



United States
Department of
Agriculture

Forest Service

Northeastern Forest
Experiment Station

General Technical
Report NE-67

1982



Social Research in the Backcountry:

A Compendium of Survey Questions

Herbert E. Echelberger
Lance K. Canon
Raymond E. Leonard
Steve Adler



Abstract

Questionnaires have played a significant role in backcountry and wilderness research, but developing precise questionnaire items is an art that is still evolving. This report presents a sample of questionnaire items that have been used in backcountry and wilderness research studies during the past two decades. Nearly 2,000 items, taken from 126 questionnaires were screened and categorized within seven major subdivisions. More than 500 items remain; their sources are given in a questionnaire index.

ODC: 907.2, 901

The Authors

Herbert E. Echelberger is Social Scientist for the Outdoor Recreation Trends Research Project located at the USDA Forest Service's Forestry Sciences Laboratory in Durham, New Hampshire.

Lance K. Canon (1939 - 1981) was Associate Professor, Department of Psychology, University of New Hampshire, Durham.

Raymond E. Leonard is Project Leader of the Backcountry Research Project at the USDA Forest Service's Forestry Sciences Laboratory in Durham, New Hampshire.

Steve Adler is President of D.C.I. Research Associates in Bradenton, Florida.

Acknowledgements

Assembling and compiling any document this size requires considerable teamwork. We are indebted to all our colleagues who supplied materials for this compendium, to Judi Johnson for her technical support and to Linda Sinclair, Tracey Taylor, and Annette Nadeau for their contribution toward a more easily read compendium.

LIBRARY CARD

Echelberger, Herbert E.; Cannon, Lance K.; Leonard, Raymond E.; Adler, Steve. Social research in the backcountry: A compendium of survey questions. Broomall, PA: Northeast. For. Exp. Stn.; 1982; USDA For. Serv. Gen. Tech. Rep. NE-67. 131 p.

Presents a sample of questionnaire items that have been used in backcountry and wilderness research studies during the past 20 years. Nearly 2,000 items from 126 questionnaires were screened and categorized; more than 500 items remain. Their sources are given in a questionnaire index.

ODC: 907.2, 901

Table of Contents

	Page
Introduction.....	1
Procedure.....	2
Using the Compendium.....	3
The Compendium.....	4
I. Demographics.....	4
A. Classic Demographics.....	4
B. Backcountry Demographics.....	8
II. Current Behavior.....	24
A. Travel Patterns.....	24
B. Trip Activities.....	29
C. Management-Relevant Behavior.....	36
D. Group Behavior.....	38
E. Knowledge of Area.....	39
III. Predispositional Sets.....	41
A. Attitudes.....	41
B. Expectations.....	72
C. Motivations.....	75
IV. User Evaluations.....	82
A. Satisfaction with the trip.....	82
B. Facilities.....	88
C. Site or Geographic Area.....	91
D. Interactions with Other Users.....	95
E. The Wilderness Experience.....	97
F. Level of Expertise/Experience.....	100
V. Measuring Backcountry User Knowledge.....	102
VI. Questions for Managers.....	107
A. Questions About Backcountry/Wilderness Use.....	107
B. Sequential Questions About Problems and Their Solutions.....	110
VII. Observation as a Data Collection Technique.....	120
Questionnaire Index.....	123
Literature Cited.....	128

Table of Contents

	Page
Introduction.....	1
Procedure.....	2
Using the Compendium.....	3
The Compendium.....	4
I. Demographics.....	4
A. Classic Demographics.....	4
B. Backcountry Demographics.....	8
II. Current Behavior.....	24
A. Travel Patterns.....	24
B. Trip Activities.....	29
C. Management-Relevant Behavior.....	36
D. Group Behavior.....	38
E. Knowledge of Area.....	39
III. Predispositional Sets.....	41
A. Attitudes.....	41
B. Expectations.....	72
C. Motivations.....	75
IV. User Evaluations.....	82
A. Satisfaction with the trip.....	82
B. Facilities.....	88
C. Site or Geographic Area.....	91
D. Interactions with Other Users.....	95
E. The Wilderness Experience.....	97
F. Level of Expertise/Experience.....	100
V. Measuring Backcountry User Knowledge.....	102
VI. Questions for Managers.....	107
A. Questions About Backcountry/Wilderness Use.....	107
B. Sequential Questions About Problems and Their Solutions.....	110
VII. Observation as a Data Collection Technique.....	120
Questionnaire Index.....	123
Literature Cited.....	128

In 1958 the Outdoor Recreation Resources Review Commission (ORRRC) was created to ascertain the supply of and demand for outdoor recreation in America, and to recommend policies and programs to ensure outdoor recreation opportunities in the future. In 1962, the ORRRC reports were published and became the landmark for outdoor recreation management and research. "Research--An Essential Foundation" was among 52 recommendations made by the Commission. Research was called upon to inventory the Nation's outdoor recreation resources and its participation in outdoor recreation activities, to study the management of outdoor recreation programs, and to identify the social values and methods of evaluating intangible benefits associated with outdoor recreation.

Toward this end recreation researchers have made great strides, and questionnaires have played a significant role. Americans have been asked questions about their aspirations, their attitudes, their perceptions, their activities, age, income, educational levels, and a host of other topics. The rationale frequently advanced to justify such data collection is that better management of recreational resources will result from an improved understanding of outdoor recreationists.

Backcountry and wilderness research has been a part of the total research effort. However, backcountry research questionnaires are in a process of evolution. In order to avoid duplication and confusion, and to provide a sound basis for the accumulation of knowledge, we need to know where questionnaire items come from, how they have been used, and if there are more efficient ways of asking for the information. We need to know what kinds of response formats seem to work best under which conditions, what potential biases are built into the way questions are asked, and much more. When we have this information and understand why, as well as how, questions are asked, we will be in a better position to advance the art of backcountry data collection.

This compendium provides answers to some of these and other related questions. Its purpose is to present an extensive inventory of questions that have been used in backcountry and wilderness research, to organize the questions into logical and easily understood categories, and to identify the research publications from which they were taken so that the reader can ascertain who asked what of whom and with what result.

Even a cursory examination of the current backcountry research literature shows that the use of questionnaires to gather data is widespread.

Although it is only one of several methods in wide use, it seems clear that questionnaire-based research will continue to be a popular and useful way of generating information. This is in part because it is an efficient data-gathering technique and applicable to a wide range of problems.

Questionnaire construction, however, is typically inefficient. Once a researchable problem is identified and the decision is made to gather data by a questionnaire, the laborious task of generating questions begins. A great deal of energy is expended in developing clear and unambiguous ways of presenting the questions, in creating the most appropriate response categories, and in choosing an effective format and sequence of items. Certainly such care is laudable and, especially when new ground is being broken, necessary to assure high-quality results. On the other hand, although researchers are careful to identify, examine, and benefit from the theoretical perspectives and empirical findings of earlier studies, they do not typically examine and build upon the questionnaire-construction efforts of others.

Clearly, one reason for this is the relative difficulty of gaining access to questionnaires that may be relevant. Journal reports based on them rarely include more than a few sample items because of space limitations. Research tradition does not require inclusion of the questionnaire as it does examination of the relevant prior research. The questionnaire tends to be viewed simply as a research tool that may or may not be published at the discretion of the researcher.

Consequently, even though a variety of investigations may have included some of the same general information, developing questionnaire items is likely to be a slow, hit-or-miss process. Many questionnaires with overlapping goals persist with idiosyncratically developed items to tap the same information domain. This does little to facilitate the development of efficiently structured, broadly tested questionnaire items whose reliability and validity have been demonstrated by extensive and carefully examined usage.

This situation is not only inefficient, it slows the development of a systematic body of knowledge. Although several investigations may deal with the same general issues, it may not be possible to assemble their findings into some integrated, meaningful whole without a great many qualifications because non-comparable measurement instruments were used. Similarly, examination of trends over time or of regional differences may

impossible because very different questionnaire techniques were used to assess the dimensions of interest. It may be difficult to compare findings or different studies because questionnaires that report to measure similar dimensions do so with techniques that differ in important ways from each other.

We do not mean to argue for a single-minded push toward broad standardization--that is undoubtedly inappropriate at this time. The field is too diverse and unstructured, and there is little general agreement on the precise nature of the major theoretical dimensions. In fact, it can be argued that unfettered creativity and diversity are to be highly valued at this stage in the development of backcountry research. Nevertheless, the development of standard measurement devices is the hallmark of scientific progress and must remain a long-term goal. The existence of widely-accepted and well-validated indices of the prime concepts in any discipline is critical if a body of empirical findings whose applied and theoretical interrelationships can be understood in depth is to be generated.

This volume is an initial step in this very long process. Certainly we have several purposes in developing the compendium. It may increase the attention backcountry researchers pay to the process of questionnaire construction and development. In addition, it should demonstrate the diversity of approaches to similar ends at the current state of the art. This diversity may stimulate constructive criticism. In some instances the need for creative new approaches to a measurement problem may be made more evident by the opportunity to examine some of the current attempts at a solution. In others, the compendium may suggest that good and adequate questionnaire approaches are already available, so that some convergence toward the best or most effective of these alternatives may be appropriate.

For researchers in the process of generating a questionnaire for backcountry research, the compendium is organized to permit ready reference to a sample of questions and formats that have been used by other researchers studying the same topic.

There are several general references that backcountry researchers who use questionnaires might benefit from. Questionnaires for Research: an annotated bibliography on design, construction, and use (Potter et al. 1972) summarizes and briefly evaluates nearly 200 publications about outdoor recreation that employed questionnaires. The Wildland Planning Glossary (Schwarz et al. 1976) would aid researchers in their choice of

terms. It defines more than 1400 terms used by resource planners, managers, and researchers. A number of books also address the broader issue of questionnaires and social surveys. Some of these are: The Dynamics of Interviewing (Kahn and Cannell 1962), Survey Methods in Social Investigation (Moser 1961), Research Methods in the Behavioral Sciences (Festinger and Katz 1953), Experiments in Recreation Research (Burton 1971), Research Methods in Social Relations (Seltiz et al. 1961), Survey Sampling (Kish 1965), Professional Mail Surveys (Erdos 1970), Questionnaire Design and Attitude Measurement (Oppenheim 1966), Improving Interview Method and Questionnaire Design (Bradburn 1979), and Questionnaires: Design and Use (Bardie and Anderson 1974).

PROCEDURE

Our basic intention was to assemble as comprehensive a sample as possible of questionnaires that have been used since 1960 in research on backcountry issues. We searched the major professional journals in which reports of questionnaire-based research were likely to have appeared during the approximately 20-year study period. The bibliographies of relevant articles appearing in these sources were also examined for leads. Government and university technical reports were another major source of questionnaires. Lists of dissertations and theses were also examined and every effort was made to track down the authors at their current locations. Finally, a number of especially active researchers provided us with questionnaires they were aware of, but which had not been turned up by our other search techniques.

When we found a reference to a specific questionnaire, we wrote the author(s), briefly explained the nature of the project, requested a copy of the referenced questionnaire, and asked that they include any others that might be available. In general, those contacted were most helpful and we obtained a very high response rate.

Obviously these techniques could not turn up all questionnaires developed during the study period. Our intention was to cast as wide a net as possible, and we believe the sample that was eventually developed is representative of the broad spectrum of questionnaires available. The final pool included nearly 2,000 individual questions taken from 126 questionnaires.

Faced with this mass of items, we considered a variety of organizational schemes that might have some potential for maximizing the ease of use, clarity, and efficiency of the final product. It

was clear that the approach employed in some of the other questionnaire-based volumes (e.g., Robinson and Shaver 1973) -- including previously developed questionnaires, organized by topic but otherwise whole and unedited -- would not have been particularly useful. Unlike research fields with a longer history and a more extensively developed and refined set of experimental procedures, backcountry research has few substantial series of questionnaires focusing on the same topic.

A more functional approach, given the current state of the field, would permit easy access to a sample of the ways in which specific items have been formulated, ranging from some quite specific topics such as age or income level to some relatively broad ones such as, for example, sources of recreational satisfaction in the backcountry.

The classification system used in this compendium was empirically derived. We began by identifying items in different questionnaires that, on their face, clearly shared a common purpose or objective. Then we searched for commonalities among subgroups that would permit the creation of broader categories into which a variety of specific topics might logically fit. We realize that other category systems might have been derived from the same raw material, and we would defend the one we settled on only as one of several possible ways of structuring the items. Obviously we think it is the best of the options we considered.

Item selection was the next step. Simply fitting all 2,000 items into the categories would have resulted in excessive redundancy and an unwieldy, not very useful end product. We screened the items four times. On each screening, each author independently judged the appropriateness of each item. We then met as a committee and, where there was not unanimous agreement, discussed the item until some consensus was reached.

A number of criteria guided the item selection process. First, items that were judged to be ungrammatical, ambiguous, or "double-barreled" were excluded. Then there were instances where, within a category, there was a substantial number of items very similar in wording and format. Obviously, we wanted to be sure to include an item representative of this group that would reflect the apparent consensus among different researchers. In such cases, in addition to representativeness, qualities such as clarity of writing style and conciseness guided our choice. On the other hand, it seemed important to illustrate the wide range of item types in any given category, so an attempt was also made to choose

questions that illustrate the variety of approaches being used in the measurement of a given quality or attribute and the range of response formats.

Of course, the selection is somewhat arbitrary. Many well-designed items were left out to keep the compendium to a manageable size. Omission of any item does not imply that it was flawed; neither does inclusion imply endorsement. We recognize that some of the questions may invade privacy, but they were asked, and so are included in the compendium.

USING THE COMPENDIUM

Our examination of the questions suggested seven major categories of items: the first category contains questions that solicit self-descriptive demographic information from the respondent. The second major category contains questions that request information about the current behavior of the backcountry user. The general focus in the third category is on identifying factors that predispose an individual to act or respond in a particular way. User evaluations of the trip, facilities, site, experience and other aspects of backcountry recreation make up the fourth category, while categories five and six present questions to measure user knowledge and questions that have been directed toward backcountry and wilderness area management personnel.

The final category provides some exposure to a method of data collection that is currently underutilized. Observational techniques may not technically have a place in a questionnaire-based compendium, but they are important enough to merit coverage. With careful attention and an innovative approach, they could pay great dividends. Refining some current approaches to observatory methods could dramatically increase their usefulness.

Each second-level category in the compendium is preceded by a brief description; users should read these before using the questions that follow. The number in parentheses before each item identifies its source in the Questionnaire Index, so that the user can find the question's author and context.

We hope this compilation will help researchers make their studies comparable with earlier ones so that trends can be established.

I. DEMOGRAPHICS

Classic Demographics

Questions to determine age of respondent or other party members, past and/or present residence, occupational information, education and income levels, and individual or family characteristics.

Age

(18) In which age bracket do you fall?

___-12 ___ 12-15 ___ 16-20 ___ 21-26 ___ 27-35 ___ 36-55 ___ +55

(1) How many of the participants were in each of the following age groups (estimate when necessary)?

___ over 50 years ___ 18 to 25 years ___ under 12 years
___ 26 to 50 years ___ 12 to 17 years

(10) Age? ___

Residence

(51) Where is your permanent residence?

county _____
state or province _____
zip code _____

(9) Where do you live now?

farm ___ open country ___ small village ___ suburb ___ city ___

(18) What is the zip code of your home address? _____

(31) Where do you live? _____
city state

How long have you lived there? _____ years

If you were not born there, where did you live before?

city state

Were you brought up mainly in: ___ a city ___ small town ___ rural area

(71) Indicate the number of years you have lived in each of the following locations (the total number should equal your age):

___ farm ___ small town ___ suburban ___ urban

(45) How far is your permanent home from this wilderness area? _____

(65) What was the approximate population of the town you grew up in?

Rural or rural non-farm ___ 25,000 to 49,999 ___

Urban ___ 50,000 to 99,999 ___

10,000 or under ___ 100,000 and over ___

10,000 to 24,999 ___ Don't know ___

I. Demographics A. Classic Demographics 2. Residence

(15) Which of the following best describes where your permanent home is located? (Please check one blank)

- The central area of a large city of more than 500,000 people
- The central area of a medium size city of 100,000 - 500,000 people
- The suburb of a medium or large city
- A small city of 50,000 to 100,000 people
- A town of 5,000 to 50,000 people
- Village of less than 5,000 people
- Farm or rural area

(89)

Item	farm	Rural non-farm	Village or city under 10,000	City of 10,000 to 99,999	City of 100,000 to 499,999	City of 500,000 & over
What sort of area did you live in during most of your childhood? (check one)						
What sort of area have you lived in during most of your adult life? (check one)						
What sort of area do you live in now? (check one)						

3. Education

(14) How many years of school have you completed?

- 1 2 3 4 5 6 7 8 9 10 11 12
- some college BA or equivalent MA or equivalent
- Advanced degree (MD, Ph.D., etc.)

(33) Which of the answers below best describes the level of education completed by the head of the party? (check one)

- grade school post high school--technical-vocational
- part high school part university
- high school graduate university graduate

(70) Please indicate the highest level of formal education attained by your parents:

Father: _____ Mother: _____

I. Demographics A. Classic Demographics 3. Education

(17) What is the highest year of school you have completed?
(circle one)

	Elementary							High School					College				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	

4. Occupation

(15) Which of the following best describes your occupation?

<input type="checkbox"/> hourly laborer	<input type="checkbox"/> manager
<input type="checkbox"/> clerical	<input type="checkbox"/> professional
<input type="checkbox"/> salesman	<input type="checkbox"/> homemaker
<input type="checkbox"/> skilled tradesman	<input type="checkbox"/> student
<input type="checkbox"/> technical	<input type="checkbox"/> other

(53) What type of work do you do? _____
What type of organization are you employed by? _____

(71) If your work is seasonal or covers only part of the year, how many months do you generally work during the year?
_____ months

(94) If you are retired or temporarily unemployed, please answer these questions about your last job. If you have more than one job, please answer these questions about your main job.

What is your main occupation or job title? _____

What kind of work do you do; that is, what are the main duties of this job? _____

In what type of business or industry is this; that is, what product is made or what service is given? _____

(94) (If married) Is your husband or wife currently. . .

Employed full time _____	Temporarily unemployed _____
Employed part time _____	Not employed and not looking for work _____
Retired _____	

5. Income

(53) Into which of the following categories does the annual income of your entire household fall?

\$5,999 or less _____	\$12,000 - 13,999 _____	\$20,000 or over _____
\$6,000 - 7,999 _____	\$14,000 - 15,999 _____	
\$8,000 - 9,999 _____	\$16,000 - 17,999 _____	
\$10,000 - 11,999 _____	\$18,000 - 19,999 _____	

(18) Which of the following best describes your family's total income last year, or your income last year if you are independent from your family?

<input type="checkbox"/> under \$6,000	<input type="checkbox"/> \$16,000 - 19,999
<input type="checkbox"/> \$6,000 - 8,999	<input type="checkbox"/> \$20,000 - 24,999
<input type="checkbox"/> \$9,000 - 11,999	<input type="checkbox"/> \$25,000 - 29,999
<input type="checkbox"/> \$12,000 - 15,999	<input type="checkbox"/> Over \$30,000

Demographics A. Classic Demographics

Family/Individual
Characteristics

- (54) What is your marital status?
 single married divorced widowed
- (72) Number of Children? _____
- (19) In total, how many persons live in your household, including yourself? _____
- (71) On the average, about how many weeks of time-off with pay do you take during the year? _____ weeks
- (37) How many days of paid vacation do you have each year? _____
If self-employed, how many days of vacation do you take each year? _____
- (94) If your husband or wife is employed, how many days of paid vacation did he/she have last year?
 none 1-7 days 8-14 days 15-21 days
 22-28 days over 28 days
- (45) Are you on your vacation, is this a weekend holiday, or some other kind of trip?
 vacation counselor
 weekend holiday retired
 other
- (1) What do you consider to be your basic racial or ethnic background?
 American Indian Chicano
 Black Oriental
 Caucasian Other
- (19) What (other) type of vehicle(s) do/does your family have? (read list)
 recreational vehicle (RV) truck
 boat any other
 motorcycle no other (do not read)
- (66) Whether you belong to a church or not, do you consider yourself very religious, fairly religious, or not at all religious?
 very religious fairly religious not at all religious
- (61) Would you call yourself a:
 strong republican independent democrat
 weak republican weak democrat
 independent republican strong democrat
 independent other _____
- (61) What is your religious affiliation?
 Protestant Roman Catholic Jewish Other

I. Demographics B. Backcountry Demographics

Questions to establish basic, descriptive, non-evaluative information about respondent's use of an area, experience and skills, activities normally participated in (see also III. B. 6), equipment ownership, cost (see also III. A. 1. j), group structure (see also II. D), and club or organization affiliations.

1. Use of Area

- (14) About what year did you first visit this area? ____ year
- (25) During the (year) season, how many trips did you, yourself, make into (area)? _____
- (71) How many times have you been on this particular stretch of the river? (check one)
 - ____ once only (this trip) ____ six to ten times
 - ____ two to five times ____ more than ten times
- (51) Is the number of days you hiked in (area) during (year) more, less, or about the same as you hiked during the past few seasons? (check only one)
 - ____ more ____ less ____ about the same
- (93) By the end of this summer (August 31), about how many separate visits will you have made to (area)? Circle Number
 - 1 2 3 4 5 6 7 8 9 10+
- (25) In total, how many days did you spend in (area) during (year)? ____
- (76) How old were you when you first traveled into this area? _____
- (49) How many hours is your typical trail ride? _____ hours
- (25) Was (year) the first year you visited the interior of (area)?
 - ____ yes ____ no
 - If "no", please write in the years in which you have previously visited (area). ____; ____; ____; ____
- (43) Have you come to (area) to ride before? ____ yes ____ no
 - If yes, how many times? ____ When was the first time? _____
- (37) Was this your first trip down the (area)? ____ yes ____ no
 - If no, how many previous trips have you made? _____
- (75) Have you ever visited any other parks, monuments, seashores, or other areas administered by the National Park Service?
 - Yes--please list up to three. _____
 - No _____
- (37) How many times have you camped on this trail? never; 1-5; 6-10; more

I. Demographics B. Backcountry Demographics 1. Use of Area

(20) Please estimate how often you ride your trailbike on each of the following types of property.

Property Type	Never	Rarely	Occasionally	Frequently	Almost Always
Your own land					
Other land-owners with permission					
Other land-owners without permission					
Trailbike club designated trails					
Town-owned lands					
State forests & parks and/or wildlife lands Which ones? a) b) c)					
Out-of-state					
Other (describe)					

(51) Approximately how many miles did you hike on the following trails this season?

- _____ number of miles on Long Trail
- _____ number of miles on Appalachian Trail
- _____ number of miles on other trails

I. Demographics B. Backcountry Demographics I. Use of Area

(86) Please indicate in what kinds of locations you do your big game hunting in (area). Circle whether you use each of these locations Most of the Time, Some of the Time, Occasionally, or Never.

	Most of the Time	Some of the Time	Occasionally	Never
Along roads	1	2	3	4
In clearcuts	1	2	3	4
In the timber	1	2	3	4
Along open ridges	1	2	3	4
Along creek bottoms	1	2	3	4
Brushy draws	1	2	3	4
Anywhere away from roads	1	2	3	4
Other (please describe)				
_____	1	2	3	4
_____	1	2	3	4

(69) Have you ever spent the night in an Appalachian Trail shelter?
 _____ yes _____ no

(51) What percentage of your (area) hiking time do you usually spend on the following trail types? (Responses must add to 100%.)

