

FS 97-09

December, 1997

**Profile of Participants in Fish and Wildlife Related  
Outdoor Recreational Activities in the United States**

H. Ken Cordell, R. Jeff Teasley, John C. Bergstrom,  
Jeremy Thomas, Cindy Swanson, and Barbara McDonald

**Profile of Participants in Fish and Wildlife Related  
Outdoor Recreational Activities in the United States**

H. Ken Cordell, R. Jeff Teasley, John C. Bergstrom, Jeremy Thomas,  
Cindy Swanson, and Barbara McDonald

Cordell and McDonald are Research Social Scientists and Social Scientist, respectively, Southern Research Station, USDA Forest Service, Athens, GA. Teasley, Bergstrom, and Thomas are Project Coordinator, Professor, and Graduate Research Assistant, respectively, Department of Agricultural & Applied Economics, University of Georgia, Athens, GA. Swanson is an Economist/RPA Coordinator, USDA Forest Service, Washington, DC..

This report produced in partial fulfillment of an Environmental Resources Assessment Group cooperative agreement. The Environmental Resources Assessment Group is a joint research group between the U.S.D.A. Forest Service, Outdoor Recreation and Wilderness Assessment Group and The University of Georgia, Department of Agricultural & Applied Economics. Dr. H. Ken Cordell (U.S.D.A. Forest Service) and Dr. John C. Bergstrom (University of Georgia) serve as coordinators for this group.

---

Dept. of Agricultural & Applied Economics  
College of Agricultural & Environmental Sciences  
University of Georgia

---

**Profile of Participants in Fish and Wildlife Related  
Outdoor Recreational Activities in the United States**

H. Ken Cordell, R. Jeff Teasley, John C. Bergstrom, Jeremy Thomas,  
Cindy Swanson, and Barbara McDonald

Department of Agricultural and Applied Economics

University of Georgia

Athens, GA 30602-7509

[jbergstrom@agecon.uga.edu](mailto:jbergstrom@agecon.uga.edu)

Faculty Series are circulated without formal review. The views contained in this paper are the sole responsibility of the authors.

The University of Georgia is committed to the principle of affirmative action and shall not discriminate against otherwise qualified persons on the basis of race, color, religion, national origin, sex, age physical or mental handicap, disability, or veteran's status in its recruitment, admissions, employment, facility and program accessibility, or services.

## **EXECUTIVE SUMMARY**

In 1994 and 1995, the National Survey on Recreation and the Environment (NSRE) interviewed approximately 17,000 Americans over age 15 in random-digit-dialing telephone samplings. The primary purpose of the project was to learn about the outdoor recreation activities of people over age 15 in the United States. Respondents were asked about their participation in 81 specific recreation activities.

### **Massive Participation**

Results show that 94.5 percent of Americans participated in at least one of the surveyed forms of outdoor recreation in 1994-95. That percentage translates into 189 million participants nationwide. Walking is the single most popular activity, with about 134 million participants. Other activities with over 100 million participants include visiting a beach, gathering outdoors with the family, and sightseeing.

Activities with 60 to 99 million participants include picnicking, visiting a nature center, visiting a historic site, playing yard games, attending outdoor sporting events and concerts, pool swimming, swimming in lakes, streams, rivers, etc., visiting a visitor center, and wildlife viewing. Those with 40 to 60 million participants are hiking, boating, skiing, birdwatching, freshwater and warmwater fishing, water-based nature study, running or jogging, biking, and motorboating. Activities with 25 to 40 million participants are tent camping in developed areas, visiting a prehistoric site, other wildlife viewing, volleyball, off-road driving, softball, fish viewing, golf, basketball, and fish viewing.

A wide range of activities, 48 in total, ranging from snowmobiling to windsurfing attracted less than 25 million participants. Even closed-top canoeing, the most specialized of all the activities listed, attracted almost a million participants. Thus, there are large segments of the population seeking opportunities for a wide range of recreation activities. Many activities—such as caving and mountain climbing—require specific settings while other activities can be enjoyed in more general settings.

### **Trends Since 1982-83**

Since 1982-83, the population of the nation has increased by 13.4 percent and the proportion of people participating in at least one activity has risen from 89 to 94.5 percent. As a result, numbers of participants have increased for almost all activities.

In addition, in 1994-95 new activities were added to the list because of their growing popularity. These activities included orienteering, mountain climbing, rock climbing, caving and specific kinds of nature viewing.

## **Participant Demographics**

As one might expect, participation in activities requiring vigorous exercise is considerably higher for young and middle-aged people than for those over 60. Considerable numbers of people over 60 are participants, however. Many of these older people have greater time to recreate because they are retired, and interest in maintaining physical fitness is growing for people of all ages.

