

INTERIM PROGRESS REPORT

July 1985

Subagreement #4

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A STUDY OF BACKCOUNTRY USER ATTITUDES AND
COMPLIANCE WITH MINIMUM IMPACT PROCEDURES
MT. RAINIER NATIONAL PARK

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Summary of Research Progress

As a result of considerable interaction between personnel from the CPSU and Mount Rainier National Park, progress in the development of the various components of the Mount Rainier Backcountry User Attitudes Study and Compliance with Minimum Impact Procedures has been good. Overall, the project is proceeding on schedule. Field workers are presently gathering data in the park.

As of the Interim Progress Report, March 30, 1985, the issue of the availability of an SCS from the park or the availability of funds for a work study student from the University of Washington had not been resolved. Shortly after the report was written, the issue was decided in favor of hiring a work-study student to assist with the study as a CPSU employee. Fifteen hundred dollars was added to the project budget for this purpose. Subsequently, Lisa Paulsen was hired and is currently stationed at Longmire. She is working primarily in the Paradise Meadow Visitor Survey and Sign Experiment projects.

At the request of Supt. Guse, a general visitor survey was added to the work elements of the Cooperative Agreement. Fourteen thousand dollars was added to the Cooperative Agreement budget to conduct this research. This study will identify park user constituencies, travel and use patterns within the Park, latent demand for facilities and services and replicate William Beyers' 1968 Mt. Rainier Economic Impact Study. William Salvi, a CPSU Research Analyst working part-time on the Indian Henry EMI platform component of the study, has been assigned lead responsibility for development of the General Visitor Survey (GVS) questionnaires and execution of the field phase of the research.

During April and May the CPSU staff constructed, revised and edited several versions of the questionnaires being used in this research. This process culminated in a CPSU/NPS-MORA meeting on May 24 at Longmire where Tommy Swearingen and Salvi presented draft copies of the questionnaires for comment by appropriate Mount Rainier staff. (A summary of this meeting is included as Appendix A).

Revised drafts of the questionnaires were presented at another meeting at Longmire on June 4. (A summary of this meeting is included as Appendix B). This meeting was devoted to collecting reviews of questionnaires from MORA staff and to discussion of the revised questionnaires. The texts and design of the signs for the sign experiments were discussed and agreed upon.

Throughout May and early June the CPSU staff was intensively involved in questionnaire editing, layout and refining research methodologies. On June 21 Salvi and Swearingen attended the new seasonal employee orientation program at Longmire. Presentations were made at the seasonals' orientation briefly explaining the research and the cooperative arrangement with the CPSU.

On June 22 and 23 GVS and Muir research instruments were pretested. The same questionnaire drafts were reviewed by Dr. Perry Brown, Oregon State University, Dr. Edwin Krumpe, University of Idaho, Dr. Bill McCloughin, University of Idaho and Dr. Bill Beyers, University of Washington. The final GVS and Camp Muir questionnaires were printed, following revision from the pretest results, outside reviewer comments and continued review from CPSU investigators. These forms are included as Appendices C, D, E, and F. A line drawing of Mount Rainier was received from the Park and is on the cover of all questionnaires. The

questionnaires for each project are different colors to facilitate error free distribution and processing.

A pretest of the Paradise Meadows Visitor Survey questionnaire was conducted at Alta Vista in the meadows on July 2. Revisions of the instrument are in process and a final version of the questionnaire is forthcoming. The sign experiment observation form was field tested on July 4. The experimental signs are ready. Initiation of the sign experiment will begin July 14.

As of the writing of this report, the visitor contact procedures at the park entrances have been planned in consultation the Ranger staff. These procedures should result in no appreciable traffic back-up and have negligible impact on visitors' park experience. Depending upon the entrance station, these operations require up to three people. The agreed upon budget and research plan called for the Park to recruit volunteers to accomplish this work. However, insufficient numbers of volunteers have been recruited and a labor shortfall presently exists.

The early snow melt is resulting in a rapid disappearance of snow in the Paradise day use area. This earlier than usual melt may impact the signing experiments dealing with trail departures due to snow cover. Invesitators are considering contingency plans to alter the highly structured research schedule to gather adequate data for the snow sign experiments.

In conclusion, all of the components of the 1985 MORA Backcountry User Attitude Survey are proceeding on schedule. With the exception of the shortage of volunteers, the problems that have arisen have been satisfactorily resolved. The pretests have gone well; final questionnaires are printed or being printed. The field workers are

successfully gathering data with few problems. Mount Rainier Park visitors appear accepting of the studies and negligent negative feedback has been received.

II. Status Reports of Individual Study Components

A. Camp Muir Climbers Survey

1. Summary

Following the CPSU/NPS-MORA meeting of June 4, 1985 (see Appendix B), a pretest draft version of the Camp Muir Climbers Survey instrument was written. This version represented a major revision from earlier drafts. Modifications include specific questions regarding individual human waste disposal, expectations regarding sightings of human waste, and the impact of human waste sightings on climbing trip enjoyment and satisfaction.

Swearingen administered the questionnaire to a non-random group of 25 climbers at Camp Muir on June 29 and 30. An attempt was made to obtain a cross-section of users including a few hiker-campers at Muir, private climbers (successful and unsuccessful) from Muir and Ingraham Flats, a group of Rainier Mountaineering Inc. clients, and both NPS and RMI staffs.

Final revisions were made on the questionnaire as a result of the pretest results, continued review by CPSU investigators and review from Dr. Edwin Krumpe at the University of Idaho. The final version of the questionnaire is now being printed. The Camp Muir site sheet administration was initiated July 5.

2. Comments

See Appendix C for the Camp Muir Questionnaire and Appendix G for the Camp Muir Climbers Survey Research Design.

B. Paradise Meadows Visitors Survey

1. Summary

Following the CPSU/NPS-MORA meeting of June 4, 1985 (see Appendix B), a pretest draft version of the Paradise Meadows Visitors Survey questionnaire was written. This version was based on input from both the CPSU and MORA staffs, and required somewhat less revision than the other other questionnaires being developed.

A pretest of the Paradise Meadows Visitors Survey was conducted on Monday, July 1, 1985 at Alta Vista in Paradise Meadows by Swearingen and Paulsen. The study was well received by dayhikers at Alta Vista.

Further revisions of the questionnaire are in process. The final version of the questionnaire will be printed the week of July 8-12.

2. Comments

See Appendix D for the Paradise Meadows Visitors Survey Questionnaire and Appendix H for the Paradise Meadows Visitor Survey Research Design.

C. Paradise Meadows Signing Experiment

1. Summary

The Interpretation Division of MORA has completed the signs to be used in the sign text experiments at Paradise Meadows. A meeting with Ranger Jane Ruckman, Swearingen, and Paulsen was held on July 1, 1985 at

Paradise Visitors Center to work on the experiment logistics. At present progress on the experiment is proceeding as planned and no significant problems exist. The snowmelt is occurring rapidly at Paradise, a condition which means that less time will be available to develop and test field procedures regarding the snow sign component of the experiment. The observation schedule is in place. A comprehensive site observation form has been designed but may require further refinement. Johnson and Swearingen will both be on site to initiate the sign experiment July 14.

2. Comments

Based on input from the MORA staff in the series of meetings relating to the study design (see Quarterly Report, March 30 and other meeting reports in this text), the questionnaires used in the various components of the overall project were expanded to address the role of general visitor information in visitors' perceptions and behavior and concerns of a site specific nature. The length of the questionnaires therefore, have precluded their administration in the field (given a high priority of avoiding excessive burden on the visitor experience). Pretests indicate an average time of approximately 10 minutes is needed to complete the Muir and Paradise instruments.

Less attention has been directed in the study design to analysis of specific interpretative media oriented toward low impact behavior. Given limited project resources, the growing complexity of other components of this study made such a specific evaluation increasingly difficult. Following a meeting involving Bill Dengler, Bill Swift, and

Tommy Swearingen, Tuesday, July 2, 1985, Longmire and subsequent discussion with the Project Leader it was deemed inappropriate to attempt a critique of any specific interpretive media. Therefore, the contingent plans to do so as a peripheral part of the overall project (Appendix H) are no longer operational.

D. Indian Henry's Meadow Visitor Survey

1. Summary

Based upon review comments received at the June 4th meeting at Mt. Rainier, pretest versions of the survey instruments have been developed. These pretest instruments will be sent out for continued review by the Park staff and to experts in recreation research. An on-site pretest of the instruments will be conducted at the EMI platform site on July 18 and 19. It is anticipated that the final version will be printed by August 1. On-site data collection will begin August 8.

2. Comments

See Appendix E for the pretest draft of the Indian Henry's Meadow Visitor Survey Questionnaire and Appendix I for the Indian Henry's Meadow Visitor Survey Research Design.

E. Mt. Rainier General Visitor Survey

1. Summary

Based upon review comments received at the June 4th meeting at Mt. Rainier, pretest versions of the three survey questionnaires were developed. The pretest versions of the questionnaires were sent out for

reviewed by recognized social science researchers and appropriate MORA staff. In addition, the pretest versions were administered to 23 Park visitors on-site on June 22 and 23. An effort was made to record the time it took to complete the questionnaire, as well as to verbally go through a questionnaire evaluation with each of the visitors. In particular, John Wilcox, Randy Brooks, Rick Harris, and Ed Wilson were helpful during the pretest period in providing input and suggestions for the administration of the on-site form.

A final version of each of the three questionnaires was produced based upon the review comments and on-site pretest results. The questionnaires have been printed and are scheduled to be mailed to a sample of Park visitors beginning the week of July 15.

One area of concern that is specific to the General Visitor Survey and could affect the results of this component is the lack of volunteers to help with the administration of the on-site forms at the entrance stations. The CPSU staff spent a good portion of two days recruiting volunteers in the Ohanepecosh and White River areas with minimal results. The ability to contact the desired number of visitors at the entrance is crucial to the success of the General Visitor Survey. It is, therefore, critical that this issue is quickly resolved.

2. Comments

See Appendices F1, F2, and F3 for the Mt. Rainier General Visitor Survey Questionnaire and Appendix J for the Mt. Rainier General Visitor Survey Research Design.

Appendix A
(Meeting Report, May 24, 1985)

MORA Backcountry User Attitude Survey
Report: NPS/CPSU Meeting

May 24, 1985

Summary, Comments, and Additional Continued Discussion

Submitted by

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I. Introduction

The subject of this report is a summary of the meetings held between MORA staff and CPSU representatives held at Mt. Rainier National Park on May 24, 1985. This meeting was the fourth in a series of CPSU/MORA meetings held to discuss the 1985 MORA Backcountry User Attitude Survey. The purpose of this particular meeting was to review the draft copies of the questionnaire designed by the CPSU staff that will be used in the study.

II. Meeting - 24 May 1985, 10 am, Longmire

MORA staff attending: Bob Dunnagan, Pete Thompson, John Wilcox, Bill Swift.

CPSU staff attending: Tommy Swearingen, William Salvi.

Summary

It was agreed at the outset that the rough drafts of the questionnaires would briefly be reviewed in the meeting and additional copies of each questionnaires would be distributed to other MORA staff familiar with the relevant specific component of the study. The additional reviewers' comments would be collected at a subsequent meeting. The following sections are a summary of comments concerning each draft questionnaire. Since the comments were very specific to the questions in the draft questionnaires presented, only a brief summary is included.

A. Paradise Meadows Visitors Survey

1. Discussion Summary

The immediate reaction from some MORA staff was that the questionnaire was too long. John Wilcox questioned whether a mail questionnaire might be less desirable due to time bias than an interview procedure in the field. Swearingan explained that the intention was to derive more information than was appropriate in the field interview and that such an interview might be an intrusion on the Park recreational experience. Wilcox also questioned the effect of a visitor's fitness level on his perceptions of the experience. Pete Thompson mentioned the role of cultures and nationality in a person's perceptions and behavior. Bob Dunnegan commented on the need to avoid personal evaluations in the questionnaire and specifically requested that the final "general" open ended question be worded to directly address only the relevant research issue and not the users' total park experience.

2. Comments

The drafts presented by the CPSU at this meeting were not initial drafts, but represented considerable prior reviews and revisions by CPSU personnel. The mail questionnaire format was chosen to maximize the information obtained and to minimize intrusion into the visitor's experience. Many comments by the NPS personnel were incorporated into subsequent drafts.

B. Camp Muir Climbers Survey

1. Discussion Summary

The most important comment on the questionnaire draft came from Pete Thompson who asked for more questions concerning the reasons persons do or do not use a specific facility. The concern is not only low impact guideline compliance, but also public acceptance of the facilities. Bob Dunnegan wanted to ascertain that staff of MORA, GSI and RMI were all to be included in the survey since staff reactions are quite important to the success of the waste management program.

