
STRATEGIC PLAN AND POLICIES FOR THE
UNIVERSITY OF IDAHO
WILDERNESS RESEARCH CENTER
AND
THE TAYLOR RANCH WILDERNESS FIELD
STATION

OCTOBER 1996
(Revised 11/20/96)

By

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**STRATEGIC OVERVIEW
FOR THE UNIVERSITY OF IDAHO WILDERNESS RESEARCH CENTER
AND TAYLOR RANCH WILDERNESS FIELD STATION**

The Wilderness Research Center was first conceived with the university's purchase of the 65 acre Taylor Ranch in 1969, a unique facility entirely surrounded by what is now the Frank Church-River of No Return Wilderness. In 1972, the University of Idaho established the Wilderness Research Center to coordinate and focus interdisciplinary wilderness-related research by UI and cooperating organizations, including efforts at the Taylor Ranch facility. There is opportunity and need for such wilderness research in Idaho, a resource dependent state with abundant wilderness and even more potential wilderness. Further, the UI has the most active of only three university efforts nationwide with money dedicated to valuable Wilderness Research and Education and thereby providing valuable university involvement to a large land use (Hendee 1995).

The Wilderness Research Center is supported by access to the Taylor Ranch Wilderness Field Station, Clark Fork and McCall Field Campuses, the latter two near existing or proposed wilderness in north and central Idaho, respectively, and three designated Research Natural Areas on the University Experimental Forest. These, along with the many outstanding faculty interested in wilderness, give the university a potential for excellence in research and related education on wilderness, natural ecosystems, and nature conservation.

July 1, 1994, with direction and support from President Elisabeth Zinser and Provost Thomas Bell, the Center director position was restored to full-time and John Hendee appointed as director, with an administrative secretary, modest operating budget, and a suite of three new offices adjacent to the Department of Resource, Recreation and Tourism in the College of Forestry, Wildlife and Range Sciences (CFWR). Offices are across the hall for Dr. Ed Krumpe, WRC principal scientist for wilderness management. Additional support is provided from CFWR in the form of budget and administrative services, with the Dean's Office administering the Taylor Ranch Wilderness Field Station.

The director will be a tenured faculty member in a University of Idaho department, with the historical relationship with the CFWR maintained, but with strengthened campus-wide focus and a campus-wide advisory committee of diverse faculty and administrative leaders (see appendix).

Organization of the Plan

This strategic plan provides policy direction for the research, education and service programs of the Wilderness Research Center (WRC) and the Taylor Ranch Wilderness Field Station (TR). The plan defines the major functions of the WRC and the Taylor Ranch Wilderness Field Station. The plan identifies the current status and sets forth policy and direction for:

- I. Purpose of the Wilderness Research Center
- II. Research Program
- III. Education Program
- IV. Service Program
- V. Taylor Ranch Wilderness Field Station
- VI. Organization and Management of the Wilderness Research Center

The format for presenting the Center's four programs (Research, Education, Service and Taylor Ranch) uses the following format:

- a. Statement of Objectives
- b. Assessment of the Current Situation
- c. Assumptions About the Future
- d. Policy Guidelines (providing direction to meet objectives)

Specific activity for the center's operations will be described as needed in proposals, action and project plans. Progress is periodically assessed by program reviews and through advice from the Campus Advisory Committee. Each year an annual report describes the Center's activities and accomplishments.

PURPOSES OF THE WILDERNESS RESEARCH CENTER (WRC)

The WRC was established to coordinate and focus interdisciplinary wilderness research by the University of Idaho and with cooperating organizations. The purpose of the WRC has been to encourage research, education and service programs leading to a better understanding of the structure and function of natural ecosystems, humankind's relationships to them, and their perpetual protection as wilderness.

The Wilderness Research Center has conducted research throughout the Northwest and Alaska; however, the majority of the research has been conducted in the Frank Church-River of No Return Wilderness (RNRW) because of the existence of the Taylor Ranch Wilderness Field Station in the remote lower Big Creek drainage. To date, research has consisted primarily of several

unrelated studies and lines of research rather than the coordinated program of wilderness ecosystem research and monitoring, and wilderness use studies that is needed and desired.

The university and the CFWR have not provided funding to the WRC for research, though some research has benefited from logistical support, such as by the Taylor Ranch Field Station. Most WRC research has been funded through outside grants and contracts, totaling nearly one million dollars since its inception (see Appendix A). But under this approach, research funding has been sporadic and opportunistic, making it extremely difficult to implement a planned and focused long-term research program. Thus, a major challenge for the WRC is to develop programmatic, funded research efforts that build upon one another, rather than the study by study approach of the past. Progress toward this goal is reflected in the proposal for a "Consortium for Wilderness Ecosystems Research and Monitoring in the Frank Church-River of No Return Wilderness (Hendee 1996) and the McIntire-Stennis funded program of research on "The Use of Wilderness for Personal Growth... 1994-99" (Hendee 1994).

The Wilderness Research Center and the Taylor Ranch Wilderness Field Station are also a repository for pertinent data about wilderness, including a library collection of research publications; written and recorded information from agencies, local businesses and individuals; maps and aerial photographs; and plant and animal specimen collections.

The University of Idaho Library maintains a special historical collection of wilderness primary source material. An extensive collection of articles has been accumulated in the WRC in association with producing the revised second edition of the textbook, "Wilderness Management" (Hendee et al. 1991) and an annotated bibliography (Friese et al. 1996).

RESEARCH

During its 25 year history an impressive record of research has been compiled by the WRC, much of it at the TR Wilderness Field Station. The studies at Taylor Ranch are summarized in an illustrated monograph (Hendee et al. 1993) and a more complete list of the research associated with the WRC is indicated in Appendix A "Funding of Current and Past Research Associated with the UI Wilderness Research Center" and Appendix E, Publications associated with the Wilderness Research Center (in preparation).

Wildlife studies have traditionally led the WRC agenda, but during the past decade studies of human relationships to wilderness have emerged in importance. There has been important work by Krumpke and students in limits of

acceptable change (LAC), human use and impacts on wilderness, and current work by Hendee and students on the use of wilderness for personal growth.