- _____ % summit trails (hike to a mountain top and back down)
- _____ % sections of the Long Trail or other lengthy trails
- _____ % recreation trails (casual walk for a few hours)
- _____ % off-trail hiking (bushwacking and orienteering)
- _____ % other _____

Please specify

100 %

(51) Do you snowshoe or cross-country ski during the winter months?
 _____ yes _____ no

(50) Please estimate the percentage of your (year) boating that took place on the following types of water bodies (total should equal 100%).

- _____ % on natural lakes (over 100 acres)
- _____ % on natural ponds (under 100 acres)
- _____ % on man-made reservoirs and lakes
- _____ % on rivers
- _____ % on wetlands (swamp, marsh, bog)
- _____ % on other

100 % (total should equal 100%)

I. Demographics B. Backcountry Demographics

2. Recreational Skills/
Experience/Activities
(See also III.B.6)

(18) We are also interested in the types of outdoor recreation activities you engage in. Please look at the following list and on the space after each activity, please write in your best estimate of the total number of days during the past year in which you engaged in that activity at least once. So if you swam on two different days during the past 12 months you would put a 2 after swimming.

Camping at developed sites	_____	Long outdoor hikes	_____
Camping at rustic or wild sites	_____	Motor (or trail) biking	_____
Canoeing	_____	Motorboating	_____
Cross-country skiing	_____	Nature trail walks	_____
Downhill (lift) skiing	_____	Picnicking	_____
Driving for pleasure	_____	Sailing	_____
Fishing for trout	_____	Swimming (outdoors)	_____
Fishing for other species	_____	Tennis (outdoors)	_____
Gardening	_____	Snowmobiling	_____
Golf	_____	Other _____	_____
Hunting	_____		

(14) About how often do you participate in the following activities?

	<u>Never/Seldom/Occasionally/Frequently</u>			
	N	S	O	F
Hiking on Trails				
Hiking through the woods (not on trails)	N	S	O	F
Backpacking	N	S	O	F
Camping	N	S	O	F
Canoeing	N	S	O	F
Hunting	N	S	O	F
Fishing	N	S	O	F
Orienteering/Compass	N	S	O	F
Mountain Climbing	N	S	O	F
First Aid	N	S	O	F
Search and Rescue	N	S	O	F
Outdoor Cooking	N	S	O	F
Horseback Riding	N	S	O	F

I. Demographics B. Backcountry Demographics 2. Recreational Skills/Experiences/Activities

- (14) Over the past 5 years, about how many times have you gone hiking in a trailless area, using map and compass only?
- | | | |
|---------------|----------------------|--------------------------|
| _____ never | _____ 3 to 5 times | _____ 16 to 20 times |
| _____ 1 time | _____ 6 to 10 times | _____ more than 20 times |
| _____ 2 times | _____ 11 to 15 times | |

(40) Camping experience:

Number of years camping _____

Number of years wilderness camping _____

Number of times you have visited this wilderness area _____

Number of times you have used this entrance before this _____

Number of other trails which you have used to enter and/or leave this wilderness area. _____

- (51) Approximately what is the length of your typical day hiking trip?
_____ miles/trip

- (51) Approximately how many hours do you spend actually walking on the trail during a typical hiking day? _____ hours

- (49) Were the number of days you trail biked during (year) more, less, or about the same as in previous years? If (year) was your first year of trail riding in (area), check "First year." (Check only one)
- _____ more _____ less _____ about the same _____ first year

- (44) Compared with (year), how much did you and your immediate family use the canoe on rivers and streams in (year)? (Check one)

more than in (year) about the same as (year)

less than in (year)

- (7) Circle the number below which most accurately represents your current level of expertise as a backcountry camper:

1	2	3	4	5	6	7	8
novice/ beginner							highly experienced

- (7) We are interested in determining whether there is any sequence in which people develop outdoor skills. Please carefully indicate at what age you first engaged in the following activities:

Summit hiking	_____ years old
Car, camper or trailer camping in established sites	_____ years old
Solo backcountry camping	_____ years old
Backcountry and wilderness camping	_____ years old
Tent platform or shelter use	_____ years old
Day hiking	_____ years old

I. Demographics B. Backcountry Demographics 2. Recreational Skills/Experiences/Activities

(5) Which statement below best describes you as a hiker or backpacker?
 Novice Highly skilled, much experience
 A little bit of experience Expert
 Intermediate

(77) What kind of food do you generally take on your backpacking trips?
 dehydrated some dehydrated, some canned
 canned some dehydrated, some fresh
 fresh some canned, some fresh
 all three

(51) How do you usually locate hiking trails in (area)?
 guide books go on organized outings
 public agency brochures other _____
 friends, word-of-mouth enter here

(78) Do you usually use a gas cooking stove when you camp?
 yes no

(2) Do you bring a day's more food supply than you think necessary?
 yes no

(10) Do you ever travel off the posted trails? _____

(77) How do you dispose of your human waste?
 bury it leave it on top of the ground

(77) How do you dispose of your garbage (other than food waste and burnables)?
 bury it leave it in campfire pack it out

(77) What do you do with garbage left in area by other people?
 bury it ignore it pack it out

(51) What overnight facility do you use most often?
 an overnight trail shelter both of these about equally
 your own tent other: _____
please specify

(92) With whom did you do most of your early hiking? (Please check one)
 Alone With an organized group (Boy Scouts, YMCA, etc.)
 With friends Other (Please specify) _____
 With family _____

(43) When do you do most of your off-road vehicle riding? (Check only one in each group)
 weekdays weekends holidays non-holidays

I. Demographics B. Backcountry Demographics

3. Area Selection

(7) Which of the following possible sources of information do you use in helping you decide where to camp? Check all applicable.

- radio broadcasts
- discussions with friends
- Forest Service Rangers
- National Forest pamphlets
- trail signs
- guide books
- camping supply stores
- organized camping groups
- popular magazines
- camping/backpacking magazines

(5) How did you first hear about the hiking trails in the (area)?

- family or friend
- television or radio
- U.S. Forest Service Information
- travel brochures
- trail guide books (specify) _____
- newspaper or magazine (specify) _____
- Others (specify) _____

(54) Did you talk to anybody at the outfitter's place about your travel route?

- yes
- no

(76) What was your source of information about this particular area as a place to hike? Check as many as apply.

- I had hiked there before
- Sign along highway or trail
- Map of (area)
- Newspaper or magazine
- A conservation or outdoor club
- A family member or friend
- U.S. Forest Service literature
- Trail guide booklet or publication
- Forest Ranger
- Other (please describe) _____

(94) Who usually suggests that you visit a wilderness area? (Check one only)

- Yourself
- Your parents
- Your friends
- Your spouse
- Your brothers or sisters
- Someone else (Specify)
- Your children

(81) Do you find yourself returning to areas already visited, or do you spend most of your hiking time in areas new to you?

- I spend most of my time hiking in areas new to me.
- I spend most of my time revisiting areas I've previously enjoyed.
- I spend my time doing both about equally.

I. Demographics B. Backcountry Demographics 3. Area Selection

(20) If you have ever ridden your trailbike on other landowners' property without permission, please indicate the three most common reasons why you were inclined to do so. Number them 1, 2, and 3 according to the frequency of their occurrence. (1=most frequent)

- Insufficient land area available in close proximity to your home.
- Lack of club or other organization to aid in securing permission.
- Lack of desirable terrain on existing trails.
- Lack of means available for transporting trailbike to other trails.
- Lack of designated trails on public lands.
- Landowner's property provides shortest path of access to a designated trail.
- Lack of effort on your part to secure permission from landowner.
- Difficulty in determining and/or locating the landowner.
- Other (describe) _____

(51) What is the major factor determining where you choose to hike in (area)?

(49) What is the most important factor determining where you trail ride? (Check one)

- | | |
|---|--|
| <input type="checkbox"/> Knowledge of area | <input type="checkbox"/> No conflicts with owners or other users of the area |
| <input type="checkbox"/> Accessibility of area | <input type="checkbox"/> Like the natural characteristics of the area (aesthetics) |
| <input type="checkbox"/> Availability of trails in area | <input type="checkbox"/> Other (Enter on line below) _____ |

(42) When you first heard about this area, what was the most important thing about the description that caused you to come here?

(35) What influenced you to take your Wild River trip? (Check as many answers as apply)

- | | |
|---|---|
| <input type="checkbox"/> Advertising of the Wild Rivers | <input type="checkbox"/> Travel agency advice |
| <input type="checkbox"/> A previous Wild River trip | <input type="checkbox"/> Reading (other than advertising) |
| <input type="checkbox"/> Recommendations of others | <input type="checkbox"/> Other (please list) |

(43) What other types of areas have you used for off-road vehicle riding?

- | | |
|---|---|
| <input type="checkbox"/> Private lands | <input type="checkbox"/> National Parks or National Forests |
| <input type="checkbox"/> State Parks or State Forests | <input type="checkbox"/> Other (Please describe) _____ |

I. Demographics B. Backcountry Demographics 3. Area Selection

(48) Please estimate the percentage of the (year) snowmobiling season you spent riding on the following types of trails or lands.

- Your own land
- Land owned by friends
- Private land on which you alone received permission to ride
- Private land on which your snowmobile club received permission to ride
- Public land on which you used posted snowmobile trails only
- Public land on which you drove your snowmobile cross country
- 100% (Total should equal 100%)

4. Costs (See also III.A.1.j.)

(44) How much did your family spend for:

- _____ Lodging _____ Rental of: Boats and Motors
- _____ Food and Beverages _____ Camping Gear
- _____ Guide Service _____ Other (Please List)
- _____ Recreational Supplies

(74) An important aspect of the public discussion about (area) concerns the local economy and the effects different policies may have on it. To improve our understanding, we need to know what you spent on your visit to the area. Please write down your best estimate of what you spent for each kind of item.

- Restaurant meals (including tips) \$ _____
- Groceries \$ _____
- Entertainment (bars, dancing, amusements, etc.) \$ _____
- Retail goods other than groceries \$ _____
- Lodging (motel and hotel) \$ _____
- Campground fees \$ _____
- Gasoline and oil \$ _____
- Automobile repairs \$ _____
- Bait \$ _____
- Fishing tackle \$ _____
- Equipment rentals \$ _____
- Other (please list) \$ _____

I. Demographics B. Backcountry Demographics 4. Costs

(53) Please indicate your approximate expenditure for this trip in each of the following categories, together with the main area in which the expenditures were made.

		Area where main part of expenditure in category was made		
		In		
		northern	In	Other
		<u>Minn.</u>	<u>Ontario</u>	<u>points</u>
Food & provisions	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Camping equipment - rented	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Camping equipment - purchased	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boats, canoes, motors - rented	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boats, canoes, motors - purchased	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gasoline & oil (for marine use)	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other purchases - please specify:	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What would be your estimate of the total out-of-pocket cost of your party's trip from home to home?

\$ _____

(88) Not including any equipment you might have bought, about how much do you figure this wilderness trip cost you (and your family) from the time you left home until you returned?

Camping Group Structure

(45) What is the size of your party? _____

(14) Including yourself, how many people were in your party during this trip?

_____ number of adult males (over 17 years)	_____ number of male children
_____ number of adult females (over 17 years)	_____ number of female children

(37) What was the approximate number of people (by age group) that made up this party?

_____ 18 & over females	_____ 18 & over males
_____ under 18	_____ under 18

I. Demographics B. Backcountry Demographics 5. Camping Group Structure

(14) Who did you hike with? (Please check all that apply)

- parents friends
 brother or sister I hiked alone
 other relatives

(91) Age and sex distribution of group

- females older than 12 males older than 12
 females younger than 12 males younger than 12

(37) Which category best describes the party you floated the (area) with?

- member of a commercially-guided float party
 member of an organized group (Sierra Club, etc.)
Name of organization _____
 "Do-it-yourselfer"

(18) The preferences of local and non-local users frequently differ so let us define a non-local user as someone who will spend at least one night in this region away from their current residence. Please check which of the following best describes you.

- A local user
 A non-local user whose trip destination was this general region
 A non-local user who stopped here on their way to a primary destination elsewhere
 Other (Please describe) _____

(93) If your hiking party is larger than one, which of the following describes your hiking party's history? (Please check all the appropriate answers)

- Our hiking party has hiked before as a unit.
 Some, but not all, of our party members have hiked together before.
 This is the first time any of our party members have hiked together.
 Our hiking party has participated in other recreation activities (not including hiking) before as a unit.
 Some, but not all, of our party members have participated together in other recreation activities (not including hiking).
 This is the first time any of our party members have participated together in a recreation activity.

I. Demographics B. Backcountry Demographics

6. Backcountry Affiliations (22) What organizations are you a member of THAT HAVE CONTRIBUTED TO YOUR KNOWLEDGE OF WILDERNESS? (They do not necessarily have to be outdoor-oriented.)

- | | |
|--|--|
| <input type="checkbox"/> American Camping Association | <input type="checkbox"/> National Audubon Society |
| <input type="checkbox"/> American Forestry Association | <input type="checkbox"/> National Parks and Conservation |
| <input type="checkbox"/> American Museum of Natural History | <input type="checkbox"/> National Wildlife Federation |
| <input type="checkbox"/> Boy Scouts of America | <input type="checkbox"/> Natural Resources Defense Council |
| <input type="checkbox"/> Church Organization | <input type="checkbox"/> (The) Nature Conservancy |
| <input type="checkbox"/> Environmental Action | <input type="checkbox"/> Packers Association |
| <input type="checkbox"/> Environmental Defense Fund | <input type="checkbox"/> Recreational Equipment, Inc. |
| <input type="checkbox"/> Explorers | <input type="checkbox"/> Sierra Club |
| <input type="checkbox"/> Federation of Outdoor Clubs (Western) | <input type="checkbox"/> Society of American Foresters |
| <input type="checkbox"/> Friends of the Earth | <input type="checkbox"/> Solo |
| <input type="checkbox"/> Girl Scouts of America | <input type="checkbox"/> Wilderness Research Foundation |
| <input type="checkbox"/> Idaho Conservation League | <input type="checkbox"/> Wilderness Society |
| <input type="checkbox"/> Mountain Travel, Inc. | <input type="checkbox"/> Others _____ |

(74) Do you currently belong to any of the following kinds of organizations? Please indicate your membership by placing a mark in the space provided.

<u>Kind of Organization</u>	<u>Check if you are currently a member</u>
Conservation-preservation groups, such as the Audubon Society and the Sierra Club.	()
Wildlife sporting groups, such as Ducks Unlimited.	()
Fishermen's organizations, such as the Chicamacomico Anglers Club.	()
Motorcycle clubs	()
Dune-buggy clubs	()
Jeep and four-wheel drive owners' associations	()
Civic groups	()
Please write in the name of the organization in which you are most active. _____	

(92) To what hiking or conservation organization do you belong?

I. Demographics B. Backcountry Demographics 6. Backcountry Affiliations

(16) Are you a member in any conservation groups or outdoor clubs?

_____ years
_____ years

(61) Have you ever written to any public officials giving your opinions about a conservation issue? ___yes ___no

If you have, how often have you written such letters?

Once 6-10 times
 2-3 times 11-20 times
 4-5 times more than 20 times

(61) Have you ever written to the editor of a newspaper or magazine about a conservation issue? ___yes ___no

If you have, how often have you written such letters?

Once 6-10 times
 2-3 times 11-20 times
 4-5 times more than 20 times

(77) In the past two years, how many hearings or public meetings (governmental, no club) on wilderness or primitive area classification, or roadless areas have you

_____ attended _____ testified for _____ submitted written testimony for

7. Equipment Ownership and Use

(50) Do you own a nonmotorized water-craft that you used during the (year) (state) boating season? (check all types that you own)

_____ sailboat (nonauxiliary power) _____ row boat
_____ canoe _____ rubber raft (4 man or larger)
_____ kayak _____ other (enter on line below)

(44) Between April 1 and October 31, (year), where was the canoe generally stored? (Check only one)

Your principal residence A marina or other commercial dock facility
 Your second home (cabin, condominium, etc.) Other (Please specify) _____
 Home of a relative, friend, etc.

(43) What type(s) of off-road recreational vehicles do you own or have used?

Trail bikes (motorcycle) All terrain vehicles
 Minibikes Snowmobiles
 Four wheel drive vehicles Other (please describe) _____

(50) Do you own or rent for your own use, a home or cottage on the shore of a (state) water body where motor boating is permitted?

. Demographics B. Backcountry Demographics 6. Equipment Ownership and Use

(48) How many snowmobiles are owned by your immediate family (father, mother, sons and daughters living at home)?

_____ Number

(50) How many motorized boats did you register in (state) during (year)?

_____ Boats registered

(61) If you own any of the following types of recreational equipment, please place a check in the space provided. (1) How many of the items do you own, and (2) on the average, how often during the year do you use this item?

Equipment	Own	Number owned	Frequency of use of item per year (in days)
4-wheel drive vehicle	___	___	___
10 speed bicycle	___	___	___
Trail bike	___	___	___
Snowmobile	___	___	___
Power boat	___	___	___
Sail boat	___	___	___
Kayak	___	___	___
Canoe	___	___	___
Camping trailer	___	___	___
Camper	___	___	___
Tent	___	___	___
Down sleeping bag	___	___	___
Pack frame	___	___	___
Hiking boots	___	___	___
Ropes, pitons, crampons, etc.	___	___	___
Snow shoes	___	___	___
Skis	___	___	___
Water skis	___	___	___
Scuba gear	___	___	___
Surf board	___	___	___
Fishing rod	___	___	___
Bow	___	___	___
Handgun	___	___	___
Rifle	___	___	___
Shotgun	___	___	___

II. CURRENT BEHAVIOR

A. Travel Patterns

Questions to obtain information about a respondent's travel to and within a backcountry area, length of stay, and factors affecting choice of areas and campsites (see also III. C. 1).

1. Travel to and within Area

(82) Would you please look at the map included with this questionnaire and note the places you camped (the name of the nearest lake or mountain will do), how many nights you spent at each place, and how many other parties were camped in the same area each night (within sight or hearing). Your best guess or estimate will be OK.

<u>Place camped</u>	<u>Nights</u>	<u># Other Parties</u>
---------------------	---------------	------------------------

(46) Did you or do you plan to remain overnight on or along (area) shoreline? ("X" one)

_____ yes _____ no

If so, how many nights? (Include nights already spent) _____

About how many hours will you spend in the area? _____

Where are you spending your nights?

_____ My home (permanent or seasonal)

_____ Home of a relative or friend

_____ Commercial resort

_____ Commercial hotel or motel

_____ Public auto campground (Forest Service, state)

_____ Private commercial auto campground

_____ Private camp (YMCA, Boy Scout, etc.)

_____ Parking lot at the landing (not an auto campground)

_____ Some other place (specify) _____

(41) How many miles will you cover on this trail? _____
(one way length)

(65) How many miles from the road do you intend to go into the back country?

_____ 0-5 miles

_____ 21-50 miles

_____ 6-10 miles

_____ over 50 miles

_____ 11-20 miles

(5) On which of the following trails did you hike during this trip?

_____ North Country

_____ Minister Valley

_____ Tanbark

_____ Tracy Ridge

_____ Twin Lakes

_____ Johnnycake

(76) Area planners and managers need better information on where visitors go and what they do in the wilderness. In answering the items below, please think of your entire trip in the (area). On the map provided on the following page, please indicate the following:

Your entrance point: mark with an X

Your route through the area: trace with a solid line

Your camping spots: mark with an O

Your exit point: mark with a /

Current Behavior A. Travel Patterns 1. Travel to and within Area

(46) On the map please draw an arrow () along the route you traveled today. If adequate space is available, show any wandering movements you made in crossing lakes. Besides drawing your route, please indicate on the map the following:

The time (to the nearest hour) that you ARRIVED at any of the portages or narrows marked with a red dot on the map. Please use an arrow to connect the time with a red dot.

As closely as you can, where you are camping tonight ("c") and the approximate time you stopped.

If you moved to a new campsite today, the time you left your old campsite this morning.

At the end of the trip, the time that you arrived back at the landing.

(1) Where did you travel? Estimate percentages of total distance traveled.

- % Primary maintained trails
% Secondary maintained trails; all other maintained trails
% Unmaintained trails
% Cross-country, open terrain
% Cross-country, wooded terrain
100 % Total

(16) Approximately how far did you travel, on your present visit, to reach the (area)? miles or hours travel time.

(29) On what highway were you traveling when you entered the area?

(49) How far do you usually travel to get to the area where you trail ride most often? miles

(14) Which trail did you spend most of your time on today?

trail

2. Length of Stay

(93) Of the total nights in the park, about what percentage were spent camped in the backcountry?

- none 21-40% 61-80% All (100%)
1-20% 41-60% 81-99%

(40) The length of our stay was (please select the most appropriate answer from this card).

- Just about what we had planned
Shorter
because of insufficient equipment
because the food ran out
because too many other wilderness users were encountered
because too much abuse of the land was seen, such as garbage and damage to the vegetation
because of the weather
because we did not meet enough people

II. Current Behavior A. Travel Patterns 2. Length of Stay

_____ Extended

_____ so we could push further into the area and see more of the wilderness

_____ so we could enjoy the country, but not to push into the wilderness much further

(35) What date did you start your trip? month _____ day _____

(92) How much time did you spend in the backcountry during your trip?

_____ 6 hours or less _____ 1 - 3 days

_____ 7 - 12 hours _____ other (specify) _____

(76) On this hike, did your group stay out overnight in the wilderness?

_____ no _____ yes If yes, how many nights? _____

(29) Did you stop anywhere along the river for more than one hour?

_____ no _____ yes If yes, can you tell me where? _____

For what purpose did you stop? _____

3. Geographical Area Selection Factors

(40) The most important factor in planning your route of travel in the wilderness was (please select the most appropriate answer):

_____ The points of interest that the party wanted to see

_____ The need to return to the trail head as no overnight provisions were taken

_____ The amount of time allotted for the trip

_____ Didn't plan to go. Just thought we would go as far as we could.

_____ The outfitter decided this.

_____ The availability of natural horse feed.

_____ The number of people we desired to encounter.

_____ Other: _____

(45) How important were the history and legends of the (area) in attracting you to this area?

_____ Very important _____ Fairly important _____ Not at all important

(14) In planning your trip to the (area), which of the following best describes how you decided to go to the area? Please check the single response which best applies to you.

_____ We really didn't plan. We woke up in the morning and saw that it was a nice day and decided to go to (area).

_____ We had thought about the possibility and decided a day or two in advance.

_____ We had planned for a week or two before the trip.

_____ The trip to the (area) was a big event that we had planned for a long time in advance. The date was set several months in advance.

_____ Other--please specify _____

II. Current Behavior A. Travel Patterns 3. Geographical Area Selection Factors

(79) Did you change your route from the one you planned to travel after you entered the wilderness area?

() No () Yes

If yes, what caused you to change your planned route? For example, was it over-crowded in a particular area, weather liked in a particular spot and stayed or what?

(1) In general, to what degree was a certain location designated beforehand for your night's camp?

- absolutely; not subject to change
- firmly; but open to change when necessary
- apparently; primary campsite determined, but others acceptable
- flexible; easily adjustable to change, one site only weakly chosen over others
- pending; undecided at time of departure
- undetermined; spontaneous decision made each day

(14) In planning this trip, did you attempt to avoid crowds by choosing a time when you thought there would be fewer people in the (area)

no yes It really didn't matter.

(71) How long before your trip did you actually decide to go?

(Check one)

- less than 24 hours
- more than 24 hours
- one week to one month
- one month to six months
- six months to twelve months
- more than one year
- don't remember

(29) For this last trip, how many weeks ahead of time did you begin planning for it?

less than one 1-3 3-5 more than 5

(28) How long before your visit to this Wilderness (Park) did you decide on where to travel within the backcountry?