2. Comments

A concern of the CPSU was the fact that it was uncertain exactly what issues were relevant to this portion of the study. Since some of the facilities had not seen extensive (or any) use, controversies or problems relating to a specific facility were not yet defined. In an attempt to avoid the excessive use of open-ended questions, Swearingan requested that the NPS staff further clarify any issues or specific information needs which were relevant to the study. Some progress was made in refining the scope of the questions.

C. Indian Henry's Visitors Survey

1. Discussion Summary

William Salvi presented the rough draft of the questionnaire to be used in the Indian Henry EMI Platform component of the study. Park staff comments were generally directed toward the study methodology

rather than the questionnaire design. The principle concern was possibility of interviewer bias if the seasonal ranger on site was involved in the administration of the questionnaire. Bob Dunnegan mentioned that EMI site location and painting the catwalk will certainly have a considerable effect on visitors' perceptions. John Wilcox asked for a question relating to expanding tent platform usage to other areas. The general concensus was to avoid any controversies or leading questions that might imply future Park management objectives.

2. Comments

The CPSU staff was aware of potential on-site interviewer bias, and William Salvi had previously discussed with Nancy Swain (the probable seasonal ranger), the need to remain completely impartial during visitor contact. Contact with the seasonal ranger will be minimized since the site sheet used in the field will be brief and contains only questions concerning party characteristics and respondent addresses.

D. General Visitor Survey

1. Discussion Summary

William Salvi also presented the questionnaires to be used in the General Visitor Survey. These questionnaires will be mailed to a random sample of MORA visitors contacted at the Park entrance stations. Comments were few; there are no immediately important controversial issues to address in this component of the study. Salvi arranged to use a MORA map in the traffic survey component of the General Visitor Survey.

2. Comments - none.

E. Closing Comments

There was some confusion as to the progress of the development of the experimental sign texts to be used in that part of the Paradise Meadows study. Bill Swift was to report on progress at the next meeting. The CPSU was to furnish Pete Thompson with a sampling schedule. The next CPSU/NPS-MORA meeting was scheduled to collect additional NPS staff comments on the questionnaires and to review further revisions.

III. Conclusion

The meeting of May 24, 1985 between the CPSU staff and MORA staff was very productive. For the first time, MORA staff were exposed to drafts of the questionnaires. Their input was quite constructive. Further revisions of the questionnaires by the CPSU staff will reflect this input hopefully enhancing the usefulness of the 1985 MORA Backcountry User Attitude Survey in park planning and management.

Appendix B
(Meeting Report 6/4/85)

MORA BACKCOUNTRY USER ATTITUDE SURVEY
REPORT: NPS/CPSU MEETING

June 4, 1985

SUMMARY, COMMENTS, AND ADDITIONAL CONTINUED DISCUSSION

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I. Introduction

The subject of this report is a summary of the meetings held at Mount Rainier National Park on June 4, 1985. This meeting was the fifth in a series of CPSU/MORA meetings held to discuss the 1985 MORA Backcountry User Attitude Survey. The purpose of this meeting was to collect comments from the MORA staff on the draft survey questionnaires and to present the research designs for each of the study components.

II. Meeting - Tuesday, 4 June 1985k, 10am, Longmire

MORA staff attending: Pete Thompson, Rick Kirschner, Bill Swift.

CPSU staff attending: Darryll Johnson, Tommy Swearingen, William Salvi.

Summary:

The first topic of discussion was the General Visitor Survey. Written comments from the MORA staff were collected and verbal discussion from those present followed. The concept of using three questionnaires was discussed. This procedure is necessary due to the large number of questions to be included and the need to reduce respondent burden. As presented, the focus of each of the questionnaires is as follows: (1) a primary questionnaire -- containing descriptive visitor and Park visit questions, group affiliation questions, recreation demand questions, and trip satisfaction questions; (2) a facilities and activities map questionnaire -- including identification of facilities used and a map detailing entry, exit, route

travelled, and location of activities engaged in; and (3) the economic impact questionnaire -- including questions included in the Beyers 1968 Mt. Rainier Economic Impact Study questionnaire. To identify problems in questionnaire content and administration of the survey instrument, the CPSU staff has worked closely with the principal investigator of the 1968 study, William Beyers of the University of Washington.

A list of groups actively concerned with the management of Mount Rainier was provided to the CPSU staff for inclusion in the group affiliation section of the first questionnaire. The research design for the Visitor Survey was presented and discussed. It was decided that an on-site pretest of the questionnaire would be conducted in the Park on June 22-23.

The next topic of discussion was the Indian Henry's Meadow Visitor Survey. Written comments from the MORA staff were collected and verbal discussion followed. The point was raised about including a question directed toward the acceptability of site hardening as a management option. Discussion followed and it was decided not to generate additional controversy by including such a question. The idea of including a series of paired adjective items on the questionnaire to obtain a measure of acceptability of the EMI platform was presented and accepted. It was decided that an on-site pretest of the survey instruments would be conducted on July 18-19.

Discussion of the Camp Muir Climbers Survey followed. Written comments were collected and a discussion concerning specific areas of the questionnaire occurred. It was agreed that in fact it would be informative and appropriate to directly ask the respondents to state the number and location of defecations, as well as to detail the use of the

various components of the waste management program. The research plan for this component was presented and it was decided that an on-site pretest of the survey instrument would be conducted June 22-23.

Finally, the two segments of the Paradise Survey (surveying of day hikers and observation of depreciative behavior at signing locations) were discussed. Written comments on the questionnaire and suggestions for sign text from the MORA staff were also received. Four areas of concern were discussed with regard to signing issues: (1) the snow melt/social trail issue; (2) the picking of wildflowers; (3) meadow rehabilitation at social trail locations; and (4) meadow rehabilitation at an identified rehabilitation site. The research design was presented, with the pretest of the day hikers' survey to occur on July 2 and the field testing of the observation of depreciative behavior to be conducted July 4.

In addition to the discussions concerning the specific components of the study, the point of presenting a brief overview of the four studies to those included in the new seasonal orientation on June 21 was discussed. This was arranged through further conversations with the Park staff. Following these meetings at Longmire, the CPSU staff met with Superintendent Guse and Bob Dunnegan and discussed the progress of the studies.

III. Conclusion

The meeting of June 4, 1985 between the CPSU and MORA staff was very beneficial. The written comments presented on the questionnaires were instructive and helpful toward the development of pretest versions of the instruments.

Appendix C
(Muir Questionnaire)

CAMP MUIR CLIMBER SURVEY



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THESE QUESTIONS CONCERN THE KIND OF INFORMATION REGARDING WASTE MANAGEMENT POLICIES AT MT. RAINIER TO WHICH YOU WERE EXPOSED PRIOR TO YOUR CLIMB.

- Q-1 In terms of your decisions in handling solid body waste during your Mount Rainier climb, how influential were the following information sources? *(Please circle the appropriate response for the source(s) to which you were exposed. Circle NA for those sources to which you were not exposed.)*

	Very Influential ↓	Moderately Influential ↓	Slightly Influential ↓	Not Influential ↓	Not Applicable ↓
1 Park Service/REI "Clothespin" Brochure	VI	MI	SI	NI	NA
2 Bag Waste Package Information Sheet	VI	MI	SI	NI	NA
3 Handout "On Climbing Mount Rainier"	VI	MI	SI	NI	NA
4 Other printed information	VI	MI	SI	NI	NA
<i>(Please specify)</i>					
5 Personal contact with climbing ranger	VI	MI	SI	NI	NA
6 Personal contact with a commercial climbing guide	VI	MI	SI	NI	NA
7 Other nonprinted sources	VI	MI	SI	NI	NA
<i>(Please specify)</i>					

- Q-2 Which of the above sources of information were the two most influential in guiding your disposal of human waste? *(Write the number from above for the information source. If you used less than two sources of information, or if none of the sources were influential, write 0 in the appropriate blanks.)*

_____ MOST INFLUENTIAL
 _____ SECOND MOST INFLUENTIAL

THESE QUESTIONS CONCERN THE AMOUNT OF SOLID HUMAN WASTE YOU SAW ON YOUR CLIMBING TRIP AND YOUR REACTIONS TO THESE SIGHTINGS.

- Q-3 Which of the following statements best describes your sighting of solid human waste while climbing Mt. Rainier on this trip? *(Circle one)*

- 1 I did not see any solid human waste. → *(Go to Q-8)*
- 2 I saw a small amount of solid human waste.
- 3 I saw a moderate amount of solid human waste.
- 4 I saw a large amount of solid human waste.

Q-4 Was the amount of solid human waste you saw excessive at any location? *(Circle one)*

- 1 NO → *(Go to Q-6)*
 2 YES → *(Go to Q-5)*

Q-5 Please specify this (these) locations. *(Circle appropriate numbers)*

- 1 Summit rocks
 2 Top of Disappointment Cleaver
 3 Ingraham Flats (other than Privacy Screens)
 4 Camp Muir area
 5 Along route at other locations _____

(Please specify)

Q-6 Did your sightings of solid human waste detract from the enjoyment of your climbing trip? *(Circle one)*

- 1 No decrease in enjoyment.
 2 Slight decrease in enjoyment.
 3 Moderate decrease in enjoyment.
 4 Great decrease in enjoyment.

Q-7 How did the amount of human waste you saw on this climb of Mt. Rainier compare with what you thought you would see? *(Circle one)*

- 1 A lot less than I expected
 2 Less than I expected
 3 About what I expected
 4 More than I expected
 5 I had no expectations

THE FOLLOWING QUESTIONS CONCERN YOUR EXPERIENCE WITH THE FACILITIES OR METHODS PROVIDED TO DISPOSE OF SOLID HUMAN WASTE ON THE CAMP MUIR CLIMBING ROUTE.

Q-8 How many times did you use the following facilities or methods to dispose of your solid body waste when you defecated during your Mt. Rainier climbing trip? *(Write in the appropriate number of times you disposed of solid waste, NOT URINATION. The total should equal the number of times you defecated during your climb after you left Paradise and before you returned to Paradise.)*

	Number Times
1 Camp Muir Solar Assisted Outhouse	_____
2 Camp Muir Pit Toilet	_____
3 Ingraham Flats Privacy Screen	_____
4 Carry Out Bag System	_____
5 Deposited solid waste on ground or snow	_____
6 Other <i>(Please specify facility or method and number of times)</i>	_____
_____	_____
Total	_____

Q-9 Were you given the carry out bag system for solid human waste? *(Circle one)*

1 NO → *(Go to Q-11)*

2 YES → *(Go to Q-10)*

Q-10 If you disposed of your solid human waste on the ground or snow, please explain why you did not use the carry out bag waste system. *(If you did not deposit solid waste on the ground or snow please go on to Q-11.)*

Q-11 In your opinion is there currently a human waste management problem on the Camp Muir climbing route? *(Circle the statement that best describes your feelings.)*

1 There is a substantial problem.

2 There is a moderate problem.

3 There is a slight problem.

4 There is no problem. → *(Go to Q-13)*

5 I don't know or have no opinion. → *(Go to Q-13)*

Q-12 What, if anything, should the National Park Service do to correct this problem? *(Please be specific)*

Q-13 Did you have any problems with these facilities or methods for disposing of solid human waste? *(If you had no problems with them, write NA on the appropriate lines. Please answer all questions.)*

Camp Muir Solar Assisted Outhouse. _____

Camp Muir Pit Toilets. _____

Ingraham Flats Privacy Screen. _____

Carry Out Bag Waste System. _____

FOR EACH OF THE FOLLOWING STATEMENTS CIRCLE THE SINGLE RESPONSE THAT BEST DESCRIBES THE WAY YOU FEEL.