This strategic plan defines a dual focus for future WRC research on:
(1) Wilderness Ecosystem Research and Monitoring -- including studies of all kinds of flora, fauna and physical resource studies that describe and measure wilderness conditions, processes and interactions. That is, Wilderness as a Land Laboratory in the words of Aldo Leopold (1941); and
(2) Wilderness Use for Recreation, Personal Growth, Therapy and Education. These two areas of focus for research pursue the following broad objectives:

1. Wilderness Ecosystem Research and Monitoring: Conduct and facilitate long-term research on wilderness ecosystem dynamics, including baseline inventory and descriptive studies as well as studies of resource interactions, and the comparison of wilderness baseline conditions with intensively managed lands. In cooperation with the Forest Service, WRC has proposed a "Consortium for Wilderness Ecosystem Research and Monitoring in the Frank Church-River of No Return Wilderness" to coordinate and fund a program of activity in this topic (Hendee 1996).
2. Wilderness Use for Recreation, Personal Growth, Therapy and Education: Conduct and facilitate studies and programs aimed at identifying the effects of wilderness experiences on users including effects described as personal growth, therapy, education, leadership development and their socio-economic and ecological impacts, and their management to optimize benefits while minimizing impacts. The WRC is currently engaged in a five year program of research on the topic of "Use of Wilderness for Personal Growth" under funding through the McIntire-Stennis program of federal support for forestry and related research and other grant funds (Hendee 1994).

EDUCATION

Since its inception, the WRC and TR have provided for education in concert with research, including field courses and internships at Taylor Ranch and studies involving graduate students. The WRC has also facilitated, courses in Wilderness Management and Wilderness Impacts since the early 1980s and since 1995, in The Use of Wilderness for Personal Growth, with a course "Wilderness Vision Quest Experience" planned for Fall 1997 and Spring 1998. The Distinguished Wilderness Lecture Series has provided periodic opportunities for the university community to hear current perspectives by national and international figures. With leadership from CFWR Dean Charles

hatch, a program of four summer courses at the Taylor Ranch Wilderness field Station is proposed for Summer 1997.

The educational objectives of the WRC are stated as follows:

Provide and facilitate educational programs to disseminate research findings and promote a broader understanding of wilderness resources, wilderness stewardship, wilderness values and uses, among the general public, governmental agencies, user groups, scientists, and the environmental community.

SERVICE

As the knowledge base about wilderness and its stewardship has increased in the WRC and the university, this expertise and the use of the university as a forum for discussion and debate of wilderness policy issues has provided service to the broader community of citizens and natural resource professionals.

For example, in 1983, the WRC sponsored the first National Wilderness Management Conference, facilitating the first National Wilderness Management Five-Year Plan by all four federal wilderness agencies -- a plan reviewed and revised in 1994 at the 6th National Wilderness Conference in Santa Fe, with a process directed by Ed Krumpe of the WRC, who also supervised the 1983 conference. Ed Krumpe also chaired the Wilderness Management Task Force of the SAF (Society of American Foresters) in 1989 and led the public involvement process for wilderness management plans in the Selway Bitterroot Wilderness 1983; in Hells Canyon 1992 and Frank Church-River of No Return Wilderness 1994. John Hendee chaired the Wilderness Research Needs Task Force of SAF in 1994, was Vice Chair for Science for the 4th World Wilderness Congress in Colorado 1987 and led a six session scientific symposium at the 5th World Wilderness Congress 1993, and co-chaired a major symposium on management of the Frank Church-River of No Return Wilderness 1993. In 1992, the WRC held a forum for Idaho's congressional delegation on "ideas from the university" for an Idaho Wilderness Bill. The WRC also sponsored a "Wilderness Quest" program in 1987, taking high-potential, but low-achieving students on a wilderness experience to help redirect their academic efforts, and in 1997 will test a "New Student Orientation Program Utilizing Wilderness Experience."

The WRC Director also serves as founding Managing Editor, 1995-97 for the new International Journal of Wilderness, which bridges the gap between wilderness, science, education, management, and the environmental community.

The Service Program objectives of the WRC are: to provide and host public forums, conferences and workshops; to provide professional leadership to make the wilderness knowledge and expertise of the University of Idaho available to public and private groups, thereby enhancing their contributions to wilderness stewardship, research, and education.

These research, education and service objectives take advantage of the unique opportunities afforded by Idaho's wilderness resources and the WRC. Benefits to Idaho will accrue as the Center's efforts continue to (1) explain the dynamic processes of natural ecosystems to help protect them, and thereby also contribute to management of developed ecosystems and (2) explain human

responses to wilderness experiences and their impacts and management, which will help determine the acceptable levels of human uses of wilderness that will maintain sufficient naturalness and solitude, and optimize benefits from use of wilderness for personal growth.

TAYLOR RANCH

The Taylor Ranch Wilderness Field Station, now administered by the CFWR Dean's Office, is located in the middle of the Frank Church-River of No Return Wilderness, about seven miles up Big Creek from the Middle Fork of the Salmon River. TR is remote with access limited to a 37 mile trail or by bush plane to a private airstrip for official business.

The Taylor Ranch Program objectives are to provide a location, staging area and facilities to support wilderness research and education programs of the University of Idaho, including the Wilderness Research Center and UI cooperators.

Several major research efforts have been conducted from Taylor Ranch, and others are in progress to study various wildlife species in undisturbed environments, especially those species associated with wilderness settings (See Hendee et al. 1993). These studies include ecology of the species, animal and bird community relationships, predator-prey relationships, and wildlife habitat relationships. Species studies include cougar, marten, owls, bighorn sheep, bobcat, and most recently: grouse by Kerry Reese; amphibians by Chuck Peterson; long-term stream response to disturbance by Minshall et al.; long-term vegetation monitoring by Peek and Yeo; with other studies proposed.

A new laboratory at the Taylor Ranch Wilderness Field Station includes basic labware, microscopes, reference collections, some conventional wet lab facilities and laptop computer with solar power source.

Education efforts at Taylor Ranch include: Two internships, competitively awarded to UI students and funded in recent years by the Ralph M. Bleak endowment for student wilderness research and education; a class in wilderness field ecology staged from Taylor Ranch; with a major effort to develop new summer courses in 1997 launched under leadership from CFWR Dean Charles Hatch.