(76) What was your source of information about this particular area as a place to hike? Check as many as apply.

- I had hiked there before
- Sign along highway or trail
- Map of area
- Newspaper or magazine
- A conservation or outdoor club
- A family member or friend
- U.S. Forest Service literature
- Trail guide booklet or publication
- Forest Ranger
- Other (please describe)

II. Current Behavior A. Travel Patterns 3. Geographical Area Selection Factors

(35) What influenced you to take your trip? (Check as many answers as apply)

- | | |
|--|---|
| <input type="checkbox"/> Advertising of (area) | <input type="checkbox"/> Travel agency advice |
| <input type="checkbox"/> A previous (area) trip | <input type="checkbox"/> Reading (other than advertising) |
| <input type="checkbox"/> Recommendations of others | <input type="checkbox"/> Other (please list) |

(39) What was the major consideration that caused you to visit this area?

(53) How did you select this particular travel route? What influenced you to choose this route rather than some other one?

(54) Was there any person or persons who convinced you that you should come to this area?

4. Site Selection Factors

(36) Were you given any particular information that directed you to this site by friends, campground employees or someone else?
If yes, what information was given?

(68) What factors do you consider essential in selecting a campsite?
Mark each factor: 1 - very essential 2 - moderately essential
3 - not essential

- | | |
|---|--|
| <input type="checkbox"/> nearness to a lake | <input type="checkbox"/> being near toilet facilities and camp shelter |
| <input type="checkbox"/> nearness to drinking water | <input type="checkbox"/> much surrounding vegetation for protection from wind and rain, etc. |
| <input type="checkbox"/> being close to other other parties | <input type="checkbox"/> much surrounding vegetation so nearby campers cannot be seen |
| <input type="checkbox"/> being far away from other parties | <input type="checkbox"/> near fireplace |

(71) Did you have trouble finding a good place to camp?

no yes

What was the reason?

- | |
|---|
| <input type="checkbox"/> the good campsites were occupied by others |
| <input type="checkbox"/> there were no good places to camp |
| <input type="checkbox"/> other (specify): _____ |

(53) Do you usually select a campsite which is unoccupied or do you prefer to camp near another party?

unoccupied near another party

(46) Why did you choose to camp at this particular site tonight?

What influenced your decision to choose this campsite rather than other place on this lake or nearby lakes where you could have camped?

I. Current Behavior A. Travel Patterns 4. Site Selection Factors

(7) Please grade the importance to you of the following campsite selection factors. Use a scale from 0 (not at all important) to 10 (extremely important) to indicate the weight you generally give to each in selecting a campsite.

- being close to the trail
- accessibility to water
- quality of the view of the surrounding area
- level, rock-free site
- being out of sight from trail
- apparent safety
- being near other campers
- information you've received about campsites
- general convenience
- Forest Service regulations regarding site location
- privacy and solitude

. Trip Activities

Questions to determine visitor observations of man's impact on the area, of wildlife and of other visitors (see also III. A. 1. d.); questions about activities participated in by visitors; questions to learn what equipment visitors used on the trip.

1. Visitor Observations

(29) While you were floating, about what percentage of the time were other canoes (other than those in your party) in sight?

(45) About how many boats and canoes did you see on this lake today? If you didn't notice one way or the other, check this box.

Total number seen today: If you saw no one today, check this box.

canoes motor canoes motor boats

(6) Have you noticed any appreciable change over the last five years in the number of people you've come across when hiking?

The number of people I meet:

- really hasn't changed
- has risen substantially
- has declined substantially
- has risen moderately
- has declined moderately
- I don't know

(19) About how many hikers did you see while hiking today?

- none
- less than 5
- 5 to 10
- 11 to 20
- 21 to 30
- more than 30

(7) On the trip you have been describing, about how many camping parties did you actually camp with per night?

- none
- 1 to 5 parties
- 6 to 10 parties
- 11 to 15 parties
- more than 15 parties
- I didn't stay overnight in the (area)

(14) How often did you actually see another party on the trail today? I actually saw another party about every:

- 15 minutes
- half hour
- hour
- 2 hours
- 3 to 5 hours
- 6 to 8 hours
- I didn't see any other parties

. Current Behavior B. Trip Activities 1. Visitor Observations

(93) About how many nights, if any, did your party camp near other parties?
(Please write in the appropriate number of nights for each category)

- _____ nights right next to other parties
- _____ nights near, but not right next to other parties
- _____ nights far away, but within sight of other parties
- _____ nights completely away from and out of sight of other parties

(93) With how many sighted hikers, if any, did you interact (for example, talk to or exchange greetings, either verbal or nonverbal) during this backcountry trip? (If you did not interact with any, please write in 0.) _____

(71) Estimate the number of people you saw (do not count members of the group you were with) at each of the following places:

Estimated # of
people seen

- _____ Where you first put into the river
- _____ While travelling on the river
- _____ While camping on the river (if you camped)
- _____ Where you last took out of the river

(11) Did you have unpleasant encounters with other wilderness visitors on your trip?

_____ no _____ yes

If yes, could you indicate the nature of unpleasant instances?

(87) Did you notice any signs of pollution, environmental damage, or overuse in the area you hiked through?

_____ no _____ yes (please tell what signs and where)

(69) Have you seen or heard any timber harvesting, either at close range or distance, from the trail?

_____ yes _____ no

(93) About how much, if any, evidence of human impact did you see on this backcountry trail?

	None	Small amounts at certain spots	Small amounts over the entire area	Large amounts at certain spots	Large amounts over entire area
Human waste	_____	_____	_____	_____	_____
Toilet paper	_____	_____	_____	_____	_____
Campfire rings	_____	_____	_____	_____	_____
Litter	_____	_____	_____	_____	_____
Horse waste	_____	_____	_____	_____	_____
Cut bushes or trees	_____	_____	_____	_____	_____
Hiker-made trails	_____	_____	_____	_____	_____
Hiker-made campsites	_____	_____	_____	_____	_____

II. Current Behavior B. Trip Activities 1. Visitor Observations

(93) How many nights, if any, during this backcountry trip did you camp at a spot where there was evidence of previous overnight use?
(Circle number)

0 1 2 3 4 5 6 7 8 9 10+

(56) Check any of the wildlife below that you saw in the wilderness:

<input type="checkbox"/> grizzly bear	<input type="checkbox"/> beaver
<input type="checkbox"/> black bear	<input type="checkbox"/> moose
<input type="checkbox"/> bear, not sure which kind	<input type="checkbox"/> coyote
<input type="checkbox"/> elk	<input type="checkbox"/> wolf
<input type="checkbox"/> deer	<input type="checkbox"/> bald eagle
<input type="checkbox"/> mountain goats	<input type="checkbox"/> other _____
<input type="checkbox"/> bighorn sheep	

On-site Activities

(67) How much of each characteristic is present while backpacking here? Please circle one number along the continuum to indicate your choice, with 1 indicating complete absence and 7 indicating an extremely great amount. Answer each item as it applies to you.

	Completely absent	1	2	3	4	5	6	7 Extremely great amount
Scenic beauty and picturesqueness		1	2	3	4	5	6	7
Flowers, trees, shrubs, and grasses (amount and variety)		1	2	3	4	5	6	7
Pollution (air, water, noise, etc.)		1	2	3	4	5	6	7
Opportunity to learn new things and gain new perspectives		1	2	3	4	5	6	7
Opportunity to get away from the problems and/or boredom of everyday life		1	2	3	4	5	6	7
Enjoying myself in the outdoors		1	2	3	4	5	6	7
Feeling of exhilaration		1	2	3	4	5	6	7
Opportunity to strengthen close personal relationships with family and/or friends		1	2	3	4	5	6	7
Opportunity for other recreational activities such as fishing		1	2	3	4	5	6	7
Comfort		1	2	3	4	5	6	7
Feeling of being surrounded by the sights, smells, and sounds of the area		1	2	3	4	5	6	7
Opportunity for solitude and privacy		1	2	3	4	5	6	7
Crowding		1	2	3	4	5	6	7
Cost of using this area and/or facility		1	2	3	4	5	6	7
Annoying bugs and insects		1	2	3	4	5	6	7
Accessibility		1	2	3	4	5	6	7
Annoying and inconsiderate neighboring backpackers		1	2	3	4	5	6	7

Current Behavior B. Trip Activities 2. On-site Activities

(7) If you remained out on one or more nights in an area outside of the (area), what type of facility did you use?

- | | |
|--|--|
| <input type="checkbox"/> designated campsite
(no tent platform) | <input type="checkbox"/> three-sided shelter |
| <input type="checkbox"/> undesignated campsite | <input type="checkbox"/> enclosed camp (no meals provided) |
| <input type="checkbox"/> tent platform | <input type="checkbox"/> hut (meals provided) |

(75) Sometimes you will find registers asking for name, address and destination along hiking trails. When trail registers are available, do you sign them?

- does not apply Yes No
If no, why not?

(93) During this backcountry trip, to what extent did your party hike on the following landscapes? (Please write in the appropriate percentage for each landscape. The percentages should total 100%.)

- | | |
|--|---|
| <input type="checkbox"/> Along rivers or streams | <input type="checkbox"/> On snow or glacier |
| <input type="checkbox"/> On vegetated ground | <input type="checkbox"/> On trails |
| <input type="checkbox"/> On rock or scree | <input type="checkbox"/> <u>100%</u> Total |

(93) Which of the following actions, if any, did you take while on this backcountry trip?

- Applied repellents to skin and clothing to ward off insects.
- Applied repellents to skin and clothing to ward off other wildlife.
- Attached noise making implements to my person or equipment.
- Wrapped food well enough to eliminate odors.
- Cooked and ate away from the tent.
- Located food away from the tent.
- Hiked around rather than through dense stands of vegetation.
- Moved along on hike making considerable noise such as singing, shouting, etc.
- Avoided following what appeared to be wildlife trails.
- Other actions (specify) _____
- I did not take any actions.

(25) Did you participate in any recreational activity during your visit that you had not known about or planned for beforehand? _____

What did you miss doing or seeing during this visit that you had planned on before coming here? _____

What did you spend most of your time doing while you visited this riverway area? _____

II. Current Behavior B. Trip Activities 2. On-site Activities

(58) Write the number of days you hunted each kind of game in the wilderness in the first column. Check the second column if you saw that kind of game. Check the third column if you shot at it, and check the fourth column if you got it.

	Days hunted	Saw	Shot at	Got
elk	/	/	/	/
deer	/	/	/	/
goat	/	/	/	/
sheep	/	/	/	/
black bear	/	/	/	/
grizzly	/	/	/	/
moose	/	/	/	/
grouse	/	/	/	/
other (kind)	/	/	/	/
	/	/	/	/
	/	/	/	/

3. Equipment

- (29) Do you own your own canoe? _____
 Did you rent it? _____ If rented, did you rent it locally? _____
 Did you borrow it? _____ Or in home area? _____
- (53) Did you bring all of the necessary equipment and provisions for this trip from your home?
 _____ yes _____ no
- (37) Type of boat used on your float trip?
 _____ canoe _____ kayak
 _____ rubber raft _____ other (please specify) _____
 _____ wooden (McKenzie river boat)
- (27) Are you carrying a: (yes or no)
 _____ stove _____ axe _____ tent _____ map
- (69) What are you using as a guide on this hike?
 _____ AT guidebook _____ Trail blazes _____ map (specify type)
 _____ other (specify) _____

II. Current Behavior B. Trip Activities 3. Equipment

- (58) Did your party have maps or guidebooks for the wilderness you visited?
_____ no _____ yes If yes, what kinds? _____
- (77) Check each of the following backpacking equipment items you own:
_____ sleeping bag _____ rain gear _____ pack
_____ tent _____ stove _____ approximate total cost
of equipment
- (49) What is the engine size and weight of the cycle you use most often for trail riding?
_____ engine size (cc) _____ pounds
- (49) How many cycles used for trail riding are owned by you and your immediate family (father, mother, spouse, sons, daughters living at home)?

- (71) Which of the following types of watercraft are you going to ride in on this trip. (Check all that apply.)
() innertube () raft, no motor
() kayak () raft with motor
() canoe, no motor () motor boat
() canoe with motor () other _____
- (12) If hunting, what weapons were you using, principally?
_____ Rifle _____ Shotgun _____ Bow _____ Other
- (43) Type of camping unit used for stay at (area)?
_ Tent _____ Trailer camper
_ Tent camper _____ Van camper
_ Truck camper _____ Other (please specify) _____
- (20) Approximately what is the total combined mileage for all of the snow-mobiles owned by your household per season? (Please check appropriate category.)
_____ 0-100 miles _____ 501-800 miles
_____ 101-200 miles _____ 801-1000 miles
_____ 201-300 miles _____ 1001-1500 miles
_____ 301-500 miles _____ more than 1500 miles

II. Current Behavior

C. Management-Relevant Behavior

Questions about the availability and use of backcountry/wilderness permits and about the source and quality of information visitors were exposed to during their trip.

1. Rules and Regulations

(14) How did you find out about permits in the (area)? Please check your first source of information about permits.

- friends Forest Service brochures
- other hikers AMC centers (like Pinkham Notch)
- signs at the entrance to the (area) other (please specify) _____
- Forest Service personnel

(14) If you had a difficult time in obtaining a permit, what suggestions do you have for making permits easier to get? (Please be as specific as possible.) _____

(14) Before you visited the (area), did you know that day-use and overnight camping permits were required?
 yes no

(21) Obtaining the permit was:
 very convenient inconvenient
 convenient very inconvenient

(2) What is your permit number? _____

(84) How did you apply for your permit?
 in person by mail by phone

(54) Did your outfitter mention to you that travelers in the (area) are required to have a Travel Permit?
 yes no

(84) Did you apply for a permit to the (area) at any other time?
 no yes If yes, did you receive one? no yes

(94) How well did the person who issued you the last permit explain the (area) rules and regulations to you?
 very well-----fair-----very poorly
 1 2 3 4 5

2. Source and Quality of Information

(54) Have you stopped at the visitor information center in (area)?
 yes no

(75) Following is a list of information services. Please circle the number in front of any that you ever visited or had contact with at (area).
 1 (name) visitor center 4 naturalist contact--personal
 2 naturalist evening programs 5 backcountry slide show
 3 morning or afternoon programs 6 publications

(30) If you wanted additional information about a future wilderness trip to to the (area), who would you contact or what information source would you use?

II. Current Behavior C. Management-Relevant Behavior 2. Source and Quality of Information

(30) Did you stop anywhere to seek additional information about your wilderness trip while you were in the (area)?

_____ no _____ yes If yes, where? _____
 what kind of information did you seek? _____

(73) Do you feel you had adequate information about (area) backcountry (its trails, points of interest, rules and regulations)?

_____ yes _____ no If no, please rank each of the following possible backcountry information systems from most preferred (1) to least preferred (4).

- _____ personal contact with a ranger at an entrance station
- _____ self-operating informational slide program at visitor centers or backcountry permit offices
- _____ trailhead bulletin board
- _____ backcountry information brochures available at visitor centers or at permit issuing stations

(22) On your first visit to this area, from whom did you obtain information about what the area is like? _____

(92) This is a two-part question. For each topic listed below:

- (a) Please indicate whether information was provided by the crew at the hut(s) which you visited this past year.
- (b) Please indicate whether this information was accurate.

Topic	Information provided			Accuracy			
	Yes	No	Sometimes	Good	Fair	Poor	Don't Know
Forest Regulations							
Weather Information							
Trail Information							
Mountain Safety							
Mountain History							
AMC Membership							
Natural History							

(21) During the summer did you read, see, or hear information regarding backcountry (wilderness) management in (area)? This might indicate such things as: What the National Park Service is doing to preserve the environmental quality of backcountry area; What users can do to preserve such country quality; The new backcountry use permit system.

_____ no _____ yes If yes, in what form did you receive this information? (Most people will have only been involved with one of the below information media, if any. Please check only the one, or more if necessary, that you definitely remember.)

- _____ read a green-colored brochure entitled: Tips on Protecting Your Backcountry
- _____ read a sign at trailhead about backpackers and the permit system.

. Current Behavior C. Management-Relevant Behavior 2. Source and Quality of Information

_____ read an article about it. Please specify in what newspaper(s) or magazines. _____

Did you read it before _____ or after _____ your park visit?

_____ saw a narrated slide exhibit at park headquarters

_____ saw a television program. What station (city, call letters?) _____

_____ Did you see it before _____ or after _____ your park visit?

_____ Other (please specify): _____

Group Behavior

Questions to determined group make-up, group leadership, or group cohesiveness. (See also I. B. 5.)

- (42) Is party with guide or outfitter?
 _____ yes _____ no
- (2) Is there a leader of your group?
 _____ yes _____ no
- (71) Are you an outfitter or employed by an outfitter on this trip?
 _____ yes _____ no
- (71) Are any of the watercraft your are going to ride in on this trip owned by an outfitter?
 _____ yes _____ no
- (65) How many persons traveling with your group were hired to help out on this trip (that is, guides, wranglers, cooks, etc.)?
 _____ none _____ 1,2, _____ 3-5, _____ 6-10, _____ over 10 _____
 (specify)
- (76) Who among your group played the major role in deciding to go on this hike?
 _____ you _____ a friend
 _____ your spouse _____ a club or organization
 _____ a family member other than _____ other (please describe)
 you or your spouse _____
- (71) Are any of the watercraft you are going to ride in on this trip piloted by an outfitter?
 _____ yes _____ no
- (82) Was this an organization-sponsored trip?
 _____ no _____ yes If yes, what organization? _____
- (52) Did your group stay together after your arrived here?
 _____ yes _____ no If no, please explain how the group divided.

- (2) Do you share any camping equipment or divide food or gear between yourselves?
 _____ no _____ yes

II. Current Behavior

E. Knowledge of Area

Questions designed to measure visitor knowledge of the area's physical characteristics and management policies.

Area Characteristics

(47) Can you tell me what lake drainage you presently are in or have just passed through? _____

(65) About how large do you think this particular wilderness area is? (just your best guess)

<u>Acres</u>	<u>Or Square Miles</u>
Under 5,000	Under 8
5,001-50,000	8-78
50,001-100,000	79-156
100,001-500,000	157-780
over 500,000	over 781
have no idea	

(13) In thinking about today's trip, which of the following classifications best describes the area that you just hiked through? (please check only one)

- _____ a wilderness area _____ a backcountry area
- _____ an undeveloped recreation area

Which of the following have been designated national wilderness areas?

- _____ Carter-Mariah _____ Pemigewasset _____ Great Gulf
- _____ Dry River _____ Kilkenny _____ Wild River
- _____ None of the areas listed here are national wilderness areas.

Management Policies

(81) Have you heard about the proposal to reclassify approximately 37,000 acres on the (area) from (area) National Park jurisdiction to the jurisdiction of the U.S. Forest Service?

_____ yes _____ no

(54) Can you tell me what the no-cut zone is? _____

(93) Do you know why limits have been placed on backcountry use at (area)?
_____ no _____ yes If yes, why are these limits imposed? _____

(65) Do you happen to know what governmental agency is in charge of this area?

- _____ U.S. Forest Service _____ Other: _____ (specify)
- _____ National Park Service _____ Don't know
- _____ State Agency

I. Current Behavior E. Knowledge of Area 2. Management Policies

(45) As far as you know, what is the official policy in this immediate region in regard to permitting the following:

	Permitted	Not permitted	Don't know
Roads			
Mining			
Big game hunting			
Killing predators			
Resort development			
Spraying forest insects			
Cattle and sheep grazing			

(93) Before arriving at (area), were you aware of the following management policies?

	YES	NO
That the backcountry is divided into travel zones.		
That a permit is required for overnight backcountry zones.		
That there is a limit on the number of hikers permitted to camp in most zones on any given night.		
That there is no limit as to the number of hikers permitted to hike in any zone.		
That there are 2 zones open to unlimited overnight use.		
That a travel permit is not required for day hikers.		
That certain areas of the backcountry are always closed to overnight backcountry use.		
That hikers are sometimes prohibited from entering certain backcountry zones.		
That campfires are not allowed in the backcountry.		
That there is a free shuttle-bus transportation system.		

III. PREDISPOSITIONAL SETS

Questions to ascertain attitudes and opinions about management policies regarding use of natural resources (see also III. B. 3. c.), level of development (see also III. B. 3.), rules and regulations as they relate to environmental degradation, conflicting uses, use restrictions and general attitudes, user density (see also II. B. 1., III. B. 1. a., III. B. 4., III. C. 2.), management personnel, legislation, information and education (see also II. C. 2.), maintenance practices, area management problems, finance; questions to ascertain attitudes and opinions concerning backcountry travel and camping practices.

A. Attitudes about:

Management Activities and Policies Regarding:

Use of Natural Resources

(61) This section concerns your feeling about regulation for preservation of the environment. For the next four questions, please indicate if you strongly agree, agree, disagree, or strongly disagree.

SA A D SD

In order for the earth's ecosystem to survive, it will probably be necessary to eliminate most private ownership of land and natural resources, and govern their use with an environmental control agency. () () () ()

While someone may own land, he has no right to do anything to it that will permanently damage the environment. () () () ()

Oil and automobile companies are such destructive forces in our environment that their ownership should be taken over by the Federal government. () () () ()

Even though industries in socialist societies may now be polluting the environment, it is only through state ownership and control of every industry that we will ever save ourselves from ecological disaster. () () () ()

(61) Generally speaking, do you think man should try to control and manage the wildlife and vegetation in a wilderness area, or do you think that nature's forces should be allowed to proceed with minimum interference from man?

Control and manage Minimum interference don't know

(71) Do you feel that controls are needed to prevent the environment from being damaged by recreational use of the river?

yes, controls are needed now to stop environmental damage caused by recreational use of the river. What damages do you feel are being caused by recreation?

Yes, although no damage is occurring now, controls are needed to prevent the possibility of future damage.

No, controls are not needed now, but they should be imposed in the future if and when recreation begins to cause environmental damage.

No, there should be no controls now or in the future.

II. Predispositional Sets of Natural Resources A. Attitudes about: 1. Management Activities and Policies Regarding: a. Use

(54) Do you favor or oppose the following practices in the (area)?

	Favor	Oppose	No Opinion
Timber cutting	_____	_____	_____
Mining	_____	_____	_____
Building reservoirs	_____	_____	_____
Cattle and sheep grazing	_____	_____	_____

(64) Do you think that natural resources in wilderness areas such as minerals, timber, grazing lands or water should be utilized for the public or should the area be left untouched?
 _____ Utilized for public _____ Left untouched _____ Undecided

(24) The following statements are about wildlife. Place a check mark in the box to the left of those statements with which you agree.

_____ Surplus wildlife should be captured and restocked in other suitable locations.

_____ Wildlife often occupy areas that could be better used for other purposes.

_____ Wildlife were meant to be utilized by mankind.

_____ Lands now being used for wildlife could be better used for other purposes where man might receive more direct benefits.

_____ Wildlife will be forced to move aside to make room for our expanding population.

_____ Cleaning up pollution should be given a priority over the preservation of wildlife.

Level of Development

(55) How did you, personally, feel about the general level of development in the area you visited on this trip? (The number and kind of trails, bridges, campsite facilities, and so on.)

_____ Underdeveloped, not enough or not good enough developments

_____ About right

_____ Overdeveloped, more or fancier facilities than I prefer

_____ Do not remember

Please comment on any developments you liked or disliked, and any you would like added, changed, or eliminated.

(81) Are you in favor of improving the access to the backcountry of (area)?
 _____ yes _____ no

(81) Which of the following means of improving access would seem most acceptable to you?

