1987

Social Science Project Abstracts

Prepared by

Social Science Program

National Park Service
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INTRODUCTION

Last January, each Region was asked to identify its ongoing social science research projects. These individual projects were compiled into a master list and distributed to the field.

As a follow-up to that effort, the Regions subsequently were asked to prepare a one-paragraph project description for each of these research projects. KEYWORDS were identified so that the information could be accessed automatically on COMMON by personnel throughout the System.

The attached report contains a one-page Project Statement for each social science research project reported by the Regions. Principal investigators, project status and schedules, estimated costs, etc., are identified. If you want further information about an ongoing project, or if you wish to request a copy of the findings when the research effort is completed, please contact the principal investigator or the Regional NPS coordinator directly.

Finally, it is our intention to compile and distribute a summary of ongoing NPS social science research projects on an annual basis. We thank those of you who provided input for this year's report and hope you find the document useful. Your comments and suggestions as to how we can make this a better report will be most welcome.

Richard Briceland
Special Assistant to the Director
Science and Technology
ALASKA REGION
SOCIAL SCIENCE STUDIES
FY87
TITLE: Description of Visitor Use Patterns and Review of Social Science Literature Associated with the Establishment of Acceptable Visitor Use Levels

PARK: Glacier Bay National Park and Preserve

ONGOING: August 1987 to August 1990

NPS CONTACT: Darryll R. Johnson, Gary Vequist, Al Lovaas

PRINCIPAL INVESTIGATOR: Darryll R. Johnson
National Park Service/CPSU
College of Forest Resources AR-10
University of Washington
Seattle, WA 98195

PROJECT DESCRIPTION: Relevant literature in the areas of recreation conflict and visitor impact management will be reviewed. Recommendations will be made for the adoption of a model to establish acceptable visitor use levels at selected areas of Glacier Bay National Park. Existing visitor use data will be compiled, analyzed and evaluated for use in establishing acceptable visitor use levels given recommendations for the above model. As appropriate, recommendations will be made for additional data collection in a second phase of the project.

KEYWORDS: Visitor use patterns, visitor impact management
TITLE: Roles and relationships of indigenous peoples in the management of national parks and reserves in northern Scandinavia

PARK: Alaska Regional Office project


NPS CONTACT: Al Lovaas

PRINCIPAL INVESTIGATOR: Dr. Frederick C. Dean
Professor of Wildlife Management
University of Alaska, Fairbanks
Fairbanks, AK 99775-1780

PROJECT DESCRIPTION: Dr. Dean, long time leader of the University of Alaska CPSU until it was disbanded, is on sabbatical leave in Scandinavia. The purchase order will enable him to visit the northern parts of Norway, Sweden, and Finland to study the interface between native Lapps and national park management in those areas. Current impressions are that each country has different problems and handles them with different philosophies. Dr. Dean has personal contacts in Scandinavia who have had considerable direct contact with native herders. The effort will focus on relationships of local and indigenous peoples to the management of park and preserve areas that are designated biosphere reserves.

The information gathered by Dr. Dean is expected to have direct application to NPS areas in Alaska. Products of the study are a detailed trip report and summary of findings and a seminar to be presented at the Alaska Regional Office. Publications may be warranted.

KEYWORDS: Subsistence, native peoples, northern Scandinavia, Biosphere Reserves
TITLE: Lake Clark Sociocultural Study

PARK: Lake Clark National Park and Preserve

ONGOING: October 1, 1985 to September 30, 1988

NPS CONTACT: Leslie Starr Hart

PRINCIPAL INVESTIGATOR: Dr. Linda Ellanna
Department of Anthropology
University of Alaska, Fairbanks
Fairbanks, AK 99775

PROJECT DESCRIPTION: Lake Clark National Park and Preserve is part of the original homeland of the Dena'ina Athabaskan Indians. Many of the Dena'ina still use the park and preserve for traditional subsistence and other cultural pursuits. Several hundred live in inholdings within the park unit or just outside its borders.

The purpose of the sociocultural study is multi-fold: to gain background information which enable the National Park Service to better manage relations with the Dena'ina; to learn from the Dena'ina who possess a detailed knowledge of the local environment; and to document the culture of a people who are as much a part of the story of Lake Clark as the spectacular natural environment. The products will include an ethnography, an ethnobotany, and an archival and interpretive videotape of traditional resource use.

KEYWORDS: Ethnography study, resource use, Dena'ina Indians
TITLE: Ethnobotany of the Dena'ina Indians of South Central Alaska

PARK: Lake Clark National Park and Preserve

ONGOING: October 1, 1985 to September 30, 1987

NPS CONTACT: Leslie Starr Hart

PRINCIPAL INVESTIGATOR: Ms. Priscilla Kari
POB 2365
Homer, AK 99603

PROJECT DESCRIPTION: This study is a distinct sub-part of the Lake Clark Sociocultural Study. The study gleans a wealth of knowledge about local Dena'ina (Indian) plant use in Lake Clark National Park and Preserve.

The product will serve cultural resource, natural resource, and interpretive information needs within the park. It will also assist the park in the management of local subsistence and other traditional resource use practices within the Lake Clark unit.

KEYWORDS: Ethnobotany, resource use, Dena'ina Indians
PROJECT DESCRIPTION: A visitor mapping study was undertaken at Gettysburg National Military Park during the summer of 1986 as part of its ongoing Visitor Services Project. The purpose of the study was to provide the park staff with useful information about their visitors and interpretive program.

Questionnaires were administered to 1093 visitors—the survey provided a profile of the people who visit Gettysburg, how they spend their time, which sites they visited, and which visitor service they used. The report also provided visitor comments and an interpretive profile developed in conjunction with the study.

KEYWORDS: Visitor mapping, visitor comments, interpretive profile
TITLE: Visitor Services Project Report 8: Independence National Historical Park

PARK: Independence National Historical Park

ONGOING: July 1986 to February 1987

NPS CONTACT: Gary E. Machlis

PRINCIPAL INVESTIGATOR: Gary E. Machlis
NPS/CPSU
College of FWR
University of Idaho
Moscow, Idaho 83843

PROJECT DESCRIPTION: A visitor mapping study was done at Independence National Historical Park during the week of July 31 – August 6 as part of the ongoing Visitor Services Project. Questionnaires were administered to 1,300 visitors.

The survey provided a profile of the people who visit Independence, which sites they visit, their activities, their reasons for purchasing items at park bookstores, their reasons for visiting the City Tavern, and their sources of information about the park. It also provides feedback on what visitors liked most and least about Independence and Philadelphia in the form of responses to open-ended questions and general comments, which was included in Volume 2 of the report.

KEYWORDS: Visitor mapping, visitor comments, interpretive profile
PROJECT DESCRIPTION: A visitor mapping study was undertaken at Valley Forge National Historical Park during the week of August 9-15, 1986 as part of the ongoing Visitor Services Project. Questionnaires were distributed to 782 visitors.

The visitor survey provided a profile of the people who visit Valley Forge, how they spent their time, which areas of the park they used, their activities, their visit frequencies, and which service types they used. It also provided visitor comments, and an interpretive profile developed in conjunction with the study, found in Volume 3 of the report.

KEYWORDS: Visitor mapping, visitor comments, interpretive profile
TITLE: Visitor Services Report 10: Colonial National Historical Park

PARK: Colonial National Historical Park

ONGOING: July 1987 to July 1988

NPS CONTACT: Gary E. Machlis

PRINCIPAL INVESTIGATOR: Gary E. Machlis
NPS/CPSU
College of FWR
University of Idaho
Moscow, Idaho 83843

PROJECT DESCRIPTION: This study will be conducted as part of the ongoing Visitor Services Project. The purpose of this effort is to provide Colonial managers with information on visitors, their activities, and opinions about the park. Questionnaires will be distributed July 12-18, 1987, and a report prepared in FY87. A workshop on using the data will be conducted for park staff.

KEYWORDS: Visitor mapping, visitor services, visitor comments
TITLE: Visitor Services Report 14: Shenendoah National Park

PARK: Shenendoah National Park

ONGOING: July 1987 to July 1988

NPS CONTACT: Gary E. Machlis

PRINCIPAL INVESTIGATOR: Gary E. Machlis
NPS/CPSU
College of FWR
University of Idaho
Moscow, ID 83843

PROJECT DESCRIPTION: This study will be conducted as part of the ongoing Visitor Services Project. The purpose of this effort is to provide Shenendoah managers with information on visitors, their activities, and opinions about the park. Questionnaires will be distributed July 25-August 1, 1987, and a report prepared in FY87. A workshop on using the data will be conducted for park staff.