PLANNING DIRECTION

Following for each of the four program areas (research, education, service and Taylor Ranch) are statements of goals and objectives, the current situation, assumptions about the future and policy guidelines.

RESEARCH PROGRAM

Goals of the WRC research program are to develop long-term information: about wilderness ecosystems and monitoring methods; and benefits and impacts of wilderness use, including methods for their management, that are of such quality and scope to have national and international significance.

Objectives: (1) Establish a long-term program of research that builds a reliable wilderness research and monitoring data base for the FC-RNRW and knowledge of the benefits and impacts of wilderness. (2) Secure, broaden, and diversify short-term and long-term funding to support the research program. (3) Disseminate research findings through journals, monographs, experiment station publications, conference presentations and proceedings. (4) Provide up-to-date research equipment, facilities and logistical support. (5) Promote research by cross-section of university faculty and cooperators. (6) Promote graduate and undergraduate research opportunities.

Current Situation (1994)

Taylor Ranch Wilderness Field Station provides an excellent staging area for research, but has a finite capacity for accommodating research activity without impacting the surrounding wilderness. It includes a landing field, a resident manager to maintain facilities and assist in research project execution, sometimes seasonal pack stock for research and education support, ten buildings including six with lodging space for visiting scientist and field personnel. Total overnight, single bed capacity at the Taylor Ranch Wilderness Field Station is 17 persons.

External funding from the Forest Service and Department of Labor has recently supported a major national study of the feasibility and effects of Wilderness Discovery, a wilderness experience program for youth-at-risk in the federal Job Corps; national study of the wilderness for personal growth industry, including program methods and effects, supported by the McIntire-Stennis program; and the meaning of wilderness experience to disadvantaged youth supported by the Aldo Leopold Institute.

With external funding secured by individual faculty, studies are underway at Taylor Ranch on Stream Recovery from Fire (Minshall of ISU), Amphibians as Indicators of Global Change (Peterson, ISU), Vegetation Change (Peek and Yeo), Bighorn Low Survival (Peek), and Natural Population Regulation in Grouse (Reese).

The Ralph M. Bleak endowment, established in 1992, now stands at more than \$100,000 and yields close to \$6000 per year for student wilderness research and education, and helps support two internships per year at Taylor Ranch. The De Vlieg endowment for wilderness fish and wildlife research is administered by the Department of Fish and Wildlife Resources to support graduate research.

Assumptions About the Future

1. A decline in the number of acres of land unaltered by human activity will increase the value of wilderness and natural environments for research and, thus, the importance of the Wilderness Research Center and the Taylor Ranch Wilderness Field Station. The emerging emphasis on ecosystem management of public lands and concerns over forest and ecosystem health will further increase demand for research on natural ecosystem processes. The TR Wilderness Field Station and surrounding wilderness will continue to be an important location for ecological studies in natural environments and will grow in value as additional information is collected.
2. Federal agencies will decrease emphasis on classification of additional areas and focus on stewardship of existing classified wilderness. This will increase information needs and further increase the demand for wilderness research. As scientific knowledge related to wilderness grows, and as the WRC establishes its base of support and expertise, more focused research direction will be needed.
3. The highest priority for research at the TR Wilderness Field Station will be for projects which develop a greater understanding of the functioning of natural systems and that cannot be conducted adequately in altered environments. Enhancement of existing baseline and monitoring data will increase outside interest in doing research near Taylor Ranch Wilderness Field Station. Due to limited capacity of the facilities at Taylor Ranch, requests to conduct research there will exceed capacity. Therefore, research projects requiring use of the field station will need to be evaluated and prioritized.
4. Widespread use of wilderness for personal growth and education, and completion of WRC studies on this topic should draw favorable attention, strengthen wilderness teaching at UI, and hopefully funding for research and education.
5. As the Wilderness Special Collection at the University of Idaho Library continues to grow, the Center will be able to draw upon these resources to attract scholars studying historical and policy aspects of wilderness in Idaho and the Northwest.

Policy Guidelines

1. The WRC research program will focus on two problem areas: 1) Wilderness Ecosystem Research and Monitoring to enhance understanding of the functioning of natural systems -- featuring studies staged from the Taylor Ranch Field Station. 2) The Use of Wilderness for Recreation, Personal Growth, Therapy, Education and Leadership Development. Problem 2 will be the focus of the WRC campus operation under WRC Director John Hendee. Problem 1 will be the focus of studies at Taylor Ranch and will be administered by the CFWR Dean's Office

2. The WRC will provide leadership in organizing a "Consortium for Wilderness Ecosystem Research and Monitoring" staged at Taylor Ranch and focused on indicators of natural and human influenced conditions. Elements to be considered in the monitoring program include, for example:
 - atmospheric and climatological conditions
 - water quality and hydrology
 - plant and animal species composition, diversity, abundance, distribution, and trend
 - patterns of perturbations from fire, insect and disease
 - visitors' perceptions of naturalness
 - soil erosion, deposition, stability, and compaction
 - exotic species
 - wilderness visitor social and ecological impacts
 - genetic and demographic characteristic of plant and animal populations

3. Studies and programs pertaining to use of wilderness for personal growth will generally not be conducted near Taylor Ranch, thereby reserving capacity of the field station for wilderness ecosystem research and monitoring.

4. Use of the Taylor Ranch Field Station, will require approval of the CFWR Dean and adherence to polices set forth in this plan. Research standards of the FWR Experiment Station will be followed by the Wilderness Research Center because the WRC operates in affiliation with CFWR. That is, a study number and title will be assigned and an FWR Experiment Station number will be assigned to publications.

An evaluation report (e.g. dates, accomplishments, and publications), must be filed with the CFWR Experiment Station after any project is completed.

5. Research and monitoring will respect limitations of wilderness and be carried out with the most sensitive and unobtrusive methods possible to acquire essential data.
6. Upon completion of research projects sponsored and/or supported by the Wilderness Research Center, the principal investigator(s) will deposit with the Center four copies of any reports and publications which result. These publications will be deposited in the WRC files with the University of Idaho Library Wilderness Special Collection, at Taylor Ranch and WRC office libraries.
7. WRC Graduate assistantships (MS and Ph.D.) and research staff position will be established with external funding as possible.

