

GREAT LAKES HEALTH

Outdoor Recreation and the NSRE: An Examination of Nature Based Learning Activities with a Focus on Water

The Nationwide Survey on Recreation and the Environment (NSRE) is a nationwide cooperative research effort designed to better understand recreational use and public attitudes towards the nation's natural resources. This survey presents a unique opportunity for Sea Grant to gather information to improve its understanding of how coastal resources are used for recreation. Utilizing the NSRE data, this project seeks to: (1) enhance the description of recreation participants in nature-based, water-related learning activities; (2) determine how water-related activities differ in terms of geographic, sociodemographic, and other characteristics; and (3) provide recommendations for public and private recreation organizations interested in better understanding the water-related recreation market.

BACKGROUND:

Public natural resource agencies and private firms are actively engaged in dealing with recreation participation, visitors, travel, and activities at levels never before seen in our nation's history. Data from both U.S. Forest Service as part of the RPA process and the American Recreation Coalition point out that outdoor recreation is one of the largest economic activities in the nation. When combined with travel, it is not only one of the largest activities in the United States but also in the world (World Tourism Organization 1996).

Although "folk wisdom" suggested that as U.S. citizens became older, outdoor recreation involvement would decline, the data from a broad variety of sources continues to show just the opposite - recreation is a vital, growing and changing phenomenon in this country and the world (Schuett 1995). To be able to anticipate the demands that will be placed on our nation's resources, research directed at trying to improve our understanding about the nature of outdoor recreation involvement and change is critical (Dwyer 1994).

A key area of this participation is in the area of environmental study, environmental education, visitor center use, nature study, and the nature study directed at water. A key responsibility for both the Illinois-Indiana Sea Grant College Program and the National Sea Grant Program is to improve understanding of participants in these kinds of activities so that this can be translated into improvement in the program delivery and development. In addition, research in this area can also provide new insights in modeling factors that contribute to different views of involvement (activity, activities, time, travel, expenditures, etc.) as it relates to these activities, an area of study in need of much research attention (Havitz and Dimanche 1997).

A very unique opportunity exists for Sea Grant to gather new information and provide new insights in this area.

The Nationwide Survey on Recreation and the Environment (NSRE) is a nationwide cooperative research effort designed to establish benchmark and trend data to help better understand recreation use and public attitudes toward the nation's natural resources. The 1994-95 NSRE consisted of two national telephone surveys involving 12000 and 5000 persons respectively. Information obtained included activity participation, wilderness issues, wildlife issues, awareness of public land management agencies, and freshwater based trips.

This survey is the largest and most extensive survey in the U.S. dealing with a broad variety of measures dealing with outdoor recreation. It also was built to allow comparisons with earlier national surveys (e.g. the 1982-83 Nationwide Outdoor Recreation Survey). For this reason, it represents a critical resource for examining those involvement and change issues identified by Dwyer (1994) and others as essential.

The survey has specific information related to a series of nature based and environmentally oriented learning activities. An initial review of the data shows that large number of participants engages in these activities, and that regional studies could be done across the country as well as provide national information. There is no other data that does this at this point in the United States.

Objectives

The primary objectives of this proposed study are to:

- Provide and enhance the description of recreation participants in the nature based and specifically water related learning activities;
- Segment recreation participants by applying the Three-step Procedural Model (activity packages, sociodemographic background, trip-related characteristics, environmental attitudes; and expenditure information);
- Determine how the activity segments differ in terms of geographic, sociodemographic, travel trip, expenditure, attitudes and other characteristics.
- Provide recommendations for public and private recreation organizations interested in the outdoor recreation market.

Final Report

Major goals and objectives: The primary objectives of this proposed study are to: 1) Provide and enhance the description of recreation participants in the nature based and specifically water related learning activities; 2) Segment recreation participants by applying the Three-step Procedural Model; 3) Determine how the activity segments differ in terms of geographic, socio-demographic, travel trip, attitudes and other characteristics; 4) Provide recommendations for public and private recreation organizations

Summary of progress: A report summarizing the study findings has been completed. The general profile of those people studying nature in a water-based surrounding (SNW) has also been established. A comparison among SNW participants, non-SNW participants, and the general U.S. population was also accomplished. SNW participants were further clustered into three distinct groups: Consumptive Group, Water-based Group, and Learning & Passive Group. Each group reflects an unique segment of the SNW participants in terms of socio-demographic aspect, activities preference, and level of involvement in the SNW and other learning activities.

Recommendations were also provided in this report to help natural resource agencies/public and private recreation organizers tailor their recreation opportunities and services for appropriate segments.

Narrative report: Participation in nature-based outdoor leisure represents a relatively new but fast growing segment of the recreation market. Various studies have shown that more than half of the American public enjoys observing, studying, or photographing fish, wildlife, or plants. According to the USDA Forest Service, days spent viewing fish and wildlife on Forest Service lands are expected to increase by 150% by the year 2040. With the increased public interest in the environment and nature, it is important to create strategies for developing recreational opportunities to meet the growing public demand for nature viewing/learning related experiences, particularly in areas close to water. However there are no national studies that examine this issue and try to identify the nature of involvement for this outdoor arena. The information presented in this final report has been derived from the Nationwide Survey on Recreation and the Environment (NSRE). This large national survey includes activity participation, recreation trips, barriers and constraints to recreation, benefits of participation, wilderness issues, wildlife issues, awareness of public land management agencies, and freshwater based trips. Persons reporting that they have viewed or studied nature in a water-based surrounding (SNW) were chosen for investigation. Among the 17,217 people who participated in the NSRE survey, a total of 5,054 respondents (named SNW Participants) had participated in SNW. This

represents 29.4% of the surveyed population, and translates into 58.8 million people in the U.S. adult population. Descriptive >statistics then were used to profile the sample, and multivariate statistics were employed to further understand the details of the recreation groups.