KEYWORDS: Visitor mapping, visitor services, visitor comments
TITLE: Visitor Management

PARK: Hopewell Furnace NHS

ONGOING: April 6, 1985 to April 6, 1987

NPS CONTACT: John F. Karish

PRINCIPAL INVESTIGATOR: Dr. Robert Becker
Clemson University
Clemson, SC 19631

PROJECT DESCRIPTION: Concern existed regarding the potential impacts of increased use levels and changing visitor characteristics at Hopewell Furnace due to new swimming and camping facilities at an adjacent state park. Therefore, a visitor study was conducted in the summer of 1985 for the purpose of providing a visitor data base for use in site management. Specific concerns addressed by the study were 1) the impact between state park users and historic site users and 2) perceptions of crowding including patterns of visitor movement through the historic site. To address these concerns, data were collected regarding visitor levels, access points to the historic site, travel patterns within the site, and visitor perceptions of site characteristics and of threats to the historic site.

KEYWORDS:
TITLE: Assessing Threats To Effective Management

PARK: Petersburg NB

ONGOING: May 13, 1985 to April 1, 1987 (completed)

NPS CONTACT: John F. Karish

PRINCIPAL INVESTIGATOR: Dr. Robert Becker
Clemson University
Clemson, SC 19631

PROJECT DESCRIPTION: This study was initiated as part of a community involved, conflict management program at Petersburg National Battlefield. The purpose of the study was to identify the images of users toward the battlefield, and to classify users as historic-purists type users or recreation-oriented users. Thus the objective of the study was to answer three general questions:

1. Does the visiting population at the battlefield consist of two distinct groups with different use orientations?
2. Based on their images, can visitors be effectively classified as historic-purist type users and recreation-oriented users?
3. How do visitors, differing in their images toward the battlefield, compare in terms of their place of residence, race, use history, motives for participating, satisfaction, and behavior?

Hypotheses: This study examined the images that visitors have of Petersburg National Battlefield in order to test the following hypotheses.

1. The visitor population at Petersburg NB can be represented by at least two dimensions (historic-purist type users and recreation-oriented users).
2. Place of residence can be used to distinguish recreation-oriented users from historic-purist type users.
3. Race can be used to discriminate between recreation-oriented users and historic-purist type users.
4. Experience and use history can be used to discriminate between recreation-oriented users and historic-purist type users.
5. An individual's reason for visiting Petersburg NB will be related to his/her image of the resource.
6. An individual's on-site behavior will be related to his/her image of the battlefield.
7. An individual's overall level of satisfaction will be related to his/her image of the battlefield.
8. A measure of an individual's specialization will be related to his image of the battlefield.

The historic-purist concept introduced in the study parallels the wilderness-purist idea studied by Hendee (1967) and Hendee and Harris (1970).

KEYWORDS:
TITLE: Importance of Hunting

PARK: Delaware Water Gap NRA

ONGOING: August 30, 1986 to February 28, 1988

NPS CONTACT: John F. Karish

PRINCIPAL INVESTIGATOR: Dr. Robert Carline
USFWS Pa. Coop Unit
Ferguson Bldg.
University Park, PA 16802

PROJECT DESCRIPTION: Hunters may comprise a major part of the clientele using the Delaware Water Gap National Recreation Area in northeastern Pennsylvania and northwestern New Jersey, but little is known about this segment in terms of socio-economic characteristics, usage patterns, or potential conflicts between hunters and other user groups in the area. This study will analyze hunter characteristics, hunter use, and game harvest levels, and will develop a long-term monitoring protocol for analyzing hunter use and harvest on the Area. Visitor interviews and visitor questionnaires will be organized toward key days of each hunting season in Pennsylvania and New Jersey. A combination of check stations and interview techniques will be employed strategically within the Area.

KEYWORDS:
TITLE: Visitor Behavior in Natural Environments - Defining the Nature of the Recreation Experience

PARK: Regionwide

ONGOING: February 1986 to February 1987

NPS CONTACT: John F. Karish

PRINCIPAL INVESTIGATOR: Dr. Richard Schreyer
Utah State University
Logan, UT 84322

PROJECT DESCRIPTION:

Objectives: 1) Conduct a comprehensive literature review of research pertinent to defining the nature of recreation experiences, 2) define a model of recreation experiences which may be used to guide field research in the study areas, and 3) provide critical input into the design of research methods to identify the recreation experiences sought by recreationists in the study areas.

Accomplishments: Between February and July, 1986, an exhaustive literature review was completed. Over 500 references on psychological, social psychological, sociological and philosophical lines of thought pertaining to the management of leisure services were identified. A review and synthesis of this literature was accomplished, to a) identify major theoretical approaches to understanding recreation experience, and b) evaluate the strengths and weaknesses of each.

During the same time period, in-depth personal interviews were accomplished with 17 nationally renowned experts in psychology, social psychology, sociology, philosophy, and market research to gain a sense of cutting edge theory and technology which has relevance to research on recreation experience.

Drawing on the results of literature review, literature synthesis, and personal interviews, a holistic theoretical model of the forces shaping recreation experience was created. This model specified critical variables to be measured in the field, and was used to construct a methodology for gathering field data and for analyzing the data once it was secured. A personal interview format was developed, consisting of 16 questions to be posed to study river recreationists using qualitative research design. Also developed was a 19-item inventory for analyzing responses to the questions -- which were captured on audio tape. Finally, the strategy for using the inventory by a panel of experts to produce a content analysis of the responses was specified.

A summary of the process and results of all this activity has been prepared and submitted to the Mid-Atlantic Region in a 206-page volume.

KEYWORDS:
TITLE: Analysis of Legislative and Legal Foundations for Establishing Carrying Capacity

PARK: Delaware Water Gap NRA, New River Gorge NR, and Upper Delaware SRR

ONGOING: June 1985 to September 1987 (completed)

NPS CONTACT: John F. Karish

PRINCIPAL INVESTIGATOR: Dr. Leo McAvoy
University of Minnesota
Minneapolis, MN  55455

PROJECT DESCRIPTION:

Objectives: 1) identify for each site (Upper Delaware, Middle Delaware, and the New River Gorge), all general management directives regarding carrying capacity suggested by the legislative histories of the laws designating each site and directives contained in pertinent legal materials, 2) identify directives within the legislative histories specific to the carrying capacity issues in each river, 3) identify additional support for general management directives found in applicable court cases and law review articles, 4) identify for the Upper Delaware and the Middle Delaware, general management directives regarding carrying capacity suggested by the legislative histories of the Wild and Scenic Rivers Act and the Delaware Basin Compact, 5) for the New River Gorge, identify the management intentions of the people instrumental in the designation of the site, 6) for the New River Gorge, compile a complete legislative history of the area.

Accomplishments and Products:

The data collection and analysis for all sections of this study area complete. The objectives of the study plan have all been achieved. The final reports either have been completed or are in the process of being completed.

KEYWORDS:
TITLE: Analysis of Relationships Between Federal Presence and Local Community

PARK: New River Gorge NR and Upper Delaware SRR

ONGOING: June 1985 to July 1987 (completed)

NPS CONTACT: John F. Karish

PRINCIPAL INVESTIGATOR: Dr. Matthew S. Carroll
Washington State University
Pullman, WA 99164-6410

PROJECT DESCRIPTION: This research is being carried out to analyze relationships between the NPS and local communities affected by the agency's presence in the Upper Delaware Scenic and Recreational River and the New River Gorge National River.

Objectives: 1) present a chronology of the historical context and of events related to federal presence in the two river areas, 2) document and analyze the emergence of issues related to the federal presence in the local areas, 3) identify and analyze the perceptions and actions taken by local organizations and social groups around such issues, 4) present recommendations for the future of NPS-community relations in the two areas.

Accomplishments: In-depth interviews with managers and a cross-section of community residents in the two areas have been carried out. Secondary data concerning the history of the areas and the history of NPS presence has been gathered. Demographic information concerning the local communities has been compiled. Final reports are available.