EDUCATION PROGRAM

The goals of WRC educational efforts are to support development of wilderness classroom and field courses in cooperation with academic departments campus-wide.

Objectives: (1) Continue to sponsor the annual Wilderness Resources Distinguished Lectureship. (2) Conduct regional and/or national workshops or conferences concerning wilderness research and management. (3) Promote wilderness related scholarships for undergraduate and graduate students at the University of Idaho. (4) Continue a wilderness internship program at Taylor Ranch. (5) In cooperation with academic departments, continue existing wilderness related courses and encourage the development of additional wilderness related courses campus-wide.

Current Situation (1994)

1. The Center has annually sponsored a Wilderness Resource Distinguished Lectureship, attracting national experts at the forefront of wilderness issues and management (see Appendix B). Each lecture has been printed in booklet form and widely distributed. Four recent lectures have focused on "visions for wilderness" (respectively) in the National Forests (Worf), National Parks (Contor), Fish and Wildlife Refuges (Reffalt), the BLM (Dombeck 1995) and a vision for wilderness in the nation (Roush 1995). In 1996 the lecture was on the Four Healing Shields of Nature by Steven Foster and Meredith Little, teachers and authors in wilderness vision questing.
2. A summer student internship program at Taylor Ranch allows two students to participate in research projects and assist with operations and maintenance. This program dates back to 1972. The WRC also hosts a "Wilderness Issues Colloquium" of speakers and special programs during the academic year that is operated under student leadership.
3. The Center initiated the Michael Frome Scholarship for Excellence in Conservation Writing and continues to aid the College of FWR and Department of RRT in soliciting funding for the Selway Bitterroot Wilderness Memorial Scholarship established in 1980. These scholarships are solely supported through private contributions.
4. From 1991-1995, a summer course was offered to up to twelve students, staged from Taylor Ranch, on "Field Research in Wilderness Ecology." This course was offered cooperatively 1991-94 by UI and San Francisco State University Wildland Studies Program, but in 1995, the UI sponsored the course alone. The course was not offered in 1996 and its future is uncertain.
5. The WRC has developed a proposal for a National Science Foundation research experience for undergraduates, a program that would take place from Taylor Ranch. The proposal was rejected but could be re-submitted in response to feedback if a faculty member were available to lend the effort.

Assumptions About the Future

1. Increasing awareness of wilderness and protected areas worldwide will create more interest in education about wilderness and protected area use, protection and management.

2. There will be increasing demand for use of the Taylor Ranch Wilderness Field Station as a location for professional continuing education. Educational program expenses of the WRC, and the Taylor Ranch Wilderness Field Station, will continue to grow and require increased financial support.

Policy Guidelines

1. Educational activities associated with the WRC will give priority to courses offering University of Idaho credit, and which are self-supporting. Programs at Taylor Ranch will be under direction of the CFWR Dean's Office.
2. Educational programs co-sponsored by the WRC and using Taylor Ranch Wilderness Field Station, (conferences, short courses, etc.) will require a proposal (including objectives, justification, agenda, and budget) approved by the center director. An evaluation report (e.g., dates, attendance, accomplishments, and critique) will be filed after each program and summarized in the WRC annual report and publicity.
3. All educational programs sponsored by the Wilderness Research Center and conducted in wilderness will respect limitations of wilderness and employ the most unobtrusive and low impact techniques that are necessary.

SERVICE

The goals of service efforts by the WRC are to make the wilderness expertise of the UI available to help advance wilderness stewardship, research, and education in Idaho, the nation, and the world.

Current Situation (1994)

The WRC has sponsored and or provided leadership for several national and international conferences, symposia and task forces described more fully in the Overview section of this plan.

Assumptions About the Future

As the WRC increases its research and education activity, its available expertise will expand and so will its potential for service activities. The WRC can provide expertise on wilderness management, wilderness planning processes, wilderness ecosystem research and monitoring, and the use of

wilderness for personal growth, Leave No Trace wilderness travel and camping practices, and other wilderness topics.

Policy Guidelines

1. Develop and offer through appropriate departments, wilderness short course(s) for professionals, educators, and the lay public, provide consultation to external organizations relative to their wilderness research, management, and education.
2. The Wilderness Research Center will continue to sponsor workshops, conferences, and lectures which draw together wilderness scientists, educators, managers, and the public.
3. Provide leadership in wilderness scholarship and education including: providing leadership for regional, national, and international task forces and conferences, the Wilderness Management textbook authored by the WRC Director and the new International Journal of Wilderness for which WRC Director Hendee is Managing Editor and RRT Professor Fazio is Book Review Editor and RRT Professor Ed Krumpe is an Associate (technical review) Editor.

TAYLOR RANCH WILDERNESS FIELD STATION

Under direction from the CFWR Dean's Office, the goals of the Taylor Ranch Wilderness Field Station are to facilitate wilderness ecosystem research, monitoring, and related field classes in the Frank Church-River of No Return Wilderness.

Objectives: Provide a location, staging area and facilities at Taylor Ranch Wilderness Field Station in the Frank Church-River of No Return Wilderness to support wilderness-dependent research, monitoring, and education programs including those of the UI Wilderness Research Center and cooperators.

Current Situation (1995)

1. Description of the Facility: Taylor Ranch is remote and must be accessed by bush plane or a 37 mile trail that is only open seasonally. Most supplies and people arrive by plane from Cascade, McCall, Moscow, or Challis. Regular flights bring mail and supplies weekly from June to November and bi-monthly during December to May. A radio cooperative located in Cascade, Idaho, provides radio phone communication on an

intermittent schedule. Access, transportation, and communication are major expenses which are steadily increasing.

