

*J. Ehrenreich*

TEACHING/RESEARCH/SERVICE  
Forest/Range/Wildlife  
Fisheries/Utilization

University of Idaho

College of Forestry,  
Wildlife and Range Sciences  
Moscow, Idaho 83843

December 22, 1975

TO: Mr. William Bruner, Director  
Pacific Northwest Regional Commission

FROM: Dr. James R. Fazio, Assistant Professor  
Wildland Recreation Management Program

SUBJECT: Quarterly Report

PROJECT: "Wilderness Information Sources and Channels Utilized by  
Recreationists in the Selway-Bitterroot Wilderness Area"  
(Originally, "Wilderness Resource Analysis")

Progress to Date

As reported October 6, 1975, during the first year of this two-year study most of our efforts were directed toward development of the study plan, including research strategies and testing instruments. The latter, consisting of written questionnaires, a short oral interview, and summary forms, were pretested on several groups during the final quarter of the year. More revising and testing followed and the final draft has been forwarded to Office of Management and Budget for approval.

Other activity during this quarter included a visit with Dr. Robert Lucas of the U. S. Forest Service, Intermountain Forest and Range Experiment Station. Dr. Lucas reviewed the questionnaires and our final plans for next year's field work. His suggestions and cooperation have been most valuable to the project.

In the message analysis substudy, our second mailing was completed. In this part of the project, letters are sent to units of managing agencies responsible for wilderness or primitive areas. The letters contain a request "for any

information that might be helpful" in planning a backpack trip into the specified wilderness or primitive area. The mailed responses are presently being analyzed using the Flesch Readability Scale. This is a tedious procedure and is the first step in an overall analysis of wilderness-related information being disseminated by agencies. Spot checks and visual inspection of the 70 returns to date indicate an extreme variation in quality with many agencies providing little or no information that might help visitors voluntarily modify their behavior to protect the wilderness resource.

Financial Position

<u>Item</u>	<u>Amount Budgeted</u>	<u>Redistributed Budget*</u>	<u>Expenditures to Date</u>	<u>Amount Remaining</u>
Salaries	\$5,241.00	\$6,041.00	\$2,016.32	\$4,024.68
Irregular Help	1,500.00	976.00	-0-	976.00
Staff Benefits	959.00	983.00	983.00	-0-
Travel	3,000.00	3,000.00	218.65	2,781.35
Other Expenses	1,000.00	1,000.00	126.47	873.53
Capital Outlay	300.00	-0-	-0-	-0-
TOTALS	\$12,000.00	\$12,000.00	\$3,344.44	\$8,655.56

\* Includes transfer of funds originally budgeted for capital outlay which inadvertently was contrary to contract stipulations.

Plans for Next Quarter (Jan. 1 - March 31, 1976)

During this quarter a final, detailed survey schedule will be developed for the field season. Initial data collection may be made through testing individuals in the commercial outfitter user group and perhaps some in the group leader category, but more than likely April will be the more opportune time for these interviews.

March 16 is the date for our mailing to the final third of those agency units being studied in the message analysis substudy.

cc: R. Bartlett  
W. Bramlette  
J. Ehrenreich  
K. Sowles

## PROPOSAL FOR RESEARCH

### AN ANALYSIS OF OPPORTUNITIES FOR COMMUNICATION AND EDUCATION DIRECTED AT REDUCED RECREATIONAL IMPACT ON THE IDAHO PRIMITIVE AREA

#### Introduction

In 1962 a report from the University of California's Wildland Research Center included the following findings and recommendations:

Inappropriate and destructive wilderness recreation is frequently due to inadequate skill and knowledge. Very little active effort is directed toward improving these critically weak aspects in the use of wilderness areas. We suggest that government agencies develop enlarged public education programs concerning wilderness purposes, regulations and wilderness recreation techniques . . . (ORRC, 1962; p. 303).

Within a decade visitation to wilderness<sup>1</sup> was found to have grown phenomenally. At the same time, indications are that efforts to educate recreationists in techniques of low impact use have been practically nonexistent. What efforts do exist are rarely measured for effectiveness. They are judged by some quantity of message dissemination rather than for success in reaching the target audience (wilderness users) or the final impact on that audience (Fazio, 1974).

Of the several management tools available to agencies charged with the administration of wilderness areas, "education" is the most palatable, least controversial, and possibly one of the most effective methods known (Hendee and Lucas, 1974; Fazio, 1974). However, even for those agency personnel desiring to employ this method of user control, there remains the first problem of reaching the specific involved publics with the appropriate messages.

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<sup>1</sup>Wilderness is used here in the context of areas within the National Wilderness Preservation System and areas being studied for inclusion.

Justification

In a national park situation, the problem of reaching wilderness users is relatively simple because of the high degree of visitor regimentation and opportunities for contacts with park officials. In a national forest, even with the prospects of a nationwide wilderness permit system (Lime and Buchman, 1974), the communication problem is magnified because of more dispersed use, larger land areas and comparatively lax regulations which reflect a somewhat different management direction.

The purpose of this study is to determine optimum channels of communication with the intent of educating the greatest possible numbers of recreationists in techniques of minimizing their impact on the wilderness environment.