This document provides national estimates of the SNW population on:

(1) SNW Participants and their recreational participation pattern, (2) participants' involvement level in learning activities, (3) comparison of participants in learning activities by their geographic regions, and (4) comparison of participants by three identified clusters: Consumptive, Water-based, and Learning and Passive groups. The overall demographic profile of SNW Participants were characterized by being white, and younger than non-participants. About 38% of them have a college degree, and more than 40% had annual incomes of \$50,000 or more. In general, SNW participants have the highest participation rate in every recreational activity; the four most popular single activities identified by SNW Participants are: Visiting a beach (93.3%), Walking for pleasure (89.4%), Sightseeing (85.2%), and Family gathering in outdoors (84.7%). Involvement level is another dimension to study people's participation behavior. Two variables were selected to further investigate the level of SNW Participants engaging in this activity: 1) number of days for SNW, and 2) trips with SNW as primary purpose. The results indicated that the more days spent in SNW, the more SNW trips were taken as a primary purpose. In addition, the SNW Participants show higher interest level in various other learning activities. In terms of geographic regions, the Northeast Region has the highest participation rate in SNW. For a recreational activity preference, visiting a nature center appears to be the most popular learning activity for all the regions, followed by visiting a visitor center and viewing wildlife. The Northeast and Western States are two regions that reported higher participation rates in all the learning activities. SNW Participants were further clustered into three distinct groups: the Consumptive Group (30%), the Water-based Group (24%), and a Learning & Passive Group (46%). The Consumptive Group shows much higher interest only in traditional consumptive wildlife activities such as fishing and hunting. The Water-based Group is dominated by young males who are very involved in all sorts of recreational activities, especially in water-based adventure type opportunities. The Learning & Passive Group has a majority of females, is the oldest among the three groups, and is highly educated. They are interested more in learning/viewing and popular outdoor activities such as family gathering, picnicking, and walking. The participation in nature-related recreation examined in this study points out the extensive nature of involvement, but also the differences between participants not previously identified. In order to improve planning and management for these participants, provide appropriate services and facilities at the recreation areas, formulate policies, and encourage proper use of natural resources, this new information that helps to clarify the complexity of water related nature study involvement can now be incorporated into these deliberations.

Partnerships with other institutions/individuals

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[Back to Research Project List \(../research_glhealth_archive.php\)](#)

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Topics

- [AQUACULTURE \(/topic_aquaculture.php\)](/topic_aquaculture.php)
- [AQUATIC INVASIVE SPECIES \(/topic_ais.php\)](/topic_ais.php)
- [CLIMATE CHANGE \(/topic_climate.php\)](/topic_climate.php)
- [COASTAL RESTORATION \(/topic_coastal.php\)](/topic_coastal.php)
- [GREAT LAKES ECOSYSTEMS \(/topic_glecosystems.php\)](/topic_glecosystems.php)
- [GREAT LAKES LITERACY \(/education.php\)](/education.php)
- [MEDICINE DISPOSAL \(http://web.extension.illinois.edu/unusedmeds/\)](http://web.extension.illinois.edu/unusedmeds/)
- [NATURAL LAWN CARE \(/l2l.php\)](/l2l.php)
- [NUTRIENTS \(/topic_nutrients.php\)](/topic_nutrients.php)
- [RECREATION AND FISHERIES \(/topic_recreation.php\)](/topic_recreation.php)
- [RESILIENT COMMUNITIES \(/topic_resilient.php\)](/topic_resilient.php)
- [WATER RESOURCES \(/topic_water.php\)](/topic_water.php)

Products

- [AQUACULTURE \(/products_aquaculture.php\)](/products_aquaculture.php)
- [AQUATIC INVASIVE SPECIES \(/products_ais.php\)](/products_ais.php)
- [CLIMATE CHANGE \(/products_climate.php\)](/products_climate.php)
- [COASTAL RESTORATION \(/products_coastal.php\)](/products_coastal.php)
- [EDUCATION \(/products_education.php\)](/products_education.php)

- [FISH CONSUMPTION \(/products_fishcon.php\)](/products_fishcon.php)
- [GREAT LAKES HEALTH \(/products_glhealth.php\)](/products_glhealth.php)
- [LAND USE PLANNING \(/products_landuse.php\)](/products_landuse.php)
- [MEDICINE DISPOSAL \(/products_gros.php\)](/products_gros.php)
- [PROGRAM \(/products_program.php\)](/products_program.php)
- [NATURAL LAWN CARE \(/products_lawncare.php\)](/products_lawncare.php)
- [WATER RESOURCES \(/products_water.php\)](/products_water.php)

Resources

- [ABOUT US \(/about.php\)](/about.php)
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- [FUNDING \(/funding.php\)](/funding.php)
- [NEWSROOM \(/newsroom\)](/newsroom)
- [OTHER WEBSITES \(/other_sites.php\)](/other_sites.php)
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- [SOCIAL SCIENCE \(/glssn.php\)](/glssn.php)
- [TEACHERS \(/education.php\)](/education.php)

Careers

- [TEACHER TRAINING \(/education.php\)](/education.php)
- [FELLOWSHIPS \(/fellowships.php\)](/fellowships.php)
- [INTERNSHIPS \(/internship.php\)](/internship.php)
- [SOCIAL SCIENCE \(/glssn.php\)](/glssn.php)

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