KEYWORDS:
TITLE: User Behavior, Perceptions and Expenditures as Inputs to the Determination of Appropriate Use

PARK: Delaware Water Gap NRA, New River Gorge NR and Upper Delaware SRR

ONGOING: June 1985 to September 1987

NPS CONTACT: John F. Karish

PRINCIPAL INVESTIGATOR: Dr. Alan R. Graefe
Penn State University
267 Recreation Building
University Park, PA 16802

PROJECT DESCRIPTION:

Objectives: 1) to design and implement a survey of visitor expenditure patterns, including travel costs, equipment purchases and contributions to local economies, during the 1986 use season on the three study rivers, 2) to design and pilot test a methodology for defining the visitor's recreational experience that incorporates salient dimensions suggested by a review of current conceptions of the nature of human experience, 3) to implement the methodology in order to measure the river recreation experience on the three study rivers during the summer, 1986 use season, and 4) to develop and carry out analytical procedures using the data collected, with emphasis on identifying ways in which study results can be used as inputs to selecting management objectives.

Accomplishments: Objective 1 -- Completion of PARVS interviews with 1,258 visitors in the three study areas between May and September, 1986. Data forwarded to USFS Southeastern Forest Experiment Station, Athens, Georgia for processing and analysis. Objective 2 -- Development of user behavior study methodology completed by investigators in consultation with Richard Schreyer. Methodology pilot tested with 130 interviews of river users on the Delaware River during May and early June, 1986. Objective 3 -- Final methodology implemented on three study rivers during June-August, 1986, resulting in an additional 178 completed interviews (total data set includes both pilot test and summer interviews for a total of 308 tape recorded interviews). Objective 4 -- Analyses of data have focused on two approaches: first, preparation of customized data tapes featuring selected interview questions related to particular testing of a set of experiential rating scales designed to measure the overall experience based on the complete taped interviews. The first approach has resulted in nine topical tapes for each river area. The second approach was completed using seven raters and 35 completed interviews from the Delaware River data.

KEYWORDS:
TITLE: Recreation Impact and Value Estimation - An Economic Study

PARK: Delaware Water Gap NRA, New River Gorge NR and Upper Delaware SRR

ONGOING: June 1986 to June 1988

NPS CONTACT: John F. Karish

PRINCIPAL INVESTIGATOR: Dr. Kenneth Cordell
Southeastern Forest Experiment Station
Athens, Georgia

PROJECT DESCRIPTION: This study addresses the Regional Economic Impact portion of a larger research program. Accurate and locally specific knowledge of the amount of income, employment, and industry growth that recreation rivers contribute is important to agency administrators, legislators, and the recreation industry. A major barrier to developing highly credible measures of economic importance has been the lack of technically sound and affordable procedures and guidelines to collect and analyze the necessary data.

Objectives: 1) provide expenditure data and estimates of economic impact including income, employment and industry growth for the three study rivers, 2) provide data that will enable Travel Cost Modeling for producing willingness-to-pay estimates for recreational access to the three study rivers, and 3) to describe the visitors, their activities, year-long participation patterns, and market areas for public visitors to the three study rivers.

KEYWORDS:
TITLE: Managerial Perspectives on Determining Appropriate River Use

PARK: Delaware Water Gap NRA, New River Gorge NR and Upper Delaware SRR

ONGOING: June 1985 to June 1988

NPS CONTACT: John F. Karish

PRINCIPAL INVESTIGATOR: Dr. J. Douglas Wellman
                    Virginia Tech
                    Blacksburg, VA 24061

PROJECT DESCRIPTION:

Objectives:

1) Improve understanding of how managers establish management objectives. Specific subtopics include:
   a) manager perception of policy framework
   b) manager definition of social conflict
   c) manager definition of larger river recreation system
   d) manager perception of scientific research as pertains to river management
   e) managers' personal experiences

2) Improve understanding of how managers implement management plans. Specific subtopics include:
   a) manager perceptions of who should be involved in implementation
   b) manager beliefs and attitudes about management support technologies.

KEYWORDS:
TITLE: Exploring the Potential Partnership Role of River Outfitters in Managing Public Rivers.

PARK: Delaware Water Gap NRA, New River Gorge NR and Upper Delaware SRR

ONGOING: December 1985 to December 1987

NPS CONTACT: John F. Karish

PRINCIPAL INVESTIGATOR: Dr. Joseph Roggenbuck
Virginia Tech
Dr. David Lime
University of Minnesota

PROJECT DESCRIPTION: Increasingly, public agencies must work in partnership with other public institutions and the private sector to achieve management goals. Although the Park Service has worked closely with commercial river outfitters, there is a lack of information about the views of outfitters concerning their role as partners with managers in river management.

Objectives:

1) to identify outfitters' preferences for resource and experience values to be provided on the river, their perceptions on the adequacy of current river management, and their desires for future management directions; and, to compare these views with those of river managers.

2) to compare outfitters' and managers' perceptions of river problems, potential solutions to problems and views on how outfitters and managers might increasingly cooperate to implement solutions.

3) to characterize the operations of river outfitters on the study rivers (e.g. the nature and extent of their activities, type of trips provided, type of market area served, marketing strategies used, primary clientele groups served) and explore relationships between type of river outfitter and views on appropriate roles for river management.

KEYWORDS:
TITLE: Study of the Potential Impacts of Improving Access To and Visitor Use of Little Calumet River by Canoeists

PARK: Indiana Dunes National Lakeshore

ONGOING: February, 1985 to (ending date unknown)

NPS CONTACT: Douglas A. Wilcox

PRINCIPAL INVESTIGATOR: Douglas A. Wilcox
Indiana Dunes National Lakeshore
1100 North Mineral Springs Rd.
Porter, IN 46304

PROJECT DESCRIPTION: The General Management Plan for Indiana Dunes calls for development of the Little Calumet River for canoeing recreation. This action would have several potential impacts on the river ecosystem and current uses of the river. A study proposal has been prepared which addresses these concerns.

The first year of data collection included 1) sampling of aquatic invertebrates, 2) vegetation studies, 3) soil studies, 4) sampling of the fish community, and 5) survey of fisherman attitudes toward canoe use on the river as part of the annual creel census project.

KEYWORDS: Recreational impacts, biological surveys, fisherman attitudes
A Study of Human Impacts on Dunes

Indiana Dunes National Lakeshore

ongoing: June, 1983 to January, 1988

NPS CONTACT: Ronald D. Hiebert

PRINCIPAL INVESTIGATOR: Ronald D. Hiebert
Indiana Dunes National Lakeshore
1100 North Mineral Springs Rd.
Porter, IN 46304

PROJECT DESCRIPTION: A West Beach Management Plan was initiated in 1986 with participants from all park divisions. The plan included wayside exhibits, brochures which were distributed to each car entering the area, roving patrols and signing to keep people on marked trails. Sampling methods were repeated (questionnaires, passive observations, and vegetation sampling).

Although results are not in, observations indicate reduction in impacts and improved cooperation of visitors. The report of the results of visitor activities and behavior should be finalized by early 1987.

KEYWORDS: Human impacts, questionnaires, visitor cooperation
TITLE: Recreation Monitoring system for Individual River Zones

PARK: Ozark National Scenic Riverways

ONGOING: March 15, 1987 to September 7, 1987

NPS CONTACT: David Foster

PRINCIPAL INVESTIGATOR: Dr. Kenneth C. Chilman
Department of Forestry
Southern Illinois University
Carbondale, IL 62901

PROJECT DESCRIPTION: This project involves monitoring a river recreation by counting canoes and interviewing canoeists on the Jacks Fork District of Ozark National Scenic Riverways (OZAR) from March 15 through September 1, 1987. The system was designed during summer 1984 to test visitor perceptions of crowding. OZAR is a complex 140-mile riverway with multiple accesses, over 300,000 canoeists annually, and other recreation uses.

KEYWORDS: River recreation use, canoeists, visitors' perceptions
TITLE: Alternative Futures for Mount Desert Island and Acadia National Park

PARK: Acadia National Park

ONGOING: August 1, 1986 to September 30, 1987

NPS CONTACT: Isabel M. Mancinelli

PRINCIPAL INVESTIGATOR: Carl Steintz
   Harvard University
   Graduate School of Design
   Cambridge, MA 02138

PROJECT DESCRIPTION: Many of the basic assumptions of the 1978 Master Plan, especially the anticipated maximum visitation levels, are no longer valid. Acadia is the second most visited national park in the country and is located in a region experiencing rapid growth and development. Projecting 13 years ahead to the year 2000, a group of graduate students, under the direction of Dr. Carl Steintz, evaluated the effects of current trends in visitor use and land development on the island's resources. Three alternative strategies were then prepared considering such critical issues as visitor access to the park, transportation, landscape management and island development. A summary of their work is being published in July, 1987.