For most activities, participation is low for people with family incomes below \$25,000 per year. Interestingly, it often is also low for people with incomes above \$100,000. Participation is highest for people with family incomes between \$25,000 and \$75,000 per year. It appears, therefore, that many outdoor recreation activities are enjoyed primarily by the middle class. For many across all groups, camping is a traditional family activity, and participation increases as family size increases.

## **Resource Related Activities**

Comparing participation numbers between the 1982-83 Survey on Recreation and the 1994-95 survey, it appears that many non-consumptive activities are on the rise. Notables in this category are hiking, backpacking and several of the viewing activities. Consumptive activities, such as fishing and hunting seem to be on the decline from the perspective of numbers of people engaging in the activities. However, there is substantial participation and interrelation in all resource related activities that is of interest to land management agencies.

The types of facilities at recreation sites each group represented in this report would like to see differs. Fishers and hunters would like to see less development than those who are participating in viewing activities. However, it would seem that the majority in all groups agree on the types of resource related amenities they find important at their recreation site, the presence of wildlife being the most important.

## I. FOREWORD

The 1994-95 National Survey on Recreation and the Environment (NSRE) is the latest in a series of national surveys that was started in 1960 by the Outdoor Recreation Resources Review Commission (ORRRC). Since that time, six additional surveys were conducted in 1965, 1970, 1972, 1977, 1982-83, and 1994-95. Through the years, the series has experienced changes in funding, sponsorship, methodology, and composition. In 1960, interviews were done in person in each of four seasons. In 1965, interviewing was done only in early fall. The 1970 survey instrument was a brief mailed supplement to the national fishing and hunting survey. The 1977 survey was conducted by telephone, and the 1982-83 NRS in person.

The agencies responsible for the survey have changed considerably over the years. The ORRRC, which did the first survey in 1960, recommended that subsequent surveys be completed at 5-year intervals, but consistent funding and responsibility were not created. From 1965 through 1977, the work was done by the Bureau of Outdoor Recreation and its successor, the Heritage Conservation and Recreation Service. That agency was abolished in 1981, and responsibility for the survey fell to the National Park Service in the U. S. Department of the Interior (USDI). The National Park Service coordinated the development of a consortium that included itself, the Forest Service in the U.S. Department of Agriculture (USDA), the Department of Health and Human Services' Administration on Aging, and the USDI's Bureau of Land Management.

By the late 1980's, the National Park Service could no longer assume the financial and organizational demands of a large national survey. Park Service officials asked the Forest Service to assume its coordinating role for the next National Recreation Survey. The Outdoor Recreation and Wilderness Assessment Group, a part of the research branch of the Forest Service, assumed

this role jointly with the National Oceanic and Atmospheric Administration (NOAA). The final list of sponsoring agencies for the 1994-95 effort includes the USDA Forest Service, the USDI Bureau of Land Management, the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, and the USDA's Economic Research Service. NOAA discontinued its involvement shortly before data collection began. The Sporting Goods Manufacturers Association also joined as a sponsor. In addition, valuable assistance and resources were provided by the National Park Service, the University of Georgia, and Georgia Southern University. The University of Indiana cosponsored the section on people with disabilities.

The name "National Survey on Recreation and the Environment" was coined to reflect the growing interest by Americans in their natural environment. To address that interest, the scope of the survey was expanded from that of earlier surveys to include more issues related to natural resources and the environment.

This report is one of a series that describes the results of the 1994-95 National Survey on Recreation and the Environment (NSRE). The emphasis here is on recreation activities for which public land management agencies supply various outdoor recreation opportunities in the United States.

It is amazing to see how important recreation has become and predicting demands for recreation is increasingly difficult. In the past 13 years, the number of participants in most outdoor recreation activities have increased, placing greater demands on existing recreation resources. In addition to the increase in the total number of participants, the client base is changing as well. Because of this, recreation resource managers are faced with increasingly difficult challenges of satisfying user demands.

Because outdoor activities provide a sense of vitality that may not be available indoors, we expect many people to attach increasing importance to outdoor activities. Some Americans think of themselves as tennis players, golfers, hikers, and anglers rather than as accountants, lawyers, sales agents, and computer operators.

## **Survey Methods**

The 1994-95 NSRE was conducted to discover and describe: (1) participation by Americans in outdoor recreation activities, (2) favorite activities and constraints on participation in them, (3) uses and values of wildlife and wilderness, (4) attitudes about recreation policy issues, (5) outdoor recreation patterns and needs of people with challenging and disabling conditions, and (6) recreational trips people take away from home. NSRE data will be used by a variety of public and private organizations for various purposes. The emphasis in this report is on the regional and demographic usage patterns across various outdoor recreation activities throughout the United States. This report will therefore assist public land management agencies in the provision of corresponding recreation opportunities, services, and facilities.