	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
Q-14 Better information is needed describing solid human waste management policies on the Camp Muir climbing route.	SA	A	N	D	SD
Q-15 All climbers should be required to have and use when appropriate the carry out bag system while climbing Mt. Rainier.	SA	A	N	D	SD
Q-16 The amount of human waste I saw decreased my overall satisfaction from my climbing experience.	SA	A	N	D	SD
Q-17 No more information explaining the impact of solid human waste upon the natural environment on the Camp Muir climbing route is needed.	SA	A	N	D	SD
Q-18 The Park Service should continue to maintain the passive solar assisted outhouse at Camp Muir.	SA	A	N	D	SD
Q-19 The Park Service should expand the use of privacy screens to other climbing routes.	SA	A	N	D	SD
Q-20 The Park Service should not continue to provide the pit toilets at Camp Muir.	SA	A	N	D	SD
Q-21 The Park Service should not expand the use of solar assisted outhouses to other climbing routes.	SA	A	N	D	SD
Q-22 The Park Service should continue to provide the privacy screen at Ingraham Flats.	SA	A	N	D	SD
Q-23 The Park Service should expand the use of pit toilets to other climbing routes.	SA	A	N	D	SD

- Q-24 Did your group reach the summit? *(Circle one)*
- 1 NO
 - 2 YES
- Q-25 Have you previously climbed or attempted to climb Mt. Rainier? *(Circle one)*
- 1 NO
 - 2 YES *(Specify number of times _____)*
- Q-26 Have you previously climbed or attempted to climb other mountains? *(Circle one)*
- 1 NO → *(Go to Q-28)*
 - 2 YES → *(Go to Q-27)*
- Q-27 Please estimate the number of other climbs. *(Circle one)*
- 1 1-2 climbs
 - 2 3-5 climbs
 - 3 6-10 climbs
 - 4 11-20 climbs
 - 5 More than 20 climbs
- Q-28 How many years have you been climbing? *(Circle one)*
- 1 Less than 1 year
 - 1 1-2 years
 - 2 3-5 years
 - 3 6-10 years
 - 4 More than 10 years
- Q-29 How would you rate your climbing ability? *(Circle one)*
- 1 Novice
 - 2 Intermediate
 - 3 Advanced
- Q-30 How long before this trip did you decide to visit Mt. Rainier National Park? *(Circle one)*
- 1 DAY OF VISIT
 - 2 DAY BEFORE VISIT
 - 3 TWO DAYS TO LESS THAN ONE WEEK
 - 4 ONE WEEK TO LESS THAN ONE MONTH
 - 5 ONE MONTH TO SIX MONTHS
 - 6 MORE THAN SIX MONTHS
- Q-31 How much impact do you think solid human waste is having on the natural environment on the Camp Muir climbing route? *(Circle one)*
- 1 No Impact
 - 2 Somewhat or slight impact
 - 3 Moderate impact
 - 4 Considerable impact
 - 5 Don't know or can't judge

Q-32 Was this your first visit to Mt. Rainier National Park? (Circle one)

- 1 YES → (Go to Q-34)
 2 NO → (Go to Q-33)

Q-33 Including this trip, in the past three years how many trips have you made at any time of the year to Mt. Rainier National Park? (Please specify number. If none, write in 0 in the appropriate spaces.)

	1985	1984	1983
NUMBER OF TRIPS:	_____	_____	_____

Q-34 Have you ever visited an information or visitors' center (other than during registration at Paradise Ranger Station) at Mt. Rainier National Park? (Circle one)

- 1 NO → (Go to Q-36)
 2 YES → (Go to Q-35)

Q-35 When did you visit either of these centers? (Circle all that apply)

- 1 ON THIS VISIT TO THE PARK
 2 ON OTHER VISIT(S) TO THE PARK THIS YEAR
 3 ON OTHER VISIT(S) TO THE PARK PRIOR TO THIS YEAR

Q-36 This summer, are you working at Mt. Rainier National Park for the National Park Service (including volunteer work), for Guest Services, Inc., or for Rainier Mountaineering, Inc.? (Circle one)

- 1 NO
 2 YES, I WORKED FOR THE NPS
 3 YES, I VOLUNTEERED FOR THE NPS
 4 YES, I WORKED FOR GSI
 5 YES, I WORKED FOR RMI

Q-37 What is the highest year of formal schooling completed? (Please circle the number of the highest year completed)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24+
(Elementary thru High School)												(College/ Vocational Training)				(Graduate/ Professional School)							



Q-38 For this trip, what sources of information (including previous experiences) did you use to plan your climbing trip to Mt. Rainier National Park? (Circle as many as apply)

- 1 PREVIOUS EXPERIENCE IN THE PARK
- 2 PREVIOUS EXPERIENCE FROM OTHER CLIMBS
- 3 MAGAZINES
- 4 NEWSPAPERS/RADIO/TELEVISION
- 5 PARK NATURALIST PROGRAM
- 6 JOINT PARK SERVICE/U.S. FOREST SERVICE INFORMATION OFFICE (Seattle)
- 7 PARK SERVICE BROCHURES OR MAPS
- 8 FOREST SERVICE BROCHURES OR MAPS
- 9 PARK SERVICE RANGER
- 10 FRIENDS OR FAMILY
- 11 SCHOOLS (Specify) _____
- 12 ORGANIZED GROUPS (Specify) _____
- 13 COMMERCIAL GUIDEBOOKS OR MAPS ON MT. RAINIER OR PARKLANDS
- 14 PARK VISITOR CENTER
- 15 TRAVEL AGENT/TOUR GROUP
- 16 USGS TOPOGRAPHICAL MAPS
- 17 JOINT PARK SERVICE/U.S. FOREST SERVICE INFORMATION STATION (JCT. of HWY 123 and HWY 12)
- 18 GUIDE SERVICE
- 19 OTHER (Please specify) _____

Q-39 Which of the information sources that you circled above were the two most important in your planning to climb Mt. Rainier? (Enter a number from 1-19 in each of the blanks. If you used less than two sources of information, or if none of the sources were influential, write 0 in the appropriate blank.)

_____ MOST INFLUENTIAL SOURCE

_____ SECOND MOST INFLUENTIAL SOURCE

Q-40 Do you have any suggestions for improvements of the National Park Service facilities or methods for disposing of solid human waste or additional comments?

- Camp Muir Solar Assisted Outhouse. _____
- _____
- Camp Muir Pit Toilets. _____
- _____
- Ingraham Flats Privacy Screen. _____
- _____
- Carry Out Bag Waste System. _____
- _____

IF YOU WOULD LIKE TO RECEIVE A SUMMARY OF THE RESULTS OF THE QUESTIONNAIRE, PLEASE CHECK THIS BOX.

Appendix D
(Paradise Questionnaire)

PARADISE MEADOWS VISITOR SURVEY



Cooperative Park Studies Unit
College of Forest Resources
University of Washington
Seattle, WA 98195

Q-1 How long before this trip did you decide to visit Mt. Rainier National Park? *(Please circle one)*

- 1 DAY OF VISIT
- 2 DAY BEFORE VISIT
- 3 48 HOURS TO ONE WEEK
- 4 ONE WEEK TO ONE MONTH
- 5 ONE MONTH TO SIX MONTHS
- 6 MORE THAN SIX MONTHS

Q-2 Was this your first visit to Mt. Rainier National Park? *(Circle one)*

- 1 YES → *(Go to Q-4)*
- 2 NO → *(Go to Q-3)*

Q-3

In the last three years, how many trips have you made to Mt. Rainier National Park? *(Please specify number. If none, write 0 in the appropriate spaces.)*

	1985	1984	1983
NUMBER OF TRIPS:	_____	_____	_____

Q-4 Have you ever visited an information or visitors' center at Mt. Rainier National Park? *(Circle one)*

- 1 NO → *(Go to Q-6)*
- 2 YES → *(Go to Q-5)*

Q-5

When did you visit this center? *(Circle one)*

- 1 ON THIS VISIT TO PARK
- 2 ON PREVIOUS VISIT(S) TO PARK
- 3 BOTH OF THE ABOVE

Q-6

How long were you in the park on this trip? *(Please specify the number of days and hours. If a fraction of a 24-hour day was spent in the Park, please specify the number of hours.)*

_____ DAYS _____ HOURS

Q-7

For this trip, from what sources of information (including previous experiences) did you learn about the recreation opportunities at Mt. Rainier National Park? (Circle as many as apply)

- 1 PREVIOUS EXPERIENCE IN THE PARK
- 2 PREVIOUS EXPERIENCE VISITING ANOTHER RECREATION SITE IN THE MT. RAINIER AREA
- 3 MAGAZINES
- 4 NEWSPAPERS
- 5 TELEVISION
- 6 RADIO
- 7 PARK SERVICE BROCHURES OR MAPS
- 8 FOREST SERVICE BROCHURES OR MAPS
- 9 PARK SERVICE RANGER
- 10 FRIENDS OR FAMILY
- 11 SCHOOLS: _____
(Please specify)
- 12 ORGANIZED GROUPS: _____
(Please specify)
- 13 COMMERCIAL GUIDEBOOK OR MAP ON MT. RAINIER OR PARKLANDS
- 14 PARK VISITOR CENTER
- 15 PARK NATURALIST PROGRAM
- 16 TRAVEL AGENT/TOUR GROUP
- 17 JOINT PARK SERVICE/U.S. FOREST SERVICE INFORMATION OFFICE
- 18 OTHER (Please specify):

Q-8

Which of the information sources that you circled above were the two most influential in your decision or planning to visit Mt. Rainier National Park? (Enter a number from 1-18 in each of the blanks. If you used less than two sources or if none were influential, please write 0 in the appropriate spaces.)

_____ MOST INFLUENTIAL SOURCE
_____ SECOND MOST INFLUENTIAL SOURCE

Q-9

During any visit to the park, have you been exposed to information relating to visitor impact on the park environment? (Circle one)

- 1 NO → (Go to Q-11)
- 2 YES → (Go to Q-10)

Q-10 If you answered YES to Q-9, please identify the source of this information. (Circle as many as apply)

- 1 CONTACT WITH PARK STAFF
- 2 TRAILHEAD SIGNS
- 3 BACKCOUNTRY SIGNS
- 4 ROADWAY SIGNS
- 5 OTHER OUTDOOR SIGNS
- 6 PARK BROCHURES OR HANDOUTS
- 7 INDOOR EXHIBITS OR SIGNS
- 8 LITTER BAG
- 9 PARK NATURALIST PROGRAM
- 10 OTHER (Specify) _____

Q-11 How do you feel about the following behavior while day hiking?
(Circle the response which most closely reflects your opinion)

	STRONGLY SUPPORT ↓	SUPPORT ↓	NEUTRAL ↓	OPPOSE ↓	STRONGLY OPPOSE ↓
A) Hikers shortcutting switchbacks for personal convenience	STRONGLY SUPPORT	SUPPORT	NEUTRAL	OPPOSE	STRONGLY OPPOSE
B) Visitors picking wildflowers or living plants	STRONGLY SUPPORT	SUPPORT	NEUTRAL	OPPOSE	STRONGLY OPPOSE
C) Carrying out litter	STRONGLY SUPPORT	SUPPORT	NEUTRAL	OPPOSE	STRONGLY OPPOSE
D) Visitors staying on trails in heavily used areas	STRONGLY SUPPORT	SUPPORT	NEUTRAL	OPPOSE	STRONGLY OPPOSE
E) Walking off the trail on meadows in heavily used areas	STRONGLY SUPPORT	SUPPORT	NEUTRAL	OPPOSE	STRONGLY OPPOSE
F) Walking on restored areas during vegetation rehabilitation	STRONGLY SUPPORT	SUPPORT	NEUTRAL	OPPOSE	STRONGLY OPPOSE
G) Taking pets onto trails	STRONGLY SUPPORT	SUPPORT	NEUTRAL	OPPOSE	STRONGLY OPPOSE
H) Off-trail hiking in areas of light use	STRONGLY SUPPORT	SUPPORT	NEUTRAL	OPPOSE	STRONGLY OPPOSE

Q-12 Which of the following are common characteristics of the hiking trail surface of a formal, constructed National Park Service trail (as opposed to an informal, "social" trail) in a popular day hiking area? *(Circle as many as apply)*

- 1 Narrow trail 2-3 feet wide
- 2 Clear evidence of man-made improvements
- 3 Switchbacks on steep grades
- 4 Deeply worn paths on steep inclines
- 5 Water bars of log or stone to divert rainwater runoff
- 6 Multiple parallel trails in flat areas
- 7 Jute or other evidence of vegetative repairs
- 8 Gravel or small stone surface
- 9 Asphalt
- 10 Trail borders of stone or logs
- 11 Don't know/not sure

Q-13 Did you hike on an informal "social" trail (as opposed to a Park Service constructed trail) to a specific view or destination at Paradise Meadows? *(Circle one)*

- 1 NO → *(Go to Q-15)*
- 2 YES → *(Please specify destination)*
 - a) _____
 - b) _____
- 3 DON'T KNOW → *(Go to Q-15)*

Q-14 Would you favor developing a trail to this destination(s)? *(Circle one)*

- 1 NO
- 2 YES → *(Please specify destination)*
 - a) _____
 - b) _____

Q-15 For day hiking in the Paradise area, what type of trail aids to help people stay on trails do you prefer?

Trail Indicators: *(Circle no more than two options)*

- a) Signs
- b) Natural Barriers such as Rocks, Brush, etc.
- c) Split-rail Fences
- d) Barriers Constructed with Synthetic Materials (e.g. dacron ropes)
- e) Flags/Wands
- f) None

Q-16 If you found any of the trail indicators listed in Q-15 to be undesirable, please briefly explain why.

