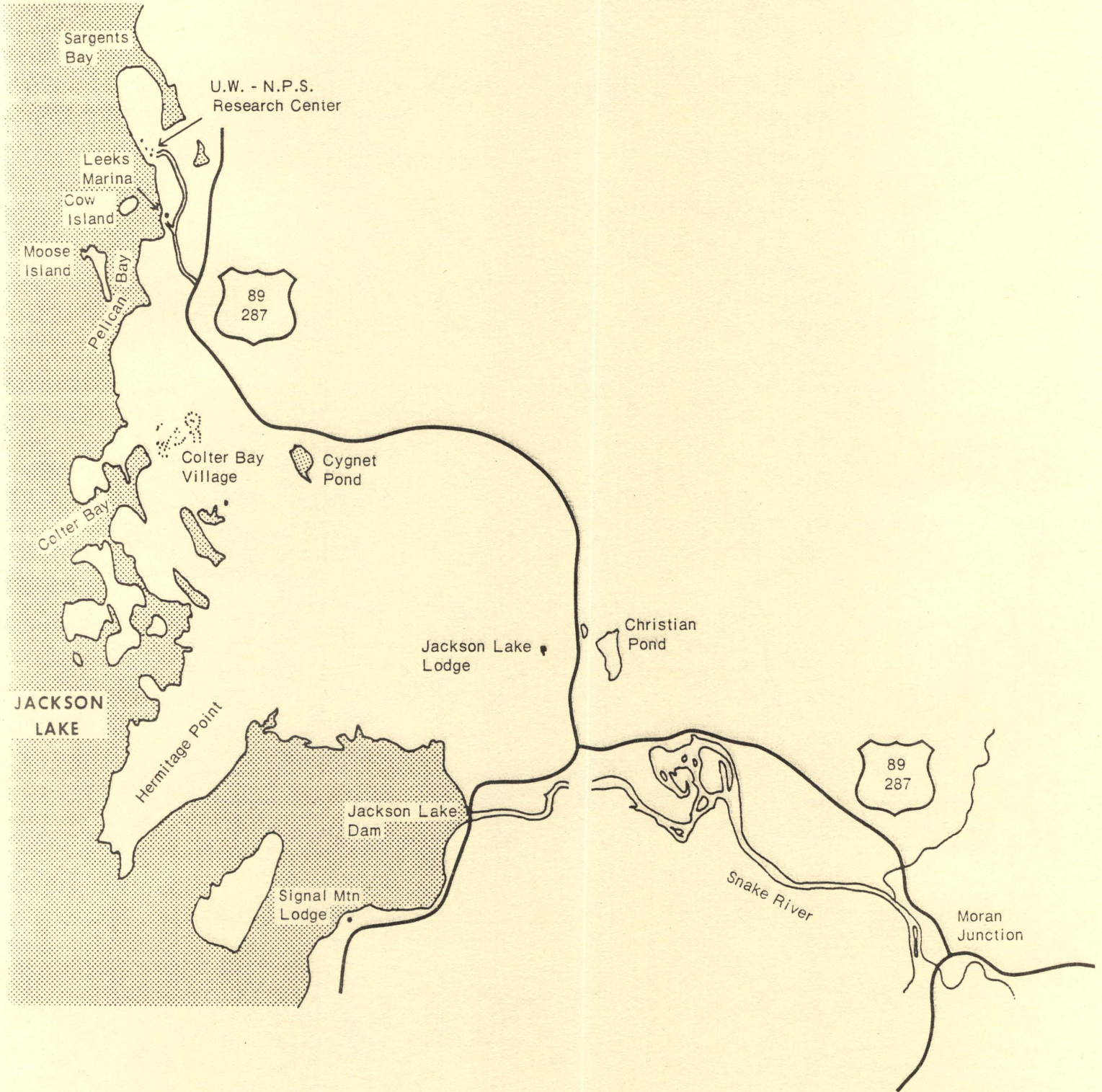




University of Wyoming
National Park Service Research Center
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PREFACE

The University of Wyoming-National Park Service Research Center sponsors and supports substantial and significant research in the biological, physical and social sciences which can best be done in National Park areas of Wyoming, Montana, North Dakota, South Dakota and Utah because of the unique features those areas possess. Administratively, the Research Center is governed by a 10-member Steering Committee composed of 5 University of Wyoming representatives and 5 National Park Service representatives. The Dean of the Arts and Sciences College serves as Committee Chairperson. A faculty member of the University of Wyoming is Director of the Research Center program and is administrator of the Research Center facilities. Also, the Director is an ex-officio member of the Steering Committee. The Research Center physical plant consists of laboratory, library, living, seminar, shop and storage accommodations. Those facilities are normally operational from mid-May to mid-October.

The Director annually calls for research proposals in October from institutions and individuals requesting such notification. Included with this solicitation are 1) guidelines for proposal preparation, 2) housing and laboratory information, 3) Research Center operational policies, and 4) the Research Center operational calendar. Topics for research include 1) those research problems identified by Park personnel, and 2) research problems suggested by outside individuals on basic or applied proposals they consider to be timely and important and uniquely appropriate to the National Park areas of the five states concerned. While many of the research topics will be directed at solution to management problems and improvement of interpretation information, there will be a concerted effort to encourage and maintain support for a substantial basic research program. Research projects may extend beyond the exact boundaries of the Park areas to work on problems common to the Park lands and adjacent lands. Limited funds are available for support of meritorious research projects. Also, research studies may be funded by other institutions or by individuals.