The Idaho Primitive Area has been selected for several reasons. These include: 1) It is one of the largest units of wilderness in the 48 contiguous states. The challenges of educational methods would be greatest under these circumstances. 2) It is a national forest unit. Some potential educational methods have been developed and tested in a national park situation, but none are known to have been studied in a national forest wilderness. 3) The University of Idaho's Taylor Ranch is centrally situated in the Idaho Primitive Area. The study falls within the research and educational objectives of this facility. Additionally, housing, work space and a landing strip are available at the ranch to help facilitate the project.

Findings from this applied research would have practical implication for wilderness areas, both in Idaho and throughout the West. The results would also be fundamental to additional research concerned with maximizing the effectiveness of education as a management tool. Ultimately, in a democratic society, it will be the success or failure of behavioral modification through education that will determine the future quality of the nation's unique wilderness resources.

#### Research Objectives

Primary objectives:

1. To preserve the Idaho Primitive Area and other northwestern wilderness areas in a state of highest environmental quality through the stimulation of education as a management tool.
2. Based on research findings, to recommend to the U.S. Forest Service and other interested organizations optimum methods of educating wilderness recreationists using the Idaho Primitive Area.

Sub-objectives:

1. To describe user characteristics, concentrating on those characteristics relative to the communication process between the managing agency and the recreationist.
2. To identify sources and communication channels commonly used by the recreationists in obtaining information pertinent to wilderness behavior.
3. To identify, and list in order of priority, user groups needing the educational efforts of the managing agency.

### Methods

Data will be obtained through a combination of written and oral interviewing both within the Primitive Area and at the residences of certain users.

#### Sampling

1. On-site interviewing will be conducted on randomly selected trails throughout the Idaho Primitive Area.
2. Sampling will be continuous throughout July and August and at practical intervals during the autumn hunting season.
3. Only party heads will be used in the study. The reason is because of their probable influence on group behavior, and to limit oral interviewing (communication pattern segment of survey) to a manageable number of subjects. An exception will be a sub-sampling of members of commercially-guided hunting parties, because of a supposition that behavioral influence is particularly two-way in this case, i.e. the guide will react to behavioral standards expected by his clientele. Also, all members of the party will be administered the written portion of the questionnaire to determine knowledge levels for comparison between user categories.
4. Parties sampled will be limited to those using the wilderness for recreational purposes and remaining for at least one night. River rafters will be excluded on the basis that they constitute a unique user group better suited to separate research.

5. Samples of commercial packers operating in the area will be obtained through Forest Service listings. Through pre-contact correspondence or telephoning, interviews will be arranged at times convenient to the packer and his guests so as not to interfere with their operations in the field.
6. Samples of organized group leaders (Boy Scouts, church groups, etc.) will be augmented by obtaining names and addresses of these individuals from special forms located at trailhead registration stations.

#### Questionnaire

1. A standardized questionnaire form will be developed that can be partially completed by the visitor. One portion, designed to probe communication patterns, will be administered orally by the interviewer.
2. The instrument will be used to obtain data in three general categories:
  - a. socio-economic background.
  - b. knowledge-levels regarding low impact wilderness use.
  - c. communication channels through which information on wilderness behavior is normally obtained.

#### Analysis and Reporting

All information will be computerized for summation and analysis of statistically significant differences. Results will be reported at least partially in the form of a Master of Science thesis and totally as a soft cover publication suitable for distribution to interested researchers or other individuals.



Personnel

Principle Investigators: James R. Fazio, Assistant Professor  
Wildland Recreation Management Program  
College of Forestry, Wildlife and Range Sciences  
University of Idaho

David F. Johnson, Graduate Student (M.S.)  
Wildland Recreation Management Program  
College of Forestry, Wildlife and Range Sciences  
University of Idaho

Consultants: Floyd L. Newby, Director  
Wilderness Research Center  
Wildland Recreation Management Program  
College of Forestry, Wildlife and Range Sciences  
University of Idaho

Richard I. Walker, Research Associate  
Wilderness Research Center  
Wildland Recreation Management Program  
College of Forestry, Wildlife and Range Sciences  
University of Idaho

Time Schedule

Detailed project planning, preparation and review of literature	Spring, 1975
Field interviewing	July - approx. November 15, 1975
Data Analysis	December, 1975 - March, 1976
Report completion	June 30, 1976



Literature Cited

- Fazio, James R. 1974. A mandatory permit system and interpretation for backcountry user control in Rocky Mountain National Park. Ph.D. dissertation, Colorado State Univ. 246 pp.
- Hendee, John C. and Robert C. Lucas. 1974. Police state wilderness: a comment on a comment. J. of Forestry 72(2): 100-101.
- Lime, David W. and Roland G. Buchman. 1974. Putting wilderness permit information to work. J. of Forestry 72(10): 622-626.
- Outdoor Recreation Resources Review Commission. 1962. Wilderness and recreation - a report on resources, values, and problems. ORRRC Study Report No. 3, Univ. of California Wildland Research Center. 352 pp.