Q-17 From sources other than Mt. Rainier National Park, have you been exposed to information relating to visitor impact on the natural environment and/or low impact backcountry use? *(Circle one)*

- 1 NO → *(Go to Q-19)*
 2 YES → *(Go to Q-18)*

Q-18

If you answered YES to the last question, please identify the source of this information. *(Circle as many as apply)*

- 1 TELEVISION
- 2 RADIO
- 3 NEWSPAPERS
- 4 MAGAZINES
- 5 NATIONAL PARK SERVICE
- 6 U.S. FOREST SERVICE
- 7 BUREAU OF LAND MANAGEMENT
- 8 STATE PARK
- 9 OTHER NATIONAL PARK
- 10 OTHER PARK OR RECREATION AGENCY
- 11 MAIL INQUIRY
- 12 SCHOOL
- 13 OUTDOOR SCHOOL
- 14 ORGANIZATION/CLUB MEETING
- 15 ORGANIZATION/CLUB NEWSLETTER
- 16 GUIDE OR OUTFITTER
- 17 FAMILY OR FRIENDS
- 18 OTHER *(Specify)* _____

Q-19

In your opinion, is there currently a human impact problem in the Paradise Meadows area? *(Circle one)*

- 1 There is a substantial problem
- 2 There is a moderate problem
- 3 There is a slight problem
- 4 There is no problem → *(Go to Q-21)*
- 5 I don't know or have no opinion → *(Go to Q-21)*

Q-20

What, if anything, should the National Park Service do to correct this problem? *(Please be specific)*

Q-21

Including yourself, how many people were in your party?

_____ PEOPLE

Q-22 This summer, are you working at Mt. Rainier National Park for the National Park Service (including volunteer work), for Guest Services, Inc., or for Rainier Mountaineering Inc.? *(Circle one)*

- 1 No
- 2 Yes, I work for the NPS
- 3 Yes, I volunteered for the NPS
- 4 Yes, I work for GSI
- 5 Yes, I work for RMI

Q-23 What is your sex? *(Circle one)*

- 1 FEMALE
- 2 MALE

Q-24 Are you presently married? *(Circle one)*

- 1 NO
- 2 YES

Q-25 Do you have any children? *(Circle one)*

- 1 NO → *(Go to Q-27)*
- 2 YES → *(Go to Q-26)*

Q-26 If you answered YES to Q-25, please list the ages of your children. *(Please specify)*

Q-27 What is your occupation? *(If retired, student, homemaker, or unemployed, please also indicate)*

Q-28 What is the highest year of formal schooling you have completed? *(Please circle the number of the highest year completed)*

- | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|----|----|----|--------------------------------------|----|----|----|--|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24+ |
| <i>(Elementary thru High School)</i> | | | | | | | | | | | | <i>(College or Technical School)</i> | | | | <i>(Graduate/ Professional School)</i> | | | | | | | |

Q-28 What activities, services or facilities that are not available in the Paradise Meadow area would you like to see provided? *(Please be specific)*

Q-29 Is there anything else you would like to tell us about your visit to Paradise Meadows at Mt. Rainier National Park? Please use this space for any comments you would like to make.

IF YOU WOULD LIKE TO RECEIVE A SUMMARY OF THE RESULTS OF THE QUESTIONNAIRE, PLEASE CHECK THIS BOX.

Thank you for your time and effort. Your contribution to this effort is greatly appreciated.



Appendix E
(Indian Henry's Questionnaire
Pretest Draft)



CPSU/MORA SURVEY:
INDIAN HENRY

I.D. No. _____

INDIAN HENRY VISITOR SURVEY

1. Name _____
Permanent Address _____
City _____ State/Country _____ Zip Code _____

2. Today's Date _____ month-day-year)

3. What is the makeup of the group that you are traveling with at this time?
(Please circle one number)

- 1 INDIVIDUAL
- 2 FAMILY
- 3 FRIENDS
- 4 FAMILY AND FRIENDS
- 5 ORGANIZED GROUP

Name of Group: _____
(Please specify)

6 OTHER: _____
(Please indicate)

4. How many people are in the group that you are presently traveling with?

NUMBER OF PEOPLE: _____

5. How would you best describe your present use of the Indian Henry area?
(Please circle one)

- 1 OVERNIGHT BACKCOUNTRY CAMPER ON TENT PLATFORM
- 2 OVERNIGHT BACKCOUNTRY CAMPER IN OTHER AREA OF PARK HIKING ON TRAIL
- 3 DAY TRAIL HIKER
- 4 OTHER: _____

(Please indicate)

6. What is your age?

_____ YEARS

Q- How long were you in the park on this trip? (Please specify the number of days and hours. If a fraction of a 24-hour day was spent in the Park, please specify the number of hours.)

_____ DAYS _____ HOURS

Q- a. Was this your first visit to Mt. Rainier National Park?
(Circle one number)

1 NO (GO TO NEXT QUESTION)

2 yes (GO TO Q-)

b. In the last five years, how many trips have you made to Mt. Rainier National Park? (Please specify number. If none, write in 0.)

1985 1984 1983 1982 1981

NUMBER OF TRIPS:

q- When did you first encounter the Experimental Minimum Impact test platform?
(Circle one)

1 THIS TRIP

2 ANOTHER TRIP IN 1985

3 SUMMER 1984

Q- Where did you first learn of the Indian Henry EMI tent platform?
(Circle one)

1 ON-SITE VISUAL CONTACT WITHOUT ADDITIONAL INFORMATION

2 ON-SITE INTERPRETIVE SIGN

3 CONTACT WITH PARK RANGER

4 HIKERS INFORMATION CENTER - LONGMIRE

5 INFORMAL CONTACT OUTSIDE PARK

6 OTHER HIKERS IN PARK

7 OTHER _____

(Specify)

Q- How do you feel about the following option for camping at Indian Henry Meadow? (Circle one word for each option)

OPTION	STRONGLY OPPOSE	OPPOSE	NEUTRAL	SUPPORT	STRONGLY SUPPORT
1 Remove the tent platform and allow no camping in the meadow	STRONGLY OPPOSE	OPPOSE	NEUTRAL	SUPPORT	STRONGLY SUPPORT
2 Remove the tent platform, but allow camping elsewhere in the meadow	STRONGLY OPPOSE	OPPOSE	NEUTRAL	SUPPORT	STRONGLY SUPPORT
3 Remove the tent platform and allow only "cross country camping" in meadow (campsite out of view of trail and 100 feet from open water source)	STRONGLY OPPOSE	OPPOSE	NEUTRAL	SUPPORT	STRONGLY SUPPORT
4 Continue with, but improve existing tent platform	STRONGLY OPPOSE	OPPOSE	NEUTRAL	SUPPORT	STRONGLY SUPPORT
5 Continue with the tent platform, but move to different location in Mt. Rainier Park	STRONGLY OPPOSE	OPPOSE	NEUTRAL	SUPPORT	STRONGLY SUPPORT
6 Continue with present tent platform	STRONGLY OPPOSE	OPPOSE	NEUTRAL	SUPPORT	STRONGLY SUPPORT
7 Continue with present tent platform and add more platforms <i>at other areas</i>	STRONGLY OPPOSE	OPPOSE	NEUTRAL	SUPPORT	STRONGLY SUPPORT

Q- What alternatives to the experimental minimum impact (EMI) tent platform would you suggest? (Please be specific)

Q- Do you have any specific suggestions for the improvement of the existing platform? (Circle one)

1 NO

2 YES

Q- Are you? (Circle one number)

- 1 FEMALE
- 2 MALE

Q- a. Are you married? (Circle one)

- 1 NO
- 2 YES

b. If YES, is your spouse employed? (Circle one)

- 1 NO
- 2 YES

Q- What is the highest year of formal schooling completed?
(Please circle the number of the highest year completed)

- 1 2 3 4 5 6 7 8 9 10 11 12 (Elementary thru High School)
- 13 14 15 16 (College)
- 17 18 19 20 21 22 23 24+ (Graduate/Professional School)

Q- a. What is your occupation? (If retired, student, homemaker, or unemployed, please also indicate)

Q- This summer, were you working for the National Park Service (including volunteer work) or for Guest Services, Inc. at Mt. Rainier National Park? (Circle one)

- 1 NO
- 2 YES, I WORKED FOR THE NPS
- 3 YES, I VOLUNTEERED FOR THE NPS
- 4 YES, I WORKED FOR GSI

Is there anything else you would like to tell us about the use of the Indian Henry meadow area or are there any other comments that you would like to make? Please use this space for these comments.

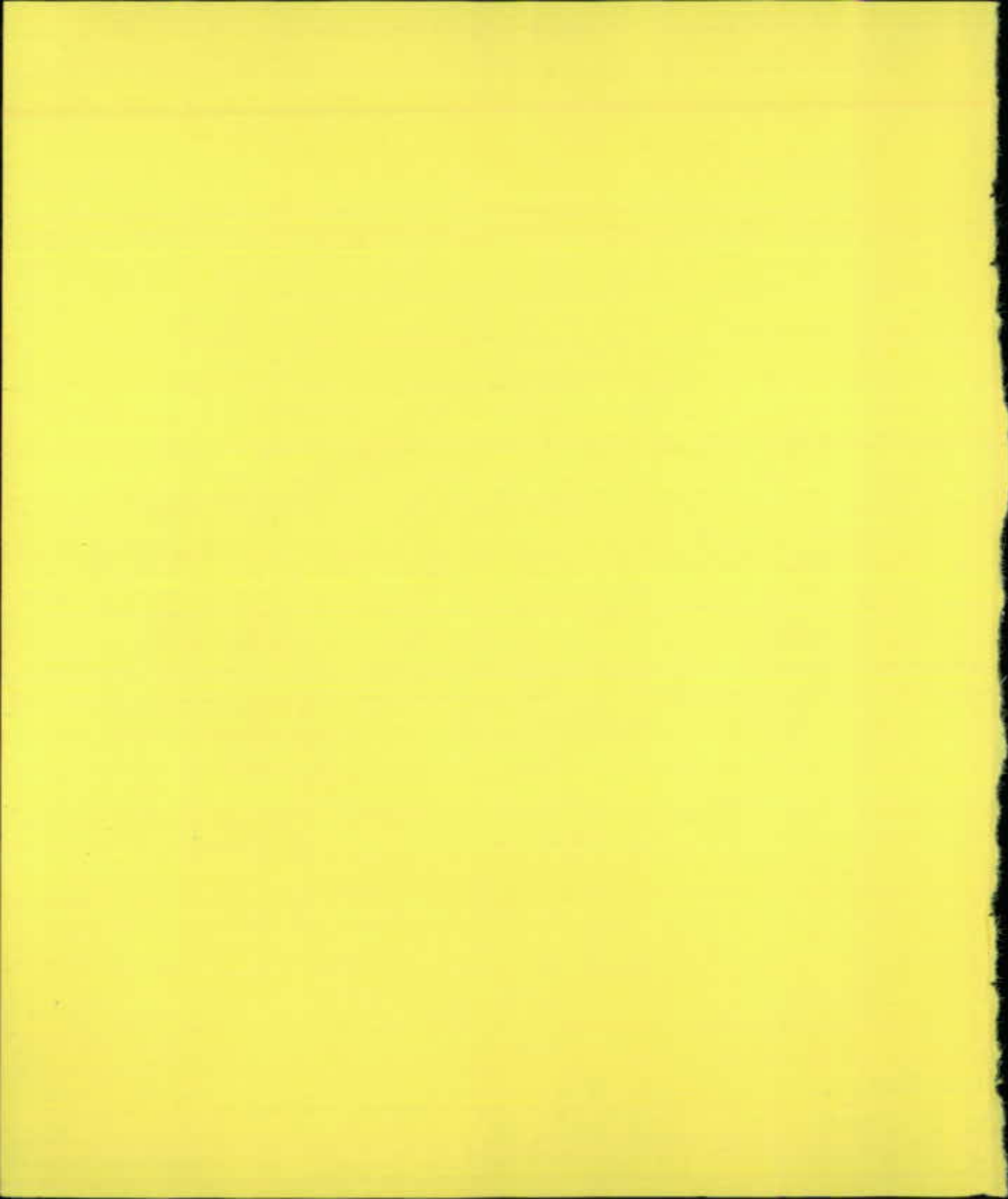
Thank you for your time and effort. Your contribution to this effort is greatly appreciated.

Appendix F1, 2, and 3
(All 3 GVS Questionnaires)

MT. RAINIER VISITOR SURVEY



Cooperative Park Studies Unit
College of Forest Resources
University of Washington
Seattle, WA 98195





IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE MOUNT RAINIER NATIONAL PARK

Taboma Woods, Star Route
Ashford, Washington 98304

Dear Park Visitor:

It is increasingly important that we understand the effects of National Parks upon surrounding regions. To this end, I have asked the Cooperative Park Studies Unit at the University of Washington to conduct a survey of park visitors. This survey is designed primarily to gather information which will allow us to better understand the economic effects of travel and recreation expenditures, associated with Mount Rainier, upon the area economy.

