

University of Idaho
Wilderness Research Center



**FIRST
ANNUAL
REPORT**



University of Idaho
FEBRUARY 1976

First Annual Report

UNIVERSITY OF IDAHO WILDERNESS RESEARCH CENTER

The year 1975 was a period of organization and unprecedented growth for the University of Idaho Wilderness Research Center. After nearly a decade of uncertainty, policy evolution and attempts at staffing, the Center has achieved a point of solid beginning. This first annual report is a brief outline of the history, progress and plans of a relatively new unit of one of the nation's oldest natural resources institutions.

The Conception of a Wilderness Center

The idea for a wilderness center at the University of Idaho may be traced to May 31, 1966. Two years after passage of The Wilderness Act, and well before most institutions were concerned with the problems and opportunities of the wilderness concept, Dr. Paul D. Dalke proposed that a wilderness center

" . . . would unify under one research authority the disciplines of the University and its cooperators to provide a major national and international thrust in an area of lasting concern. The Institute or Center, located strategically to the major wild areas of western United States, would provide a major research fund solicitor, an intellectual resource pool, and a well equipped agency for broadly conceived research into the . . . nature of wilderness and man."

At the same time a field station was identified as a possible site for some projects of the proposed Center. Through the philanthropy of Mr. Jess Taylor, the acquisition of a 65-acre parcel of land was made possible in the heart of the Idaho Primitive Area, the nation's largest remaining tract of roadless America.

In 1970, Dr. Dalke's concept of a wilderness research center became reality. Unfortunately, the Center's first years were accompanied by a series of personnel problems, obscured definition and the evolution of policy and purpose in a discipline new to the scientific community.

1975 - A Turning Point

In the spring of 1975, direction for the Wilderness Research Center was assumed by John E. Ehrenreich, dean of the College of Forestry, Wildlife and Range Sciences. One of his first acts as the new director was formation of a Technical Board to share the responsibility of formulating policy and guiding the efforts of the Center. A listing of personnel serving on the board, along with their qualifications in wilderness research and education, is presented on page 12.

A major accomplishment of the Technical Board has been the establishment of objectives, policies and responsibilities of the Center and its personnel. These are outlined in Appendix A and represent the guiding principles under which the Wilderness Research Center will operate.

Other achievements of the Center in 1975 include the organization of research being conducted under its auspices, the initiation of several new investigations and the beginning of an educational thrust. The results of these efforts are described on the following pages.

RESEARCH



Research on natural wildlife populations and wilderness vegetation has been carried on at the University of Idaho since the 1930's. One purpose of the Center, however, has been to synthesize the results and make them available under the unique heading of wilderness studies that in actuality they represent. Further, the Center was proposed to coordinate, assist and stimulate such studies, and in the aggregate to use this strength for the solicitation of funding to support additional research.

At the close of 1975, the Center could list the following projects as actively pursuing new knowledge in the laboratory of wilderness:

- a. Movement and behavior of bighorn sheep in The Idaho Primitive Area.

Dr. Jerran Flinders and James Bennett, graduate assistant

- b. Wilderness information sources and channels utilized by recreationists in the Selway-Bitterroot Wilderness Area.

Dr. James R. Fazio and William W. Bramlette, graduate assistant

- c. Aquatics of upland lakes and streams.

Dr. Michael Falter and Edward Buettner, graduate assistant

- d. Impact of camping on vegetation in the Bighorn Crags.

Dr. John Mitchell and Elizabeth Coombs, graduate assistant

- e. Deer-elk-fire relationships in the White Cap Management Area of the Bitterroot-Selway Wilderness Area.

Dr. James Peek and Jeff Keay, graduate assistant

- f. Factors affecting depredations on backcountry campgrounds by bears in Glacier National Park.

Dr. James Peek and Evelyn Merrill, graduate assistant

- g. Habitat use patterns and populations of Bighorn sheep in Glacier National Park.

Dr. James Peek and Robert Riggs, graduate assistant

- h. The effects of fire on martin distribution and abundance in the Selway-Bitterroot Wilderness.

Dr. Maurice G. Hornocker and Gary M. Koehler, graduate assistant

- i. Wildfire and ungulates in the Glacier National Park Area, Northwestern Montana.