_____ improve the existing trail system

_____ extend the trail system by building new trails in new areas

_____ build rough roads into the low-lying backcountry

_____ build first-class roads into the backcountry

_____ build rough roads to very low standards but useful for jeeps and buses of a concessionnaire (private vehicles prohibited)

Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
 b. Level of Development

(52) Which of these would you say would be a good idea, a bad idea, or something you don't care about either way? (This doesn't necessarily mean the Forest Service is planning these things.)

	<u>Good</u>	<u>Bad</u>	<u>Don't Care</u>
Pumps or piped water at all campgrounds	___	___	___
Straighten and blacktop more roads	___	___	___
Build more small campgrounds	___	___	___
Build more large campgrounds	___	___	___
Build more large boat-launching ramps	___	___	___
Keep the area wild	___	___	___
Increase number of fish	___	___	___
Ban water skiing on some areas	___	___	___
Ban storage of boats and canoes over portages in the (area)	___	___	___

(78) The number of shelters is:

___ inadequate, more should be planned	___ excessive, all shelters should be removed
___ adequate at the present time	___ alternative: _____
___ excessive, some should be phased out	_____

(64) Listed below are suggestions that have been made to improve the wilderness area you visited. For each suggestion, please indicate whether you consider it a good idea or a poor idea or have no opinion.

	<u>Favor</u>	<u>Oppose</u>	<u>No Opinion</u>
Build primitive roads for public use within the wilderness	___	___	___
Provide rustic sanitary facilities	___	___	___
Have telephones available at various locations in case of emergency	___	___	___
Establish camps within the wilderness where meals and sleeping accommodations can be purchased	___	___	___
Build a small public airfield for helicopters and airplanes	___	___	___
Build a modern resort hotel or lodge within the area	___	___	___

(37) In several European countries and in Canada, a trail hut system is maintained to provide food and lodging for hikers and skiers traveling through a wildland recreation area. Would you favor the establishment of such a hut system in backcountry areas? (check one block)

___	yes	Why?	_____
___	no	Why?	_____

II. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
b. Level of Development

(71) Given the existing conditions at the river as you experienced them, what priority would you give to each of the following management actions?

	Very low priority	Low priority	Medium Priority	High priority	Very high priority
Providing more camping areas along the river	()	()	()	()	()
Develop hiking trails along the river	()	()	()	()	()
Improve existing access roads	()	()	()	()	()
Provide more points of public access to the river	()	()	()	()	()
Control the flow of water in the river for recreational use	()	()	()	()	()
Provide better information services (brochures, maps, signs, displays, etc.) regarding:					
1) The flow of water in the river	()	()	()	()	()
2) Level of congestion on the river	()	()	()	()	()
3) Locations of camping areas	()	()	()	()	()
4) Locations of access points	()	()	()	()	()
5) Navigation hazards	()	()	()	()	()
6) Natural and scenic features	()	()	()	()	()
7) Historic sites	()	()	()	()	()
8) Availability of services (gas, food, lodging, etc.)	()	()	()	()	()
Other improvements that you think should be listed:					

I. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
 b. Level of Development

(58) Thinking just about the roadless wilderness country, how desirable or undesirable do you think each of the following things is? (check one box after each item)

	Very undesirable	Undesirable	Neutral	Desirable	Very desirable
Bridges over rivers that are dangerous for hikers to wade	()	()	()	()	()
Small, loose -rock fireplaces	()	()	()	()	()
Natural forest fires started by lightning	()	()	()	()	()
Pole corrals at campsites for horses	()	()	()	()	()
Leaving some areas with no trails	()	()	()	()	()
A few trees blown down across the trail, maybe 1 or 2 a mile	()	()	()	()	()
Signs along the trail explaining natural features or early history	()	()	()	()	()

Rules and Regulations (71) If and when recreational use of the river does cause environmental damage, how would you feel about the following management actions?

	Strongly oppose	Oppose	Neutral	Support	Strongly support
Require all water craft to carry portable toilets	()	()	()	()	()
Prohibit firearms	()	()	()	()	()
Allow fires only at designated locations	()	()	()	()	()
Require people to carry out their own trash	()	()	()	()	()
Prohibit the use of cans, bottles and other non-burnable disposable containers	()	()	()	()	()
Allow camping only at designated locations	()	()	()	()	()

I. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
c. Rules and Regulations

	Strongly oppose	Oppose	Neutral	Support	Strongly support
Impose special fishing restrictions	()	()	()	()	()
Impose special hunting restrictions	()	()	()	()	()

(51) Increased use has caused damage to camping areas. What should be done to control this damage? (Check all you agree with.)

- limit size of camping parties
- ban wood fires
- close campsites periodically
- remove trail shelters
- limit use at campsites with quota system
- develop more campsites
- allow dispersed camping use; campsite would be used only once
- no parties allowed to camp within 200 feet of the trail, water source, or other camping parties
- station staff at heavily used sites to enforce camping regulations
- rehabilitate campsite areas by replanting vegetation, installing tent platforms, etc.
- do nothing
- other _____

Please specify

(71) If and when there are conflicts among different kinds of use of the river, how would you feel about the following management actions?

	Strongly oppose	Oppose	Neutral	Support	Strongly support
Allow the conflicts to continue without any controls	()	()	()	()	()
Separate incompatible activities through zoning by requiring them to use different sections of the river	()	()	()	()	()
Separate incompatible activities by requiring them to use the river at different times	()	()	()	()	()
Prohibit motorized travel on the river	()	()	()	()	()

III. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
c. Rules and Regulations

I

	Strongly oppose	Oppose	Neutral	Support	Strongly support
Prohibit boating of any kind	()	()	()	()	()
Prohibit camping along the river	()	()	()	()	()
Prohibit off-road vehicles in the vicinity of the river, except on designated roads, highways, etc.	()	()	()	()	()
Prohibit construction and development along the river	()	()	()	()	()
Prohibit swimming in the river except at designated places	()	()	()	()	()

Other ways to manage conflict:

(21) I believe the Backcountry Use Permit is (check one)

very necessary I feel neutral very unnecessary
 necessary unnecessary undecided

(84) At present, permits for using the (area) are issued on a "first-come, first-served" basis. In your judgment, are there better ways permits to visit the wilderness could be issued? _____

(21) Which would you prefer: (check one)

- Allow for advance registration with cancellation being automatic if I do not appear by a certain day and time (similar to most hotels and motels)
- Do away with any permit system
- No changes in present system
- Other (please specify) _____

(78) Permits should be required for:

- all recreation uses in the (area)
- day hikes
- overnight use
- fires outside of shelter sites
- fires in all areas including shelter sites
- alternative: _____

Comments: _____

III. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
c. Rules and Regulations

(14) In a wilderness area. . .

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree
Permits are an effective means for controlling number of people	()	()	()	()
Wilderness users should have to use designated campsites	()	()	()	()
There should be regulations on the distance people may camp from trails and rivers	()	()	()	()
Day use permits should be required	()	()	()	()
Overnight permits should be required	()	()	()	()
Fire permits should be required for every party of wilderness users	()	()	()	()
Trails should be reinforced (i.e. with wood chips, water bars, etc.)	()	()	()	()
Trails should be maintained in as natural a state as possible	()	()	()	()
Signs should be placed at trail junctions only	()	()	()	()
There should be restrictions on the number of people who can use the area at any given time	()	()	()	()

- (71) Do you feel that controls are needed to prevent conflicts from occurring among different kinds of river use? (e.g. fishing, rafting, motor boating, canoeing, tubing, swimming, camping, hiking, etc.)
- () Yes, controls are needed now to correct existing conflicts among different users.
What conflicts are there? _____
- () Yes, although no conflicts exist now, controls are needed now to prevent conflicts from occurring in the future.
- () No, controls are not needed now, but they should be imposed in the future if and when conflicts develop.
- () No, there should be no controls now or in the future on the kinds of activities that are allowed on the river.

III. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
c. Rules and Regulations

(84) The (area) and (area) Wildernesses are the only Forest Service Wildernesses where use was rationed in 1973. Would you continue to visit wilderness if use in all wildernesses was rationed?
 _____ no _____ yes _____ not sure

(23) The rules and regulations they have in forest areas are usually fair and reasonable.
 _____ Agree _____ Disagree _____ No opinion

(85) If the use of a wilderness was very heavy, and controls on use were being considered, check how you would feel about each of the following management policies:

	Strongly favor	Favor	Neutral	Oppose	Strongly oppose
Limit the number of people entering the wilderness area by:					
issuing a limited number of permits on a first-come, first-served basis	()	()	()	()	()
issuing a limited number of permits on a drawing (or lottery) basis	()	()	()	()	()
issuing a limited number of permits through a mail reservation system	()	()	()	()	()
Charge an entrance fee	()	()	()	()	()
Issue permits so that people could only camp in the area assigned to them	()	()	()	()	()
Reduce the number of trails and signs so that only those persons willing to make the effort could visit the area	()	()	()	()	()
Block off the last few miles of the access roads so the trail to the wilderness would be longer	()	()	()	()	()
Allow use to continue to increase without controls	()	()	()	()	()
Something else would be better; I would suggest:					

III. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
c. Rules and Regulations

(71) How would you feel about the following controls aimed at personal safety?

	Strongly oppose	Oppose	Neutral	Support	Strongly support
Require everyone to wear a life jacket while on the river	()	()	()	()	()
Provide search and rescue services at the user's expense	()	()	()	()	()
Require every group to have approved first-aid equipment	()	()	()	()	()
Prohibit travel on the river by unsafe watercraft	()	()	()	()	()
Prohibit travel on the river at unsafe times (during storms, high water, etc.)	()	()	()	()	()
Post signs warning and advising of hazards	()	()	()	()	()
Prohibit swimming except in designated areas	()	()	()	()	()
Be more aggressive in the enforcement of safety rules and regulations	()	()	()	()	()
Require each group to have an educational contact prior to the trip so the managing agency can explain the rules and hazards	()	()	()	()	()
Provide emergency telephones along the river	()	()	()	()	()

Other ways to ensure safety:

- (23) The people in charge of the forests sometimes exaggerate the danger of a fire to encourage visitors to abide by forest regulations.
 ___ Agree ___ Disagree ___ No opinion ___ No answer
- (23) The one place where people should be free from rules and regulations is when they're off in the woods. Do you agree or disagree?
 ___ Agree ___ Disagree ___ No opinion ___ No answer
- (47) Most people will stop using outdoor recreation areas if they have to put up with a lot of rules and regulations.
 ___ Strongly agree ___ Strongly disagree ___ Disagree
 ___ Undecided ___ Agree

III. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
c. Rules and Regulations

(93) Which of the following management options do you support or oppose for the (area) backcountry? (Please indicate your feelings by circling the appropriate answer code next to each statement).

	Strongly support	Mostly support	Neutral	Mostly Oppose	Strongly Oppose
Require a backcountry use fee	SS	MS	N	MO	SO
Allow horse travel in all backcountry zones	SS	MS	N	MO	SO
Restrict horse travel to a few backcountry zones	SS	MS	N	MO	SO
Brightly colored tents should be banned in the backcountry	SS	MS	N	MO	SO

(78) Of the following activities, place a check mark next to the ones you feel SHOULD NOT be allowed at HIGH elevation (above 2500 feet), but SHOULD BE ALLOWED in the LOWER elevation areas:

- 1 () hunting
- 2 () fishing
- 3 () rock-climbing (with equipment)
- 4 () firewood cutting
- 5 () commercial timber harvesting
- 6 () shelter & lodge-type camping
- 7 () tenting in designated tenting areas
- 8 () tenting (individual, scattered sites)
- 9 () vehicle camping (trailers, etc.)

Now, list those activities you think should not be allowed ANYWHERE in this state park. Just list the number (2 = fishing, etc.): _____

1. User Density

(37) If use of a wild river was heavy, and controls were being considered, please indicate how you would feel about each of the following management policies:

	Strongly favor	Favor	Neutral	Oppose	Strongly oppose
Limit the number of people entering by restricting use to only those with prior river experience	()	()	()	()	()
issuing a limited number of permits through a mail reservation system	()	()	()	()	()
allowing only one float trip per person in a lifetime	()	()	()	()	()
issuing a limited number of permits on a first-come, first-served basis	()	()	()	()	()

III. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
d. User Density

	Strongly favor	Favor	Neutral	Oppose	Strongly oppose
restricting use to only those with proper equipment for floating white water rivers	()	()	()	()	()
regulated launch time (a restricted number of parties per day at stated intervals)	()	()	()	()	()
charge an entrance fee	()	()	()	()	()
assign campsites prior to launch	()	()	()	()	()
Something else may be better. I suggest: _____					

(14) Below are listed some ways that the number of people using this area might be limited. For each item, please circle the response which is closest to the way you feel.

	Strongly Favor	somewhat favor	somewhat oppose	Strongly Oppose
Limiting numbers of users by . . .				
Assign trails and campsites to reduce between-group contacts	SF	sf	so	S0
Allow heavy use on some trails but only light use on others	SF	sf	so	S0
Establish more trails to spread out use	SF	sf	so	S0
Nothing needs to be done	SF	sf	so	S0
Something else would be better. _____				

(5) Do you feel there should be a limit on the number of groups allowed to camp within seeing and hearing distance of your own campsite?
 _____ No _____ Yes What should that number be? _____

(78) What is the best way to discourage or limit the number of hikers using the trails?

- _____ don't clear the trails as well; make it more difficult to hike
- _____ post signs at trailheads each day indicating the number of hikers already using the trail
- _____ publicize periodic closure of popular trails and shelters
- _____ charge fees for use of trails and shelters
- _____ require applications for permit
- _____ enforce quota system - first come, first served
- _____ enforce quota system - issue present number of permits
- _____ alternative: _____

Comments: _____

III. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
d. User Density

	<u>Very low priority</u>	<u>Low priority</u>	<u>Medium priority</u>	<u>High priority</u>	<u>Very high priority</u>
Rafting by private groups	()	()	()	()	()
Tubing	()	()	()	()	()
Motor boating	()	()	()	()	()
Fishing	()	()	()	()	()
Camping	()	()	()	()	()
Hiking	()	()	()	()	()
Swimming	()	()	()	()	()

(87) How do you feel about the following management policies regarding horse use in backcountry areas?

	<u>Agree</u>	<u>Disagree</u>	<u>Neutral</u>
Establish separate trails for horse use			
Set horse party-size limits for day trips			
Set horse party-size limits for overnight trips			
Restriction of grazing by horses in favor of use of pelletized feed during overnight trips			
Designated stopping areas for horse groups to reduce trampling and grazing impact			

Constructive comments regarding horsemanagement are welcome.

(13) The area you just hiked through is called the (area). For each of the following statements, please circle the single response which is closest to the way you feel about the (area).

	<u>Strongly Disagree</u>	<u>Probably Disagree</u>	<u>Probably Agree</u>	<u>Strongly Agree</u>
The (area) is too crowded to be considered a wilderness.	SD	PD	PA	SA
The (area's) environment is being damaged by overuse.	SD	PD	PA	SA
The (area) would be more of a wilderness if visitor use were limited.	SD	PD	PA	SA

III. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
d. User Density

(13) continued

	Strongly disagree	Probably disagree	Probably agree	Strongly agree
The number of visitors using the (area) should be limited by:				
permits issued on a first-come, first-served basis	SD	PD	PA	SA
a reservation system	SD	PD	PA	SA
a lottery system	SD	PD	PA	SA
user licenses (similar to a hunting license)	SD	PD	PA	SA
entrance fees	SD	PD	PA	SA
certification of users through a backcountry skills test	SD	PD	PA	SA

- (5) How do you feel about the number of people you saw on the trip as a whole?
- | | |
|---|--|
| <input type="checkbox"/> Far too many people | <input type="checkbox"/> Somewhat too few people |
| <input type="checkbox"/> Somewhat too many people | <input type="checkbox"/> Far too few people |
| <input type="checkbox"/> About the right number of people | <input type="checkbox"/> No opinion |

- (14) On your (area) trip, did you feel crowded while you were hiking?
- | | | | | | | | | |
|------------|------------------|---|--------------------|---|-------------------|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Not at all | Slightly crowded | | Moderately crowded | | Extremely crowded | | | |

- (16) What is your impression of the overall use intensity of this area?
- | | |
|---|---|
| <input type="checkbox"/> Greatly overused | <input type="checkbox"/> Slightly underused |
| <input type="checkbox"/> Slightly overused | <input type="checkbox"/> Greatly underused |
| <input type="checkbox"/> Neither overused nor underused | <input type="checkbox"/> No opinion |

Would you say that this area is being overused today?
 Yes No No opinion

- (81) How much use do you think the (area) backcountry receives?
 under capacity at capacity over capacity

- (14) While you were hiking today, did you feel that the trails you used were crowded? (Please circle one)
- | | | | | | | | | |
|------------|------------------|---|---|---|--------------------|---|-------------------|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| not at all | slightly crowded | | | | moderately crowded | | extremely crowded | |

III. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
d. User Density

(7) Did the number of parties you encountered on this trail increase, decrease, or not affect your satisfaction with your hike?

1	2	3	4	5	6	7
greatly decreased satisfaction	decreased satisfaction	did not affect satisfaction	did not affect satisfaction	did not affect satisfaction	increased satisfaction	greatly increased satisfaction

(85) For each of the following statements, please indicate how much you agree or disagree with it by circling one of the symbols following each statement.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	SD	D	N	A	SA
Seeing too many people in the wilderness is more disturbing than finding a littered campsite	SD	D	N	A	SA
It is reasonable to expect that one should be able to visit a wilderness area and see few, if any, people	SD	D	N	A	SA
When staying out overnight in the wilderness, it is most enjoyable not to be camped near anyone else	SD	D	N	A	SA
Seeing a large party (a dozen or more people from a club, etc.) reduces the feeling that you're out in the wilderness	SD	S	N	A	SA

(82) For each of the following statements, please indicate how much you agree or disagree with it by circling one of the symbols following each statement.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	SD	D	N	A	SA
It's most enjoyable when you don't meet anyone in the wilderness	SD	D	N	A	SA
You should see at least one group a day in the wilderness to get the most enjoyment out of your trip	SD	D	N	A	SA
Direction signs should be placed in wilderness areas	SD	D	N	A	SA
There should be areas of a wilderness designated for horseback use only and other areas for backpackers only	SD	D	N	A	SA
If a wilderness area becomes overcrowded, restrictions on the number of people allowed to visit should be enforced	SD	D	N	A	SA
While I am traveling in the wilderness (whether by foot or horseback), I prefer that the people I meet are traveling by the same means I am	SD	D	N	A	SA

III. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
d. User Density

- (5) What do you feel would have been an acceptable number of hikers to see per day while on the hiking trip? _____
- (5) What do you feel would have been an acceptable number of groups to see per day while on the hiking trip? _____
- (14) About what size of groups would you prefer to meet while hiking in the (area)?
_____ small (3 people or less) _____ large (7 to 10 people)
_____ medium (4 to 6 people) _____ makes no difference
- (14) About how many hiking parties would you prefer to meet per day while hiking in the (area)?
_____ none _____ 11 to 15 parties
_____ 1 to 5 parties _____ more than 15 parties
_____ 6 to 10 parties _____ I don't have any preferences
- (14) About how often would you prefer to encounter another hiking party while hiking in a wilderness area?
I would prefer to see another party about every:
_____ 15 minutes or less _____ 3 to 5 hours
_____ half hour _____ 6 to 8 hours
_____ hour _____ I prefer to see no one
_____ 2 hours _____ I have no preferences
- (54) Do you think that the number of visitors to (area) should be limited, or that anyone should be able to come here at any time he wants?
_____ should limit visitors _____ don't know
_____ should not limit visitors _____ other (specify)
- (81) How much additional use could the backcountry of (area) Park support and continue to offer about the same level of recreational quality as far as you are concerned?
() no increase in use () 100% increase () 300% increase
() 50% increase () 200% increase () more than 300%
- (14) Imagine the (area) as a "natural recreation" area, the kind of place where a natural setting is provided but meeting other people is part of the experience. In this case, which encounter levels would be appropriate? Indicate the point where there would be too many people for even this kind of natural recreation experience. Number of encounters with other hiking parties, while hiking each day.
OK to have as many as _____ encounters per day.
_____ makes no difference to me.
Number of encounters with other camping parties, while camping in a natural recreation area.
OK to meet as many as _____ camping parties while camping.
_____ makes no difference to me.

III. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
d. User Density

- (14) Imagine the (area) as a "wilderness", a place generally unaffected by the presence of man. If the (area) were this kind of area, which encounter levels would be appropriate? Indicate the highest level you would tolerate before the trip would no longer be a "wilderness experience".

Number of encounters with other hiking parties, while hiking each day.

OK to have as many as _____ encounters per day.

_____ makes no difference to me

Number of encounters with other camping parties, while camping.

OK to meet as many as _____ camping parties while camping.

_____ makes no difference to me.

Imagine the (area) as a "semi-wilderness", the kind of place where complete solitude is not expected. In this case, which encounter levels would be acceptable? Indicate the highest level you would tolerate before the trip would no longer be a "semi-wilderness experience".

Number of encounters with other hiking parties, while hiking each day.

OK to have as many as _____ encounters per day.

_____ makes no difference to me.

Number of encounters with other camping parties, while camping in a semi-wilderness area.

OK to meet as many as _____ camping parties while camping.

_____ makes no difference to me.

- (1) In wilderness or backcountry areas, how close would you prefer to camp to another party, at the minimum? With shielding from rocks or vegetation:

() Less than 100 feet

() More than 500 feet

() 100 to 200 feet

() Out of sight and sound, but

() 200 to 500 feet

possibly in sight

With no shielding from rocks or vegetation:

() Less than 100 feet

() More than 500 feet

() 100 to 200 feet

() Out of sight and sound

() 200 to 500 feet

- (14) About what size of group would you prefer to hike with in a wilderness area?

_____ small (3 people or less)

_____ large (7 to 10 people)

_____ medium (4 to 6 people)

_____ makes no difference

- (78) How many people at a shelter usually means it is overcrowded to you?

_____ 4 people _____ 8 people

_____ 12 people

_____ 6 people _____ 10 people

_____ more than 12 people

III. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
d. User Density

- (82) When looking for a spot to camp, which of the following locations would you like best (check one)?
- A spot out of sight and hearing of all other campers.
 - A place some distance from other campers; seeing or hearing them, however, wouldn't bother me.
 - A place near other campers. They would add enjoyment to my wilderness trip.
 - It doesn't make any difference to me.

e. Management Personnel

- (32) Administrators of backcountry recreation areas should be specifically trained for this task, and the task should be recognized as different from administration of other types of wild lands.
() Agree () Neutral () Disagree
- (32) Seasonal backcountry rangers should be trained in public interpretation of the area's natural features, as well as in safety and trail techniques.
() Agree () Neutral () Disagree
- (19) Do you feel it is important to have a uniformed person such as a park ranger, etc., at public recreation areas?
() Yes () No

- (37) Which type of fire management program would you favor in wilderness and backcountry areas? (Check one block under wilderness and one block under backcountry).

	<u>Wilderness</u>	<u>Backcountry</u>
Put out all fires	<input type="checkbox"/>	<input type="checkbox"/>
Put out all man-caused fires and let all natural fires burn	<input type="checkbox"/>	<input type="checkbox"/>
Put out all man-caused fires and large natural fires, but let small fires burn	<input type="checkbox"/>	<input type="checkbox"/>
Something else would be better. I would suggest: _____		

- (25) Who do you think manages this area?
() Federal () State () no idea () private
- (23) How good a job are they doing making the forests and wildland areas enjoyable places for people to visit?
() excellent () good () fair () poor () don't know
- (23) It would be a good idea to have more rangers to check up on forest visitors and make sure they abide by the forest regulations.
() Agree () Disagree () No opinion () No answer

f. Legislation

- (88) Are you in favor or opposed to the National Wilderness Preservation Act? Would you say you favor it strongly, are moderately in favor of it, moderately opposed to it, or strongly opposed to it?
- | | |
|---|---|
| <input type="checkbox"/> Strongly favor the bill | <input type="checkbox"/> Strongly oppose the bill |
| <input type="checkbox"/> Moderately favor the bill | <input type="checkbox"/> Undecided |
| <input type="checkbox"/> Moderately oppose the bill | <input type="checkbox"/> Don't know anything about it |

III. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
g. Information and Education

(75) Information on topics can be provided through displays, programs, and publications. Please circle the number that indicates how important information on each of these topics is to you.