As part of those studies, a computerized geographic data base was developed for the Mount Desert Island portion of Acadia National Park. From this, visual and ecological models are being developed to identify the areas of high ecological and visual sensitivity. These models will be used to guide and evaluate design alternatives to be developed in the upcoming general management plan.

KEYWORDS: Projected visitor use, geographic data base, transportation
TITLE: Social Science Research at Acadia National Park

PARK: Acadia National Park

ONGOING: Began in July 1985; expected to end September 30, 1987 (although the ending date may be extended a few months from the Final Report completion).

NPS CONTACT: Nora Mitchell and Michael Soukup

PRINCIPAL INVESTIGATOR: Robert E. Manning, Associate Professor
School of Natural Resources
Recreation Management Program
George D. Aiken Center
University of Vermont
Burlington, VT 05405

PROJECT DESCRIPTION: This social science project was initiated in Acadia National Park to provide managers with a better understanding of the public's expectations of the park as well as their perceptions of park resources and their management. Several park management concerns prompted this study including the increase in park visitation over the past few years, proposals for new park legislation and General Management Plan development, increased development on the island, and the need to initiate potentially controversial fire management programs. A questionnaire was distributed to both park visitors (during all four seasons) and residents from the local towns on Mount Desert Island. Questions on visitor use patterns, type of use (activities), and evaluation of park areas and facilities. In addition, visitors were asked their opinion on several current park management issues such as preservation of natural resources, air quality, fire management, park signage, and public transportation. The response rate was exceptionally high, generally above 80% and in some cases as high as 87%. The data are currently being analyzed and a final report will be prepared in the fall of 1987.

KEYWORDS: Visitor characteristics, seasonal differences, park neighbor characteristics
TITLE: Visitor Use and Impact Patterns on the Isle au Haut Unit, Acadia National Park

PARK: Acadia National Park

ONGOING: February 1985 to December 1, 1988

NPS CONTACT: Michael Soukup

PRINCIPAL INVESTIGATOR: Burnham Martin
Research Department
Appalachian Mountain Club
P.O. Box 298
Gorham, NH 03581

PROJECT DESCRIPTION: PL 97-335 required the Service to determine visitation levels which would not harm the natural environment nor impact the social environment of the Town of Isle au Haut. The AMC has designed a program of trail use monitoring, impact monitoring and visitor/residents' surveys to determine these levels.

KEYWORDS: Trail use impacts; remote island experience; carrying capacity; visitor satisfaction
PACIFIC NORTHWEST REGION
SOCIAL SCIENCE STUDIES
FY87
PROJECT DESCRIPTION: The 1986-87 Pacific Northwest Outdoor Recreation Study is a coordinated regional approach to gathering recreation demand data central to the State Comprehensive Outdoor Recreation Plan (SCORP) process. A first for the region, the study will provide current recreation use data and future recreation demand projections not only for the states of Oregon, Washington, and Idaho but also for the Northwest as a geographic region. Close coordination among participating state and federal agencies during questionnaire and sample design has ensured the compatibility and comprehensiveness of data for regional modeling of recreation demand.

The majority of visitors to many recreation areas in the Northwest are from regionally contiguous points-of-origin. Thus, regional recreation demand data has enhanced potential for state and federal management planning functions. The greatest potential uses of regional recreation data involve the identification of recreation activity and regional travel patterns and trends.

KEYWORDS: Recreation demand, regional recreation, recreation planning
TITLE: Visitor Use and Perceptions of Interpretation at Ft. Clatsop National Memorial

PARK: Ft. Clatsop National Memorial

ONGOING: June 1, 1986 to September 30, 1987

NPS CONTACT: Donald R. Field

PRINCIPAL INVESTIGATOR: Donald R. Field
NPS/CPSU
College of Forestry
Oregon State University
Corvallis, OR 97331

PROJECT DESCRIPTION: Visitation to National Park Service areas, while on the increase, fluctuates from year to year, season to season, and during the week. Visitation to parks, in other words, occurs in "cycles." Therefore, periodic monitoring of visitors provides managers with an update of who is visiting a site and the nature of their visit for a given time frame.

The study at Ft. Clatsop National Memorial was intended to provide a current picture of visitation to the area. By tapping into the summer cycle for one weekend, we provided the park superintendent and his staff with an assessment of 1) who is visiting the park, 2) characteristics of the visiting public, 3) a description of their visit, 4) an evaluation of the interpretive services provided by the park, and 5) limited information about park visitors' stay in the immediate area.

KEYWORDS: Visitor characteristics, visitor interest, interpretation
TITLE: Visitor Use and Perceptions of Interpretation at Ft. Vancouver National Historic Site

PARK: Ft. Vancouver National Historic Site

ONGOING: June 1, 1986 to September 30, 1987

NPS CONTACT: Donald R. Field

PRINCIPAL INVESTIGATOR: Donald R. Field
NPS/CPSU
College of Forestry
Oregon State University
Corvallis, OR 97331

PROJECT DESCRIPTION: Visitation to national parks is by and large a day-use activity. Families and friends leave their home residence, travel to a park, spend all or part of a day visiting the site, and return home that same day. Small historic sites in urban areas benefit from the day use character of park visitation drawing visitors from local populations. National park visitation also occurs in "cycles," fluctuating from year to year, season to season, and during the week.

The sociological pulse conducted at Ft. Vancouver National Historic Site was conducted to provide managers with a current picture of visitation to the area. By tapping into the summer cycle for one weekend, we provided the park superintendent and his staff with an assessment of (1) who is visiting the Fort, (2) a description of their visit, (3) an evaluation of the services provided by NPS staff, and (4) limited information about park visitors' travel in the surrounding area.

KEYWORDS: Visitor characteristics, historic sites, interpretation
TITLE:  Park and Its Region

PARK:  Pacific Northwest Region

ONGOING:  Oct. 1, 1986 to September 30, 1988

NPS CONTACT:  Donald R. Field

PRINCIPAL INVESTIGATOR:  Donald R. Field
NPS/CPSU
College of Forestry
Oregon State University
Corvallis, OR  97331

PROJECT DESCRIPTION:  The impacts of rural resource development activities such as forestry, mining, agriculture, and tourism upon parks can best be examined in terms of a regional resource system. Park ecosystems are interdependent with the adjacent region and preservation of park resources hinges upon the knowledge of primary resource production activities occurring within the region and upon development of a regional resource management plan. As natural resources become more scarce, complimentary and supportive resource management activities ensuring the preservation and conservation of the diversity of natural resources within the region will be required.

The project is currently concerned with the formulation of a conceptual framework for examining national parks within the context of a regional resource system.

KEYWORDS:  Resource development, regional resource system, park ecosystem
PROJECT DESCRIPTION: The purposes of this project are: 1) to conduct a quasi-experimental study of visitor response to selected trailside signs and barriers to visitor intrusions in the off-trail areas at Paradise Meadows, Mount Rainier National Park; and 2) to construct a descriptive profile of visitors who engage in off-trail hiking, or who intrude onto the meadows in disregard of minimum impact behavioral expectations.

The specific objectives of the study are: 1) Identify visitor compliance rates to alternate sign texts directed toward off-trail hiking at selected sites in Paradise Meadows; 2) Identify the effectiveness of rope and split rail barriers to control visitor intrusions upon the meadows at selected sites in Paradise Meadows; 3) Measure the effectiveness of a wayside exhibit trailhead sign in comparison to a recorded message at the same trailhead locations; 4) Identify the effect of the presence of a uniformed employee upon off-trail use of Paradise Meadows; and 5) Construct a descriptive profile of visitors who engage in off-trail hiking or who intrude onto the meadows at the quasi-experimental sites.