2. A full-time resident manager, Dr. Dave Duncan and his wife, Stefanie, live year round at Taylor Ranch Wilderness Field Station providing for operation and maintenance of the facility and coordination and assistance for research and education. They will leave in August 1997.
3. Two wilderness interns are competitively selected each year to spend the summer at Taylor Ranch working under direction of the resident manager to help with maintenance and operation of the Field Station, and to assist with research, as assigned by the resident manager to principal investigators.
4. Six buildings provide sleeping capacity for seventeen persons. Some cabins have running water eight months of the year (April - November). Limited solar electricity is available and there is a gasoline generator for emergency use. Lighting is provided by propane lights or Coleman lanterns and limited propane refrigeration is available. Kitchens are outfitted with propane stoves, dishes and cooking utensils. Bunk bed frames and mattresses are available. Buildings are heated with wood stoves, but the Arlo cabin has propane heat.
5. A field laboratory includes basic labware and wet lab facilities, portable computers, microscopes, species lists, reference animal collections and herbarium, map and aerial photo collection, and a library collection of research publications pertinent to the area, as well as agency publications and reference books.
6. Four head of pack stock have been seasonally available for transporting equipment and personnel to wilderness locations away from Taylor Ranch Wilderness Field Station. Some camp gear is available at the station. Arrangements can be made for special services, including: long-term data collection, packing services, and organizing for groups, and other services to facilitate research. (See Fee Schedule in Appendix C). The Taylor Ranch has provided facility support for employees of the Idaho Fish and Game and Forest Service working in the area, and in 1996 as an emergency alternative landing strip for the Forest Service and three legal permittees, until flood damage to the Cabin Creek airstrip can be repaired.
7. WRC and Taylor Ranch Wilderness Field Station personnel make it a priority to maintain a good working relationship with agencies, organizations, and private outfitters and guides operating in the surrounding area.

8. Several research projects are currently being conducted from the Taylor Ranch Field Station. During the past decade public relations efforts have included two award-winning video tapes about Taylor Ranch Field Station which were shown nationwide by approximately 154 public and commercial broadcasting stations. The *Mister Wizard Science Show* aired a Taylor Ranch video tape over approximately 132 stations. ABC *Good Morning America* showed a five-minute video tape on the mountain lion research at Taylor Ranch Wilderness Field Station. A feature length (28 min.) television program entitled, "Taylor Ranch -- America's Wildest Classroom" has been prepared by the University of Idaho News Bureau for broadcast over Idaho's Public Television Broadcasting network. "Idaho the University" magazine produced feature article on Taylor Ranch in the Winter of 1986 issue and the UI Alumni News featured an article in spring 1994. American Forests featured research at Taylor Ranch in an article in (Kale 1995). The Taylor Ranch Wilderness Field Station has also been featured in several local newspaper and magazine articles. Several public presentations on Taylor Ranch, including slide shows at national and regional scientific and professional meetings, have been made by WRC staff.

Assumptions About the Future

1. The demand to use Taylor Ranch Wilderness Field Station for research and education purposes will steadily increase.
2. Operating expenses for maintenance, flights, horse feed, equipment and supplies, building repairs and materials, and labor costs will continue to increase both from inflation and as a result of increased use and aging of the facilities, e.g., stream bank stabilization; repair of roofs, water lines and septic systems; replacement of inefficient wood stoves and fire prevention, solar system, irrigation, fire prevention, and limited solar electricity development.
3. As demand for use of the field station increases, more detailed guidelines will be needed to prioritize research and educational projects to be conducted from Taylor Ranch Wilderness Field Station.
4. Income from fees assessed for use of Taylor Ranch Wilderness Field Station facilities must increase and must support more of the cost of operations and maintenance and begin to provide seed money to help support worthy studies.
5. The WRC will need to work with the US Forest Service and Idaho Fish and Game guidelines to ensure that research and monitoring methods will

respect limitations of wilderness and be carried out with the most sensitive and unobtrusive methods possible to acquire essential data.

Policy Guidelines

1. (a) The Taylor Ranch Wilderness Field Station shall only be used for research, educational or service activities, or efforts seeking to further those activities.

(b) Taylor Ranch will only be used for educational activities that utilize a wilderness-dependent field setting, emphasize hands-on learning, and normally offer university credit. Research and educational activities not dependent upon natural, undisturbed ecosystems or related to their use will be conducted elsewhere.

(c) Use of the facilities for non-wilderness related activities or conferences, commercial activities, recreation, personal or non-official business is specifically prohibited.
2. Management and operation of the field station will be sensitive to its unique location surrounded by classified wilderness. Activities at Taylor Ranch, along with associated research and travel to and from the Ranch, will respect the spirit of wilderness and will be conducted in such a manner as to have minimal impact on the wilderness. The UI is publicly committed to such principles for Taylor Ranch Operation (Yeo et al. 1994).
3. (a) All use of the Taylor Ranch Wilderness Field Station facilities will be approved by the CFWR Dean or the Taylor Ranch Wilderness Field Station resident manager.

(b) The airstrip will remain private and may only be used for UI official business related to wilderness research, teaching or service. (Taylor Ranch Visitor Policies are outline in Appendix D.)

(c) Appropriate use of Taylor Ranch is subject to CFWR research policies and commitments and Taylor Ranch policies and use fees.
4. Fees will be charged for all use of Taylor Ranch. All use will be accounted for within the fee structure by either collection, waiver of fees or payments in kind. Waiver of fees may be approved by the CFWR Dean or the Taylor Ranch resident manager in support of TR objectives. A fee schedule is included in Appendix C. Fees will be re-evaluated periodically and adjusted as necessary.

5. Research activities will be given first priority at Taylor Ranch, followed by educational programs and then service.

ORGANIZATION AND STRUCTURE OF THE WRC

The Wilderness Research Center, is a unit of the College of Forestry, Wildlife and Range Sciences, and was expanded July 1, 1994 to re-emphasize a campus-wide focus. The WRC Director (Hendee) is a tenured professor of Resource, Recreation and Tourism but reports to the CFWR Dean. The WRC is housed in the CFWR building in offices adjacent to the Resource, Recreation and Tourism Department. CFWR provides administrative services and support, and provides a college link for plans, proposals, budget, personnel, policy and other matters of importance related to wilderness. January 1, 1997, the Taylor Ranch Wilderness Field Station operations and associated wilderness ecosystem research and monitoring (Problem 1) will be transferred to the CFWR Dean's Office to facilitate the WRC Director's leadership of the growing and international program of research in use of wilderness for personal growth (Problem 2).