	+2 Very important	+1 Important	0 Neutral	-1 Unimportant	-2 Very unimportant
geology	+2	+1	0	-1	-2
plants	+2	+1	0	-1	-2
present human activity	+2	+1	0	-1	-2
management practices and policies	+2	+1	0	-1	-2
animals	+2	+1	0	-1	-2
ecology	+2	+1	0	-1	-2
rules and regulations	+2	+1	0	-1	+2
human history and prehistory	+2	+1	0	-1	-2
climate and weather	+2	+1	0	-1	-2
things to do in the park	+2	+1	0	-1	-2
places to go outside the park	+2	+1	0	-1	-2

(15) Would you like to have more information made available to interpret the history and features of the (area)?

No Yes

If yes, check in the appropriate box your preference as to how you would like this information made available.

	Greatly prefer	Prefer	Doesn't matter	Do not want
Leaflets or brochures	()	()	()	()
Signs along trails	()	()	()	()
From Forest Service rangers	()	()	()	()
In books to be read at home	()	()	()	()
Other (please specify)	()	()	()	()

(87) Do you feel that you were provided with adequate information regarding regulations governing backcountry use in (area)?

Yes No Suggestions _____

Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
g. Information and Education

(57) If you read the brochure "Routes to the Wilderness", before any of your trips, please answer the following questions.

	Useless	Some use	Useful	Very useful
How useful was the information on how to find the trailheads?				

Why do you feel this way? _____

	Useless	Some use	Useful	Very useful
How useful was the information on the amount of use of different trails?				

Why do you feel this way? _____

Area Maintenance Practices

(63) Would you like to have trail sections marked at the access points as to their difficulty?

_____ Yes _____ Wouldn't matter _____ No

(45) Some people believe that in a wilderness, wildlife and vegetation should be controlled and managed; others believe that nature should be left to take its own course. For each suggestion I give, tell me whether you think it is a good idea, a poor idea or have no opinion.

Replant in burned or barrened areas
_____ good idea _____ poor idea _____ no opinion

Stock lakes and streams with more fish
_____ good idea _____ poor idea _____ no opinion

(83) Below are some statements regarding various policies that might be adopted in regard to forest fire in wilderness. Please read all the statements carefully. Then, place an "X" on the letter of the one statement which comes the closest to your own personal feeling. Next place a circle ("O") around the letter of all other statements which are also acceptable to you.

- A. It is absolutely necessary that all forest fires be put out as soon as possible in our wilderness areas.
- B. It would probably be best if all forest fires were put out as soon as possible in our wilderness areas.
- C. Generally, it would be preferable if all forest fires in wilderness were put out as soon as possible.
- D. It is hard to decide what the policy toward forest fires in wilderness should be, but probably they should be put out as soon as possible.
- E. It is hard to decide whether we should allow forest fires to burn in our wilderness areas or not.
- F. It is hard to decide what the policy toward forest fires in wilderness should be, but probably we should allow small, "safe" ones to burn.
- G. Generally, it would be preferable if small, "safe" forest fires were allowed to burn in our wilderness areas.
- H. It would probably be best if most forest fires were allowed to burn in our wilderness areas.
- I. It is absolutely necessary that we allow all forest fires to burn in our wilderness areas.

Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
h. Area Maintenance Practices

(51) What should be done to reduce erosion and loss of trail vegetation?
(Check all you agree with)

- nothing
- limit hiking use
- strengthen trails (install waterbars, bridges, etc.)
- close trails periodically
- close trails only during the wet spring season
- other _____
(please specify)

(11) What one single condition in the (area) do you think the managing agency could improve to make your future trips more enjoyable?

(40) In what ways could the wilderness qualities of the area be improved (either physical or policy change)?

- physical change (facilities, trails, etc.) _____
- policy change _____

(32) Would you agree or disagree with the following statements?

	<u>SA</u>	<u>A</u>	<u>N</u>	<u>D</u>	<u>SD</u>
Use of helicopters is justified in remote backcountry recreational areas for protection of the area (e.g., from fire).	()	()	()	()	()
Use of helicopters is justified in remote backcountry recreational areas for protection of human life (e.g., rescues).	()	()	()	()	()
Use of helicopters is justified in remote backcountry recreational areas for routine administration and maintenance.	()	()	()	()	()
Use of helicopters is justified in remote backcountry recreational areas for bringing material and equipment to constructoin sites which otherwise would require large strings of pack animals.	()	()	()	()	()
Use of helicopters is justified in remote backcountry recreational areas for bringing patrolmen to and from the area.	()	()	()	()	()
Use of helicopters is justified in remote backcountry recreational areas for wildlife observatoin or control.	()	()	()	()	()
Man-caused fires in remote backcountry recreational areas and outbreaks of nonnative insects or diseases should be extinguished as quickly as possible after they are detected.	()	()	()	()	()

III. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
h. Area Maintenance Practices

The following suggestions have been made for improving the area. Please indicate whether you agree, disagree, or have no opinion on each one.

	<u>A</u>	<u>D</u>	<u>NO</u>
Build primitive roads which blend in with the scenery and provide easier access.	()	()	()
Promote an increase in the wildlife population.	()	()	()
Develop more campsites and trails that are spread out over more area.	()	()	()
Build a small public airfield for helicopters and airplanes.	()	()	()
Have telephones available at various locations in case of emergency.	()	()	()
Haul away some of the burned or rotting trees.	()	()	()
Keep the trails in better condition and mark them well.	()	()	()
Stock the streams with more fish.	()	()	()
Cut some of the timber so that there will be more open spaces, more meadows.	()	()	()
Have a place within the area to buy groceries and rent equipment.	()	()	()
Take better care of the campsites, restore those areas which have become run-down by overuse.	()	()	()
Develop campsite facilities so that more modern conveniences are provided.	()	()	()
Take steps to insure that the area is maintained in its natural condition.	()	()	()

Management Problems (76) This set of items concerns problems you may have run into on your visit to (area). Please indicate how much of a problem each item was for you by placing a mark in one of the spaces provided next to each item.

III. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
 1. Management Problems

Possible Problems	No problem at all	A small problem	A moderate problem	A big problem	Don't know
Trails poorly maintained	()	()	()	()	()
Trails poorly marked	()	()	()	()	()
Trails following abandoned roadbeds	()	()	()	()	()
Lack of suitable campsites	()	()	()	()	()
No supply of drinking water	()	()	()	()	()
Not enough privacy in campsites	()	()	()	()	()
Polluted streams	()	()	()	()	()
Stream bank erosion	()	()	()	()	()

(54) Do you believe that motorboats should be allowed in the (area) or not?

_____ should be allowed _____ should not be allowed
 _____ don't know _____ other (specify)

(30) Check in the appropriate box how serious you have found the following potential problems to be in the (area).

	Very serious	Serious	Moderately serious	No problem
Erosion of trails	()	()	()	()
Too many signs	()	()	()	()
Litter around campsites	()	()	()	()
Insufficient information about area	()	()	()	()
Lack of firewood	()	()	()	()

J. Finances

(20) Please select 3 of the following means of obtaining revenues to be used solely for a public snowmobile trail system, and number them 1, 2, and 3 in the order of your preference.

- _____ a percentage of current sales tax on purchase of snowmobiles, trailers, parts, etc.
- _____ an additional excise tax on purchase of snowmobiles, trailers, etc.
- _____ user fees at trail access points
- _____ existing registration fees for snowmobiles
- _____ operator's licensing fees
- _____ other (describe) _____

III. Predispositional Sets A. Attitudes about: 1. Management Activities and Policies Regarding:
j. Finances

(51) If the trail system in (state) is improved or expanded, how should funds be raised to accomplish this? (Check all you agree with.)

- sell licenses to hikers
- charge user fees
- dues from members of hiking organizations
- charge taxes on hiking equipment
- use statewide tax revenues
- revenues from timber products sold from state forests
- other _____
(please specify)

(20) Please select 4 of the following possible uses of snowmobile revenues, and number them 1, 2, 3, and 4 in the order of your preference.

- grooming present trails by the state
- improved signing and posting of route maps
- establishing new trails
- trail system planning
- law enforcement
- distribution of maps of snowmobiling areas
- purchase of trail grooming equipment for club use
- parking areas at trail access points
- additional picnicking and camping facilities along trails
- other (describe) _____

(19) Current recreation costs break down into three major categories: operations and maintenance, facilities, and land acquisition. We would like you to consider each of these separately and let us know what percentage of the costs you feel should be supported by the user rather than by taxes.

For land acquisition for recreation purposes, what percentage of costs do you believe should be paid by the user: 0, 25%, 50%, 75% 100%? (Record below)

For special recreation facilities, such as boat ramps and developed campsites, what percentage of costs do you believe should be paid by the user: 0, 25%, 50%, 75% or 100%? (Record below)

For operations and maintenance costs of providing recreation services, what percentage do you believe should be paid by the user: 0, 25%, 50%, 75% or 100%? (Record below)

(19) How much would you be willing to pay per campsite to participate in this activity at a private recreation facility?
(enter exact number)

III. Predispositional Sets A. Attitudes about: 2. User Activities a. Hiking

Encountering as many as thirty hikers in a day on the trail	SK	D	N	F	SF
Occasional tree removal to provide overlooks	SD	D	N	F	SF
A plank walk or stepping stones over a marshy area on the trail	SD	D	N	F	SF
Drinking from a mountain stream	SD	D	N	F	SF
Stone steps made from local rock at unusually steep ascents	SD	D	N	F	SF

(76) What season of the year would you most like to hike into (area)?

_____ spring _____ summer _____ fall _____ winter
_____ it doesn't matter; one season is as good as another
_____ don't know

(76) What time of the week would you most like to hike into (area) wilderness?

_____ on a weekday _____ it doesn't matter; one day is as good as another
_____ on a weekend _____ don't know
_____ on a holiday weekend

(81) How much of an impact do you think hiker use makes on the backcountry environment?

_____ none _____ very little _____ a moderate amount
_____ great amount

(13) Overall, how would you rate today's hike?

_____ poor _____ excellent, only minor problems
_____ fair _____ perfect
_____ good, but I wish a number of things could have been different

Other Backcountry Travel

(74) In answering the questions in this section, please think about all your experiences at (area). We want your general responses, not just those related to the visit on which we contact you, unless that was your first and only visit.

People who have been to (area) have different ideas about off-road vehicle use of the seashore. By off-road vehicle (ORV) we mean such vehicles as four-wheel drive trucks, jeeps, dune buggies and motorcycles. It is important in making decisions about the future use of the park to understand what users think. Please indicate how much you agree or disagree with each of the following statements by placing a mark in one of the spaces provided.

II. Predispositional Sets A. Attitudes about: 2. User Activities b. Other Backcountry Travel

<u>Statements</u>	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree	Don't know
Travelling in an ORV is a good way to experience the outdoors at (area).	()	()	()	()	()	()
ORV's damage the natural environment at (area).	()	()	()	()	()	()
ORV use of the marshlands behind the dunes has very little lasting impact.	()	()	()	()	()	()
ORV use of (area) conflicts with other uses.	()	()	()	()	()	()
Very few ORV users drive their vehicles irresponsibly.	()	()	()	()	()	()
Restricting ORV use of (area) would seriously hurt the economy of the (area).	()	()	()	()	()	()
Since (area) is public land, no restrictions should be placed on its use.	()	()	()	()	()	()

(80) How would you react to the following methods of travel in wilderness and backcountry areas? (Check one block in each row under WILDERNESS and one block in each row under BACKCOUNTRY.)

	WILDERNESS					BACKCOUNTRY				
	VU	U	N	D	VD	VU	U	N	D	VD
Hiking	()	()	()	()	()	()	()	()	()	()
Snowmobiling	()	()	()	()	()	()	()	()	()	()
Cross-country skiing	()	()	()	()	()	()	()	()	()	()
Light aircraft landing	()	()	()	()	()	()	()	()	()	()
Horseback riding	()	()	()	()	()	()	()	()	()	()
Canoeing	()	()	()	()	()	()	()	()	()	()
Trailbiking	()	()	()	()	()	()	()	()	()	()
Power boating	()	()	()	()	()	()	()	()	()	()
River rafting	()	()	()	()	()	()	()	()	()	()

VU=Very Undesirable; U=Undesirable; N=Neutral; D=Desirable; VD=Very Desirable

III. Predispositional Sets A. Attitudes about: 2. User Activities

C. Camping Practices

(21) Which litter-disposal method do you consider most proper and helpful in preserving wilderness (backcountry) quality? (check one)

- Bury all litter
- If fires are allowed, burn what you can and carry out all else
- Place litter in backcountry receptacles for the Park Service to airlift out.

On this numerical scale, indicate how strongly you feel toward your selection (circle appropriate number).

0	1	2	3	4	5	6	7	8	9
Very			Slightly			In		Strongly	
little			in			favor		in	
preference			favor					favor	

(21) Which of these bedding practices do you consider most proper and helpful in preserving wilderness (backcountry) quality (check one).

- making a bough bed
- using an air mattress or foam rubber pad
- using chalets or lean-to with cots provided

On this numerical scale, indicate how strongly you feel toward your selection (circle appropriate number):

0	1	2	3	4	5	6	7	8	9
Very little			Slightly			In favor		Strongly	
preference			in favor					in favor	

(21) In areas where wood fires are allowed, which of these practices do you consider most proper and helpful in preserving wilderness (backcountry) quality (check one).

- gather only enough firewood for your own use
- the park service should provide cut firewood at each campsite
- when you leave a campsite, always stockpile wood for the next camper

(7) One of the many possible types of backcountry activity is "dispersed camping," which means camping at least 200' from any established trail or major water source and 1/4 mile from any other campers.

Please indicate your view of dispersed camping on the following scales:

1	2	3	4	5	6	7
Environmentally					Environmentally	
beneficial					harmful	
1	2	3	4	5	6	7
Good						Bad
1	2	3	4	5	6	7
Dangerous						Safe
1	2	3	4	5	6	7
Easy					Difficult	
1	2	3	4	5	6	7
Foolish						Wise

III. Predispositional Sets A. Attitudes about: 2. User Activities c. Camping Practices

(78) What's the best way to dispose of garbage?

- hikers carry out what they carry in
- bury it
- incinerate
- provide a haul-out service
- compost the organic material; hikers carry out the rest
- alternative: _____

Comments: _____

(78) How should sewage be disposed of?

- use present pit toilet system--change location when full
- transfer sewage from pit toilet to bin composter
- install commercial sewage compost system (Clivus Multrum, Ecolet)
- incinerate - propane toilets convert sewage to ash
- haul out after collecting in portable drums
- alternative: _____

Comments: _____

(22) In a wilderness area, the most appropriate type of bedding is a:

- bough bed
- chalets or lean-tos with cot
- air mattress or rubber-like pad
- any of these

B. Expectations

Questions to determine future plans of respondents, the number and quality of contacts visitors expected on a trip (see also III. A. 1. d.), and the physical and social characteristics visitors expected to find at an area.

1. Future Plans

(44) How much do you expect that you and your immediate family will use the canoe on rivers and streams in 1978? (Check one)

- more than in 1977
- less than in 1977
- about the same as 1977

(91) How many miles do you plan to go into the area this time?

- less than 1 mile
- 4 to 10 miles
- 1 mile to 3 miles
- more than 10 miles

Where in the area do you plan to go? _____

How long do you expect to stay in this area before arriving back at a road?

- less than 1 day
- 8 days to 2 weeks
- overnight to 3 days
- over 2 weeks
- 4 to 7 days

2. Visitor Contacts

(2) Do you expect to meet people very often along this trail? Yes No
If yes, how often? 5 min. intervals; 15 min.; ½ hr.; more

I

III. Predispositional Sets B. Expectations 2. Visitor Contacts

(76) How did the following compare with what you expected to see in (area)? (Check the appropriate box for each statement)

	Far Fewer	Fewer	About What I Expected	More	Far More
a. the number of people you expected	()	()	()	()	()
b. the number of people using horses that you saw	()	()	()	()	()
c. the number of large groups (more than 6 people) you saw	()	()	()	()	()
d. the number of groups that camped within sight or hearing of you. campsite	()	()	()	()	()
e. the number of groups who walked through your campsite	()	()	()	()	()

(93) How did the amount of evidence of human impact you saw during this backcountry trip compare with what you thought you would see?

- A lot more than expected Less than expected
 More than expected A lot less than expected
 About as expected Had no expectations about the trip

B. E 3. Area Characteristics

(67) How much of each characteristic did you expect to find here, before backpacking? Please circle one number along the continuum to indicate your choice, with 1 indicating complete absence and 7 indicating an extremely great amount. Answer each item as it applies to you!

1. F

	Completely Absent						Extr Gr Am
	1	2	3	4	5	6	
Scenic beauty and picturesqueness	1	2	3	4	5	6	
Wilderness and primitiveness	1	2	3	4	5	6	
Flowers, trees, shrubs, and grasses (amount and variety)	1	2	3	4	5	6	
Wild animals and birds in their natural habitat. (amount and variety)	1	2	3	4	5	6	
Physical movement and exercise	1	2	3	4	5	6	
Feeling of mental rest and relaxation	1	2	3	4	5	6	
Feeling of peace, quiet, and tranquility	1	2	3	4	5	6	
Opportunity to strengthen close personal relationships with family and/or friends.	1	2	3	4	5	6	
Opportunity to meet new people	1	2	3	4	5	6	

2. Vi:

III. Predispositional Sets B. Expectations 3. Area Characteristics

	Completely Absent					Extremely Great Amount	
Challenge (the possibility of achieving or accomplishing something which taxes my limits or abilities?)	1	2	3	4	5	6	7
Feelings of being surrounded by the sights, smells and sounds of the area	1	2	3	4	5	6	7
Resources for backpacking (water, firewood, natural food)	1	2	3	4	5	6	7
(69) Do you (or did you) know what to expect as far as the difficulty of the Trail section on this hike? Yes ___ Had some idea ___ No ___							
(11) On your first visit, did you find the area as you expected it to be? Yes ___ No ___ If no, what was different? _____							
(81) I expect that hiker use of the (area) backcountry will:							
() decrease moderately over the next five years (25-30%)							
() decrease greatly over the next five years (more than 50%)							
() increase moderately over the next five years (25-50%)							
() increase greatly over the next five years (more than 50%)							
() not change much in the amount of hiker use							

C. Motivations

Questions to identify reasons for choosing an area to recreate in (see also II. A. 3.) and reasons for participating in selected activities (see also II. B. 2.).

1. Reasons for Area Selection

(11) Which of the following statements describe your strongest motivations for entering (area)? Please circle the one you would pick over all others. Please check as many as seem proper.

- _____ To observe the beauty of nature
- _____ Retreat from the work-a-day world
- _____ Change of pace: something different
- _____ To get away from crowds
- _____ To be alone for a while
- _____ Gain a feeling of unity and harmony with nature
- _____ To observe a natural environment
- _____ Exercise
- _____ To be outside of man-made laws
- _____ Other

III. Predispositional Sets C. Motivations 1. Reasons for Area Selection

(7) Check any of the following which are your major reasons for making this camping trip:

- _____ to develop my skills and ability
- _____ for a chance to meet new people
- _____ to experience tranquility and solitude here
- _____ to help keep physically fit
- _____ to take in the scenic beauty
- _____ for a change from my daily routine
- _____ to share this experience with friends or family

(2) Why did you select this spot to camp? _____

(75) What was your main reason for visiting the park?

1. to enjoy nature
2. to meet friends
3. for a new experience
4. to tent camp
5. for a nearby weekend trip
6. for rest and relaxation
7. to backpack
8. others: _____

(15)

	Not important	Of little importance	Somewhat important	Moderately important	Very important	Extremely important
Reasons for coming to this area -						
Chance to be with people who are enjoying themselves						
To use my equipment						
To develop my knowledge of things here						
To get away from the usual demands of life.						
So others would think highly of me for doing it						
To share my skills and knowledge with others						
To experience the tranquility here						

III. Predispositional Sets C. Motivations 1. Reasons for Area Selection

	Not important	Of little importance	Somewhat important	Moderately important	Very important	Extremely important
Reasons for coming to this area						
Because my spouse or another associate wanted me to						
To enjoy the smells and sounds of nature						
To think about good times I have had in the past						
Other reasons (please list)						

(9) Why did you choose to hike here at _____ instead of somewhere else?

_____ It's a Natural Area, I enjoy the undeveloped natural surroundings

_____ I am hiking the Long Trail

_____ It's close to my home

_____ I wanted to climb the 4th highest mountain in Vermont

_____ I don't know other areas around here to hike

_____ Other: _____

(14) For each item below, please circle the response which shows whether or not it is a reason for your personal interest in the (area)

	Strongly Agree	Probably Agree	Probably Disagree
In the (area):			
1. I can have a valuable experience.	SA	PA	PD
2. I gain some communion with nature.	SA	PA	PD
3. I experience new feelings.	SA	PA	PD
4. I can have a challenging experience.	SA	PA	PD
5. I learn a great deal about:			
ecology	SA	PA	PD
forests	SA	PA	PD
wildlife	SA	PA	PD
geology	SA	PA	PD
nature in general	SA	PA	PD

III. Predispositional Sets C. Motivations 1. Reasons for Area Selection

	Strongly Agree	Probably Agree	Probably Disagree
6. I learn things about myself.	SA	PA	PD
7. I get a chance to see wildlife.	SA	PA	PD
8. It doesn't really matter to me what the environment looks like as long as I'm with friends.	SA	PA	PD

(14) For me the (area) is a place to:

	Strongly Agree	Probably Agree	Probably Disagree
Be alone	SA	PA	PD
Enjoy a natural setting	SA	PA	PD
Get away from the stress of everyday living	SA	PA	PD
Be with friends	SA	PA	PD
Test my:			
survival skills	SA	PA	PD
woodsmen skills	SA	PA	PD
physical ability	SA	PA	PD
knowledge of the out-of-doors	SA	PA	PD

(76) People have many reasons for visiting wilderness areas. Please tell us your three most important reasons for taking this trip into this area.

1. _____
2. _____
3. _____

(93) If you camped in backcountry zones other than those scheduled on your permit, why?

- _____ I camped only in those backcountry zones scheduled on my permit.
- _____ Poor weather
- _____ Inadequate trip planning
- _____ Exhaustion
- _____ More attractive area/site
- _____ Misunderstood rules
- _____ Park Service misinformation
- _____ Other (Specify) _____

III. Predispositional Sets C. Motivations

Reasons for Activity Selection

(64) The following statements are reasons that people have given for wanting to be in the wilderness. As you read each one would you tell me whether it is very important, fairly important, or not at all important to you.