KEYWORDS: Visitor compliance, visitor non-compliance, off-trail hiking
TITLE: Pacific Northwest Regional Office Employee Survey

PARK: Pacific Northwest Regional Office (PNRO)

ONGOING: June 1987 to December 1987

NPS CONTACT: Darryll Johnson

PRINCIPAL INVESTIGATOR: Darryll R. Johnson
NPS/CPSU
College of Forest Resources
University of Washington
Seattle, WA 98195

PROJECT DESCRIPTION: At the request of the Human Resources Committee, PNRO and the approval of the Regional director, a voluntary anonymous survey was administered to Regional Office employees. Subject areas included attitudes toward supervision, physical working conditions, role ambiguity and role conflict, general job satisfaction and other components of the quality of work life. An abstract of the data will be available to employees and management providing an excellent vehicle for employee communication and management feedback about many important work related issues.

KEYWORDS: Employee survey, quality of work life, job satisfaction, role ambiguity, role conflict, physical working conditions
TITLE: Crater Lake Public Involvement Survey

PARK: Crater Lake National Park

ONGOING: June 15, 1987 to January 1, 1987

NPS CONTACT: Darryll R. Johnson, Robert E. Benton

PRINCIPAL INVESTIGATOR: Darryll R. Johnson
NPS/CPSU
College of Forest Resources
University of Washington
Seattle, WA 98195

PROJECT DESCRIPTION: Visitor preferences for the redevelopment of Rim Village and other visitor services are being measured through the administration of a mail questionnaire to a random sample of park visitors and lodge guests. This data will be valuable in park planning efforts and in the selection as development alternatives for the configuration of lodging in Crater Lake National Park.

KEYWORDS: Public involvement, visitor survey
TITLE: Visitor Services Report 11: Grand Teton National Park

PARK: Grand Teton National Park

ONGOING: July 1987 to July 1988

NPS CONTACT: Jim Tuck, Rocky Mt. Regional Office

PRINCIPAL INVESTIGATOR: Gary E. Machlis
NPS/CPSU
College of FWR
University of Idaho
Moscow, Idaho 83843

PROJECT DESCRIPTION: This study will be conducted as part of the ongoing Visitor Services Project. The purpose of this effort is to provide Grand Teton managers with information on visitors, their activities, and opinions about the park. Questionnaires will be distributed July 19-25, 1987, and a report prepared in FY87. A workshop on using the data will be conducted for park staff.

KEYWORDS: Visitor mapping, visitor services, visitor comments
TITLE: Visitor Services Report 13: Mesa Verde National Park

PARK: Mesa Verde National Park

ONGOING: July 1987 to July 1988

NPS CONTACT: Jim Tuck, Rocky Mt. Regional Office

PRINCIPAL INVESTIGATOR: Gary E. Machlis
NPS/CPSU
College of FWR
University of Idaho
Moscow, Idaho 83843

PROJECT DESCRIPTION: This study will be conducted as part of the ongoing Visitor Services Project. The purpose of this effort is to provide Mesa Verde managers with information on visitors, their activities, and opinions about the park. Questionnaires will be distributed July 12-18, 1987, and a report prepared in FY87. A workshop on using the data will be conducted for park staff.

KEYWORDS: Visitor mapping, visitor services, visitor comments

TITLE: Visitor Services Report 15: Yellowstone National Park

PARK: Yellowstone National Park

ONGOING: July 1987 to July 1988

NPS CONTACT: Jim Tuck, Rocky Mt. Regional Office

PRINCIPAL INVESTIGATOR: Gary E. Machlis
NPS/CPSU
College of FWR
University of Idaho
Moscow, Idaho 83843

PROJECT DESCRIPTION: This study will be conducted as part of the ongoing Visitor Services Project. The purpose of this effort is to provide Yellowstone managers with information on visitors, their activities, and opinions about the park. Questionnaires will be distributed July 19-25, 1987, and a report prepared in FY87. A workshop on using the data will be conducted for park staff.

KEYWORDS: Visitor mapping, visitor services, visitor comments

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TITLE: A Survey of Visitor Attitudes Towards and Perceptions of Park Values in Canyonlands and Arches National Parks

PARK: Canyonlands and Arches National Parks

ONGOING: Initial bidders not acceptable; contract will be advertised again

NPS CONTACT: Kate Kitchell, Canyonlands National Park

PRINCIPAL INVESTIGATOR: NA

PROJECT DESCRIPTION: In order to revise the backcountry plan and more effectively manage the backcountry, the project will determine visitor values and seek information about locations and specifics of visitor experiences and desires. Information will also be useful in application to determining the effects of external threats to the parks.

KEYWORDS: Visitor values, threats, visitor activities

TITLE: Impacts of Noise on the Visitor Experience in Glacier National Park

PARK: Glacier National Park

ONGOING: Contract not let

NPS CONTACT: Cliff Martinka, Glacier National Park

PRINCIPAL INVESTIGATOR: NA

PROJECT DESCRIPTION: Information not available for this report

KEYWORDS:
TITLE: Effectiveness of Communicating to the Public and Employees the Hazards of Habituated Wildlife in Yellowstone Nation Park

PARK: Yellowstone National Park

ONGOING: Contract not let

NPS CONTACT: John Varley, Yellowstone National Park

PRINCIPAL INVESTIGATOR: NA

PROJECT DESCRIPTION: Information not available for this report

KEYWORDS:

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TITLE: Lake Powell Carrying Capacity Study

PARK: Glen Canyon National Recreation Area

ONGOING: FY86 to present (report on review in RMRO)

NPS CONTACT: Mike Snyder, Rocky Mt. Regional Office

PRINCIPAL INVESTIGATOR: Chuck Wood
Glen Canyon National Recreation Area
P.O. Box 1507
Page, AZ 86040

PROJECT DESCRIPTION: As part of the study, we have incorporated the concept of social carrying capacity as it relates to flat-water recreation. Includes visitor surveys, exploring the questions of visitor perceptions, use and enjoyment.

KEYWORDS: Social carrying capacity, flat water recreation, visitor perceptions
TITLE: Orange Cliffs/Maze Development Concept Plan

PARK: Glen Canyon National Recreation Area and Canyonlands National Park

ONGOING: June 1987 to June 1989

NPS CONTACT: Mike Snyder

PRINCIPAL INVESTIGATOR: Mike Snyder
Rocky Mt. Regional Office
P.O. Box 25287
Denver, CO 80225

PROJECT DESCRIPTION: This DCP will explore and hopefully define social and resource carrying capacity of the desert backcountry.

KEYWORDS: Social carrying capacity, resource carrying capacity

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TITLE: North Fork Development Concept Plan

PARK: Glacier National Park

ONGOING: Contract not let

NPS CONTACT: Bob Dunkley, Glacier National Park

PRINCIPAL INVESTIGATOR: NA

PROJECT DESCRIPTION: A visitor use survey was conducted during the summer of 1986 to determine visitor perceptions. The results of the survey were analyzed in an effort to ultimately establish limits of acceptable change (LAC). As a result of the analysis, LAC indicators were established and standards will be established in the next phase of the work. Preliminary alternatives should be completed during the spring of 1986 and the EA written and released to the public during the fall of 1987. Project completion is scheduled for June 1988.

KEYWORDS: Visitor perceptions, limits of acceptable change
TITLE: Demography of Park Visitors Using Trails for Day Hikes and Overnight Stays in Glacier National Park

PARK: Glacier National Park

ONGOING: September 1987 to Spring 1990

NPS CONTACT: Kate Kendall, Glacier National Park

PRINCIPAL INVESTIGATOR: Bob Lucas, USFS Experimental Station, Missoula
Steve McCool, Forestry Dept., University of Montana
Missoula, MT 59812

PROJECT DESCRIPTION: The study is designed to characterize visitor demographics. Survey techniques will be developed to collect data about group size, seasonal use variations, activities.

KEYWORDS: Visitor demographics

TITLE: Visitor Services Project, Bryce Canyon National Park (This study will be funded by the Bryce Canyon Natural History Association)

PARK: Bryce Canyon National Park

ONGOING: Planned for FY88

NPS CONTACT: Margaret Littlejohn, Bryce Canyon National Park

PRINCIPAL INVESTIGATOR: Gary Machlis
NPS/CPSU
University of Idaho
Moscow, ID 83843

PROJECT DESCRIPTION: Visitor Services Projects are designed to assist park staffs in more effectively assigning interpretive efforts and activities and in determining visitor responses to park-specific questions. Visitor use and participation in the park is mapped by time and location to allow comparison with current interpretive activities and to assist planning of more effective use of interpretive staff.