You have been selected as part of a sample of park visitors to participate in the survey. In order that the results are truly representative of all park visitors, it is important that you take the time to complete the enclosed questionnaire. When you have finished, please place the questionnaire in the stamped, self-addressed return envelope and drop it in the mail.

Your responses will remain confidential. An identification number is included on the questionnaire so we may check your name off of the mailing list once the questionnaire is returned. Your name will not be placed on the questionnaire.

The results of this research will be completed and made available as quickly as possible. If you would like a summary of the results, please check the appropriate box at the end of the questionnaire.

We greatly appreciate your cooperation in this study. I hope that you have enjoyed your visit to Mount Rainier National Park.

Sincerely,

Neal G. Guse
Superintendent

The questions below pertain only to the visit to Mt. Rainier National Park during which you were contacted by a survey person.

Q-1a. Which of the following were reasons for your trip to Mt. Rainier National Park? (Circle as many numbers as apply)

- 1 SIGHTSEEING WHILE DRIVING
 - 2 WALKING ON TRAILS
 - 3 PHOTOGRAPHY
 - 4 FISHING
 - 5 CAMPING
 - 6 OVERNIGHT BACKPACKING
 - 7 PICNICKING
 - 8 MOUNTAIN CLIMBING
 - 9 VISITING INTERPRETIVE CENTERS
 - 10 LISTENING TO NATURALISTS
 - 11 OTHER (Please specify): _____
- _____

b. Please indicate the two reasons circled above which you would consider to be the most important to the overall enjoyment of your trip. (Enter a number from 1-11 for each of the blanks)

_____ MOST IMPORTANT REASON

_____ SECOND MOST IMPORTANT REASON

Q-2. Including yourself, how many people were in your group on this trip?

_____ PEOPLE

Q-3. How long were you inside the park on this trip? (Please specify the number of complete days and hours. If a fraction of a 24-hour day was spent inside the Park, please specify the number of hours.)

_____ DAYS _____ HOURS

Q-4. Was Mt. Rainier National Park your primary destination on this trip? (Please circle one number)

- 1 NO (Go to next question)
2 YES → (Go to next page)

Q-5. What share of your total trip costs would you estimate were due to your visit to Mt. Rainier National Park?

_____ %

The following questions are designed to help you estimate the expenditures you made on your trip to Mt. Rainier National Park. You may have spent money in the following places because of your trip to the Park: (1) in your home community before your trip, (2) along the way to the Park, (3) while you were in or near the Park, (4) on the way home from the Park, and (5) after you returned home.

Each of these possible places of expenditure will now be considered. Please use estimates. If the answer to a question is zero, please write '0' rather than leaving the space blank.

- Q-6. Consider only those expenditures made in your home community prior to the trip which were due to your Park visit. Please estimate the amount you spent for the following goods and services (*if none, write '0'*):

\$ AMOUNT

_____ GROCERIES AND BEVERAGES
 _____ GASOLINE AND AUTOMOBILE SERVICES
 _____ FOOD AND DRINK IN RESTAURANTS AND DRIVE-INS
 _____ PHOTOGRAPHIC SUPPLIES
 _____ CLOTHING AND SHOES
 _____ SPORTING GOODS AND CAMPING SUPPLIES
 _____ HEALTH SERVICES AND DRUG STORE GOODS
 _____ OTHER (*Please specify*): _____

- Q-7. Now consider only those expenditures made on the way to the Park that were due to your Park visit. Please estimate the amount you spent for the following goods and services (*if none, write '0'*):

\$ AMOUNT

_____ GROCERIES AND BEVERAGES
 _____ GASOLINE AND AUTOMOBILE SERVICES
 _____ FOOD AND DRINK IN RESTAURANTS AND DRIVE-INS
 _____ PHOTOGRAPHIC SUPPLIES
 _____ CLOTHING AND SHOES
 _____ SPORTING GOODS AND CAMPING SUPPLIES
 _____ HEALTH SERVICES AND DRUG STORE GOODS
 _____ CAMPING AND TRAILER FEES
 _____ MOTEL, HOTEL, AND OTHER LODGING COSTS
 _____ GIFTS, CURIOS, AND JEWELRY
 _____ BRIDGE AND FERRY TOLLS
 _____ OTHER (*Please specify*): _____

- Q-8. Next consider only those expenditures made in or near the Park. Please estimate the amount you spent for the following goods and services (if none, write '0'):

\$ AMOUNT

_____	GROCERIES AND BEVERAGES
_____	GASOLINE AND AUTOMOBILE SERVICES
_____	FOOD AND DRINK IN RESTAURANTS AND DRIVE-INS
_____	PHOTOGRAPHIC SUPPLIES
_____	CLOTHING AND SHOES
_____	SPORTING GOODS AND CAMPING SUPPLIES
_____	HEALTH SERVICES AND DRUG STORE GOODS
_____	CAMPING AND TRAILER FEES
_____	MOTEL, HOTEL, AND OTHER LODGING COSTS
_____	CURIOS, GIFTS, AND JEWELRY
_____	OTHER (Please specify): _____
_____	_____

- Q-9. Now consider only those expenditures made on the way home from the Park that were due to your Park visit. Please estimate the amount you spent for the following goods and services (if none, write '0'):

\$ AMOUNT

_____	GROCERIES AND BEVERAGES
_____	GASOLINE AND AUTOMOBILE SERVICES
_____	FOOD AND DRINK IN RESTAURANTS AND DRIVE-INS
_____	PHOTOGRAPHIC SUPPLIES
_____	CLOTHING AND SHOES
_____	SPORTING GOODS AND CAMPING SUPPLIES
_____	HEALTH SERVICES AND DRUG STORE GOODS
_____	CAMPING AND TRAILER FEES
_____	MOTEL, HOTEL, AND OTHER LODGING COSTS
_____	CURIOS, GIFTS, AND JEWELRY
_____	OTHER (Please specify): _____
_____	_____

- Q-10. Finally, consider only those expenditures made after you returned home from your trip to the National Park which were due to your Park visit. Please estimate the amount you spent for the following goods and services (if none, write '0'):

\$ AMOUNT

_____	GROCERIES AND BEVERAGES
_____	GASOLINE AND AUTOMOBILE SERVICES
_____	FOOD AND DRINK IN RESTAURANTS AND DRIVE-INS
_____	PHOTOGRAPHIC SUPPLIES
_____	CLOTHING AND SHOES
_____	SPORTING GOODS AND CAMPING SUPPLIES
_____	HEALTH SERVICES AND DRUG STORE GOODS
_____	OTHER (Please specify): _____
_____	_____

Finally, we would like to ask a few questions about yourself. The information provided will be used for statistical purposes only.

Q-11. Are you married? (Circle one)

- 1 NO
- 2 YES

Q-12a. Do you have any children? (Circle one)

- 1 NO → (Go to Q-13)
- 2 YES

b. If YES, please list the ages of the children:

Q-13. What is the highest year of formal schooling you have completed?
(Please circle the number of the highest year completed)

- | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|----|----|----|-----------------------------------|----|----|----|------------------------------------|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24+ |
| (Elementary
thru High School) | | | | | | | | | | | | (College/
Vocational Training) | | | | (Graduate/
Professional School) | | | | | | | |

Q-14. What is your occupation? (If homemaker, military, retired, student, or unemployed, please indicate)

Q-15. This summer, were you working at Mt. Rainier National Park for the National Park Service (including volunteer work), for Guest Services, Inc., or for Rainier Mountaineering, Inc.? (Circle one)

- 1 NO
- 2 YES, I WORKED FOR THE NPS
- 3 YES, I VOLUNTEERED FOR THE NPS
- 4 YES, I WORKED FOR GSI
- 5 YES, I WORKED FOR RMI

Q-16. Are you: (Circle one number)

- 1 AMERICAN INDIAN/ESKIMO
- 2 ASIAN
- 3 BLACK
- 4 WHITE
- 5 OTHER (Specify): _____
- 6 DON'T WISH TO RESPOND

Q-17. Is there anything else you would like to add about your visit to Mt. Rainier National Park, or are there any other comments that you would like to make? Please use this space for these comments.

If you would like to receive a summary of the results of this questionnaire, please check here.

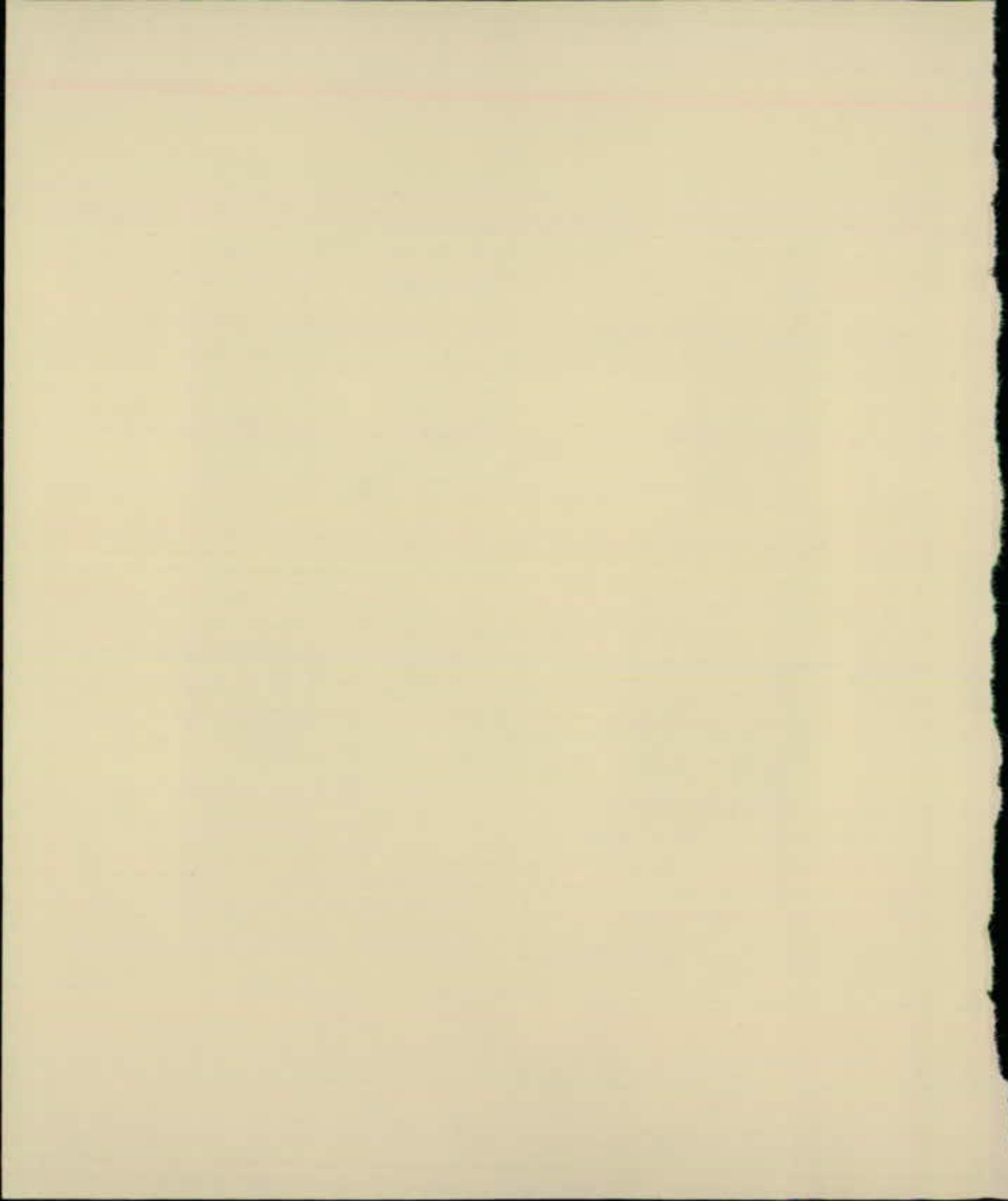
Thank you for your time and effort. Your contribution to this effort is greatly appreciated.



MT. RAINIER VISITOR SURVEY



Cooperative Park Studies Unit
College of Forest Resources
University of Washington
Seattle, WA 98195





United States Department of the Interior

NATIONAL PARK SERVICE MOUNT RAINIER NATIONAL PARK

Tahoma Woods, Star Route
Ashford, Washington 98304

IN REPLY REFER TO:

Dear Park Visitor:

Many people visit Mount Rainier National Park each year. You come from many different places and engage in a variety of recreational activities while in the park. To better serve you and other visitors, more information about recreational use of the park and visitor attitudes concerning the adequacy of existing facilities and services is helpful to me as part of the management decision process. To this end, I have asked the Cooperative Park Studies Unit at the University of Washington to conduct a survey of park visitors.