The director seeks advice and guidance concerning policies and programs from a Wilderness Research Center--Campus Wide Advisory Committee made up of UI faculty, staff and administrative leaders. The resident manager of the Taylor Ranch Wilderness Field Station (Duncan) now reports to the CFWR Dean. Dr. Ed Krumpe, Professor of Resource Recreation and Tourism is principal scientist for wilderness management in the WRC, with two-thirds of his salary paid by the WRC. Programs requiring additional staff (e.g., project technicians, research associates, interns, irregular help) are supervised by either the director, resident manager or principal scientist depending upon assigned tasks. An administrative secretary provides clerical and administrative support.

Responsibilities of the Director

The director is the WRC chief executive with responsibility for administration and management of the Center and implementation of its policies, programs, budgets, and facilities. Policies for the Center are contained in this center's Strategic Plan, prepared by the director with counsel from the Campus Advisory Committee and CFWR Dean.

The director is responsible for development and implementation of center programs and management of WRC facilities. Major responsibilities of the director include: (1) preparing and implementing annual budgets and action plans for research, education and service programs; (2) pursuing cooperative research projects; (3) soliciting funding for center programs; (4) supervising and

evaluating center personnel; (5) maintaining working relationships with the WRC Campus Advisory Committee, pertinent external organizations and cooperators.

Responsibilities of the Taylor Ranch Wilderness Field Station Resident Manager

The resident manager reports to the CFWR Dean and is delegated day-to-day responsibility for management of the field station facilities and coordination of research and education activities conducted at Taylor Ranch. The resident/manager serves as the principle field station contact representing the Taylor Ranch and its programs to the public, Frank Church-River of No Return Wilderness management personnel, Idaho Fish and Game personnel, WRC researchers and visitors, outfitters and guides, commercial and private pilots, media representatives, and local residents. He or she also has research and education responsibilities for coordinating field research, assisting researchers in collecting field data, and hosting potential researchers and representatives of potential funding institutions in coordination with the director. The resident manager's duties are: (1) operate and maintain Taylor Ranch facilities; (2) facilitate and coordinate the research and education activities of other faculty and cooperators working from the field station, and (3) assist faculty and cooperators in their research and education activities. The resident manager submits an annual report of activities at the Taylor Ranch Field Station for the annual report of the Wilderness Research Center and Focus -- Report of the FWR Experiment Station, and may write periodic reports of research at TR for other publications.

Responsibilities of Other Staff

Responsibility of additional staff (e.g., principal scientist, project technicians, research associates, scientists, interns, irregular help) will be defined in job descriptions. These will be developed as needed by the director or CFWR Dean. The WRC Director, resident manager, and advisory committee work toward creating opportunities for other faculty, scientists, post doctoral fellows and research associates to affiliate and work with the WRC.

Wilderness Research Center Campus Advisory Committee

The purpose of the Wilderness Research Center Campus Advisory Committee is to provide advice to the WRC Director and CFWR Dean on the functions of the Center and the operation of its Taylor Ranch Wilderness Field Station. Members will assist in attaining balance by helping develop policy, insuring that all aspects of the wilderness resource are considered in its programs and that there is campus-wide participation in WRC programs and activities. The committee also helps identify sources of funding and assists in the preparation, evaluation, and support of proposals. One valuable function of the committee is as a sounding board and source of advise and wisdom toward

establishing and maintaining high standards of excellence to which wilderness research, education and service at the University of Idaho aspire.

Committee Membership

The Wilderness Research Center Campus Advisory Committee will consist of campus executive leaders and scholars representing pertinent program areas of the university. Members are appointed by the Wilderness Research Center director and the CFWR Dean. Members are appointed for three-year staggered terms. Members serve without compensation. A list of current members of the Advisory Committee is contained in the appendix.

External Organizations

External organizations and private citizens with demonstrated leadership in wilderness matters will periodically be consulted on WRC programs and affairs as appropriate, e.g.:

Federal Land Management Agencies (e.g., USFS, BLM, NPS, USFWS)

Idaho natural Resource Agencies (e.g., Fish and Game,
Parks and Recreation)

Private Associations or non-profit Wilderness Users (e.g., Idaho
Outfitters and Guides Association; Back Country Horsemen;
Wilderness Guides Council, etc.)

Conservation Organizations (e.g., Wilderness Society, WILD Foundation,
Wilderness Watch)

Prominent Wilderness Operators, Outfitters and Leaders, etc.

Committee Organization and Function

The Wilderness Research Center Director will chair meetings of the Campus Advisory Committee, provide an agenda in advance, generate and distribute minutes. Committee members may submit agenda items to the Director at any time. The committee will meet about twice each year. The principal scientist for wilderness management will be an ad hoc member of the Advisory Committee.

The Campus Advisory Committee will receive copies of publications, study reports, plans, proposals and correspondence pertinent to their responsibilities with the Wilderness Research Center. Members are encouraged to communicate directly with the director or CFWR Dean at any time.

LITERATURE CITED

- Hendee, John C., Jeff Yeo and Vito LaSalle. 1993. *The Taylor Ranch Wilderness Station*, University of Idaho Wilderness Field Station.
- Leopold, Aldo. "Wilderness As A Land Laboratory", *Living Wilderness*, 1941.
- Yeo, Jeff, Ed Krumpe and John Hendee. 1994. "The Taylor Ranch Wilderness Field Station in the Frank-Church River of No Return Wilderness", Proceedings: Symposium on *Future Visions For Management of the Frank Church-River of No Return Wilderness*, University of Idaho Wilderness Field Station.
- Hendee, John C. 1996. Proposal for a Consortium for Wilderness Ecosystem Research and Monitoring in the Frank-Church River of No Return Wilderness," unpublished proposal on file University of Idaho Wilderness Research Center.
- Hendee, John C. 1994. Wilderness Experience Programs for Personal Growth Therapy, Education and Leadership Development: Their Extent, Social, Economic and Ecological Impact and Ecosystem Management Policy Implications. Research Proposal 1995 - 2000, funded by McIntire-Stennis and other grant funds.
- Friese, Gregory, Taylor Pittman and John C. Hendee. 1996. Studies of the Use of Wilderness for Personal Growth, Therapy, Education and Leadership Development: An annotation and Evaluation, available from UI Wilderness Research Center electronically or hard copy, \$30.
- Hendee, John C., George H. Stankey and Robert C. Lucas. 1991. Wilderness Management, *N. Am. Press of Fulcrum Publishing Co.*, 581 pp.
- Kale, Marla. 1995. Wilderness and the Human Spirit, *American Forests*.
- Hendee, John C. 1995. Why Universities Must Play a Larger Role in Wilderness Research, *Trends in Parks and Rec.*, 32(1), 22-27 pp.