KEYWORDS: Interpretive activities, visitor mapping, visitor services
TITLE: Evaluation of Interpretive Programs

PARK: To be determined

ONGOING: Begin fall 1987

NPS CONTACT: Jim Tuck, Rocky Mt. Regional Office

PRINCIPAL INVESTIGATOR: To be determined

PROJECT DESCRIPTION: Develop methods to evaluate cognitive and affective results of interpretive programs in relation to parks' themes, goals and objectives as stated in their Statement for Interpretation.

KEYWORDS: Themes, goals and objectives, interpretive programs
TITLE: Mount Rushmore Memorial Visitor Survey

PARK: Mount Rushmore National Memorial

ONGOING: May 1987 to May 1988

NPS CONTACT: Dan Wenk, Mount Rushmore National Memorial

PRINCIPAL INVESTIGATOR: John Hoesterwy
Denver Service Center
P.O. Box 25287
Denver, CO 80225

PROJECT DESCRIPTION: Gather visitor statistics and visitor feelings and ideas about park facilities to provide information for short term interpretive planning and for long term major renovation information.

KEYWORDS: Visitor perceptions, interpretive planning

TITLE: Park Use Survey

PARK: Wind Cave National Park and Jewel Cave National Monument

ONGOING: Planned for FY88

NPS CONTACT: Bill Swift, Wind Cave National Park

PRINCIPAL INVESTIGATOR: Bill Swift
Wind Cave National Park
Hot Springs, SD 57747

PROJECT DESCRIPTION: Preparation of new GMP will begin in FY88 for both parks. Information will be collected on visitor use patterns, activities, and characteristics.

KEYWORDS: Visitor activities, visitor characteristics
TITLE: Visitor Interpretive Information Survey

PARK: Florissant Fossil Beds National Monument

ONGOING: July 1986 to June 1987

NPS CONTACT: Duncan Rollo, Florissant Fossil Beds National Monument

PRINCIPAL INVESTIGATOR: Duncan Rollo  
Florissant Fossil Beds National Monument  
P.O. Box 185  
Florissant, CO 80816

PROJECT DESCRIPTION: The project is designed to improve interpretive program effectiveness by determining visitor characteristics and needs.

KEYWORDS: Visitor characteristics, interpretive programs

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TITLE: Visitor interpretation questionnaire

PARK: Fort Laramie National Historic Site

ONGOING: June 1986 to August 1987

NPS CONTACT: John Burns, Fort Laramie National Historic Site

PRINCIPAL INVESTIGATOR: John Burns  
Fort Laramie National Historic Site  
Fort Laramie, WY 82212

PROJECT DESCRIPTION: The project is designed to analyze interpretive program effectiveness by testing visitors pre- and post-visit.

KEYWORDS: Interpretive programs
SOUTHEAST REGION
SOCIAL SCIENCE STUDIES
FY87
TITLE: Visitor Use Patterns, Attitudes, and Expenditures at Great Smoky Mountains National Park

PARK: Great Smoky Mountains National Park

ONGOING: April 1, 1985 to November 30, 1987

NPS CONTACT: Dr. John Peine

PRINCIPAL INVESTIGATOR: Dr. John Peine  
Science Division  
Great Smoky Mountains National Park  
Gatlinburg, TN  37738

PROJECT DESCRIPTION: Project replicates survey done in 1975 as part of general management planning effort. The 1985 data set survey provides for a unique trend in Great Smoky Mountains National Park visitor demographics, use patterns, expenditures, and utilization of park facilities and programs. Visitor control is measured, as well as information on recreational equipment and vehicle type.

KEYWORDS: Use patterns, trends, demographics
TITLE: Communication Campaign and Public Effects

PARK: Biscayne National Park

ONGOING: 1988-89

NPS CONTACT: Frank P. Noe

PRINCIPAL INVESTIGATOR: University Personnel—to be determined
and Frank Noe, COTR
Southeast Regional Office
National Park Service
75 Spring Street, SW
Atlanta, GA 30303

PROJECT DESCRIPTION: This study will test various mass media strategies that may influence attitudes toward the visitor use of the waters in and adjacent to Biscayne National Park. Two previous phases of this project have already investigated visitors attitudes and expectations toward the environment.

There is speculation that cultural-ethnic influences may play a decisive role in how the visitor responds to the use of Biscayne Bay. Building upon how the respondents perceive the limits of their involvement with the natural resources, various message and channel variables will be manipulated to measure either congruent or incongruent changes in beliefs.

KEYWORDS: Visitor attitudes, communication effects, ethnic and environmental concern, recreation
TITLE: Development and Testing of Dynamic Sightseeing Model

PARK: Blue Ridge Parkway

ONGOING: 1988-89

NPS CONTACT: Frank P. Noe

PRINCIPAL INVESTIGATOR: Multi-disciplinary university team
and Frank Noe, COTR
Southeast Regional Office
National Park Service
75 Spring Street, SW
Atlanta, GA 30303

PROJECT DESCRIPTION: This project will systematically investigate the feasibility of using advanced video technology to simulate a driving experience along a parkway to determine what visual landscapes are perceived as desirable-undesirable. Existing Federal Highway imagery will be modified to produce this visual stimuli.

This possibility for advanced visual research grew out of the visual studies previously accomplished that used static representations for determining preference. This research would simulate moving sequences of vegetative management changes along the Parkway, utilizing video with different simulation media as scale models, computer-assisted graphics, or electronic photomontage to illustrate different management alternatives in a real time sequence.

KEYWORDS: Simulation, decision making, visual preference, modeling

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TITLE: Multivariate Analysis of Visual Preference Data

PARK: Blue Ridge Parkway

ONGOING: 1988-90

NPS CONTACT: Frank P. Noe and previous university researchers (Hammitt, Smardon, Wellman)

PRINCIPAL INVESTIGATOR: Previous university cooperators and Frank Noe, COTR
Southeast Regional Office
National Park Service
75 Spring Street, SW
Atlanta, GA 30303

PROJECT DESCRIPTION: This discriminate model will be tested in a multimatrix reductionistic procedure in order to refine and determine salient variables effecting sightseeing preferences. At present, distinct disciplines have each separately analyzed data influencing sightseeing choices but none have done so in a unidimensional framework.

Given the previous work already done on parkways, it would be very desirable to correlate and discriminate bio-physical variables against psychometric, social psychological, and sociological vista dimensions in order to determine what are the relative weights given each factor by the public. Such information will lead to better refining a management approach to a park's sightseeing resources.

KEYWORDS: Visual preference, sightseeing, and multi-disciplinary
TITLE: Visitor Demand for Trail and Horseback Services

PARK: OBED/Big South Fork

ONGOING: 1988-89

NPS CONTACT: Frank P. Noe and William Hammitt, University of Tennessee

PRINCIPAL INVESTIGATOR: William Hammitt, Frank Noe
Southeast Regional Office
National Park Service
75 Spring Street, SW
Atlanta, GA 30303

PROJECT DESCRIPTION: This investigation is a continuing research project to determine the amount of current interest and use of the Big South Fork river and how it might be improved by knowing what the public expects regarding facilities, services, and programs.

Current focus is on the horseback rider and how suited the current facilities may be regarding their current and potential use. This is a continuing series of studies to help management develop and plan for specialized recreation use.

KEYWORDS: Horseback riding, preferences, expectations, and visitor interests, satisfaction
TITLE: Leisure Lifestyle Effects on Outdoor Recreation Choices

PARK: Regional/Service wide

ONGOING: 1988-1990

NPS CONTACT: Frank Noe, Gary Hampe, University of Wyoming

PRINCIPAL INVESTIGATOR: Frank Noe
Southeast Regional Office
National Park Service
75 Spring Street, SW
Atlanta, GA 30303

PROJECT DESCRIPTION: This project will continue to examine the relationships between lifestyle variables and leisure choices including specific park and outdoor recreation patterns of behavior. An extensive model is currently being constructed from a national data set.

At present a selection in a symposium in Policy Studies Review, a chapter in a Greenwood Press book, a presentation at the 1st International Conference on the Future of Adult Life (Leewenhorst Congress Center - April 5, 1987, a presentation at the Pacific Sociological Conference March 1, 1987, and future article in October-November, 1987 in American Demographics will highlight this continuing research effort. This research is an outgrowth and continuation of our studies into social class, leisure, and park visitation.