	Very important	Fairly important	Not at all important
1. To observe the beauty of nature	_____	_____	_____
2. To use or increase my skills in camp and woodcraft	_____	_____	_____
3. To enjoy the easy-going companionship of camp life	_____	_____	_____
4. To get away from the demands of the work-a-day life	_____	_____	_____
5. To breath fresh air and drink pure water	_____	_____	_____
6. To experience the thrill of facing the dangers of the wild	_____	_____	_____
7. To have a change of pace, to do something different	_____	_____	_____
8. To live in a primitive way by camping out	_____	_____	_____
9. To be alone for a while	_____	_____	_____
10. To keep healthy through vigorous outdoor activity	_____	_____	_____
11. To explore uncharted areas of the wild	_____	_____	_____
12. To get away from the sights, sounds, and smells of civilization	_____	_____	_____
13. To gain a sense of communion with God	_____	_____	_____
14. To take it easy	_____	_____	_____
15. To experience the feeling of being able to survive on my own in the wild	_____	_____	_____

III. Predispositional Sets C. Motivations 2. Reasons for Activity Selection

(71) Some possible reasons why people take river trips are listed below. Think about why you took your river trip and check the box that best shows how much you agree or disagree with each of the following statements.

	Strongly Disagree	Disagree	Neither agree nor Disagree	Agree	Strongly Agree
I took this river trip because I wanted					
To help others					
To do some thinking and reflecting					
To be on my own					
To develop my skills and ability					
To release tensions and anxieties					
To be a leader					

(49) For what main purpose do you use your trail bike?

- Pleasure riding
- Sanctioned (or competitive) racing
- In conjunction with another outdoor recreation activity(s)
- Transportation to work or school
- Other (enter on line below) _____

(5) People have many reasons for hiking. We have listed some reasons given in the past and would like you to rate the importance of each of them to you. Please think back to when you decided to take this hiking trip, then check how important each seemed at that time.

Reasons for hiking:	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a. to develop my knowledge	()	()	()	()	()
b. for a challenge	()	()	()	()	()
c. to observe the beauty of nature	()	()	()	()	()
d. to feel free from society's restrictions	()	()	()	()	()
e. to feel close to nature	()	()	()	()	()
f. to get away from the crowds	()	()	()	()	()
g. other: _____					

III. Predispositional Sets C. Motivations 2. Reason for Activity Selection

(50) If you were not satisfied with the quality of the boat access you used most often, what was the reason? (briefly explain) _____

(50) If you operated your boat less during 1977 than in previous years was it because of: (check one)

- _____ decrease in time available for boating
- _____ too much time involved in boat preparation
- _____ less interest in boating
- _____ children grown up and left home
- _____ too many laws and regulations
- _____ crowded conditions
- _____ water pollution
- _____ increased cost of boating
- _____ conflict with other people
- _____ other (enter on line below) _____

(86) There are a lot of reasons behind why people hunt. Look over the list below and indicate the three principal reasons why you come to this area to hunt. Mark the most important reason as "1", the second as "2", and the third as "3".

- _____ Chance to get a trophy animal
- _____ Lots of deer and elk
- _____ Best place to get meat for the freezer
- _____ Good place to get away from other hunters
- _____ Access is good
- _____ Easy area to hunt
- _____ Close to home
- _____ Nice country to get out in
- _____ Requires little work to get an animal
- _____ Familiar with the area
- _____ Clearcuts offer good hunting
- _____ Safe place to hunt
- _____ Other (please specify) _____
- _____ Other (please specify) _____
- _____ Other (please specify) _____

IV. USER EVALUATIONS

A. Satisfaction with the Trip

User evaluations of trip satisfaction including levels of satisfaction (see also III. A. 1. d.), and enjoyable or annoying aspects of the trip; of facilities (see also III. A. 1. b.); of the site or geographical area (see also III. A. 1. a.); of their interactions with other users (see also III. A. 1. d.); of the "wilderness" experience; and of their level of experience or expertise (see also I. B. 2.).

(67) How satisfied are you with each characteristic while backpacking here? Please circle the number along the continuum to indicate your choice, with 1 indicating extremely dissatisfied and 7 indicating extremely satisfied. Answer each item as it applies to you.

Think of each statement as follows:

How satisfied are you with _____ while backpacking here?

	Extremely dissatisfied			Extremely satisfied			
Scenic beauty and picturesqueness	1	2	3	4	5	6	7
Flowers, trees, shrubs, and grasses (amount and variety)	1	2	3	4	5	6	7
Amount of pollution (air, water, noise, etc.)	1	2	3	4	5	6	7
Opportunity to learn new things and gain new perspectives	1	2	3	4	5	6	7
Opportunity to get away from the problems and/or boredom of everyday life	1	2	3	4	5	6	7
Enjoying myself in the outdoors	1	2	3	4	5	6	7
Feeling of exhilaration	1	2	3	4	5	6	7
Opportunity to strengthen close personal relationships with family and/or friends	1	2	3	4	5	6	7
Opportunity for other recreational activities such as fishing	1	2	3	4	5	6	7
Amount of comfort	1	2	3	4	5	6	7
Feeling of being surrounded by the sights, smells, and sounds of the area	1	2	3	4	5	6	7
Opportunity for solitude and privacy	1	2	3	4	5	6	7

(46) Before starting your trip, please: (a) check any of the statements below that you feel are important (check all boxes that apply), (b) among all those you checked, please rank (1st, 2nd, and 3rd) the three most important statements. After your trip, please: (a) among all the boxes you checked before your trip--now please circle the symbol which best expresses how well satisfied or dissatisfied you were in obtaining these benefits. VS means Very Satisfied; FS means Fairly Satisfied, N means Neutral feeling or no real feeling either way, SD means Somewhat Dissatisfied, VD means Very Dissatisfied.

<u>Check</u>	<u>Rank</u> <u>Top</u> <u>Three</u>	<u>Satisfaction</u>
<input checked="" type="checkbox"/> Camping experience (cooking out, campfires, sleeping out, etc.)	_____	VS FS N SD VD
<input checked="" type="checkbox"/> Motor canoeing or motor boating	_____	VS FS N SD VD

IV. User Evaluations A. Satisfaction with the Trip

<u>Types of Experiences</u>	Most strongly	Strongly	Moderately	Slightly	Neutral	Slightly	Moderately	Strongly	Most strongly
	<u>Adds</u>					<u>Detracts</u>			
Being with friends	+4	+3	+2	+1	0	-1	-2	-3	-4
Feeling your independence	+4	+3	+2	+1	0	-1	-2	-3	-4
Taking risks	+4	+3	+2	+1	0	-1	-2	-3	-4
Doing something with your family	+4	+3	+2	+1	0	-1	-2	-3	-4
Being with other members of your group	+4	+3	+2	+1	0	-1	-2	-3	-4
Talking to new and varied people	+4	+3	+2	+1	0	-1	-2	-3	-4
Viewing the scenery	+4	+3	+2	+1	0	-1	-2	-3	-4
Releasing or reducing some built up tensions	+4	+3	+2	+1	0	-1	-2	-3	-4
Experiencing tranquility	+4	+3	+2	+1	0	-1	-2	-3	-4

(73) Resource managers need to know what experiences you are seeking when you hike into wilderness and backcountry areas. We have listed 10 reasons given us in the past. Imagine that you were to hike into the _____ area of (area) next summer. Then rank each experience from 1 through 10 in terms of how much it would add to the level of satisfaction you would receive from the hike. Assign a #1 to the experience which would be most important to your satisfaction and #10 to the least important one. Be sure to assign a rating to each statement below.

<u>Rank</u>	<u>Experience</u>
_____	Enjoying the scenery and the smells and sounds of nature
_____	Getting away from other people and noise and congestion
_____	Being on your own and making you own choices.
_____	Exploring and experiencing new and different things
_____	Developing and testing your skills and abilities
_____	Getting away for a while to reduce tensions and rest your mind
_____	Doing something with your family
_____	Getting exercise to help keep physically fit
_____	Being with your friends or people with similar values
_____	Learning more and developing your knowledge

(86) How much do the following add to or detract from your hunting experience? Please rate each of the items below according to how it affects your hunting satisfaction. (circle the number indicating your reaction)

IV. User Evaluations A. Satisfaction with the Trip

	<u>ADDS</u>	<u>DETRACTS</u>
Seeing one or two other hunters during the day	1 2 3 4 5	
Hunting from the road	1 2 3 4 5	
Having to spend at lease one night camped out in order to reach the area where I hunt	1 2 3 4 5	
Getting an animal with an especially long shot	1 2 3 4 5	
Hunting in an area where I have a good chance to get an animal and be back home on the same day	1 2 3 4 5	
Spending a day hunting in an area largely untouched by man	1 2 3 4 5	
Hunting with a group of my friends	1 2 3 4 5	
Hunting all day and not seeing any other hunters	1 2 3 4 5	

(78) How often would you have to meet other hikers before you consider a trail is too crowded?

_____ every 5 minutes _____ every 15 minutes
 _____ 30 minutes _____ every hour _____ more than every hour

(31) When I go camping, the activities I like best are:
(Indicate your favorites in order by writing their numbers on the blanks below.)

- 01 driving and sightseeing from car
 - 03 motorcycle or scooter riding
 - 04 fishing
 - 06 nature study
 - 09 quiet boating or canoeing
 - 14 mountain climbing
 - 15 playing softball, football, horseshoes, catch
 - 26 doing camp chores (cutting wood, building fire, cooking, etc.)
- _____ first choice _____ fourth choice
 _____ second choice _____ fifth choice
 _____ third choice _____ sixth choice

(81) What kinds of things (list them in the order of their importance, please) irritate you when you are on a hike in the (area) backcountry?

1. _____
2. _____
3. _____

IV. User Evaluations A. Satisfaction with the Trip

(1) Did you experience any loss of enjoyment as a result of any of the following?

	0 Not at all	1 Slight	2 Moderate	3 Considerable	4 Extreme
Large groups	0	1	2	3	4
Trash--cans, bottles, garbage	0	1	2	3	4
Overcrowded trails	0	1	2	3	4
Inclement or harsh weather	0	1	2	3	4
Improper disposal of human fecal wastes	0	1	2	3	4
Fear of animals or "nature"	0	1	2	3	4

(70) How pleasant or unpleasant are these things to you when visiting a backcountry or wilderness?

	<u>Unpleasant</u>					<u>Neutral</u>	<u>Pleasant</u>				
Being out on a lake when it is snowing	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
Chasing a bear out of camp	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
Swimming nude on a warm afternoon	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
Finding a beaver dam that has been destroyed by trappers	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
Technical rock climbing	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
Splitting wood for the fire	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
Listening to the wind, rain and thunder in a violent storm	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
Lying on your back and watching cloud patterns	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5

(76) Resource planners and managers need information from you, the user, to help them make decisions on such important issues as trail and campsite location and design. The items below deal with environmental features which can affect whether or not you have an enjoyable backcountry recreation experience. Please rate each of the features on how much it would add to (+) or detract from (-) your experience when you hike into (area). Please respond to every statement, and circle only one number for each item.

IV. User Evaluations A. Satisfaction with the Trip

	Effect on your experience									
	Adds					Detracts				
	Most strongly	Strongly	Moderately	Slightly	Neutral	Slightly	Moderately	Strongly	Most strongly	
<u>Environmental features</u>										
Old cabins	+4	+3	+2	+1	0	-1	-2	-3	-4	
Lofty ridges	+4	+3	+2	+1	0	-1	-2	-3	-4	
Rugged terrain	+4	+3	+2	+1	0	-1	-2	-3	-4	
Flowering shrubs	+4	+3	+2	+1	0	-1	-2	-3	-4	
Vast areas with no trails	+4	+3	+2	+1	0	-1	-2	-3	-4	
Steep gorges	+4	+3	+2	+1	0	-1	-2	-3	-4	
Panoramic views	+4	+3	+2	+1	0	-1	-2	-3	-4	
Evidence of forest fires	+4	+3	+2	+1	0	-1	-2	-3	-4	
Evidence of logging activity	+4	+3	+2	+1	0	-1	-2	-3	-4	
Streams you can step across	+4	+3	+2	+1	0	-1	-2	-3	-4	

(54) For each item in the following list of possible features, activities, benefits associated with wilderness environment, please circle the one number that best expresses your attitude, how positive or how negative you feel toward having that particular activity, feature, or benefit.

	Dislike			Neutral	Favor		
	Undesirable				Desirable		
Backpack camping	-4	-3	-2	-1 0 1	2	3	4
Tranquility	-4	-3	-2	-1 0 1	2	3	4
Hiking	-4	-3	-2	-1 0 1	2	3	4
Solitude	-4	-3	-2	-1 0 1	2	3	4
Awareness of beauty	-4	-3	-2	-1 0 1	2	3	4
Vast areas	-4	-3	-2	-1 0 1	2	3	4
Physical exercise	-4	-3	-2	-1 0 1	2	3	4
Rugged topography	-4	-3	-2	-1 0 1	2	3	4
Self realization	-4	-3	-2	-1 0 1	2	3	4
Gravel roads	-4	-3	-2	-1 0 1	2	3	4
Car camping	-4	-3	-2	-1 0 1	2	3	4
Automobile touring	-4	-3	-2	-1 0 1	2	3	4
Campsites with outhouses	-4	-3	-2	-1 0 1	2	3	4
Remoteness from cities	-4	-3	-2	-1 0 1	2	3	4
Absence of people	-4	-3	-2	-1 0 1	2	3	4
Mountain climbing	-4	-3	-2	-1 0 1	2	3	4
Talking with other visitors	-4	-3	-2	-1 0 1	2	3	4
Adventure	-4	-3	-2	-1 0 1	2	3	4
Relieve tensions	-4	-3	-2	-1 0 1	2	3	4
Do things most people don't	-4	-3	-2	-1 0 1	2	3	4

IV. User Evaluations A. Satisfaction with the Trip

59) The items below identify situations you may have encountered in the (area) and would expect to find during a similar trip to the area in the near future. We are interested in knowing whether you would expect to find the conditions and whether the conditions would have a positive or negative effect on your experience. Please note there are two scales to answer on.

How likely is it that you would find this condition?	<u>Positive effect</u>										<u>Negative effect</u>			
	No chance	Fair chance			Absolute chance	Most strongly adds	Strongly adds	Moderately adds	Slightly adds	Neutral	Slightly detracts	Moderately detracts	Strongly detracts	Most strongly detracts
Deeply eroded trails	0	1	2	3	4	+4	+3	+2	+1	0	-1	-2	-3	-4
Man-made fences	0	1	2	3	4	+4	+3	+2	+1	0	-1	-2	-3	-4
Regulations on where you may camp	0	1	2	3	4	+4	+3	+2	+1	0	-1	-2	-3	-4
Campsites too close together	0	1	2	3	4	+4	+3	+2	+1	0	-1	-2	-3	-4
Hikers making shortcuts	0	1	2	3	4	+4	+3	+2	+1	0	-1	-2	-3	-4
Unobeyed regulations	0	1	2	3	4	+4	+3	+2	+1	0	-1	-2	-3	-4
Alpine meadows	0	1	2	3	4	+4	+3	+2	+1	0	-1	-2	-3	-4
Dog droppings on trails	0	1	2	3	4	+4	+3	+2	+1	0	-1	-2	-3	-4
Rugged terrain	0	1	2	3	4	+4	+3	+2	+1	0	-1	-2	-3	-4
Loud recreationists	0	1	2	3	4	+4	+3	+2	+1	0	-1	-2	-3	-4
Others using water improperly	0	1	2	3	4	+4	+3	+2	+1	0	-1	-2	-3	-4

B. Facilities

(31) For each of the following items circle one number that best indicates how you feel toward that item. The numbers are defined as having the following meanings: 1 = too luxurious, does not belong on a camping trip; 2 = a permissible luxury, but not quite appropriate on a camping trip; 3 = desirable, but not absolutely necessary on a camping trip; 4 = essential for a successful camping trip.

	Doesn't belong		Essential	
Flush toilet or chemical toilet	1	2	3	4
Pit toilet (with or without outhouse)	1	2	3	4
Radio	1	2	3	4

IV. User Evaluations B. Facilities

	Doesn't belong		Essential	
	1	2	3	4
Pickup camper or trailer	1	2	3	4
Campfire	1	2	3	4
Other campers close enough that they could hear you call out	1	2	3	4
Bottled soft drinks (brought from home)	1	2	3	4
Water in faucets at campsites	1	2	3	4
Campfire program to attend	1	2	3	4
Electric outlets and wash basins in restrooms	1	2	3	4
Nature trails marked with signs	1	2	3	4
Campsites located out of sight and sound of other campers	1	2	3	4
Community kitchen with sink and wood stove	1	2	3	4
Portable ice chest	1	2	3	4
Portable gasoline or propane stove	1	2	3	4
Picnic table	1	2	3	4

(60) Please check a box for the phrase that expresses how you feel about the following statement: "This item was absolutely essential to the trail experience."

Item	Strongly agree	Tend to agree	Hard to decide	Tend to disagree	Strongly disagree
A trail map					
Items on map:					
Trail distances					
North Arrow					
Elevations at selected points					
Contour lines					
Property boundaries					
Trail names					
Major features					
Rest stops					
Items on trail:					
Trail name signs					
Directional signs					
Benches					

IV. User Evaluations B. Facilities

Item	Strongly agree	Tend to agree	Hard to decide	Tend to disagree	Strongly disagree
Wildlife feeding stations					
Natural surface					
Man-made surface					
Litter containers					
One-way trails					
Guide books					
Additional comments:					

(17) How do you feel about changing the amount of backcountry facilities listed below? Check your opinion.

Facility	Add more	Don't change	Reduce existing number	Remove existing number	No opinion
Shelters along river	()	()	()	()	()
Shelters along hiking trails	()	()	()	()	()
Walk-in primitive campgrounds	()	()	()	()	()
Foot bridges along trails	()	()	()	()	()
Bridges over rivers	()	()	()	()	()
Foot trails	()	()	()	()	()
Areas with no trails	()	()	()	()	()
Camping areas at common points	()	()	()	()	()
Picnic tables	()	()	()	()	()
Small water impoundments	()	()	()	()	()
Interpretive signs	()	()	()	()	()
Other (specify):					
_____	()	()	()	()	()
_____	()	()	()	()	()

(53) With what basic facilities do you feel the "wilderness" campsites in (area) should be equipped?

- () Fireplace
- () Iron grill
- () Table
- () Earth-pit toilet
- () Dock
- () No such facilities should be provided
- Other facilities _____

IV. User Evaluations B. Facilities

(69) Which of the following features would you like at a shelter?

_____ Fireplace _____ Benches _____ Table _____ Privy
 _____ Tools _____ Bulletin board _____ Other (specify)

(39) What additional facilities and/or activities (if any) would you like to see developed here?

(71) How do you feel about facilities and improvements that serve the comfort and convenience of river users? The table on the next page has five different kinds of places listed across the top and different facilities and improvements listed down the left side. If these facilities were NOT available at the locations specified, how important would it be to put them in? Please assign a priority to each facility at each location according to the following categories: H = High Priority; M = Middle Priority; L = Low Priority; O = Should not be put in. For example, assume the facility in questions is "Hot dog stand." Assume that you feel hot dog stands have low priority at the put-in point and high priority at the take-out point. Assume that you feel they do not belong at the other locations. If these were your feelings, you would mark the table as follows:

	Put-in points	Take-out points	Campgrounds under points of access to the river	Camping areas along the river not accessible by road	Popular stopping places along the river not accessible by road
Hot dog stands	L	H	O	O	O

Now please fill in table.

Picnic tables					
Fireplaces					
Firewood					
Paved boat ramps					

C. Site or Geographic Area

(53) What kind of campsite do you like best?

- () pine cover () spruce cover () other cover
- () sand () rock () normal soil
- () beach () deep-water shore () island
- () bay () point () not tree covered

(1) If you had your choice, what amount of trees and shrubs would your camping party prefer around its campsite?

- () Completely surrounded by trees and shrubs so that your tentsite cannot be seen from other tentsites.
- () Partially surrounded by trees and shrubs; your tentsite may be partially seen from other tentsites.
- () Very few trees and shrubs surrounding your tentsite.
- () Amount of trees and shrubs around the tentsite is not very important to camping experience.
- () Other: _____

User Evaluations C. Site or Geographic Area

	Like it very much	1	2	3	Neither like nor dislike	4	5	6	7	8	9	Dislike it very much
Rugged natural scenery?	1	2	3	4	5	6	7	8	9			
Big open meadows?	1	2	3	4	5	6	7	8	9			
Stocks of fish that are not native to the area?	1	2	3	4	5	6	7	8	9			
Forests which have never been cut for timber?	1	2	3	4	5	6	7	8	9			
Areas above the timber line where no trees grow?	1	2	3	4	5	6	7	8	9			
Campsites with cabins for organizations?	1	2	3	4	5	6	7	8	9			
No man-made features except hiking trails?	1	2	3	4	5	6	7	8	9			

(34) On a scale of 1 to 9 where 1 means you'd like it very much, 5 means you'd neither like nor dislike it, and 9 means you'd dislike it very much, how much would you like or dislike it if a wilderness area had. . .

	Like very much	1	2	3	Neutral	4	5	6	7	8	9	Dislike very much
Stocks of game animals that are not native to the area?	1	2	3	4	5	6	7	8	9			
Developed campsites with plank tables, cement fireplaces with metal grates, and outhouses?	1	2	3	4	5	6	7	8	9			
No motorized travel by visitors?	1	2	3	4	5	6	7	8	9			
Forests, flowers, and wildlife much the same as before the pioneers?	1	2	3	4	5	6	7	8	9			
At least 25 square miles of land?	1	2	3	4	5	6	7	8	9			
Little evidence of other visitors before you?	1	2	3	4	5	6	7	8	9			
Lakes behind small man-made dams?	1	2	3	4	5	6	7	8	9			

(11) The following factors have been summarized as significant to the enhanced quality of a wilderness experience. Could you rate how important each statement is to your overall wilderness experience while in the (area). Please express your answer in percentages and make sure they add up to 100.

- ___ % lack of signs of civilization
- ___ % lack of signs of overuse
- ___ % beauty
- ___ % inaccessibility of area
- ___ % other (specify) _____
- 100 % Total

V. User Evaluations C. Site or Geographic Area

(94) We want to find out what people think wilderness areas are actually like. For each of the following, please indicate how strongly you agree, disagree, or are neutral.

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
In general, when people visit a wilderness area it means. . .					
being out in nature	()	()	()	()	()
seeing only a few other people	()	()	()	()	()
being without bathroom facilities	()	()	()	()	()
learning something about nature	()	()	()	()	()
encountering wild animals that might be dangerous	()	()	()	()	()
getting hard physical exercise	()	()	()	()	()
doing without adequate medical help in case of an accident	()	()	()	()	()

Interactions with Other Users

(14) The next set of statements refers to the people you met during the trip you have been describing. For each item below, please circle the response which best reflects how your meetings with other people went.

DID YOU. . .	Does not apply	Never	Seldom	Occasionally	Frequently
exchange greetings when you met others on the trail	DNA	N	S	O	F
enjoy seeing others while you were hiking	DNA	N	S	O	F
have unpleasant meetings with others you met	DNA	N	S	O	F
feel that you were disturbing other hikers you met	DNA	N	S	O	F
feel that other hikers interfered with your enjoyment of the (area)	DNA	N	S	O	F

IV. User Evaluation D. Interactions with Other Users

(20) Please choose the three types of trail users which are potential sources of conflict with you as a trailbiker. Number them 1, 2, and 3 in the order of their potential.

1 = greatest potential.

- | | |
|--------------------------|-----------------------|
| _____ snowmobilers | _____ hikers |
| _____ horseback riders | _____ campers |
| _____ four-wheel drivers | _____ other (specify) |

(93) If you felt crowded at all, which of the following factors contributed to your feeling of being crowded? (Please circle the appropriate number for each factor.)