Drs. Elwood Bizeau and Frederick D. Johnson with graduate student Francis J. Singer

- j. Ecology of the wolverine in northwestern Montana

Dr. Maurice G. Hornocker and Howard Hash

Additionally, several proposals were developed and are presently waiting to be funded. Still more are in the planning stage.

EDUCATION

Closely related to the Center's research efforts is its educational objectives. 1975 marked the beginning of this phase of the Center's mission. Appropriately, the first education activities blend into the older research efforts and could actually be reported under either heading. This is true not only for the graduate assistantships made available by funded research projects, but for the Center's first undergraduate projects.

During the spring of 1975, undergraduates in all disciplines at the University of Idaho were invited to submit proposals for independent summer research. Proposals were selected on a competitive basis by the Center's Technical Board and four studies were funded with honoraria and subsistence



Researchers in residence at the Taylor Ranch Field Station explain current projects to students visiting from the University of Idaho's Wildland Recreation Management Program.

allowances. The winning studies, all wildlife-oriented, are listed below along with the student researchers:

- a. The ecology of pocket gophers in a undisturbed environment.
Steven Anderson, advised by Dr. Kenneth Hungerford
- b. An evaluation of small mammal populations in a natural setting.
Charles Elliott, advised by Dr. Steven Peterson
- c. Mesiteric characteristics and spotting patterns of native cutthroat trout.
John LeVesque, advised by Dr. Richard Wallace
- d. Aspects of summer ecology of Blue Grouse in the Idaho Primitive Area.
Allen A. Steuter, advised by Dr. Jerran Flinders

Another successful educational project was a pre-registration backpack trip for wildland recreation management students. The purpose of this week-long field trip was to acquaint students with the problems of wilderness management and human impact on the wilderness environment. The students, guided by Drs. James R. Fazio and John H. Schomaker, crossed the Idaho Primitive Area on foot from the Bighorn Crags to Big Creek Ranger Station. Stops along the route included the Taylor Ranch Field Station where the group heard reports by researchers residing at the facility.

On campus, the university's first wilderness management course was established during the year and will be taught by technical board member, Dr. John H. Schomaker. Dr. Schomaker was also instrumental in developing a proposal to sponsor a nation-wide seminar on the historical and philosophical basis for wilderness.

THE FUTURE

Plans for 1976 call for the continued strengthening of the Center's personnel structure. An assistant director will be hired for daily administration of the Center's activities, the Technical Board will be broadened to include members outside the College of Forestry, Wildlife and Range Sciences, and an advisory council will be created to gain creative input from leading individuals across the nation who are concerned with the future of wilderness.

Current activities such as the undergraduate summer research project will be continued, a computerized wilderness bibliography will be in service by the end of the year, additional proposals will be developed, and a publicity campaign will be launched to gain financial support for the Center. The latter will include development of a periodic newsletter, descriptive brochure and the mechanism to facilitate public contributions to a special fund to help support the Center's projects.

The nation's bicentennial year will be a significant point in the history of the modern wilderness concept. It will be a time of heightened public interest in the natural resources of wilderness areas and their contribution to the welfare of American life. It will also be a time of unprecedented use pressure on the wilderness environment. The Center will have the opportunity to play a significant role in guiding the direction of use and understanding of these national treasures.



The Taylor Ranch Field Station on Big Creek in the heart of the Idaho Primitive Area. Students (below) watch as a mail plane prepares for landing at the ranch.



APPENDIX A

UNIVERSITY OF IDAHO WILDERNESS RESEARCH CENTER GUIDELINES

I. Statement of Purpose

The purpose of the Wilderness Research Center is to foster research and educational activities which will lead to a broader understanding of the structure and function of natural ecosystems, man's relationship to them, and their perpetual protection in the wilderness^{1/} context.

II. General Objectives

Research

Interdisciplinary research concerning the wilderness resource, and wilderness users, will be encouraged.