KEYWORDS: Policy, social class, outdoor recreation, leisure, status
TITLE: Visitor Expectations of Services, Facilities, and Programs

PARK: Blue Ridge Parkway

ONGOING: 1986-87

NPS CONTACT: Frank P. Noe

PRINCIPAL INVESTIGATOR: Center for Public and Urban Research
Georgia State University

Frank Noe, COTR
Southeast Regional Office
National Park Service
75 Spring Street, SW
Atlanta, GA 30303

PROJECT DESCRIPTION: This study investigates the expectations visitors have for a park and evaluates the level of satisfaction achieved through the programs, facilities, and services offered by the park. In addition, potential and real problem areas of conflict are also probed to determine the nature and issues surrounding any organizational breakdown.

This type of study deals with manageable situations which park staff can manipulate to improve the experience of the visiting public. Conducted over a year, it will provide a basis for a visitor resource plan. Evaluational Research approaches guide the conduct of these studies.

KEYWORDS: Evaluational research, expectations, conflict, satisfaction, and visitor use
TITLE: Evaluation of Visitor Facilities, Services

PARK: Biscayne National Park

ONGOING: 1986-87

NPS CONTACT: Frank P. Noe

PRINCIPAL INVESTIGATOR: Center for Public and Urban Research
Georgia State University

Frank Noe, COTR
Southeast Regional Office
National Park Service
75 Spring Street, SW
Atlanta, GA 30303

PROJECT DESCRIPTION: This study investigates the expectations and level of satisfaction the visitor has toward the programs, services, and facilities offered to the public. Specific areas of real and potential conflict are investigated to determine where organizational breakdowns occur.

The study focuses upon issues that are manageable in the context of park operations and subject to change. Such a study is carried out during the course of a year to obtain seasonal, monthly, and weekly variations in use. Contemporary Evaluational Research techniques are followed in conducting this project.

KEYWORDS: Expectations, satisfaction, conflict, visitor use evaluational research
TITLE: Environmental Concern and Awareness

PARK: Biscayne National Park

ONGOING: 1986-87

NPS CONTACT: Frank P. Noe

PRINCIPAL INVESTIGATOR: John Hutcheson, Center for Public and Urban Research
Georgia State University

Frank Noe, COTR
Southeast Regional Office
National Park Service
75 Spring Street, SW
Atlanta, GA 30303

PROJECT DESCRIPTION: A cross-cultural comparative study between Anglo-Nonanglo attitudes toward the use of Biscayne Bay and the natural environment is being conducted to examine how different cultural groups respond to a preservation ethic. There is some prevailing beliefs that differences in attitude exist between cultural groups leading to problems in use of the outdoors.

The analyses incorporates national and international assessments of environmental concern to better determine the extent, if any, of differences in beliefs about how to use nature, and the extent to which the environment may be exploited for personal use.

KEYWORDS: Environmental concern, attitudes and beliefs, cross-cultural comparisons
TITLE: Perceived Conflict of Visitors Toward Parks

PARK: Southeast Region

ONGOING: 1987-88

NPS CONTACT: Frank P. Noe

PRINCIPAL INVESTIGATOR: Center for Public and Urban Research
Georgia State University

Frank P. Noe, COTR
Southeast Regional Office
National Park Service
75 Spring Street, SW
Atlanta, GA 30303

PROJECT DESCRIPTION: A content analysis of case incident reports is being undertaken to provide an overview of park perceptions of conflict between visitor and staff. This is an exploratory effort to try and obtain a more universal view of where and how conflicts are being perceived.

Four areas of conflict previously identified form the basis of this research investigation. Conflict between visitor and visitor, visitor and resource, visitor and park, community and park focus the effort of the screening process.

KEYWORDS: Conflict, park problems, content analysis
TITLE: Potential Applicability of Communication Models

PARK: Regionwide and servicewide

ONGOING: 1987-88

NPS CONTACT: Frank P. Noe

PRINCIPAL INVESTIGATOR: Cary McDonald
Clemson University

Frank P. Noe
Southeast Regional Office
National Park Service
75 Spring Street, SW
Atlanta, GA 30303

PROJECT DESCRIPTION: This investigation will undertake an evaluation of current mass communication models for possible application in park settings. There has been a serious lack of concrete theoretical and empirical knowledge is absent in previous efforts at understanding channels, sources, messages, receivers, and media effects on the N-step flow of communication between park staff and the public.

Interpretation has not received the benefit of knowledge produced by the relatively new field of communication studies. This effort is a small step toward correcting that deficiency.

KEYWORDS: Communication, models, diffusion of innovation
PROJECT DESCRIPTION: This study examines the larger implications of the social class—leisure connection regarding the effects of social standing on the visiting park public. The research was invited by Sociology and Social Research as a follow-up on the original work done in the early 1960s.

This inquiry is more basic research that attempts to explain a model describing leisure and outdoor behavior which may be a spurious artifact of other more pervasive reasons for visiting a park. This research provides the baseline data to probe beyond the trends among status groups through time.

KEYWORDS: Leisure, social class, lifestyle, recreation, trends
TITLE: International Visitation to U.S. and Canadian National Parks

PARK: Servicewide

ONGOING: October 1986 - October 1987

NPS CONTACT: Dr. F. Dominic Dottavio

PRINCIPAL INVESTIGATOR: Dr. Joseph O'Leary
Visiting Professor in Parks, Recreation and Tourism Management
Clemson University
Clemson, SC 29631

PROJECT DESCRIPTION: In summer, 1986 a five-year agreement was signed between Canada and the United States which allowed the two countries to undertake joint travel market research. It was the first time such an agreement was signed. This year the United Kingdom, France, Japan, and the Federal Republic of Germany were studied. In future years approximately 14 additional countries will be studied. A substantial part of the survey instruments being used include questions on visitation to national parks. This project is being used to provide substantive input into the design of the survey instrument and to conduct analyses of information on international park visitors for policy and management implications.

KEYWORDS: Foreign visitors, international travel
PROJECT DESCRIPTION: In order to gain a better perspective of the American people's outdoor recreation pursuits, preferences, constraints, and concerns, a Nationwide Recreation Survey (NRS) was conducted in 1982 and 1983. This survey was sponsored by the Interior Department's National Park Service (NPS) in cooperation with the Forest Service, Bureau of Land Management, and Administration on Aging. A total of 5757 personal interviews were conducted by trained persons within the U.S. Bureau of Census.

Purpose: The purposes of this project were: (1) to familiarize field personnel with the NRS and possible uses, (2) to highlight examples of how data can aid the management of parks and recreation areas, (3) to show the extent and ways data from the NRS was and can be used to stimulate basic research, and (4) to aid in the planning and design of the 1987-88 NRS.

KEYWORDS: Nationwide Recreation Survey
PROJECT DESCRIPTION:

Background: Parks face many threats to their integrity. One threat is that the visiting public may misunderstand the purpose of specific park programs. To meet the need for effective public programs, parks need answers to specific visitor questions. Among these questions are: what images do the public have of a specific park and the programs offered by that park, and what is the most effective vehicle or media for delivering interpretive and management information?

Purpose: The purpose of this study was to develop and test an instrument for use by the park staff to ascertain the level of knowledge and images the visiting public has of the park. In addition, the project determined the most effective media for delivering interpretive and management information to the visiting public.

Objectives:

1. To develop a questionnaire for determining the level of visitor knowledge of Congaree National Monument.

2. To determine the types of approaches to which the visiting public may be most receptive.

3. To test the instrument for ease of presentation by park staff.

4. To recommend a program to monitor visitor receptivity toward park information programs.

KEYWORDS: Interpretation, perceptions
TITLE: Assessing the Impact of Increased Visitation to Fort Sumter National Monument

PARK: Fort Sumter National Monument

ONGOING: June 1987 - June 1988

NPS CONTACT: Mr. Brien Varnado

PRINCIPAL INVESTIGATOR: Dr. Robert H. Becker
Director, Regional Resource Development Institute
Clemson University
Clemson, SC 29631

PROJECT DESCRIPTION:

Background: Fort Sumter National Monument (FOSU) in South Carolina consists of Fort Sumter itself, the site of the first engagement of the civil War, and Fort Moultrie, scene of the patriot victory of June 28, 1776. Fort Sumter is located on a small island accessible only by boat. A concessioner, under contract to the National Park Service, operates a boat service to and from the island. In the spring of 1986, boat service from a second location was added, resulting in additional visitation to the fort. The fort has already experienced an 80 percent increase in visitation over the last five years. In order to plan for the park's future in a rational manner, management needs information on the impacts of this increased visitation to park resources and visitor enjoyment.