	Did not contribute		Somewhat contributed		Greatly contributed
Number of hikers	1	2	3	4	5
Type of hikers	1	2	3	4	5
When hikers seen:					
while hiking	1	2	3	4	5
while camping	1	2	3	4	5
Number of tents	1	2	3	4	5
Color of tents	1	2	3	4	5
Amount of evidence of human impact	1	2	3	4	5
Type of evidence of human impact	1	2	3	4	5
Other (specify) _____	1	2	3	4	5

(1) Are organized or large (15 people or more) groups objectionable to you? (Check all that apply)

- Not objectionable
- Use too much stock (horses, mules, burros)
- Sheer size (numbers of people)
- Too many in a fragile environment
- Take all the firewood
- Take all the good campsites
- Expand the campsites too much
- Too noisy--affect tranquility
- Destroy solitude
- Camps look like a "tent city"
- Other: _____

IV. User Evaluations D. Interactions with Other Users

(20) To what extent do you wish to encounter other snowmobilers under each of the following circumstances?

	Never	Rarely	Occa- sionally	Fre- quently	Almost always
on the trail, same direction					
on the trail, opposite direction					
at resting points along the trail					
at points of departure					
Other (describe)					

3. The Wilderness Experience

(37) As you think of wilderness and backcountry, how desirable or undesirable do you consider each of the following items? (Check one block in each row under WILDERNESS and one block in each row under BACKCOUNTRY.) VU = Very Undesirable; U = Undesirable; N = Neutral; D = Desirable; VD = Very Desirable

	WILDERNESS					BACKCOUNTRY				
	VU	U	N	D	VD	VU	U	N	D	VD
No motorized travel by visitors	()	()	()	()	()	()	()	()	()	()
Absence of man-made features, except trails	()	()	()	()	()	()	()	()	()	()
Stocking the area with kinds of game animals that were not native to the area	()	()	()	()	()	()	()	()	()	()
Stocking the area with kinds of fish that were not native to the area	()	()	()	()	()	()	()	()	()	()
Forests, flowers, and wildlife much the same as before the pioneers	()	()	()	()	()	()	()	()	()	()
Solitude (not seeing many other people except those in your own party)	()	()	()	()	()	()	()	()	()	()
Cutting firewood	()	()	()	()	()	()	()	()	()	()
Forest Service cabins	()	()	()	()	()	()	()	()	()	()
Cutting trees to open scenic vistas from trails	()	()	()	()	()	()	()	()	()	()
Wooden bridges over rivers and streams	()	()	()	()	()	()	()	()	()	()

(1) For each item in the following list of factors associated with wilderness use, circle the number that best expresses your attitude, i.e., how essential you feel the factor is to your ideal wilderness experience.

IV. User Evaluations E. The Wilderness Experience

	Not at all	Slightly	Moderately	Highly	Absolutely
Comradeship (enjoyment of experience with others)	0	1	2	3	4
Climb peaks	0	1	2	3	4
Getting away from the city	0	1	2	3	4
Absence of man-made features	0	1	2	3	4
Peace of mind	0	1	2	3	4
Challenge	0	1	2	3	4
Sleeping out-of-doors	0	1	2	3	4
Solitude	0	1	2	3	4
Adventure	0	1	2	3	4
Other (specify): _____	0	1	2	3	4

(41) For each item in the following list of possible features, activities or benefits associated with wilderness type recreation, circle one number that best expresses your attitude -- how positive or negative you feel toward having that feature, participating in that activity or receiving that alleged benefit from such an experience.

	Strongly dislike				Neutral				Strongly favor
Sleeping outdoors	-4	-3	-2	-1	0	1	2	3	4
Enjoyment of nature	-4	-3	-2	-1	0	1	2	3	4
Camping	-4	-3	-2	-1	0	1	2	3	4
Alpine meadows	-4	-3	-2	-1	0	1	2	3	4
Drinking mountain water	-4	-3	-2	-1	0	1	2	3	4
Hiking	-4	-3	-2	-1	0	1	2	3	4
Solitude	-4	-3	-2	-1	0	1	2	3	4

IV. User Evaluations E. The Wilderness Experience

(68) How desirable or undesirable do you feel each of the following is in contributing to a wilderness trip?

	<u>Very un-</u> <u>desirable</u>	<u>Undesir-</u> <u>able</u>	<u>Desirable</u>	<u>Very</u> <u>desirable</u>
Primitive roads	()	()	()	()
Remote from towns or cities	()	()	()	()
Interpretive signs on trails	()	()	()	()
Difficult access	()	()	()	()
Simple bridges across large rivers	()	()	()	()

(54) For each item in the following list of possible features, activities, and benefits associated with wilderness environment, please circle the one number that best expresses your attitude -- how positive or how negative you feel -- toward having that particular activity, feature, or benefit.

	<u>dislike</u>					<u>favor</u>			
	<u>undesirable</u>		<u>neutral</u>				<u>desirable</u>		
Backpack camping	-4	-3	-2	-1	0	1	2	3	4
Tranquility	-4	-3	-2	-1	0	1	2	3	4
Hiking	-4	-3	-2	-1	0	1	2	3	4
Solitude	-4	-3	-2	-1	0	1	2	3	4
Awareness of beauty	-4	-3	-2	-1	0	1	2	3	4
Vast areas	-4	-3	-2	-1	0	1	2	3	4
Physical exercise	-4	-3	-2	-1	0	1	2	3	4
Rugged topography	-4	-3	-2	-1	0	1	2	3	4
Self realization	-4	-3	-2	-1	0	1	2	3	4
Gravel roads	-4	-3	-2	-1	0	1	2	3	4
Car camping	-4	-3	-2	-1	0	1	2	3	4
Automobile touring	-4	-3	-2	-1	0	1	2	3	4
Campsites with outhouses	-4	-3	-2	-1	0	1	2	3	4
Remoteness from cities	-4	-3	-2	-1	0	1	2	3	4
Absence of people	-4	-3	-2	-1	0	1	2	3	4
Mountain climbing	-4	-3	-2	-1	0	1	2	3	4
Talking with other visitors	-4	-3	-2	-1	0	1	2	3	4
Adventure	-4	-3	-2	-1	0	1	2	3	4
Relieve tensions	-4	-3	-2	-1	0	1	2	3	4
Do things most people don't	-4	-3	-2	-1	0	1	2	3	4

IV. User Evaluations E. The Wilderness Experience

- (39) How important would you rate a backcountry or wilderness trip in relation to other ways in which you spend your leisure time? Check a position on the scale which best approximates the way you feel.
- () Less important than other leisure pursuits
 - () No more important than other leisure pursuits
 - () Slightly more important than any other leisure pursuit
 - () Definitely more important than any other leisure pursuit
 - () The most treasured use of my leisure time

- (45) How important are wilderness areas and wilderness trips to you personally?
- | | |
|--|---|
| <input type="checkbox"/> Extremely important | <input type="checkbox"/> Not very important |
| <input type="checkbox"/> Very important | <input type="checkbox"/> Not at all important |
| <input type="checkbox"/> Important | |

- (14) For some people, going on a wilderness trip is one of the most important things in their lives. To others, it may be just one of a number of interests — something they enjoy but to which they are not strongly committed. Please check the one statement below which best describes your feelings.

If I couldn't go on a wilderness trip,

- I would soon find something else I enjoyed just as much.
- I would miss it, but not as much as a lot of other things I now enjoy.
- I would miss it more than almost any other interest I have.
- I feel a great deal of the total enjoyment I now get out of life would be gone.

F. Level of Expertise/ Experience

- (14) How would you rate your skills in the following activities? Please circle the response which best represents your skill level.

	No skill	Very little skill	Some skill	A lot of skill
	1	2	3	4
Hiking on trails	1	2	3	4
Hiking through the woods (not on trails)	1	2	3	4
Backpacking	1	2	3	4
Camping	1	2	3	4
Canoeing	1	2	3	4
Hunting	1	2	3	4
Fishing	1	2	3	4
Orienteering/compass	1	2	3	4
Mountain climbing	1	2	3	4
First aid	1	2	3	4
Search and rescue	1	2	3	4
Outdoor cooking	1	2	3	4
Horseback riding	1	2	3	4

(59) Check a position on the two scales below which best describes yourself as a backcountry user.

Inexperienced	Medium experience	High experience
.....
Low ability	Medium ability	High ability
.....

(14) Overall, how would you rate your wilderness skills?

_____ below average	_____ above average
_____ about average	_____ expert

V. MEASURING BACKCOUNTRY USER KNOWLEDGE

Questions designed to ascertain general knowledge about conservation/
resource issues and agencies, and about backcountry department.

(22) FIRST, PLEASE READ THE DIRECTIONS

Column A

Check the one answer that is correct
or expresses your opinion:

PLEASE DO NOT GUESS

Column B

Please write in from whom
you FIRST learned the infor-
mation in Column A.

The list below may help you
remember, but there are many
other possible ways you may
have learned about this bit
of information.

*Parents or other relative

*Teacher (college or other)

*Club leader

*U.S. Forest Service

*Nat'l Park Service

*or someone else

*or, if you don't remember,
please say so

Please think carefully. If
it is impossible to remember,
write "Don't know". Do Not
Guess.

1. If you were to get wet _____ cotton B.
in freezing weather, _____ flannel
which clothing would _____ wool
you prefer to be _____ canvas
wearing: _____ nylon
_____ don't know

2. East on most maps would be the: B.
_____ top
_____ bottom
_____ left
_____ right
_____ don't know

3. Hypothermia is a danger when: B.
_____ a person with the disease
is at high elevations
_____ the temperature is below
5F
_____ wetness, wind and fatigue
is combined
_____ the temperature is high
_____ don't know

V. Measuring Backcountry User Knowledge

(22) (Continued from previous page)

<u>Column A</u>	<u>Column B</u>
4. Which species of tree most needs forest fires to reproduce itself? <input type="checkbox"/> Douglas-fir <input type="checkbox"/> lodgepole pine <input type="checkbox"/> ponderosa pine <input type="checkbox"/> white bark pine <input type="checkbox"/> don't know	B.
5. Man's place in a wilderness area can best be described as being: <input type="checkbox"/> as permanent as the individual is strong and wise in wilderness ways <input type="checkbox"/> a recreationist <input type="checkbox"/> a temporary visitor <input type="checkbox"/> don't know	B.
6. Required wilderness use permits are the method to: <input type="checkbox"/> disperse use <input type="checkbox"/> inform visitors of rules <input type="checkbox"/> gather research data <input type="checkbox"/> all of the above <input type="checkbox"/> don't know	B.
7. For the <u>safety</u> of wilderness visitors, the Forest Service provides: <input type="checkbox"/> hidden radio-telephone at regular intervals <input type="checkbox"/> periodic air patrols <input type="checkbox"/> scattered landing strips for light aircraft <input type="checkbox"/> none of the above <input type="checkbox"/> don't know	B.

V. Measuring Backcountry User Knowledge

(22) (Continued from previous page)

<u>Column A</u>	<u>Column B</u>
8. In a wilderness area, which of these fire sources for cooking has the least "impact"?	B.
<input type="checkbox"/> rock circle	
<input type="checkbox"/> iron grill put in by Forest Service	
<input type="checkbox"/> portable gas stove	
<input type="checkbox"/> dry rotting stump	
<input type="checkbox"/> don't know	
<hr/>	
9. The Wilderness Act	B.
<input type="checkbox"/> was passed in 1933	
<input type="checkbox"/> was passed in 1944	
<input type="checkbox"/> was passed in 1964	
<input type="checkbox"/> has not yet passed	
<input type="checkbox"/> don't know	
<hr/>	
10. "left over" firewood should be:	B.
<input type="checkbox"/> scattered	
<input type="checkbox"/> piled for the next camper	
<input type="checkbox"/> burned up	
<input type="checkbox"/> doesn't matter	
<input type="checkbox"/> don't know	

. Measuring Backcountry User Knowledge

- (83) Please read each of the following statements carefully. If you feel the statement is basically correct, circle True. If you think it is basically incorrect, circle False. If you are not sure whether it is correct or incorrect, circle Not sure.

Past forest fires have not changed the way in which the Northern Rocky Mountain forests developed.

True False Not sure

Fire often proves useful in making minerals and nutrients available to plants and trees.

True False Not sure

Some kinds of trees found in Northern Rocky Mountain forests would gradually disappear over time if all fires were eliminated.

True False Not sure

Forest fires are partly responsible for some of the open meadows and grassy fields one finds in the Northern Rocky Mountains.

True False Not sure

- (94) In which one area of the United States would you say most wilderness areas are located?

Northeast Southeast Midwest West Don't know

- (94) Which one of the following groups manages most wilderness areas?

Conservation clubs Private company Federal government
State government Don't know

- (31) The following items are designed to measure the amount of knowledge that has reached you concerning the nation's resource management agencies. Please answer all questions according to your best guess or knowledge.

In the list below, for each activity, device or category of people, circle one number to indicate whether it is more common or numerous in National Parks (circle the 1) or in National Forests (circle the 2) or about equally common in both (circle the 3).

<u>Item</u>	more common	more common	equally
	in national parks	in national forests	common in both
Nature talks by rangers	1	2	3
salvage of timber downed by windstorm	1	2	3
hunting	1	2	3
grazing cattle	1	2	3
"ranger naturalists"	1	2	3
land leased for private summer homes	1	2	3
campgrounds with flush toilets	1	2	3
wilderness areas	1	2	3
visitor centers	1	2	3

V. Measuring Backcountry User Knowledge

(31) Which of the following agencies uses the phrase "multiple use" as a slogan?

- 1. National Park Service
- 2. U.S. Forest Service
- 3. both agencies

(94) Which of the following are used to provide lumber and paper?

	Yes	No	Don't know
a. National forests	()	()	()
b. National parks	()	()	()
c. National wilderness areas	()	()	()

In which one of the following would you say most people sleep when they stay overnight in wilderness areas?

- Motel Camper trailer Cabin tent
 Don't know

About what size would you say most wilderness areas are?

- Less than 100 acres 100 to 1,000 acres
 1,000 to 5,000 acres More than 5,000 acres
 Don't know

(25) Who do you think manages this area?

- Federal State no idea private

(23) A campfire permit gives you permission to build an open campfire anywhere in the forest away from residential areas.

- true false don't know no answer

VI. QUESTIONS FOR MANAGERS

Questions about size of area under management, visitor use of the area, types of uses and users, and policies to control overuse.

Questions about Backcountry/ Wilderness Use

- (3) For your convenience, we have designed questions which mainly require short answers. We would, however, appreciate more detailed responses if you can supply them.

How large is the backcountry area you manage?

Acres _____ or Square Miles _____

How many people visited this backcountry area last year?

Visitors _____ or Visitor Days _____

Is backcountry use in your area:

Increasing _____ Decreasing _____

Remaining about the same _____

- (3) Which of the following types of recreational use occur in the backcountry area(s) you manage? Please check as many as apply.

- Backpacking, Canoeing, Canoe Camping, Cross-country skiing, Fishing, Four wheeling, Hang gliding, Hiking, Horse packing, Hunting, Ice climbing, Kayaking, Mountaineering, Observing Wildlife, Rafting, Rock climbing, Ski mountaineering, Snowmobiling, Snowshoeing, Spelunking, Swimming, Trail biking, Winter hiking, Other (Please specify)

Please circle the most popular activities above.

- (90) Please estimate the total recreational use of this wilderness or proposed wilderness or primitive area, hereafter referred to as wilderness, during 1977 or 1978 (January-December). Please report this in the use statistic and period used by your agency for the most recent year available.

Year reported _____

Visitor days _____

Visits _____

Overnight stays _____

Other (Please specify) _____

- (90) How many miles of officially recognized or system trails are located in this wilderness?

Miles of trail _____

VI. Questions for Managers A. Questions about Backcountry/Wilderness Use

(90) Please estimate how total use is distributed monthly by percent of the total year's use. (A best guess will do if data are not available).

	<u>Estimated Percent of Total Use</u>
January	_____
February	_____
March	_____
April	_____
May	_____
June	_____
July	_____
August	_____
September	_____
October	_____
November	_____
December	_____

(90) About what percent of parties entering the wilderness are day-users?

(90) About what percent of the visitors are:

accompanied by commercial outfitters or guides?

taking part in Outward Bound, National Outdoor Leadership School, or similar organized outdoor educational courses?

packing or using saddle stock?

(90) What is your impression about the prior backcountry camping experience (backpacking, etc.) of users of this wilderness compared to users of most other wilderness areas in your region?

_____ Beginners are more common in this area

_____ Highly experienced users are more common in this area

_____ Users in this area include an average range of experience

_____ Have no feel for their experience compared to other users

(90) If you do ration use or are planning to, please indicate the percent of permits that are (or will be) issued under the following rationing techniques?

<u>% of permits Issued</u>	<u>Rationing Technique</u>
_____	First-come, first-served (within 24 hours of beginning of the trip)
_____	Reservations that can be obtained 24 hours or more in advance
_____	Lottery
_____	Other (Please describe) _____
100%	Total _____

_____ Don't know yet (in planning stages)

VI. Questions for Managers A. Questions about Backcountry/Wilderness Use

- (90) What percent of your reservations (or lottery reservations) end up as "no-shows"? _____%
- (90) Is there a party size limit in effect? (check those that apply)
_____ None _____ Varies by travel zone. Indicate range:
_____ On number of hikers: Number _____
_____ On number of stock: Number _____
- (90) Is there a length-of-stay limit in effect?
_____ No
_____ At individual campsites. Number of days: _____
_____ In the wilderness as a whole. Number of days: _____
- (90) If you have closed any campsites or areas to camping, what are the reasons for closure? (Check as many as apply)
_____ Too close to other campsites or trails
_____ Too close to shorelines
_____ Over-use resulting in resource damage
_____ Other (Please specify) _____
- (90) How many of these closures are temporary (e.g., long enough to allow recovery)? _____% of closures
- (90) How many are permanent (no plans for reopening to use)? _____
Approximately when were these closures first initiated? Year _____
- (90) During the main use season, how many wilderness management personnel are usually found working in the wilderness or at the trailheads?
_____ Number working in the wilderness; % that are volunteers _____
_____ Number working at the trailheads; % that are volunteers _____

VI. Questions for Managers

B. Sequential Questions about Problems and Their Solutions

Questions to learn of managers' perceptions of problems and actions they have devised or employed to solve their backcountry problems.

(90)

Recreation-caused Problems

1. Please indicate the extent that each of the following is a problem caused by recreationists and where the problems occur. Circle the number indicating how serious each problem is at each location, using;

3 = a problem in many places in this wilderness

2 = a problem in a few places

1 = not generally a problem

	<u>On trails</u>			<u>At campsites</u>			<u>On lake or stream edges</u>			<u>Other (Please specify where)</u>	
Vegetation change caused by human use	1	2	3	1	2	3	1	2	3	2	3
	<hr/>										
	(Location)										
Soil change (i.e., erosion, compaction, bog formation, etc.) caused by human use	1	2	3	1	2	3	1	2	3	2	3
	<hr/>										
	(Location)										
Vegetation change caused by recreation stock	1	2	3	1	2	3	1	2	3	2	3
	<hr/>										
	(Location)										
Soil change (i.e., erosion, compaction, bog formation, etc.) caused by recreation stock	1	2	3	1	2	3	1	2	3	2	3
	<hr/>										
	(Location)										

1. Questions for Managers B. Sequential Questions about Problems and Their Solutions

(90) For the following, we are more concerned about the seriousness and extensiveness of each problem in this wilderness rather than the location. Please check the applicable category.

(Check one for each problem)
 A serious problem in many places A serious problem in a few places Generally not a problem

Recreation-caused impacts on wildlife populations (please cite particular species and situations involved):

- a. _____
- _____
- b. _____
- _____
- c. _____
- _____

- Recreation-caused water pollution
- Litter
- Human feces and toilet paper noticeable
- Effects of crowding on the wilderness experience of visitors
- Conflicts between different types of recreation use
- Vandalism or thefts from cars at trailheads
- Theft of recreationists' equipment inside the wilderness

(90)

Management Techniques

Trail and access road policy. Which of the following actions have you taken (in the last 10 years) or definitely plan to take to meet management objectives for this area? (Check as many as apply)

Roads

- _____ Build new roads to improve access to wilderness
- _____ Close roads to make access longer
- _____ Upgrade roads to improve access to certain points
- _____ Reduce road maintenance to inhibit access to certain points
- _____ General "maintain as is" access road policy

VI. Questions for Managers B. Sequential Questions about Problems and Their Solutions

Trails (or portages)

- Build new trails to improve access
- Close trails to restrict access
- General trail upgrading
- Upgrade selected trails to encourage use at certain areas
- Reduce maintenance on certain trails to discourage use at certain areas
- General "maintain as is" trail policy
- Manage major portions of the area in a trailless condition (trailless zones)

(90) Facilities and site "hardening" in the wilderness. Please check any of the following features or facilities that are found in this wilderness:

In campsites

- Shelters
- Concrete or iron fireplaces
- Paving (asphalt, cement slabs, etc.)
- Soil cement
- Gravel (applied)
- Turf grasses (non-native)
- Tables
- Portable water facility (pumps, spring box, etc.)
- Vault toilets
- How emptied:
 - Locally (within wilderness)
 - Removed by pack stock or personnel
 - Removed by airlift
- Chemical toilets
- Composting toilets
- Fully enclosed outhouses (any kind of toilet)
- Open-pit toilets (box, "Wallowa," etc.)
- Trash cans regularly emptied by field personnel

On trails

- Soil cement
 - Asphalt or other paving
 - Stairways
 - Other techniques _____
-

I. Questions for Managers B. Sequential Questions about Problems and Their Solutions

(90) If you have any pack or saddle stock use, what limitations are there on this use? (Check all that apply)

- No limitations
- All stock use is prohibited
- Certain trails or areas are closed to all stock use
- Animals are generally prohibited within a certain distance of lake or stream edges except for watering and transportation
(Please specify distance) _____
- In certain areas, stock use is allowed only for part of the year (seasonal closures)
- Animals must stay in designated "stock camps"
- Animals must stay out of camp areas
- Grazing by permit only
- Must carry own feed
- Certain stock-restraining methods (e.g., picketing or "loose herding") are prohibited. (Please specify)

- other limitations (Please specify) _____

(90) If you have any stock limitations, approximately when were the first of these initiated?

_____ Year

(90) What regulations are there on where people may camp? (Check all that apply)

- No regulations, but encourage camping in previously used areas
- No regulations, but encourage camping in previously unused areas
- No restrictions and no guidance
- May camp anywhere other than:
 - In certain general ecosystem types (e.g., alpine meadows)
(Please specify closed types) _____
 - Within a certain distance of lakes or streams (Please specify distance) _____
 - Within a certain distance of other camps (Please specify distance) _____
 - In certain closed campsites though other campsites are available for use in the vicinity. Approximate number closed: _____
 - In certain areas (e.g., around a lake) which are completely closed to camping. Approximate number closed: _____

VI. Questions for Managers B. Sequential Questions about Problems and Their Solutions

- Must camp only at designated sites:
 - Throughout the entire wilderness
 - Within a certain distance of trails (Please specify distance) _____
 - In other localized areas (e.g., around a popular lake)
- Length-of-stay limit at some campsites
- Other (Please specify) _____

(90) If you have any regulations on where people can camp, approximately when were these first initiated? _____ Year

(90) Is there a "minimum impact camping" educational program aimed at the users of this wilderness? (Check all that apply)

- No formal program
- Recommended behavior in brochure or wilderness map (Please enclose a copy)
- Interpretive program by personnel or other interpretive media (exhibits, films) (Please describe media) _____

(90) Do you have a system to disperse use (or redirect use from high-density areas) by voluntary means (such as providing information, suggestions)?

- No
- Yes, within this wilderness
- Yes, to other wilderness or non-wilderness

If yes, please describe how you are doing this (personal contact, brochures, etc.) _____

(90) Are you using any other management techniques to affect use patterns?