Examples of biophysical research encouraged by the Center include:

- a. research that promotes insight into longterm natural phenomena and ecosystem dynamics
- b. inventory and descriptive studies, including those of a "baseline" or "benchmark" nature
- c. innovative approaches to comparative and experimental investigation that allow these studies to be conducted within the confines of wilderness

Examples of social research encouraged by the Center include:

- a. research to measure impacts and define limits of man's use of wilderness
- b. methodology for the reduction of human impact through effective management practices
- c. studies to further understand man's psychological relationship to nature, including the areas of morality and aesthetics

^{1/} The Center's working definition of "wilderness" is taken from The Wilderness Act of 1964 but is not limited to areas within the National Wilderness Preservation System. In addition, both federal and non-federal areas that have characteristics satisfying the Act's definition are considered appropriate for Center activities.

Education

Educational objectives of the Center include promoting understanding of:

- a. the phenomena and dynamic processes associated with natural ecosystems
- b. man's ecological and social role as a member of the natural world
- c. the proper use and management of wilderness
- d. the many social and psychological values of the wilderness resource

Undergraduate and graduate students, on-site users, agency personnel and the general public are considered appropriate audiences for the Center's educational activities.

III. Specific Activities of the Center

1. Coordinate wilderness-related research projects at the University of Idaho and compile annual report of activities and findings.
2. Sponsor undergraduate summer research projects and review written reports which will be incorporated into special publications of the Center.
3. Sponsor at least one annual graduate assistantship for wilderness-related research or other scholarly activity.
4. Conduct an annual Wilderness Seminar Series.
5. Inform potential financial contributors of the Center's goals and activities through publication of a brochure.
6. Inform present and potential contributors and other interested individuals of current Center activities through publication of an illustrated, quarterly newsletter.
7. As requested, assist the mass media, organizations or individuals, and units of the university with wilderness-related projects of an educational nature.

IV. Organization

Administration of the Wilderness Research Center is ultimately the responsibility of the Director. He is assisted in the daily administration of the Center's programs and activities by an Assistant Director. Policy formulation is the joint responsibility of the Director, Assistant Director and Technical Board.

Responsibilities of the Technical Board include:

- a. recommendations of research needs and the review of completed projects
- b. review of wilderness-related research and educational projects to assure conformity with The Wilderness Act and similar legislation or policies
- c. assistance with the preparation of proposals for outside funding
- d. as requested, assisting the Director with liaison between the university and various agencies in wilderness-related matters
- e. review and selection of successful proposals from university students and faculty for Center-sponsored activities
- f. assistance with administration of the Center when requested by the Director or Assistant Director
- g. advising the Director on management policies for the Taylor Ranch Field Station



Winter in the Selway-Bitterroot Wilderness Area

APPENDIX B

UNIVERSITY OF IDAHO WILDERNESS RESEARCH CENTER PERSONNEL

Director

Dr. John H. Ehrenreich, Dean, College of Forestry, Wildlife and Range Sciences.

Director of the University of Idaho Forest, Wildlife and Range Experiment Station; Research and international experience in plant ecology; chairman of Idaho Natural Areas Council; author of over 50 publications in ecology including the award-winning Ozark Range and Wildlife Plants.

Technical Board

Dr. Paul D. Dalke, Professor Emeritus of Wildlife Management (Acting Assistant Director)

A founder of The Wilderness Research Center; Leader, Idaho Cooperative Wildlife Research Unit, 1947-1968; author of numerous publications on wilderness wildlife studies.

Dr. James R. Fazio, Academic Chairman, Wildland Recreation Management Program

Doctoral research on a wilderness permit system and the effectiveness of communication channels in changing visitors' knowledge of low impact camping; research in communication sources used by wilderness recreationists; vice chairman and executive secretary, Inland Empire Chapter, The Nature Conservancy.

Dr. Jerran T. Flinders, Associate Professor of Wildlife Resources

Research interest and experience in wildlife habitat and wildlife behavioral research.

Dr. John H. Schomaker, Assistant Professor of Wildland Recreation Management

Research experience in identification of criteria associated with wilderness campsites; coauthor of Primitive Area Management Guidelines for the Colorado State Office of the Bureau of Land Management; coauthor of Powderhorn Primitive Area Management Master Plan; doctoral research in the effect of selected information on dispersal of wilderness recreationists.

Professor Kenneth Sowles, Director, Services and Special Programs

Manager of the Taylor Ranch Field Station; international experience in the establishment and funding of new programs; experienced backcountry pilot.