Investigator(s) submitting proposals to the Research Center should be a faculty member of an academic institution or a full-time member of a governmental research institution. Scientific and fiscal accountability must be assigned to an academic or governmental research institution. Normally all proposals should reach the Director no later than early December. The decisions of the Steering Committee concerning approval and where applicable, funding, are released no later than early March.

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STEERING COMMITTEE MEMBERS

- Mr. Robert Barbee, Superintendent, Yellowstone National Park, National Park Service;
- Dr. Kenneth L. Diem, Ex-officio Member, and Director, UW-NPS Research Center;
- Dr. Walter Eggers, Dean, Arts and Sciences College, University of Wyoming and Steering Committee Chairperson;
- Dr. David P. Egolf, Electrical Engineering, University of Wyoming;
- Dr. Wayne Hubert, Wyoming Coop Research Unit, University of Wyoming;
- Dr. Dan Huff, Chief Scientist, Rocky Mountain Region, National Park Service;
- Ms. Sandra Key, Superintendent, Bryce Canyon National Park, National Park Service;
- Dr. Ronald Marrs, Department of Geology, University of Wyoming;
- Dr. Anne Martha Slater, Department of Anthropology, University of Wyoming;
- Mr. Jack Stark, Superintendent, Grand Teton National Park, National Park Service;
- Mr. Jimmy D. Taylor, Superintendent, Grant-Kohrs Ranch National Historic Site, National Park Service;

Director's Report

In 1987, of 38 research proposals submitted to the Research Center, 30 from 22 institutions were approved (Table 1). Support in the amount of \$267,000 was approved for 20 projects submitted by investigators from 14 institutions.

The 1987 season at the Center in Grand Teton National Park had an auspicious beginning. In late June the Center hosted Vice President Bush, Interior Secretary Hodel, their family members, friends, official guests, staff and security personnel at an evening picnic at the Berol Lodge.

In August, two Australian ecologists, Dr. Richard Braithwaite, CSIRO and Dr. Anthony Press, Australian National Park and Wildlife Service visited the Center's field facilities. They were seeking information concerning the Center's 5-state park research program, as well as the nature of the interaction and cooperation between concerned governmental agencies and the university. Also, Dr. Meinhard Moser, University of Innsbruck, Innsbruck, Austria, in his second visit to the Center, spent 1 1/2 months as a collaborator with Dr. Kent McKnight from the Beltsville, ARS, researching the mushrooms of Grand Teton and Yellowstone National Parks. Dr. Moser is a recognized world authority on the taxonomically difficult and extensive Cortinariu mushroom aggregation.

Two Center housing facilities previously occupied by a park ranger and his family and by the retired long time AMK ranch caretaker, Slim Lawrence, were turned over to the Research Center as researcher housing. This transfer was very timely, for researcher housing requests had exceeded available center accommodations over the past 3-4 years. Even with the additional housing in 1987, all available housing was filled to capacity. Furthermore, this greater research activity extended over a longer period of time beginning in early May and extending to the end of October.

After several frustrating years, Grand Teton National Park was able to secure funding to reshingle the roof of the Center's Johnson Lodge. Completion of that project will be accomplished by early June of 1988. The persistence of the Grand Teton National Park administration in this matter is appreciated.

In July the Director was invited to participate in and help organize a horseback trip into the southern Yellowstone National Park and Bridger-Teton Wilderness for the annual Southern Greater Yellowstone Ecosystem interagency field trip.

Meetings held at the Center's Berol Lodge included: Bridger-Teton National Forest Supervisor's meeting; National Register Consulting Committee of the Wyoming State Historical Preservation Office; and the annual N.P.S. Scientist-Natural Resource Managers from national park areas participating in the Center's research program.

Table 1. Funding sources, recipient institution and location of research conducted through the U.W.-N.P.S. Research Center, 1987.

University of Wyoming		Funding Source		
Recip. Instit.	Location of Res.	National Park Service	Other Grants or Non-Grant Support	Location of Res.
		Recip. Instit.	Recip. Instit.	Fund Source
NM State Univ.	Bighorn Canyon N. Rec. Area	Univ. of WY	Carnegie Mus Nat. History	NSF
U.S. Geol. Survey	GTNP	Bryce Canyon Nat'l Park	NPS Arch. Center	U.S. Bur. of Reclam
Univ. of UT	GTNP	Capitol Reef Nat'l Park	Sc. Mus. of MN	Sc. Mus. of MN
Univ. of WY	YNP	Dinosaur Nat'l Monu.	Univ. of UT	Private & Univ. UT
Univ. of MT	YNP	Fort Laramie NHS	Univ. of NB-Omaha	Univ. of NB-Omaha
Univ. of MN	YNP	Glen Canyon N. Rec. Area	U.S. Geol. Survey	U.S. Geol. Survey
A.R.S.	GTNP & YNP	Univ. of WY	MT State Univ.	MT State Univ.

Univ. of MN	Jewel Cave & Wind Cave Nat'l Parks	Univ. of New Orleans	Private	GTNP
MT State	Theodore Roosevelt Nat'l Park	Fort Lewis College	NSF	YNP
ND Parks & Rec. Dept.	Theodore Roosevelt Nat'l Park	Univ. Of NB Omaha	U.S. Public Health Serv	GTNP & YNP
Univ. of WY	YNP			
Syracuse Univ.	YNP			
Univ. of NY	Zion Nat'l Park			
Brigham Young Univ.	Zion Nat'l Park			

RESEARCH PROJECT REPORTS

The following project reports have been prepared primarily for administrative use. The information reported is of a preliminary nature and may be subject to change as the investigations continue. Consequently, the information presented may not be used without written permission from the author(s).

BIG HOLE NATIONAL BATTLEFIELD

VANSICKLE