Purpose: The purpose of this study was to assess the effects of visitor densities on visitor experiences, interpretive programs, facility design, safety, and resource impact.

Objectives:

1. To assess how visitors to Fort Sumter impact each other.

2. To identify what aspects of the site can be modified to accommodate increased levels of visitation.

3. To identify the design capacity of the facilities on the monument and to identify the number of visitors that can be safely accommodated at any one time.

4. To determine the impact of increased numbers of visitors on the provision of quality interpretive programs and to suggest alternative methods of interpreting the fort's resources.

KEYWORDS: Crowding, density
SOUTHWEST REGION
SOCIAL SCIENCE STUDIES
FY87
TITLE: A Survey of Recreational Users at Bird Island Basin—Padre Island National Seashore

PARK: Padre Island National Seashore


NPS CONTACT: Dennis B. Fenn (CPSU/TAMU) and Jennifer Bjork (PAIS)

PRINCIPAL INVESTIGATOR: Dr. James H. Gramann
Dept. of Recreation and Parks
Texas A&M University
College Station, TX 77843-2261

PROJECT DESCRIPTION: The Bird Island Basin is a heavily visited area of Padre Island National Seashore. The area is geographically confined by the shores of Laguna Madre on one side and marshes and grassland flats on two other sides. Access is via a two lane paved road. The area receives heavy use from fisherman launching their boats into the Laguna Madre from the launch facility, campers along the shores of the Laguna, windsurfers in the Laguna, shorefishermen, picnickers and sunbathers. This diverse, heavy use in the restricted area of the Bird Island Basin creates the potential for serious conflicts. This study is designed to assess the visitors perceptions of conflict and to determine the amount and types of users currently in the Basin. This evaluation is being done on a 12-month basis by season, since Padre Island National Seashore visitor composition is known to vary seasonally. The field portion of this project got underway with the Labor Day Weekend of 1987. The final report is due January 31, 1989.

KEYWORDS: Visitor use conflicts, visitor survey, visitor characteristics
TITLE: Relations Between National Park Employees and Volunteers

PARK: Lyndon B. Johnson NHS, Hot Springs NP and Carlsbad Caverns NP

ONGOING: March 1987 - August 1987

NPS CONTACT: Dennis B. Fenn (CPSU/TAMU) and Harry O'Bryant (LYJO)

PRINCIPAL INVESTIGATOR: Dr. W. Allen Martin
Policy Studies Group
Dept. of Social Sciences
University of Texas at Tyler
Tyler, TX 75701

PROJECT DESCRIPTION: The growing use of volunteers for various functions in the National Parks is generally regarded as a positive thing for both the Service and the volunteers. However, some concern has been expressed about the potentially negative effect that volunteerism could have on employee morale if VIPs were seen as taking away career opportunities. This study was designed as a pilot survey to assess the attitudes of employees and VIPs toward volunteerism in the National Park Service. Various factors such as age, job category, sex, park location, etc. were tested against attitudes toward volunteerism. The results of this survey of employees and VIPs in the three selected Southwest Region Parks show that the VIP program is generally well liked and accepted by employees and VIPs alike. There was some variability in degree of support between various age categories and among the parks, but these differences were relatively minor. The results of this project will be published as a CPSU Technical Report in Fall, 1987.

KEYWORDS: Volunteerism, Employee attitudes, VIP
TITLE: Social Carrying Capacity, Visitor Impacts, and Monitoring Visitor Use

PARK: Whiskeytown Unit, Whiskeytown-Shasta-Trinity NRA

ONGOING: July 15, 1984 to December 30, 1987

NPS CONTACT: Gene Wehunt

PRINCIPAL INVESTIGATOR: Donald R. Field
NPS/CPSU
College of Forestry

Marty Lee and
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Dept. of Resource Recreation Mgt.

Oregon State University
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PROJECT DESCRIPTION: The two principal objectives of the study were to (1) provide managers of the Whiskeytown Unit of the Whiskeytown-Shasta-Trinity National Recreation Area with a picture of current recreation use patterns on the reservoir; and (2) describe areas of conflict among distinct user groups and between recreation activities.

The project is being completed in three phases. Phase I, completed in the summer of 1984, was a pilot study to pretest questions and determine sampling alternatives for the project. Phase II, data collection, took place during the summer of 1985. Approximately 3,200 visitors were contacted at 16 sites at Whiskeytown Lake. Phase III, data analysis, began in 1986. Three reports have been completed thus far. The first is a bibliography of water-based recreation research. The second describes the 16 research sites at Whiskeytown in terms of social, biological, and managerial characteristics. The third is a descriptive overview of the people and their recreation participation patterns at Whiskeytown. Subsequent reports will focus on social conflicts, visitor attitudes toward management issues, and interpretation at Whiskeytown.

KEYWORDS: Visitor characteristics, water-based recreation, carrying capacity
NATIONAL CAPITOL PARKS
SOCIAL SCIENCE STUDIES
FY87
TITLE: Visitor Services Report 12: Harpers Ferry National Historical Park

PARK: Harpers Ferry National Historical Park

ONGOING: July 1987 to July 1988

NPS CONTACT: Gary E. Machlis

PRINCIPAL INVESTIGATOR: Gary E. Machlis
NPS/CPSU
College of FWR
University of Idaho
Moscow, Idaho 83843

PROJECT DESCRIPTION: This study will be conducted as part of the ongoing Visitor Services Project. The purpose of this effort is to provide Harpers Ferry managers with information on visitors, their activities, and opinions about the park. Questionnaires will be distributed July 26-August 1, 1987, and a report prepared in FY87. A workshop on using the data will be conducted for park staff.

KEYWORDS: Visitor mapping, visitor services, visitor interest
DENVER SERVICE CENTER
SOCIAL SCIENCE STUDIES
FY87
TITLE: National Park Statistical Abstract

PARK: All

ONGOING: Annual

NPS CONTACT: Chief, NPS Statistical Office

PRINCIPAL INVESTIGATOR: NA

PROJECT DESCRIPTION: Monitoring public use for resource protection, planning, and management.

KEYWORDS: NPS visitation, backcountry use statistics, future park use, carrying capacity, overnight stays

TITLE: Monthly Statistical Summary and Regional Statistics

PARK: All

ONGOING: Continuous monthly data gathering

NPS CONTACT: Chief, NPS Statistical Office

PRINCIPAL INVESTIGATOR: NA

PROJECT DESCRIPTION: Monitoring public use for resource protection, planning, and management.

KEYWORDS: NPS visitation, backcountry use statistics, future park use, carrying capacity, overnight stays.
TITLE: Monthly State Report

PARK: All

ONGOING: Continuous monthly data gathering

NPS CONTACT: Chief, NPS Statistical Office

PRINCIPAL INVESTIGATOR: NA

PROJECT DESCRIPTION: Monitoring public use for resource protection, planning, and management.

KEYWORDS: NPS Visitation, backcountry use statistics, future park use, carrying capacity, overnight stays

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TITLE: Film in User Analysis

PARK: All

ONGOING: 1980

NPS CONTACT: Denis Piper, Central Team, Denver Service Center

PRINCIPAL INVESTIGATOR: NA

PROJECT DESCRIPTION: Develop a how-to manual on the use of time lapse photography to analyze public use patterns.

KEYWORDS: Behavioral analysis, time lapse photography
TITLE: Annual Information Exchange

PARK: State Parks Aggregated by State Location

ONGOING: Annual

NPS CONTACT: Jim Rigg, Texas State Parks (512) 389-4904

PRINCIPAL INVESTIGATOR: NA

PROJECT DESCRIPTION: State park statistics published by the NPS as a courtesy to the Association of State Park Directors and for the purpose of comparison with NPS data.

KEYWORDS: State Park Use

TITLE: Public Involvement in Planning

PARK: All

ONGOING: 1978

NPS CONTACT: Ken Hornback, NPS Statistical Office

PRINCIPAL INVESTIGATOR: NA

PROJECT DESCRIPTION: Manual for design of a responsive program (of communications devices) to involve the public in NPS planning and avoid litigation and staff burnout.

KEYWORDS: Public involvement, public centered management, public involvement techniques, citizen participation