You have been selected as part of a sample of park visitors to participate in the survey. In order that the results are truly representative of all park visitors, it is important that you take the time to complete the enclosed questionnaire and map. When you have finished, please place the questionnaire and map in the stamped, self-addressed return envelope and drop it in the mail.

Your responses will remain confidential. An identification number is included on the questionnaire so we may check your name off of the mailing list once the questionnaire is returned. Your name will not be placed on the questionnaire.

The results of this research will be completed and made available as quickly as possible. If you would like a summary of the results, please check the appropriate box at the end of the questionnaire.

We greatly appreciate your cooperation in this study. I hope that you have enjoyed your visit to Mount Rainier National Park.

Sincerely,

Neal G. Guse
Superintendent

The questions below pertain only to the visit to Mt. Rainier National Park during which you were contacted by a survey person.

Q-1. Was Mt. Rainier National Park your primary destination on this trip?
(Please circle one number)

- 1 NO
- 2 YES

Q-2a. Did you visit any other outdoor recreation areas in Idaho, Oregon, Washington, or British Columbia while on this trip? (Circle one)

- 1 NO → (Go to Q-3)
- 2 YES (Please specify below):

b. Other recreation areas visited on this trip (Please give specific name and location):

Q-3a. Was this your first visit to Mt. Rainier National Park? (Circle one number)

- 1 NO
- 2 YES → (Go to Q-4)

b. In the last three years (including 1985 to-date), how many trips have you made, at any time of the year, to Mt. Rainier National Park?
(Please specify number for each year. If none, write in 0.)

	1985	1984	1983
NUMBER OF TRIPS:	_____	_____	_____

Q-4. Including yourself, how many people were in your group on this trip?

_____ PEOPLE

Q-5. How long were you inside the park on this trip? (Please specify the number of complete days and hours. If a fraction of a 24-hour day was spent inside the Park, please specify the number of hours.)

_____ DAYS _____ HOURS

Q-6. Which of the following facilities or services did you use on this visit to Mt. Rainier? (*Circle as many numbers as apply*)

	Location	Facility or Service
1	CARBON RIVER	RANGER STATION
2	COUGAR ROCK	AMPHITHEATER
3	COUGAR ROCK	CAMPGROUND
4	IPSUT CREEK	CAMPGROUND
5	LONGMIRE	CAMPGROUND
6	LONGMIRE	GAS STATION
7	LONGMIRE	PARK SERVICE HIKER'S STATION
8	LONGMIRE	PARK SERVICE HISTORICAL MUSEUM
9	LONGMIRE	NATIONAL PARK INN
10	LONGMIRE	RANGER STATION
11	LONGMIRE	PARK SERVICE RESEARCH LIBRARY
12	MOWICH LAKE	CAMPGROUND
13	MOWICH LAKE	RANGER STATION
14	OHANAPECOSH	AMPHITHEATER
15	OHANAPECOSH	CAMPGROUND
16	OHANAPECOSH	RANGER STATION
17	OHANAPECOSH	VISITOR CENTER
18	PARADISE	PARADISE INN
19	PARADISE	RANGER STATION
20	PARADISE	RAINIER MOUNTAINEERING, INC. GUIDE SERVICE
21	PARADISE	VISITOR CENTER
22	SUNRISE	RANGER STATION
23	SUNRISE	SUNRISE LODGE
24	SUNRISE	VISITOR CENTER
25	SUNSHINE POINT	CAMPGROUND
26	WHITE RIVER	CAMPGROUND
27	WHITE RIVER	RANGER STATION
28	OTHER (<i>Please specify the facility or service and the location</i>):	

29 I DID NOT USE ANY FACILITIES OR SERVICES IN THE PARK

Q-7. Were there any activities, services or facilities that were not available at Mt. Rainier National Park that you would like to see provided? (*Please circle one*)

1 NO

2 YES → (*Please specify*): _____

Q-8.

We would like you to provide certain information about your visit to the Park on the enclosed map. On the map please provide the following information: 1) point of entry into the Park; 2) route travelled while in the Park (in a vehicle or on foot); 3) location of activities engaged in while in the Park; and 4) point of exit from the Park.

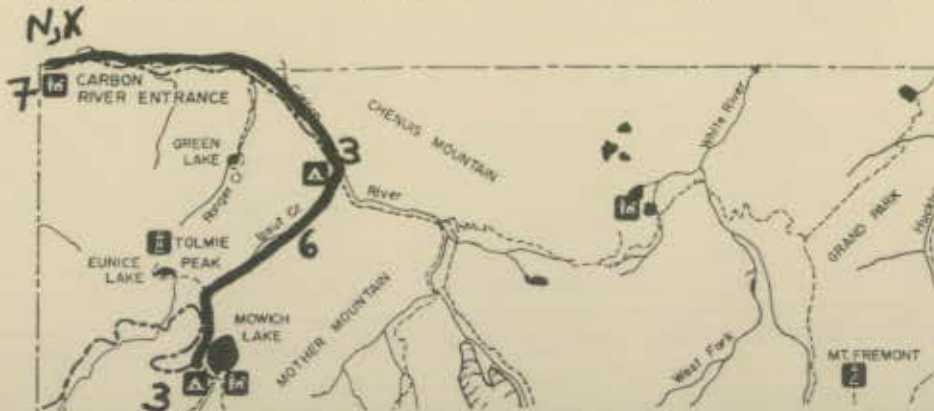
NOTE: Please use the following symbols and place at the appropriate locations on the map.

<u>Symbol</u>	<u>Activity</u>
N	Entry Point into the Park (Point at which you first entered the Park boundaries)
X	Exit Point from the Park (Final point at which you left the Park boundaries)
1	Attending a Park Service Naturalist Talk
2	Camping - Backcountry Site (Trailside Camp, Alpine Camp, or Cross Country Zone)
3	Camping - Developed Campground
4	Eating - Outdoors (for example, picnicking)
5	Eating - Indoors (for example, restaurant dining)
6	Day hiking - Self Led
7	Day hiking - on Self-Guiding Nature Trail
8	Day hiking - Led by Park Service Naturalist
9	Horseback Riding
10	Mountain Climbing - Highest Point Reached
11	Shopping
12	Skiing
13	Snowshoeing
14	Viewing Glaciers, Mt. Rainier
15	Viewing Wildlife
16	Other (Please specify): _____
17	Other (Please specify): _____
18	Other (Please specify): _____

In addition to placing the above symbols on the map, please draw a solid line to indicate the route you travelled while in the Park. This includes travel on roads, trails, and open backcountry areas. Please use a pen or pencil in a color other than black.

EXAMPLE

The example below gives a sample of the type of information desired.



Finally, we would like to ask a few questions about yourself. The information provided will be used for statistical purposes only.

Q-9. Are you married? (Circle one)

- 1 NO
2 YES

Q-10a. Do you have any children? (Circle one)

- 1 NO → (Go to Q-11)
2 YES

b. If YES, please list the ages of the children:

Q-11. What is the highest year of formal schooling you have completed?
(Please circle the number of the highest year completed)

- | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|----|----|----|-----------------------------------|----|----|----|------------------------------------|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24+ |
| (Elementary thru
High School) | | | | | | | | | | | | (College/
Vocational Training) | | | | (Graduate/
Professional School) | | | | | | | |

Q-12. What is your occupation? (If homemaker, military, retired, student, or unemployed, please indicate)

Q-13. This summer, were you working at Mt. Rainier National Park for the National Park Service (including volunteer work), for Guest Services, Inc., or for Rainier Mountaineering, Inc.? (Circle one)

- 1 NO
2 YES, I WORKED FOR THE NPS
3 YES, I VOLUNTEERED FOR THE NPS
4 YES, I WORKED FOR GSI
5 YES, I WORKED FOR RMI

Q-14. Are you: (Circle one number)

- 1 AMERICAN INDIAN/ESKIMO
2 ASIAN
3 BLACK
4 WHITE
5 OTHER (Specify): _____
6 DON'T WISH TO RESPOND

Q-15. Is there anything else you would like to add about your visit to Mt. Rainier National Park, or are there any other comments that you would like to make? Please use this space for these comments.

If you would like to receive a summary of the results of this questionnaire, please check here.

Thank you for your time and effort. Your contribution to this effort is greatly appreciated.



MT. RAINIER VISITOR SURVEY



Cooperative Park Studies Unit
College of Forest Resources
University of Washington
Seattle, WA 98195



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE MOUNT RAINIER NATIONAL PARK

Tahoma Woods, Star Route
Ashford, Washington 98304

Dear Park Visitor:

Many people visit Mount Rainier National Park each year. You come from many different places and engage in a variety of recreational activities while in the park. To better serve you and other visitors, more information about recreational use of the park and visitor attitudes concerning the adequacy of existing facilities and services is helpful to me as part of the management decision process. To this end, I have asked the Cooperative Park Studies Unit at the University of Washington to conduct a survey of park visitors.

You have been selected as part of a sample of park visitors to participate in the survey. In order that the results are truly representative of all park visitors, it is important that you take the time to complete the enclosed questionnaire. When you have finished, please place the questionnaire in the stamped, self-addressed return envelope and drop it in the mail.

Your responses will remain confidential. An identification number is included on the questionnaire so we may check your name off of the mailing list once the questionnaire is returned. Your name will not be placed on the questionnaire.

The results of this research will be completed and made available as quickly as possible. If you would like a summary of the results, please check the appropriate box at the end of the questionnaire.

We greatly appreciate your cooperation in this study. I hope that you have enjoyed your visit to Mount Rainier National Park.

Sincerely,

Neal G. Guse
Superintendent

The questions below pertain only to the visit to Mt. Rainier National Park during which you were contacted by a survey person.

Q-1. How long before this trip did you decide to visit Mt. Rainier National Park? (Please circle one number)

- 1 DAY OF VISIT
- 2 DAY BEFORE VISIT
- 3 FROM TWO DAYS TO LESS THAN ONE WEEK
- 4 FROM ONE WEEK TO LESS THAN ONE MONTH
- 5 FROM ONE MONTH TO SIX MONTHS
- 6 MORE THAN SIX MONTHS

Q-2a. For this trip, from what sources of information (including previous experiences) did you learn about the recreation opportunities at Mt. Rainier National Park? (Circle as many numbers as apply)

- 1 PREVIOUS EXPERIENCE IN THE PARK
- 2 PREVIOUS EXPERIENCE VISITING ANOTHER RECREATION SITE IN THE MT. RAINIER AREA
- 3 MAGAZINES
- 4 NEWSPAPERS/TELEVISION/RADIO
- 5 PARK SERVICE BROCHURES OR MAPS
- 6 FOREST SERVICE BROCHURES OR MAPS
- 7 PARK NATURALIST PROGRAM
- 8 PARK SERVICE RANGER
- 9 FRIENDS OR FAMILY
- 10 SCHOOLS: _____
(Please specify name)
- 11 ORGANIZED GROUPS: _____
(Please specify name)
- 12 COMMERCIAL GUIDEBOOKS OR MAPS ON MT. RAINIER OR PARKLANDS
- 13 PARK VISITOR CENTER
- 14 TRAVEL AGENT/TOUR GROUP
- 15 JOINT PARK SERVICE/U.S. FOREST SERVICE INFORMATION OFFICE
(Seattle)
- 16 JOINT PARK SERVICE/U.S. FOREST SERVICE INFORMATION STATION
(Junction of highways 123 and 12)
- 17 U.S.G.S. TOPOGRAPHICAL MAP
- 18 GUIDE SERVICES
- 19 OTHER (Please specify):

b. Which of the information sources that you circled above were the two most influential in your decision to visit Mt. Rainier National Park? (Enter a number from 1-19 in each of the blanks. If none were influential, please enter 0)

_____ MOST INFLUENTIAL SOURCE
_____ SECOND MOST INFLUENTIAL SOURCE

c. If you took another trip to Mt. Rainier National Park, which source of information from Q-2a above would you most likely rely upon? (Please circle one number below)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

Q-3. Including yourself, how many people were in your group on this trip?

_____ PEOPLE

Q-4. How long were you inside the park on this trip? (Please specify the number of complete days and hours. If a fraction of a 24-hour day was spent inside the Park, please specify the number of hours.)

_____ DAYS _____ HOURS

Q-5a. Did you stay overnight in the Park? (*Circle one number*)

1 NO → (Go to Q-6)

2 YES

b. If you answered YES above, please indicate below the type of overnight facility you used and the number of nights spent in each type of facility while inside the Park. (If none, please write in 0)

Overnight Facility:

NUMBER OF NIGHTS (Please specify)

- | | |
|---|-------|
| 1 BACKCOUNTRY SITE - ALPINE CAMP | _____ |
| 2 BACKCOUNTRY SITE - CROSS COUNTRY ZONE | _____ |
| 3 BACKCOUNTRY SITE - TRAILSIDE CAMP | _____ |
| 4 DEVELOPED CAMPGROUND | _____ |
| 5 INN/LODGE | _____ |
| 6 OTHER: _____ | _____ |
- (Please specify)

Q-6a. While on this trip, did you stay overnight in a commercial or public facility in the Mt. Rainier area that was outside the Park? (Please circle one)

1 NO → (Go to Q-7)

2 YES (Please specify facility name and location below)

b.