- No Yes If yes, what and why? _____

Questions for Managers B. Sequential Questions about Problems and Their Solutions

(26)

Name of Designated Wilderness _____	Mailing Address: _____
Name of person responding _____	_____
Title of person responding _____	_____
Business phone number _____	_____

Do you want a copy of the final report? Yes No

Management problems in "Designated Wilderness"	When did this become a problem?	Why did this become a problem?	How are you handling this problem now?	What other ways of handling it have you considered or are you considering?	What do you think the situation will be like five years from now?	How do you think you will be handling this problem five years from now?	Additional Comments
Next most important problem is:							

VI. Questions for Managers B. Sequential Questions about Problems and Their Solutions

- (4) List both the I & E techniques you use in dealing with the problems, and the user groups you have observed causing that problem. Feel free to provide information about problems we have not marked if they occur in your area.

Problem	I & E Techniques Used	User Groups Involved
Conflicts between users		
Damage by ORV's		
Disturbance damage to flora/fauna		
Fire		
Litter/garbage		
Loss of solitude		
Overuse or concentrated use		
Poor camping habits		
Trail deterioration		
User safety/ search & rescue		
Vandalism		
Violation of regulations		
Water pollution/ sanitation		

VI. Questions for Managers B. Sequential Questions about Problems and Their Solutions

(4) The following questions refer to signs in general.

What backcountry topics do you present on signs?

Is the style of your signs standardized or not? If standardized, over what areas?

Have you eliminated or minimized any problem in the past using signs?

Do you have a problem with vandalism of signs? If so, how do you deal with it?

What percentage of your total I & E budget is spent on signing?

Please describe in detail one of your most successful signs. What factors make this broadcast successful? Include information about location, contact, height, format, size, color, etc.

Including salaries, materials, equipment, etc., what is the total cost of producing a sign? Please break that total into component costs as much as possible.

What advice can you give for a person who is trying to create a good sign?

(4) The following questions refer to radio and TV techniques you may use.

Do you and your staff create and produce materials for radio and TV yourselves or do you use outside assistance?

Have you eliminated any problems in the past using this technique?

How have users reacted to these broadcasts?

What percentage of your total I & E budget is spent on radio or TV time?

Please describe in detail one of your most successful radio or TV broadcasts. What factors make this broadcast successful? Include information about format, length, frequency, timing, speakers, graphics, distribution, etc. Including staff and consultation time, air time, material, etc., what is the total cost of producing this radio or TV show? Please break the total cost down into component costs as much as possible. Please send a script of this broadcast if possible.

What advice can you give for a person who is trying to create a good radio or TV broadcast?

(4) I & E personnel

How many visitors do I & E people speak with per day?

Is contact between visitors and I & E personnel initiated by the public or by information givers?

What backcountry topics do you present through these people?

How have users reacted to this type of information personnel?

What advice can you give for a person who is trying to create a good I & E personnel program?

VI. Questions for Managers B. Sequential Questions about Problems and Their Solutions

(20) Name of agency or organization: _____
What is your organization's policy towards the use of off-road vehicles on your land? _____

What has been the extent of your cooperation with ORV user clubs and organizations in the past? ...with (other) government agencies?

What would be your organization's disposition towards any future attempts by the state to coordinate a voluntary system of statewide ORV trails, utilizing a combination of public, quasi-public, and private organizational land holdings? _____

Does your organization have any existing or proposed ORV trails located on any of your land holdings, rights-of-way, etc.? If so, which properties are they located on? Are there any maps of these trails available? _____

How are the costs of trail planning, construction, and maintenance financed by your organization? _____

VII. Observation as a Data Collection Technique

(2) OBSERVATIONS

1. Number in party?
2. Distance from trail? 50, 100, 150, 200, more feet
3. Distance from entry points? 1, 2, 3, 4, 5, more miles
4. Type of equipment? EMS, Army Navy, New, Old
5. Sex of party: All male, All female, mixed
6. Approximate age of party members? 15-20, 21-25, 25-35, older
7. Observed activity at time of encounter. Time, _____ Date, _____
Site Location on map _____
8. Campfire or gas stove.
9. Are there others camping nearby? Yes No How many tents?
10. Are there other suitable campsites within 200 feet? Yes No

(8) Date _____ Time _____^{AM}/_{PM}
 Location and direction of party on Long Trail _____ heading ^N
 near _____ shelter
 on side trail _____ heading ^E/_W
 name of trail _____

(8) Nearest shelter _____
 _____ # in party _____ # males _____ # females

(8) Age estimate (Give # in each category)
 _____ # under 12 years _____ # 25-40 years
 _____ # 12-15 years _____ # over 40 years
 _____ # 16-24 years

(8) Types of hikers
 _____ # day hikers _____ # overnights (2-3 days) _____ # through hikers

(8) Party consists of
 _____ single hiker _____ friends and family
 _____ friends _____ organized group
 _____ family

Equipment (circle one response)

- Yes No Not observed - Packs
 Yes No Not observed - Map/guidebook
 Yes No Not observed - Canteens or Waterbottles

Experience Rating (party as a whole)

1 2 3 4 5
 very inexperienced very experienced

QUESTIONNAIRE INDEX

- Absher, James D.
1973. High Sierra Wilderness traveler questionnaire. Calif. State Univ., San Jose. (Questionnaire provided by R. C. Lucas.)
- Adler, Stephen
1977. Motivational factors in campsite selection. Master's thesis, Psychology Univ. N.H., Durham.
- Appalachian Mountain Club
1979. Backcountry information & education inventory. Review Copy, Part I. Pinkham Notch Camp, Gorham, NH.
- Appalachian Mountain Club
1979. Backcountry information & education inventory. Review Copy, Part II. Pinkham Notch Camp, Gorham, NH.
- Bowley, Curtis S.
1975. Trail user study. Allegheny National Forest. Master's thesis, Coll. Health, Phys. Ed. & Recreation. Pa. State Univ., State College.
- Canadian National Park Service
1979. Kootenay Backcountry permit compliance survey. Dep. Indian Affairs and North. Dev., Ottawa.
- Canon, Lance K.
1979. Development and assessment of a technique for promoting dispersed backcountry camping practices. Paper presented at Symposium on Leisure Research, NRPA Parks and Recreation Congress, New Orleans, LA.
- Ciali, Charles
1977. Surveying hikers on the Long Trail: A methodological study. Master's thesis, Univ. Vt., Burlington.
- Connecticut, University of
Storrs Agricultural Experiment Station.
1969 Project. (Questionnaire provided by R. C. Lucas.)
- Cooke, Douglas
1972. The perceived environment of wilderness in Kings Canyon National Park. Master's thesis, Dep. of Geogr., Univ. Cincinnati.
- Cunningham, Allen B.
1973. Determining visitor perceptions as part of a wilderness area management system. Master's thesis, Univ. Mo., Columbia.
12. Cushwa, Charles T.
1963. A study to develop methods for measuring and predicting dispersed recreation use of forest land. Master's thesis, Va. Polytech. Inst., Blacksburg.
13. Donally, Maureen
1980. An investigation of hikers' perceptions of the Great Gulf Wilderness Area in New Hampshire. Master's thesis, Univ. Md., College Park 92 p.
14. Donally, Maureen, and Fred Kuss
1980. Great Gulf Wilderness user study. Review Copy of questionnaire. Master's thesis, Univ. Md., College Park.
15. Driver, B.L., and D.J. Allen
1977. Office report: Pilot study of summer 1976 hikers in the Mahoosuc Range of the White Mountain National Forest, N.H. Rocky Mt. For. and Range Exp. Stn. and Dep. Recreation Resour., Colo. State Univ., Fort Collins. 14 p., illus.
16. Echelberger, Herbert E., Daniel H. Deiss, and Douglas A. Morrison
1974. Overuse of unique recreation areas: A look at the social problems. J. Soil and Water Conserv. 29(4):173-176.
17. Echelberger, Herbert E., and George H. Moeller
1977. Use and users of the Cranberry Backcountry in West Virginia: Insights for eastern backcountry management. USDA For. Serv. Res. Pap. NE-363.
18. Economic Development Council of Northeastern Pennsylvania
1977. Human needs served by outdoor recreation in northeastern Pennsylvania. Econ. Dev. Coun. of Northeast. Pa., Box 777, Avoca, PA.
19. Economic Research Associates
1976. Evaluation of public willingness to pay user charges for use of outdoor recreation areas and facilities. U.S. Dep. Inter., BOR. 45 p.
20. Edward, James R., and Michael J. Viani
1979. Massachusetts ORV trail system study: Guidelines and recommendations for the development of a statewide system of snowmobile and trail bike trails. Master's thesis, Dep. Reg. Plann., Univ. Mass., Amherst.

21. Fazio, James R.
1974. A mandatory permit system and interpretation for backcountry user control in Rocky Mountain National Park. Ph.D. thesis, Colo. State Univ., Fort Collins.
22. Fazio, James R.
(no date) Selway-Bitterroot Wilderness Area questionnaire. Wilderness Res. Cent., Univ. Idaho, Moscow.
23. Folkman, William S.
1979. Urban use of wildland areas as forest fire risks. USDA For. Serv. Res. Pap. PSW-137.
24. Fowler, Ron
1972. Visitors to Okefenokee National Wildlife Refuge, Georgia, their characteristics, attitudes, satisfactions and preferences. Master's thesis, Dep. Recreation and Parks, Texas A&M Univ., College Station.
25. Gisi, Donald B.
1971. Recreation expectations of the first time visitor to the Ozark National Scenic Riverways. Master's thesis, Univ. Mo., Columbia. 53 p.
26. Godin, Victor B., and Raymond E. Leonard
1979. Management problems in designated wilderness areas. J. Soil and Water Conserv. 34(3):141-143.
27. Golden, Steven
1975. Forest recreation problems in metropolitan areas: A study of hikers on Bear Mountain and Harriman State Parks, New York. Master's thesis, Coll. Environ. Sci. and For., State Univ. N.Y. Syracuse. 176 p.
28. Haas, Glen, and Ed Krumpe
1979. Report to Forest Service (Region 2) "Trails Workshop" held on February 12-16, 1979, in Denver; Colorado. Authors are from Colo. State Univ., Fort Collins.
29. Habermelh, James
1973. Determining visitor perceptions of crowding on the Ozark National Scenic Riverways. Master's thesis, Univ. No., Columbia. 103 p.
30. Habermelh, James
1974. A study report on determining visitor perceptions and attitudes about crowding in the Minarets Wilderness. USDA For. Serv., Inyo Nat. For. Bishop, CA.
31. Hendee, John C.
1967. Recreation clientele: The attributes of recreationists preferring different management agencies, car campgrounds or wilderness in the Pacific Northwest. Diss. Abstr. 28(5).
32. Hendee, John D., William R. Catton, Larry D. Marlow, and C. Frank Brockman.
1968. Wilderness users in the Pacific Northwest: Their characteristics, values and management preferences. USDA For. Serv. Res. Pap. PNW-61.
33. Ho, Raina Jui-Chu
1972. Analysis of camping by Winnipeg residents at selected parks in Manitoba with projections of participation to 1976. Master's thesis, Univ. Manitoba, Winnipeg.
34. Hollender, John W.
1977. Motivational dimensions of the camping experience. J. Leisure Res. 9(2):133-141.
35. Humphrey, Dave
1969. Salmon, Little Salmon, and South Fork of Salmon, questionnaire for transient use. Idaho Water Resour. Res. Inst., Univ. Idaho, Moscow.
36. Husted, Richard
1976. Campsite preference study. Campers in high and low density camp areas. Master's thesis, South. Ill. Univ., Carbondale. 57 p.
37. Idaho, University of
1972. Middle Fork of the Salmon River recreation study: A study of the attitudes and opinions of the Middle Fork floaters. Univ. Idaho, Moscow.
38. James, George A., and Hans T. Schreuder
1971. Estimating recreation use on the San Geronio Wilderness. J. For. 69(8):490-493.
39. James, George A.
1977. Land Between the Lakes recreation use survey. TVA, Golden Pond, KY.

40. Jubenville, Alan
1970. Travel patterns of wilderness users in the Anaconda-Pintlar Wilderness. Ph.D. thesis, Univ. of Mont., Missoula. 240 p.
41. Juurand, Priidu
1971. The relation of trail use to the wilderness trail experience. Master's thesis, Univ. West. Ont., Kitchener.
42. Knopp, T. and J. Tyger
1973. A study of conflict in recreational land use: Snowmobiling vs. ski touring. *J. Leisure Res.* 5(3):6-17.
43. Kupcekevicius, Kazys
1975. Determining off-road vehicle area user characteristics and perceptions as a basis for management planning. Master's thesis, South Ill. Univ., Carbondale. 115 p.
44. Leatherberry, Earl C.
1979. Minnesota canoe and kayak owners: Their characteristics and patterns of use. *USDA For. Serv. Res. Pap. NC-171.*
45. Lewis, J. W.
1971. Perceptions of desert wilderness by the Superstition Wilderness user. Master's thesis, Univ. Ariz., Tucson.
46. Lime, David W.
1972. Large groups in the Boundary Waters Canoe Area: Their numbers, characteristics and impact. *USDA For. Serv. Res. Note NC-142.*
47. Lindsay, John J.
(no date) Outdoor recreation user group conflicts on Vermont forest lands. Pilot data collection schedule for McIntire-Stennis Project #20. Univ. Vt., Burlington.
48. Lindsay, John J.
1975. A survey of Vermont snowmobiling. *Recreation Manage. Program, Sch. Nat. Resour., Univ. Vt., Burlington.*
49. Lindsay, John J.
1976. Vermont trail bike survey. *Recreation Manage. Program, Sch. Nat. Resour., Univ. Vt., Burlington.*
50. Lindsay, John J.
1977. Vermont boating survey. *Recreation Manage. Program, Sch. Nat. Resour., Univ. Vt., Burlington.*
51. Lindsay, John J.
1979. Hiking study. *Recreation Manage. Program, Sch. Nat. Resour., Univ. Vt., Burlington.*
52. Lucas, Robert C.
1964. Wilderness perception and use: The example of the Boundary Waters Canoe Area. *Nat. Resour. J.* 3(3):394-411.
53. Lucas, Robert C.
1967. A survey among Quetico visitors. (Questionnaire provided by R. C. Lucas.)
54. Lucas, Robert C.
1967. BWCA user interview schedule. *Sch. For., Univ. Minn.* See also: Lucas, R. C. 1967. The changing recreational use of the BWCA. *USDA For. Serv. Res. Note NC-42.*
55. Lucas, Robert C., and Jerry Oltman
1971. Survey sampling wilderness visitors. *J. Leisure Res.* 3(1):28-44.
56. Lucas, Robert C., H.T. Schreuder, and G. A. James
1971. Wilderness use estimation: A pilot test of sampling procedures on the Mission Mountains Primitive Area. *USDA For. Serv. Res. Pap. INT-109.* 44 p.
57. Lucas, Robert C.
1974. Redistributing wilderness use through information supplied to visitors. Study #1903-16. Intermountain For. & Range Exp. Station, *USDA For. Serv., Missoula, Montana.*
58. Lucas, Robert C., and Robert P. Rhinehart
1976. The neglected hiker. *Backpacker* 4(1):35-39.
59. Manfredo, Mike
(no date) Draft copy of Popo Agie Primitive Area questionnaire used in dissertation for College of Forestry and Natural Resources, Colo. State Univ., Fort Collins. (Questionnaire provided by R. C. Lucas.)
60. McCay, Roger E.
1978. Hiker preferences for trail features and maps. *USDA For. Serv. Res. Note NE-262.*
61. McEvoy, James, III
(no date) Pilot project: Questionnaire draft copy #1. *Dep. of Sociol., Univ. Calif., Davis.* (Questionnaire provided by R. C. Lucas.)

62. McLaughlin, Kevin
1972. Salmon River user survey.
State Univ. N.Y., Syracuse (Questionnaire provided by R. C. Lucas.)
63. Meganck, Richard Albert
1975. Columbia's national parks: An analysis of management problems and perceived values. Ph.D. thesis, Dep. Resour. Recreation Manage., Oregon State Univ., Corvallis.
64. Merriam, L.C., Jr.
1963. A land use study of the Bob Marshall Wilderness Area of Montana. For. and Conserv. Exp. Station Bull. 26.
65. Merriam, L. C., Jr.
1964. The Bob Marshall Wilderness Area of Montana - Some socioeconomic considerations. J. For. 62(11):789-795.
66. Merriam, L. C., Jr., and R. B. Ammons
(no date) The Wilderness user in three Montana areas. Sch. For., Univ. Minn., St. Paul. (Early to mid 1960's.) 54 p.
67. Montana State University
1973. Gallatin Valley backpacker study. (Questionnaire provided by R. C. Lucas.)
68. Mount, K.
1977. Riding Mountain National Park backcountry study. Dep. Stat., Univ. Manitoba. Final report for Parks Canada.
69. Murray, Judith
1974. Appalachian Trail users in the southern national forests. USDA For. Serv. Res. Pap. SE-116.
70. Peterson, G. L.
1974. A comparison of the sentiments and perceptions of wilderness managers and canoeists in the Boundary Waters Canoe Area. J. Leisure Res. 6:194-206.
71. Peterson, George L.
1978. National river recreation study. Technol. Inst., Dep. Civil Eng., Program Reg. and Urban Plann., Northwestern Univ., Evanston, IL.
72. Plumb, Steve
1972. An analysis of perceived attitudes towards environmental and sociological effects of the recreational use of off-road vehicles at the Back Bay National Wildlife Refuge. Master's thesis, Coll. Health, Phys. Ed. and Recreation, Pa. State Univ., State College.
73. Roggenbuck, Joseph W.
1978. Shenandoah National Park hiker survey. Dep. For., Va. Polytech. Inst. and State Univ., Blacksburg.
74. Roggenbuck, Joseph W.
1978. Cape Hatteras - a survey of visitors and area residents. Dep. For., Va. Polytech. Inst. and State Univ., Blacksburg.
75. Roggenbuck, Joseph W.
1978. Shenandoah Project. Dep. For., Va. Polytech. Inst. and State Univ., Blacksburg.
76. Roggenbuck, Joseph W.
1978. Joyce-Kilmer-Slickrock Wilderness hiker study. Dep. For., Va. Polytech. Inst. and State Univ., Blacksburg.
77. Ross, Karen
(no date) Western wilderness area questionnaire. P.O. Box 743, Mont. State Univ., Bozeman. (Questionnaire provided by R. C. Lucas.)
78. Rupe, Mary Lynn
1978. Opinions of hikers toward current and alternative management policies for the Camel's Hump section of Vermont's Long Trail. Master's thesis, Univ. Vt., Burlington.
79. Shomaker, John Henry
1975. Visitor dispersed experiments in wilderness. Ph.D. thesis, Dep. Recreation Res., Colo. State Univ., Fort Collins.
80. Schomaker, John Henry
(no date) Backcountry recreation study: Wilderness questionnaire. Wilderness Res. Cent., Univ. Idaho, Moscow.
81. Sommarstrom, Allan Ralph
1966. The impact of human use on recreational quality: The example of the Olympic National Park Backcountry user. Master's thesis, Dep. Geogr., Univ. Wash., Seattle. (Questionnaire provided by R. C. Lucas.)

- Stankey, George H.
1973. Visitor perceptions of wilderness recreation carrying capacity. USDA For. Serv. Res. Pap. INT-142. 61 p.
- Stankey, George H.
1976. Wilderness fire policy: An investigation of visitor knowledge and beliefs. USDA For. Serv. Res. Pap. INT-180. 17 p.
- Stankey, George H.
1979. Use rationing in two southern California wildernesses. J. For. 77(6):347-349.
- Stankey, George H.
1980. A comparison of carrying capacity perceptions among visitors to two wildernesses. USDA For. Serv. Res. Pap. INT-242. 34 p.
- Stankey, George H., Robert C. Lucas, and Robert R. Ream
1973. Relationships between hunting success and satisfaction. Trans. 38th North Am. Wildl. Conf. March 18-21, 1973.
- Trottier, Garry C. and George W. Scotter
1975. Backcountry management studies, The Egypt Block, Banff National Park, Can. Wild. Serv. Environment Canada, Edmonton, Alberta.
- U.S. Department of the Interior, Bureau of Outdoor Recreation
1962. Wilderness and recreation - a report on resources, values and problems. Wildland Res. Center, Univ. Calif. ORRRC Res. Rep. No. 3, U.S. Gov. Print. Off., Washington, D.C. pp. 167-202.
- U.S. Department of the Interior, Bureau of Outdoor Recreation
1962. The quality of outdoor recreation as evidenced by user satisfaction. ORRRC Study Rep. No. 5, Washington, D.C. pp. 47-51.
- Washburne, Randel F.
1980. Wilderness management questionnaire. Wilderness Management Research Project. USDA For. Serv. Intermountain For. & Range Exp. Station. Missoula, MT.
91. Wenger, Wiley D., Jr., and H. M. Gregersen
1964. The effect of non-response on representativeness of wilderness trail register information. USDA For. Serv. Res. Pap. PNW-17. 20 p., illus.
92. Williams, Paula J.
1977. White Mountain National Forest user study. Master's thesis, Yale Sch. For., New Haven, CT.
93. Womble, Peter
1977. McKinley/Glacier Bay Backcountry study. USDI Park Service Cooperative Studies Unit, Coll. For. Resour., Univ. Wash., Seattle.
94. Young, Robert Allen
1978. An analysis of wilderness concepts and values. Dep. of Leisure Studies, Univ. Ill., Urbana-Champaign.

LITERATURE CITED

62. Berdie, D. R., and J. F. Anderson
1974. Questionnaires: Design and use. Scarecrow Press, Metuchen, NJ. 225 p.
63. Bradburn, N. M.
1979. Improving interview method and questionnaire design. Jossey-Bass, San Francisco. 214 p.
- Burton, Thomas L.
1971. Experiments in recreation research. Rowman and Littlefield, Totowa, NJ. 365 p.
64. Erdos, Paul L.
1970. Professional mail surveys. McGraw-Hill, New York. 289 p.
65. Festinger, L., and D. Katz
1953. Research methods in the behavioral sciences. Holt, Rinehart and Winston, New York. 660 p.
66. Kahn, R. L., and C. F. Cannell
1962. The dynamics of interviewing. John Wiley & Sons, New York. 368 p.
67. Kish, Leslie
1965. Survey sampling. John Wiley & Sons, New York. 643 p.
- Moser, C. A.
1961. Survey methods in social investigations. Heinemann Press, London. 352 p.
68. Oppenheim, A. N.
1966. Questionnaire design and attitude measurement. Basic Books, New York. 298 p.
69. Potter, D. R., K. M. Sharpe, J. C. Hendee, and R. N. Clark
1972. Questionnaires for research: An annotated bibliography on design, construction, and use. USDA For. Serv. Res. Pap. PNW-140. 80 p.
70. Robinson, John P., and Phillip R. Shaver
1973. Measures of social psychological attitudes. Survey Research Center, Institute for Social Research, Ann Arbor, Michigan. 750 p.
71. Schwarz, C. F., E. C. Thor, and G. H. Elsner
1976. Wildland planning glossary. USDA For. Serv. Gen. Tech. Rep. PSW-13. 252 p.
- Seltiz, Claire, M. Jahoda, M. Deutsch, and S. W. Cook
1961. Research methods in social relations. Holt, Rinehart and Winston, New York. 662 p.
- Webb, E. J., D. T. Campbell, R. D. Schwarz, and L. Sechrest
1973. Unobtrusive measures: Nonreactive research in the social sciences. Rand McNally, Chicago. 225 p.