The NSRE survey was comprised of two random-digit-dialing (RDD) telephone surveys. In the first survey, with a target sample of 12,000 Americans above the age of 15, people were asked questions in four areas: (1) participation in activities and the numbers of days and trips spent in recreation activities, (2) the characteristics of recreation trips, (3) barriers and constraints to outdoor recreation, and (4) alternative strategies for charging user fees for recreation. The average length of interviews for this survey was 20 minutes.

In the second survey, the target sample was 5,000 Americans above age 15. People were asked about their participation in specific outdoor recreation activities and the benefits of that



participation. Each respondent also was asked questions in three of five additional randomly assigned modules: (1) favorite activities and barriers and constraints to participation in them, (2) wilderness issues, (3) wildlife issues, (4) awareness about public land management agencies, and (5) freshwater-based trips. For each of the randomly assigned modules, sample size was approximately 2,500.

In both surveys, respondents were asked if they had a disability or challenging physical condition. If the answer was positive, additional questions about accessibility of recreation areas were asked. If respondents indicated that a disabled person other than themselves lived in the home, the disabled person was contacted and interviewed at a convenient date.

Data were collected from January 1994 through May 1995. A total of 17,216 interviews were completed—12,214 for survey one and 5,002 for survey two. One goal of the first survey was to have valid samples in each of eight regions in the United States. A minimum sample size of 900 was set for regions 1 through 7 and a minimum of 400 samples was set for Alaska. The Nation's population is heavily concentrated in the Northeast and the South, so individuals in these regions were proportionately under represented in the first survey. Samples for the second survey were based on population distribution, so almost 47 percent of the samples were in the Northeast and more than 30 percent were in the South.

### **Sources of Error**

State-by-state random digit dialing was employed to sample households across the country. This approach, however, reaches a random sample of telephone numbers, rather than of people. Affluent families are virtually certain to have a telephone number and many have more than one. At the other end of the affluency scale, many low-income households may not have a

telephone. As a result, affluent people may have been over-represented somewhat in the survey sample. Demographic characteristics of the NSRE sample are compared with 1990 Census estimates for individuals 16 and above in Table 1.1. Differences in age, race, and gender were adjusted for over- or under- representation during data analysis.

**Table 1.1 – Comparison of the NSRE survey sample with 1990 Census of Population Estimates.**

<b>Category</b>	<b>NSRE Proportion of Sample</b>	<b>1990 Census of Population Proportion</b>
<b>AGE</b>		
16-24	15.1	17.2
25-29	9	11.1
30-39	23.9	22
40-49	19.6	16.5
50-59	12.8	11.5
Over 60	19.5	21.8
<b>RACE</b>		
Caucasian	85.3	81.9
African-American	6.3	11.1
American Indian	1	0.7
Asian Pacific Islander	1.5	2.8
Other	5.9	3.4
<b>GENDER</b>		
Male	42.6	48
Female	57.4	52

In viewing the results presented in this report, it is important to remember that individuals were asked about their personal participation in specific recreation activities. But they were also

asked about the characteristics of their households. Thus, when we report the relationship of family size to rate of participation, the percentages given represent the proportions of respondents in various sizes of households who participated in specific activities.

### **Activities, Singly and In Groups**

Questions were asked about participation in 68 distinct outdoor recreation activities. For some of these activities, there is a subset of more specific types of that type of activity. For instance, cross-country skiing is one of the 68 activities, however, participants were also asked what type of cross-country skiing they participated in (i.e., skiing on groomed vs. ungroomed trails, backcountry skiing, etc.).

For analysis and description of results, it was useful to place these activities into 13 groups, or activity headings. For simplicity, each activity was placed in only one category. In many cases, however, activities could have been placed in more than one category. Bicycling, for example, was classified as a fitness activity, which it is for many people. For others, however, bicycling might best be classed as an outdoor adventure activity.

Percentages in the tables were obtained using the results of the 1994-95 NSRE. Number of participants in the tables are based on those percentages and U.S. Census estimates of the number of persons in the country 16 years or older for the survey period, winter 1994 through spring 1995. National participation estimates across all activities are provided in Table 1.2. A 4-region breakdown of participation is provided in Table 1.3 for only those activities appropriate for this report. The four regions shown correspond to the four census regions by which the weighting procedures were applied by. Also of potential interest is the Forest Service 9-region participation breakdown as shown in Table 1.4.