NAME AND LOCATION
OF OVERNIGHT FACILITY OUTSIDE PARK:

NUMBER OF NIGHTS (Please specify)

_____	_____
_____	_____
_____	_____

Q-7. Was Mt. Rainier National Park your primary destination on this trip?
(Please circle one)

- 1 NO
2 YES

Q-8a. Did you visit any other outdoor recreation areas in Idaho, Oregon, Washington, or British Columbia while on this trip? (Circle one)

- 1 NO → (Go to Q-9)
2 YES (Please specify below)

b. Please give specific name and location of other recreation areas visited on this trip:

Q-9a. Was this your first visit to Mt. Rainier National Park? (Circle one number)

- 1 NO
2 YES → (Go to Q-10)

b. In the last three years (including 1985 to-date), how many trips have you made, at any time of the year, to Mt. Rainier National Park?
(Please specify number for each year. If none, write in 0.)

	1985	1984	1983
NUMBER OF TRIPS:	_____	_____	_____

Q-10.

Below is a list of recreation activities. During this visit, which of these activities did you participate in while at Mt. Rainier National Park? (Circle as many as apply)

- 1 ATTENDING A PARK SERVICE NATURALIST TALK
- 2 CAMPING - DEVELOPED CAMPGROUND
- 3 CAMPING - BACKCOUNTRY SITE
- 4 DAY HIKING - SELF LED
- 5 DAY HIKING - ON SELF GUIDING NATURE TRAIL
- 6 DAY HIKING - LED BY PARK SERVICE NATURALIST
- 7 DRIVING TO VIEW SCENERY
- 8 HORSEBACK RIDING
- 9 MOUNTAIN CLIMBING - TECHNICAL CLIMB
- 10 MOUNTAIN CLIMBING - DAY TRIP TO CAMP MUIR
- 11 OBSERVING WILDLIFE
- 12 PHOTOGRAPHY
- 13 PICNICKING
- 14 SKIING
- 15 SNOWSHOEING
- 16 VIEWING WILDFLOWERS
- 17 OTHER (Please specify): _____

Q-11.

Of the activities circled above, which two were the most important to you on this trip to Mt. Rainier? (Enter a number from 1-17 in each of the blanks)

_____ MOST IMPORTANT ACTIVITY
_____ SECOND MOST IMPORTANT ACTIVITY

Q-12.

Were there any activities, services or facilities that were not available at Mt. Rainier National Park that you would like to see provided? (Please circle one)

- 1 NO
- 2 YES → (Please specify): _____

Q-13. Overall, how would you rate your visit to Mt. Rainier National Park?
(Please circle one number)

- 1 POOR
2 FAIR
3 GOOD
4 VERY GOOD
5 EXCELLENT

Q-14. How satisfied were you with the following during your visit to Mt. Rainier? (Please circle one response for each component)

NOTE: For the purpose of clarity, the following examples are provided for the three components listed below. Examples of activities are camping and mountain climbing. Examples of facilities are visitor centers and trails. Examples of services are guided walks and interpretive programs.

1 Activities in the Park:

VERY DISSATISFIED DISSATISFIED NEUTRAL SATISFIED VERY SATISFIED
(If you were dissatisfied, please explain):

2 Facilities in the Park:

VERY DISSATISFIED DISSATISFIED NEUTRAL SATISFIED VERY SATISFIED
(If you were dissatisfied, please explain):

3 Services in the Park:

VERY DISSATISFIED DISSATISFIED NEUTRAL SATISFIED VERY SATISFIED
(If you were dissatisfied, please explain):

Q-15. Is there anything else that added to or detracted from your overall trip satisfaction? (Please specify and circle a response)

_____ :	STRONGLY ADDED	ADDED	NEUTRAL	DETRACTED	STRONGLY DETRACTED
_____ :	STRONGLY ADDED	ADDED	NEUTRAL	DETRACTED	STRONGLY DETRACTED

- Q-16. Some possible reasons that people visit recreation areas are listed below. How important to you was each of the following reasons for visiting Mt. Rainier National Park this trip? (Please circle one word for each reason)

Reasons	How important was each reason for taking this trip to the Park?				
	NOT IMPORTANT ↓	SOMEWHAT IMPORTANT ↓	MODERATELY IMPORTANT ↓	VERY IMPORTANT ↓	EXTREMELY IMPORTANT ↓
1 Developing your skills and abilities.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
2 Chancing dangerous situations.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
3 Keeping physically fit..	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
4 Releasing or reducing some built-up tensions..	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
5 Doing something with your family.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
6 Experiencing solitude...	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
7 Observing other people in the area.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
8 Helping direct the activities of others....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
9 Being close to nature...	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
10 Experiencing new and different things.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
11 Gaining a sense of self-confidence.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
12 Thinking about good times you've had in the past.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
13 Learning more about nature.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
14 Getting away from the usual demands of life...	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
15 Talking to new and varied people.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY

How important was each reason for taking this trip to the Park?

NOT IMPORTANT SOMEWHAT IMPORTANT MODERATELY IMPORTANT VERY IMPORTANT EXTREMELY IMPORTANT

Reasons

	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	EXTREMELY IMPORTANT
16 Being on your own.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
17 Testing and using your equipment.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
18 Being with others who enjoy the same thing you do.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
19 Resting physically.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
20 Viewing the scenery.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
21 Being with friends.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
22 Experiencing excitement.	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
23 Experiencing more elbow room.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
24 Getting exercise.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
25 Sharing what you have learned with others.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
26 Experiencing tranquility	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
27 Being in control of things that happen.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
28 Avoiding the unexpected.	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
29 Thinking about your personal values.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY
30 Feeling isolated.....	NOT	SOMEWHAT	MODERATELY	VERY	EXTREMELY

Q-17a. To which of the following conservation or outdoor recreation organizations do you individually belong? (Circle as many as apply)

- | | |
|--|-------------------------------------|
| 1 NONE → (Go to Q-18) | 15 NATURE CONSERVANCY |
| 2 AMERICAN CAMPING ASSN. | 16 SIERRA CLUB |
| 3 AUDUBON SOCIETY | 17 TROUT UNLIMITED |
| 4 EARTH FIRST | 18 TATOOSH GROUP |
| 5 FRIENDS OF MT. RAINIER | 19 WASHINGTON ENVIRONMENTAL COUNCIL |
| 6 FRIENDS OF THE EARTH | 20 WASHINGTON WILDERNESS COALITION |
| 7 GREENPEACE | 21 WILDERNESS SOCIETY |
| 8 HIGH LAKERS | 22 OTHER (Please specify): _____ |
| 9 IZAAK WALTON LEAGUE | _____ |
| 10 MAZAMAS | _____ |
| 11 MOUNTAINEERS | |
| 12 NATIONAL PARKS & CONSERVATION ASSN. | |
| 13 NATIONAL RIFLE ASSOCIATION | |
| 14 NATIONAL WILDLIFE FEDERATION | |

b. Which of the following activities at Mt. Rainier National Park have you participated in that were organized or formally sponsored by the organizations you circled or listed above? (Circle as many as apply)

- | | |
|-----------------------------------|----------------------------------|
| 1 NONE → (Go to Q-18) | 7 SNOWSHOEING |
| 2 DAY HIKING | 8 INNER TUBING ON SNOW |
| 3 BACKCOUNTRY CAMPING | 9 BICYCLING |
| 4 CAMPING IN DEVELOPED CAMPGROUND | 10 OTHER (Please specify): _____ |
| 5 MOUNTAIN CLIMBING | _____ |
| 6 CROSS COUNTRY SKIING | _____ |

Q-18. Do you belong to any organizations (such as civic or retirement groups), outside of those listed in Q-17a, that have an active interest in the management of Mt. Rainier National Park? (Circle one)

- 1 NO
- 2 YES → (Please specify): _____
- _____

Q-19. Over the last five years, have you engaged in any of the following political activities relating to park or natural resource management? (Circle as many as apply)

- 1 NO
- 2 YES, I COMMUNICATED WITH THE NATIONAL PARK SERVICE CONCERNING A NATURAL RESOURCE ISSUE (For example, letter writing, phone call, etc.)
- 3 YES, I COMMUNICATED WITH A GOVERNMENT AGENCY OTHER THAN THE NATIONAL PARK SERVICE, CONCERNING A NATURAL RESOURCE ISSUE
- 4 YES, I PARTICIPATED IN A PUBLIC INVOLVEMENT MEETING CONCERNING A NATURAL RESOURCE ISSUE
- 5 YES, I COMMUNICATED WITH AN ELECTED PUBLIC OFFICIAL CONCERNING A NATURAL RESOURCE ISSUE (For example, letter writing, phone call, etc.)
- 6 OTHER POLITICAL ACTIVITY (Please specify): _____
- _____
- _____

Finally, we would like to ask a few questions about yourself. The information provided will be used for statistical purposes only.

Q-20. Are you married? (Circle one)

- 1 NO
- 2 YES

Q-21. Do you have any children? (Circle one)

- 1 NO → (Go to Q-22)
- 2 YES

b. If YES, please list the ages of the children:

Q-22. What is the highest year of formal schooling you have completed?
(Please circle the number of the highest year completed)

- | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|----|----|----|-----------------------------------|----|----|----|------------------------------------|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24+ |
| (Elementary
thru High School) | | | | | | | | | | | | (College/
Vocational Training) | | | | (Graduate/
Professional School) | | | | | | | |

Q-23. What is your occupation? (If homemaker, military, retired, student, or unemployed, please indicate)

Q-24. This summer, were you working at Mt. Rainier National Park for the National Park Service (including volunteer work), for Guest Services, Inc., or for Rainier Mountaineering Inc.? (Circle one)

- 1 NO
- 2 YES, I WORKED FOR THE NPS
- 3 YES, I VOLUNTEERED FOR THE NPS
- 4 YES, I WORKED FOR GSI
- 5 YES, I WORKED FOR RMI

Q-25. Are you: (Circle one number)

- 1 AMERICAN INDIAN/ESKIMO
- 2 ASIAN
- 3 BLACK
- 4 WHITE
- 5 OTHER (Specify): _____
- 6 DON'T WISH TO RESPOND

Q-26. Is there anything else you would like to add about your visit to Mt. Rainier National Park, or are there any other comments that you would like to make? Please use this space for these comments.

If you would like to receive a summary of the results of this questionnaire, please check here.

Thank you for your time and effort. Your contribution to this effort is greatly appreciated.



Appendix G
(Muir Research Design)

Camp Muir Visitors Survey - Research Design

Sampling Procedure

The Mt. Rainier-Camp Muir Visitors Survey is a descriptive study designed to receive input from climbers at the camp on Park Service Waste management policies in that climbing area. The University of Washington Cooperative Park Studies Unit (CPSU) will be responsible for the collection and analysis of data and for reporting the results. The study population is the population of climbers over the age of 14 going through Camp Muir during the summer of 1985. A list of names will be gathered on site each week throughout the season to ensure an even sampling distribution over time. There will be a survey person at Camp Muir a total of 22 days. From the list of names gathered on site, a sample will be randomly selected which will be designed to be representative of the user population over the entire season. The random sample of climbers (approximately 500) will receive the survey instrument in the mail.

In addition as the opportunity arises short, qualitative, loosely structured interviews will be administered to selected climbers on site. The intention of the interview is to investigate the climbers' perceptions of the waste management policies.

Survey Procedure

The climbers and hikers at Camp Muir will be contacted by the survey person and asked to fill in the on-site form. The on-site form will be brief, covering basic descriptive data only: name, address, age, group makeup, and party size. The mail questionnaire will be sent to a

random sample of the climbers selected from the list of persons provided by the on-site form distributed over the summer.

The interview components of the survey will be administered to select groups of climbers returning through Camp Muir on their descent. Due to the sensitive nature of the issue, it is anticipated that an informal interview may elicit opinions not immediately forthcoming in the open-ended questions contained in the mail questionnaire.

All of the Camp Muir Survey instruments will be pretested by receiving input from several sources: (1) individuals in the field of social science research, (2) MORA staff, and (3) visitors to Camp Muir. The pretest is designed to identify potential problems in the instruments.

After a reasonable period has elapsed following the initial mailing of the questionnaires, a follow-up reminder letter will be sent to non-respondents. A duplicate questionnaire and second reminder letter will be sent to those who did not respond to the first reminder letter. This standard research procedure should significantly reduce the possibility of nonresponse bias in the results.