The purpose of this form is to provide a checklist for the Principal Investigator(s) plus secure Institutional approval.

Institutional Policy Requires Submission to the Coordinator of Research then to Controller's Office at least One Week Before Deadline

**REQUEST FOR APPROVAL OF APPLICATION FOR EXTERNAL SUPPORT**

Proposal No.

FROM JAMES R. FAZIO College of Forestry, Wildlife & Range Sciences  
 PRINCIPAL INVESTIGATOR(S) DEPT. ~~XXXXXX~~ Wildland Rec. Mgt. DATE 11/21/74

FROM Wilderness Research Center College of Forestry, Wildlife  
 PRINCIPAL INVESTIGATOR(S) DEPT. and Range Sciences DATE 11/21/74

TO BE SUBMITTED TO: (to be determined)

1. ATTACHED IS A:
- Research Proposal
  - Equipment Proposal
  - Fellowship Traineeship Proposal
  - Training Grant Proposal
  - Research Contract
  - Service Contract
  - Other (Specify) \_\_\_\_\_
- Possibly, U.S. Forest Service.  
Please return to principal  
investigator for mailing

The Agency requires \_\_\_\_\_ signed and \_\_\_\_\_ unsigned copies. Forward this number plus one for each approving official indicated below. The deadline is \_\_\_\_\_ at the Agency/postmarked.

2. TITLE: An Analysis of Opportunities for Communication and Education Directed at Reduced Recreational Impact on the Idaho Primitive Area.

BRIEF LAY DESCRIPTION: A survey of wilderness users, with emphasis on where and how they obtain information relative to behavior in a wilderness setting, <sup>and</sup> the level of their knowledge relative to low impact wilderness use. The results will provide insights for effective educational efforts to preserve wilderness qualities.

3. Amount requested: \$ 8,797 First year, \$ \_\_\_\_\_ Second year, \$ \_\_\_\_\_ Third year, \$ 8,797 Total requested \$ \_\_\_\_\_ Indirect cost first year \_\_\_\_\_ Matching U of I \_\_\_\_\_ Source of Matching Funds: \_\_\_\_\_

Support requested from 7/1 19 75 to 6/30 19 76 This proposal is new  renewal \_\_\_\_\_ supplemental \_\_\_\_\_ revised \_\_\_\_\_

If renewal or supplemental, give assigned agency number \_\_\_\_\_ and U of I account number. \_\_\_\_\_

If a revision, give date of original request for approval \_\_\_\_\_

4. A. If other department involved, give % involvement of each department \_\_\_\_\_

B. Other institutions? % U of I \_\_\_\_\_ Indirect costs U of I \_\_\_\_\_ List: \_\_\_\_\_

5. (N.B.) IF THE ANSWER TO ANY OF THE FOLLOWING QUESTIONS IS YES USE A SEPARATE PAGE TO EXPLAIN IN DETAIL EACH INSTANCE.

	yes	no
A. Will additional space be required for the project?.....		X
B. Will space available require alteration or remodeling?.....		X
C. Will a central service facility be utilized?.....		X
D. Has this or a substantially similar proposal been submitted elsewhere? .....		X
E. Are there matching requirements?.....		X
F. Is any compensation for personnel in addition to their regular salary?.....	X	

- H. Are radiation safety considerations involved? .....
- I. Are security classifications or publication restrictions required? .....
- J. Are indirect costs reimbursed at less than U of I rates? .....
- K. Is more than one department, program, college, university, involved in this project? .....
- L. Does this proposal result in (insert yes or no) a ( no ) new program, ( no ) new degree, ( no ) new major, ( no ) new emphasis within a major or new credit course, ( no ) impact on institutional or state general fund.
- M. Is computer support required? (yes) X (no) \_\_\_\_ If so, has the proposal been reviewed with the computer center for adequacy of funds, equipment, facilities, procedures? (yes) \_\_\_\_ (no) X (Minor, routine computer runs)
- N. Are animals involved? If so, indicate approval of small animal committee (Facilities, operational procedures standards, etc.) \_\_\_\_\_

yes	no
	X
	X
X	<del>X</del>
	X

Signature and date

O. Include statement as appropriate in proposal to the extent that the provisions of the excess property program will be utilized to give greater flexibility to the project and institutional programs. N/A

P. If human subjects involved, indicate approval of Assurance Committee: See attached  
Signature of Chairman and date

As a percentage of time what is your present committment to other programs? No research projects at moment.  
As a percentage of time what will be your committment to: Teaching 60% Research 30%  
Service 10% If Approved.

SUBMITTED James R. Fejo  
PRINCIPAL INVESTIGATOR(S)

Floyd L. Newby  
DEPARTMENT OR PROGRAM CHAIRMAN

Floyd L. Newby  
PRINCIPAL INVESTIGATOR(S)

J. H. Chewnick  
DIRECTOR DEAN COORDINATOR OF RESEARCH

APPROVED FOR THE UNIVERSITY \_\_\_\_\_  
FINANCIAL VICE PRESIDENT

DATE FORWARDED TO THE AGENCY \_\_\_\_\_ 19 \_\_\_\_\_