APPENDIX A
FUNDING OF CURRENT AND PAST RESEARCH
ASSOCIATED WITH THE WILDERNESS RESEARCH CENTER

<u>Project/Principal Investigator</u>	<u>Funding Source</u>	<u>Amount</u>	<u>When (Estimated)</u>
Mountain Lion Ecology & Predator-Prey Study Dr. Maurice Hornocker	NY Zoological Society Smithsonian Institute National Geographic	\$150,000 50,000	1970s; early 1980s
Prehistoric Settlement & Subsistence Patterns Dr. Frank Leonhardy	National Geographic Soc USDA Forest Service UI Research Council Idaho State Historical Society	\$20,000 2,000 3,200 2,000	1975-85
Ecology of the Bobcat in River of No Return Dr. Maurice Hornocker & Gary M. Koehler	USDA Fish and Wildlife National Wildlife Federation	\$225,000	1975-85
Bighorn Sheep Competition on Winter Range Ms. Holly Akenson	Wilderness Research Center	10,000	1986-88
Identification & Evaluation of Indicators to Monitor Wilderness Conditions Dr. Edwin Krumpe	McIntire-Stennis Wilderness Research Center	20,000	1985-87
Assessing Recreation Impacts in the Wilderness Dr. Edwin Krumpe	McIntire-Stennis Wilderness Research Center	10,000	1988
Habitat of Boreal Owl in Central; Idaho Dr. Oz Garton and Gregory D. Hayward	Idaho Fish & Game USFS, WRC National Bluebird Society	47,000	1985-88

Human-Bear Interaction at Pack Creek Preserve, Admiralty Island, AK Dr. Edwin Krumpe	USDA Forest Service	9,000	1984
Communication with the Wilderness Visitor Dr. James Fazio	Northwest Regional Commission	20,000	1982-84
Laptop Computers to Measure Campsite Impacts Dr. Edwin Krumpe	McIntire-Stennis & WRC	4,000	1988
Comparison of Wilderness Inventory Techniques of BLM & USFS Dr. Edwin Krumpe	McIntire-Stennis & WRC	5,000	1989
Assessment of Scientific Studies at Glacier National Park Drs. Gerald Wright and Ed Krumpe	National Park Service	20,000	1982-85
Wilderness Evaluation Approaches of the BLM & USFS: A Survey Research Comparison Martin Sharp and Dr. Ed Krumpe	FWR Experiment Station Wilderness Research Center	2,000	1984
Resource Partitioning Around Six Forest Owls in the River of No Return Wilderness Dr. Oz Garton and Gregory D. Hayward	Multiple Sources	30,000	1985-87

A Winter Passerine Ecology Study in the River of No Return Wilderness Dr. Winward Kessler and Susan L. Tank		?	1980
Documentation of Historical Resources in the Idaho Primitive Area, Big Creek Drainage Dr. James Fazio and John W. Hartung	National Geographic Society	?	1982
Amphibian Survey of Big Creek Drainage Dr. Charles Peterson, ISU	Payette National Forest	3,000	1994
Wilderness Monitoring of Amphibian Populations in the Frank Church-River of No Return Wilderness Dr. Charles Peterson, ISU	Idaho State University Wilderness Research Center	?	1995
Meta-populations Analysis of Amphibian Populations in Relation to Fish Stocking in the Bighorn Crag Dr. Charles Peterson	Intermountain Research Station	6,000	1994
Wilderness Stream Community Response to Wildlife Dr. Wayne Minshall, ISU	Payette National Forest	20,000	1990-95
Methodologies for Assessing Stream Integrity in Wilderness Dr. Wayne Minshall, ISU	Aldo Leopold Wilderness Research Institute	40,000	1994

Natural Regulation of Bighorn Sheep Population Dr. James Peek	Idaho Department of Fish and Game McIntire-Stennis	20,000	1988
Monitoring Vegetation Composition & Productivity in Big Creek Drainage Dr. James Peek	McIntire-Stennis and various sources	20,000	1990
Monitoring Terrestrial Community Response to Natural Disturbance Dr. Jeffrey Yeo	Wilderness Research Center		1990-95
Ecological Fitness of Naturally Regulated Forest Grouse Lineages Dr. Kerry Reese	Wilderness Research Center	3,000	1993-95
Annual Monitoring of Juvenile Chinook Salmon Out-migration Timing and Survival			1992-95
National Marine Fisheries Service	National Marine Fisheries Service		
Annual Monitoring of Anadromous Chinook Salmon and Steelhead Reproduction Idaho Dept. of Fish & Game	Idaho Dept. Of Fish & Game		1992-95

STUDIES ASSOCIATED WITH WILDERNESS USE

Project/Principal Investigator	Funding Source	Amount	Year
Analysis and Abstract of 103 Wilderness Laws John Hendee	McIntire-Stennis CFWR	\$15,000	1986-1988
Identify, annotate, and classify published studies of Use of Wilderness for Personal Growth John Hendee	US Forest Service SE Forest Experiment Station Wilderness Research Center	\$15,000	1992-1995
Wilderness Discovery -- Feasibility of Seven Day Wilderness Experience Program for Poverty Youth in the Curlew Job Corps Center, Colville National Forest. John Hendee	Colville National Forest -- in kind and employment of students	\$15,000	1992-1993
Wilderness Discovery Two Year Pilot Program and Study of Effects John Hendee	US Forest Service US Department of Labor University of Idaho WILD Foundation	\$105,000	1993-1995