Camp Muir Visitors Survey -- Task Schedule

<u>Task</u>	<u>Completion Date</u>
Present draft questionnaire to MORA staff	May 24
MORA/CPSU meeting to review questionnaire	June 4
Revisions with MORA input	June 5-9
Final draft to reviewers	June 10
Draft comments from reviewers due	June 17
Additional revisions and layout	June 18
Print pretest questionnaire	June 19-21
On-site pretest of questionnaire	June 22-23
Final editing and layout	June 24-27
Print final questionnaire	July 1-4
Data collection	July to Sep 15

Camp Muir Visitors Survey -- Goals and Questionnaire Guide

- Goals:
- To obtain general information about climbers and other users of Camp Muir and their level of exposure to selected specific information sources
 - To measure the degree of compliance with existing waste management policies and amount of specific facility use
 - To measure degree of acceptance by climbers of waste management policies and obtain input on suggested revisions or improvements

Guide to the Questionnaire

<u>Page</u>	<u>Item</u>
1	Cover
2	Trip Decision
2	Experience at MORA Sources of information
3	Sources of information Degree of influence of sources
4	Waste management information sources Degree of influence of sources
5	Compliance/acceptance of waste management policies -- subject to revision
6	Problem perception scale Open ended - suggestions Group makeup and information
7	Socioeconomic information
8	Directed open comments Thanks

Appendix H
(Paradise Research Design)

Paradise Meadows Visitors Survey - Research Design

Sampling Procedure

The Mt. Rainier Paradise Meadows Visitors Survey is a descriptive survey designed to receive input from visitors to the Paradise area relative to exposure to passive communications relating to low impact usage of the area. The University of Washington Cooperative Park Study Unit (CPSU) is responsible for the collection and analysis of data and reporting the results. The study population is the population of dayhikers in the Paradise Meadows during the summer of 1985. A list of names will be gathered on site every other week throughout the season to ensure an even sampling distribution over time. There will be a survey person(s) on site a total of 48 person/days.

Person's agreeing to participate in the study through the on-site interview will be mailed questionnaires. The sample size will be approximately 750. It is not anticipated that this sample will be a random sample of all Paradise day-hikers. Rather the questionnaires will be distributed at a few locations thought to represent a cross-section of day-hikers

Survey Procedure

The survey will be conducted using two instruments, an on-site form and a mail questionnaire (see attached). The dayhikers at Paradise will be contacted by the survey person(s) and asked to fill in the on-site form. The on-site form will be brief, covering descriptive data only: name, address, age, group makeup, and party size. The mail questionnaire will be sent to the dayhikers completing the on-site form.

All of the Paradise Meadows Survey instruments will be pretested by receiving input from several sources: (1) individuals in the field of social science research (2) NPS-MORA personnel, and (3) visitors to Paradise Meadows. The pretest is designed to identify potential problems in the instruments.

After a reasonable period has elapsed following the initial mailing of the questionnaires, two follow-up reminder letter will be sent to nonrespondents.

Paradise Meadows Visitors Survey -- Task Schedule

Present draft questionnaire to MORA staff	May 24
MORA/CPSU meeting to review questionnaire	June 4
Provisions with MORA input	June 5-9
Final draft to reviewers	June 10
Draft comments from reviewers due	June 17
Additional revisions and layout	June 18
Print pretest questionnaire	June 19-21
On-site pretest of questionnaire	June 29-30
Final editing and layout	July 1-4
Print final questionnaires	July 8-12
Data collection	July to September 15

Paradise Meadows Visitors Survey -- Goals and Questionnaire Guide

- Goals:
- To measure visitors exposure to low impact usage messages
 - To determine source of visitors knowledge of low impact guidelines
 - To describe visitor explanations for depreciative trail usage
 - To measure visitors perception of the human impact problem at Paradise

Guide to the Questionnaire:

Page

- | | |
|---|---|
| 1 | Cover |
| 2 | Trip decision
Experience at MORA
Sources of information |
| 3 | Sources of information
Degree of influence of sources |
| 4 | Sources of low impact information
Attitudes concerning low impact guidelines |
| 5 | Reasons for off trail hiking
Preference for types of trail guides |
| 6 | Outside sources of low impact information
Perception of problem scale |
| 7 | Socioeconomic information |
| 8 | Directed open comments
Thanks |

Sampling Procedure -- Sign Observation Experiment

The sign observation experiment involves the experimental application of two signing texts and a control (no sign) at several sites in the backcountry dayhiking area behind Paradise Visitor Center. The University of Washington CPSU will be responsible for observation of the sites, recording of the data, administering interviews, and reporting results. The study population will be all dayhikers passing the designated sites during the time the experiments are conducted.

The observation periods will be throughout the summer. The two treatments and control will be randomly alternated at each site during each observation period to ensure an even distribution of treatments and observations over the season. An observer(s) will be on site a total of 55 person/days.

The sample will be those persons exposed to sign treatments at the observation sites. Some of these persons will be asked to fill out a day-user survey following observer determination of their compliance or noncompliance to low impact guidelines.

The sign text and manufacture are be the responsibility of the MORA Interpretation staff. Sign locations and text changes in the field will be coordinated between the CPSU and MORA staffs.

As feasible and on days when a second observer is present, persons exposed to the experiments will be asked to complete an on-site form and to participate in the day-user survey. The observer will record the individuals' compliance status on the on-site form. This information will allow description of differences between the complying and noncomplying user sample based on variables in the survey instrument.

Additional Components of the Paradise Study

- 1) Trail counters will be installed at selected locations to determine the number of visitors on specified trails and at specified access points. Installation will be done by the MORA staff, as schedules allow. Dates: throughout the summer.

- 2) Time lapse cameras and observations will be used to determine the number of visitors actually reading entire texts of selected exhibits. This procedure setup will be the joint responsibility of MORA and CPSU staffs; observations will be the responsibility of the CPSU. Dates: July 9, 23, 30.

Appendix I
(Indian Henry's Research Design)

Indian Henry Meadow Survey - Research Design

SAMPLING PROCEDURES

The Indian Henry Meadow Survey is a descriptive study designed to receive input from visitors to the Meadow on a number of areas of interest. The University of Washington Cooperative Studies Unit (CPSU) will be responsible for the collection of data, analysis of data, and reporting of results. The study population selected is all visitors exposed to the Experimental Minimum Impact (EMI) tent platform while on a recreation trip to Indian Henry Meadow during the summer of 1985 and over the age of 18. The unit of analysis is the individual recreationist.

The summer season will be divided into three 3-week periods, due to the shortness of time in which the tent platform is available for use. This scheduling is done to ensure an even sampling distribution. A survey person will be on-site a total of nine sampling days.

Given the list of names gathered on-site (explained below), a sample will be randomly selected for each of the 3-week periods. It is anticipated that a sample size of approximately 200 will be achieved.

SURVEY PROCEDURE

The survey will be conducted using two instruments: an on-site form, and a mail-back questionnaire. The visitor to the area will be contacted and asked to complete the on-site form in one of two ways: (1) those camping on the platform will be contacted by the NPS ranger for the area; and (2) those hiking on the trail adjacent to the platform will be contacted by the survey person. This on-site form will require a minimum of visitor time and will be used to gather basic descriptive

information: name, address, age, group makeup, camper/hiker status, and party size. With the names and addresses provided on the on-site form, a mail-back questionnaire will be sent to a sample of the visitors. (See attached questionnaire for a list of the questions to be included.

Both types of forms will be pre-tested by receiving input from three groups of people: (1) individuals in the field of social science research; (2) Park personnel; and (3) the visitors to the Meadow themselves. The pre-test is designed to identify potential problems in the questionnaire design and questionnaire content.

Two to three weeks after the questionnaire is sent out, a follow-up reminder letter will be sent to those who have not yet returned the questionnaire. A duplicate questionnaire and second reminder letter will be sent to those who have not responded to the initial reminder letter. Past studies have shown this follow-up procedure to greatly increase the response rate.

SAMPLING SCHEDULE FOR INDIAN HENRY MEADOW SURVEY

Dates

Period 1	8/ 8-8/10
Period 2	8/26-8/28
Period 3	9/21-9/23

On-Site Pre-Test: 7/18/7/19

Indian Henry Meadow Survey - Task Schedule

Task	Completion Date
Meet with Park Personnel to present draft of questionnaire	May 24
Meet with Park Personnel to receive comments on draft questionnaire	June 4
Layout of questionnaire	June 17
Questionnaire sent to reviewers	June 25
Cut-off date for receipt of review comments	July 3
Pre-test on-site at the Meadow	July 17, 18
Final revisions and layout	July 25
Questionnaire sent to printer	July 25
Questionnaire back from printer	August 7
Data collected	August to September 20

Indian Henry Meadow Survey - Goals and List of Questions

Goal: To obtain descriptive information about the visitor to the Meadow and to measure reactions by visitors to the Experimental Minimum Impact tent platform at Indian Henry Meadow.

General Visitor Information

group makeup
residence
party size
use status
previous experience in Park
gender
marital status
number of and ages of children
education
occupation
NPS/GSI status
age
length of stay

Specific Platform Questions

first encounter with tent platform
first source of information related to the tent platform
reactions to options for camping at Indian Henry Meadow
alternatives
suggestions for improvement of platform
reactions to platform adjective scales

Appendix J
(GVS Research Design)

Mt. Rainier Visitor Survey - Research Design

SAMPLING PROCEDURE

The Mt. Rainier Visitor Survey is a descriptive study designed to receive input from Park visitors on a number of identified areas of interest. The University of Washington Cooperative Park Studies Unit (CPSU) will be responsible for the collection of data, analysis of data, and reporting of results. The study population selected is all recreation visitors to the Park, during the summer of 1985, who enter the Park by way of an entrance station and who are over 18 years of age. The unit of analysis is the individual recreationist.

The summer season will be divided into four 3-week periods. This is done to ensure an even sampling distribution. In addition, weekend and weekday use will be equally sampled. Each of the four entrance stations will be sampled during each 3-week period. This procedure results in a total of 16 sampling days.

It is anticipated that a sample size of approximately 2,000 will be achieved.

SURVEY PROCEDURE

The survey will be conducted using three instruments: an on-site form, and three mail-back questionnaires. The on-site form will be completed by the park visitor prior to passing through an entry station. This form will require a minimum of visitor time and will be used to gather basic descriptive information: name, address, age, type of vehicle, and group makeup. Given the name and address provided on the on-site form, one of the three mail-back questionnaires will be sent to a sample of the visitors. Three questionnaires will be used because of

the large number of questions needed in order to obtain the desired information about the park visitor and the park experience. (See attached questionnaire for a list of the questions to be included.)

Both types of forms will be pre-tested by receiving input from three groups of people: (1) individuals in the field of social science research; (2) Park personnel; and (3) the visitors to the Meadow themselves. The pre-test is designed to identify potential problems in the questionnaire design and questionnaire content.

Two to three weeks after the questionnaire is sent out, a follow-up reminder letter will be sent to those who have not yet returned the questionnaire. A duplicate questionnaire and second reminder letter will be sent to those who have not responded to the initial reminder letter. Past studies have shown this follow-up procedure to greatly increase the response rate.

SAMPLING SCHEDULE FOR MT. RAINIER VISITOR SURVEY

Entrance	Period			
	1	2	3	4
Nisqually	7/ 6	7/30	8/24	9/10
Stevens Canyon	7/ 7	7/25	8/17	9/ 5
White River	6/29	8/ 2	8/12	9/ 7
Carbon River	7/10	7/21	8/ 6	9/ 1 ₂

On-site Pre-test: 6/22-6/23

Mt. Rainier Visitor Survey - Task Schedule

Task	Completion Date
Meet with Park Personnel to present draft of questionnaire	May 24
Meet with Park Personnel to receive comments on draft questionnaire	June 4
Layout of questionnaire	June 10
Questionnaire sent to reviewers	June 10
Cut-off date for receipt of review comments	July 18
Pre-test on-site at the Meadow	June 22, 23
Final revisions and layout	June 27
Questionnaire sent to printer	June 27
Questionnaire back from printer	July 11
Data collected	July to September 15

Mt. Rainier Visitor Survey - Goals and List of Questions

Goal: To obtain descriptive information about the Park visitor and the Park experience.

General Visitor Information

residence
 group makeup
 vehicle type
 size of group in vehicle
 size of group in party
 age
 marital status
 number of and ages of children
 gender
 education
 occupation
 NPS/GSI status
 previous experience in Park
 group affiliation and level of
 involvement

Park Experience Information

decision point
 source of information
 length of stay
 overnight status and type of
 lodging
 activities engaged in
 location of activities engaged in
 facilities utilized
 Park as primary destination
 visits to other recreation areas
 on trip
 satisfaction with Park visit
 economic information related to
 trip expenses prior to, during,
 and returning from trip