Meaning of Wilderness Experience to Economically Disadvantaged Youth John Hendee	Forest Service Aldo Leopold Wilderness Research Institute Wilderness Research Center	\$26,000	1994-1995
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Wilderness Experience Programs for Personal Growth, Therapy, Education and Leadership Development: Their Extent, Social, Economic and Ecological Impact and Ecosystem Management Policy Implications John Hendee	McIntire-Stennis	\$ \$125,000	1994-1999
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APPENDIX B
WILDERNESS RESOURCES DISTINGUISHED LECTURESHIPS

Date	Distinguished Lecturer	Title
1977	Senator Frank Church	Wilderness in a Balanced Land Use Framework
1978	Roderick Nash	Wilderness Management: A Contradiction in Terms?
1979	Cecil D. Andrus	Reorganization and the Department of Natural Resources Implications for Wilderness
1980	Patrick F. Noonan	Preserving America's Natural Heritage: The Decade of the Eighties
1981	Russell E. Dickenson	Wilderness Values in the National Parks
1982	Michael Frome	Battle for the Wilderness: Our Forever Conflict?
1983	Agency Directors (USFS, BLM, NPS, USFWS)	Issues in Wilderness Management
1984	Brock Evans	In Celebration of Wilderness: The Progress and the Promise
1987	Jay D. Hair	Wilderness: Promises, Poems, and Pragmatism
1988	Ian Player	Using Wilderness Experience to Enhance Human Potential
1989	Chief Oren Lyons	Wilderness in Native American Culture
1991	Bill Worf	A Vision for Wilderness in the National Forests

1992	Roger Contor	A Vision for Wilderness in the National Parks
1994	Bill Reffalt	A Vision for Wilderness in the US Fish & Wildlife Refuges
1995	Mike Dombeck	A Vision for Wilderness on BLM Administered Lands
1995	Jon Roush	A Vision for Wilderness in the Nation
1996	Steven Foster/ Meredith Little	The Four Healing Shields of Nature

APPENDIX C
**Policies for Use of
Taylor Ranch Wilderness Field Station
University of Idaho Wilderness Research Center
5/1/96**

Taylor Ranch Wilderness Field Station is a facility of the University of Idaho College of Forestry Wildlife and Range Sciences (CFWR). The mission of Taylor Ranch Field Station is to host and facilitate wilderness ecosystem research and monitoring and wilderness user studies, to offer wilderness-dependent educational courses emphasizing hands-on learning experiences and to provide service to federal and state natural resource agencies in support of their wilderness data gathering efforts. The field station maintains a simple laboratory, research library, animal and herbarium reference collection, and research data base.

Taylor Ranch is located in the heart of the Frank Church-River of No Return Wilderness (FCRNRW) and can be accessed by trail, or by air for official business. The closest trail head is about 37 miles to the west at Big Creek. Other trailheads are at Meyer's Cove (about 50 trail miles to the east) or Bighorn Crags campground (about 40 trail miles). Air access is by small "bush" plan from Cascade, McCall, and Challis. The private field station airstrip is rugged, requiring experienced pilots. Use of the airstrip is limited to that supporting Taylor Ranch programs and requires approval by the dean, College of Forestry, Wildlife and Range Sciences, or Taylor Ranch Field Station Resident Manager.

Policies

Space at Taylor Ranch is limited and teaching, research, and other activities must be coordinated. Use of the Taylor Ranch Wilderness Field Station requires approval by the dean, College of Forestry, Wildlife and Range Sciences, or Taylor Ranch Resident Manager at least one month prior to proposed use. Users conducting on-going research must provide a schedule of their planned field station use; once the schedule is approved, the dean or resident manager must be given prior notice of any changes (e.g., dates and numbers of personnel using the facility).

- All users are subject to established Field Station user fees (see attached).
- Permission to use the field station **airstrip** must be obtained from the dean or resident manager.
- Users are responsible for cleaning the facilities they used and flying or packing out their trash.
- A radio-phone is available for **emergency** or **business** purposes only, but fees must be paid by the caller.
- Users may fish (catch and release) during their free time, but may not hunt from Taylor Ranch. No game may be flown from Taylor Ranch. All Idaho fish and game regulations must be obeyed.
- Users in residence must obtain permission from the dean or resident manager to have personal guests.
- Users may not bring **pets, riding, or pack stock** except with prior permission of the resident manager.

- Users should exhibit "back country hospitality," including accommodating emergency requests, giving directions, and explaining on-going projects and respecting the spirit of the surrounding wilderness.

Fees

All fees are payable to the University of Idaho Taylor Ranch Field Station. Any adjustment in fees and payment schedules must be negotiated and agreed to in writing with the dean, College of Forestry, Wildlife and Range Sciences, Taylor Ranch Resident Manager, prior to initiation of projects. Arrangements may include exchange of services to the Field Station to offset fees, e.g. putting up firewood, mowing airstrip, special field station projects.

- **Lodging:** lodging fees are \$12.00 per day per person during **May through September**. From **October through April** lodging is \$14.00 per day per person to cover costs of firewood and additional propane use. Users must provide their own bedding. Special biodegradable-degradable bath soap, shampoo, dish soap, and laundry soap will be provided to limit impacts to the wilderness environment.
- **Food:** Taylor Ranch users must bring their own food and prepare their own meals. Kitchens are available with refrigerators, stoves, ovens, pots and pans, and utensils. Provisions for meals for large groups will be negotiated separately with the resident manager.
- **Research Support:** Field Station staff can provide horse-packing services to transport research equipment, camp supplies, and personnel to remote study sites. A daily fee of **\$10.00** per horse per day and **\$60.00** per Field Station staff per day to handle stock will be charged. Arrangements can be made for Field Station personnel to collect data in the absence of the researcher. A **data collection fee** will be negotiated based upon the frequency of data collection, and the amount of time and effort required. If studies require significant use of the Field Station laboratory, a **laboratory fee** may be negotiated.
- **Clean-up:** Users are responsible for keeping living quarters, kitchens, and laboratory clean and in good repair. **All garbage not composed or burned must be flown or packed out.** Cleaning supplies are available for use in each building. If additional clean-up or repairs by station personnel are necessary after the premises are evacuated, a **\$25.00** per hour cleaning fee plus costs of supplies will be levied.

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