**Table 1.2 -- Percent and number of U.S. population 16 years and older<sup>1</sup> participating in outdoor recreation by activity, 1994-95.**

Activity	Percent	Number (millions)
<b>Fitness Activities</b>	68.3	136.9
Running/Jogging	26.2	52.5
Biking	28.7	57.4
Walking	66.7	133.7
<b>Individual Sport Activities</b>	22.0	44.1
Golf	14.8	29.7
Tennis	10.6	21.2
<b>Outdoor Team Sport Activities</b>	26.4	53
Baseball	6.7	13.5
Softball	13.0	26.1
Football	6.8	13.6
Basketball	12.8	25.5
Soccer	4.7	9.5
Volleyball	14.3	28.7
Handball	5.6	11.3
<b>Outdoor Spectator Activities</b>	58.7	117.6
Concerts	34.2	68.4
Attending Sporting Events	47.5	95.2

---

<sup>1</sup> Estimated number of people 16 years and older for 1994-95 is 200,335,001.

Table 1.2 continued

Activity	Percent	Number (millions)
<b>Viewing Activities</b>	76.2	152.6
Visiting a Nature Center	46.4	93.1
Visiting a Visitor Center	34.6	69.4
Visit a Prehistoric Site	17.4	34.9
Visit a Historic Site	44.1	88.4
Bird-Watching	27.0	54.1
Wildlife Viewing	31.2	62.6
Fish Viewing	13.7	27.4
Other Wildlife Viewing	13.7	27.5
Sightseeing	56.6	113.4
Visiting a Beach or Waterside	62.1	124.4
Water-based Nature Study	27.6	55.4
<b>Snow and Ice Activities</b>	18.1	36.3
Ice Skating	5.2	10.5
Snowboarding	2.3	4.5
Sledding	10.2	20.5
Downhill Skiing	8.4	16.8
Cross-Country Skiing	3.3	6.5
Snowmobiling	3.5	7.1
<b>Camping (overall)</b>	26.3	52.8
Developed Area	20.7	41.5
Primitive Area	14.0	28
<b>Hunting</b>	9.3	18.6
Big game	7.1	14.2
Small game	6.5	13
Migratory bird	2.1	4.3
<b>Fishing</b>	28.9	57.8
Freshwater	24.4	48.8
Saltwater	9.5	19
Warmwater	20.4	40.8
Coldwater	10.4	20.8
Ice	2.0	4
Anadromous	4.52	9.1
Catch and Release	7.7	15.5

Table 1.2 continued

Activity	Percent	Number (millions)
<b>Boating</b>	29.0	58.1
Sailing	4.8	9.6
Canoeing	7.0	14.1
Kayaking	1.3	2.6
Rowing	4.2	8.4
Floating, Rafting	7.6	15.2
Motor-boating	23.5	47
Water Skiing	8.9	17.9
Jet Skiing	4.7	9.5
Sailboarding/windsurfing	1.1	2.2
<b>Swimming Activities</b>	54.2	108.6
Surfing	1.3	2.6
Swimming/pool	44.2	88.5
Swimming/lake,river,ocean	39.0	78.1
Snorkeling/Scuba	7.2	14.5
<b>Outdoor Adventure Activities</b>	36.8	73.6
Hiking	23.8	47.8
Orienteering	2.4	4.8
Backpacking	7.6	15.2
Mountain Climbing	4.5	9
Rock Climbing	3.7	7.5
Caving	4.7	9.5
Off-Road Driving	13.9	27.9
Horseback Riding	7.1	14.3
<b>Social Activities</b>	67.8	135.9
Yard Games	36.7	73.6
Picnicking	49.1	98.3
Family Gathering	61.8	123.8

**Table 1.3 -- Regional Participation in each activity in 1994-95.**

Activity	SOUTH		NORTHEAST		MIDWEST		WEST	
	Percent Participation	Number (millions)	Percent Participation	Number (millions)	Percent Participation	Number (millions)	Percent Participation	Number (millions)
<b>Viewing Activities</b>	<b>74.0</b>	<b>50.8</b>	<b>76.4</b>	<b>32.0</b>	<b>77.0</b>	<b>36.8</b>	<b>78.7</b>	<b>33.0</b>
Visiting a Nature Center	42.9	29.5	44.3	18.6	50.4	24.1	49.7	20.8
Visiting a Visitor Center	33.4	23.0	32.7	13.7	36.0	17.2	36.8	15.4
Visiting a Prehistoric Site	16.2	11.2	15.2	6.4	16.8	8.0	22.1	9.3
Visiting a Historic Site	43.6	30.0	44.8	18.8	43.9	21.0	44.7	18.7
Bird-Watching	26.2	18.0	28.0	11.7	29.2	13.9	24.8	10.4
Wildlife Viewing	28.9	19.9	30.5	12.8	34.0	16.2	32.4	13.6
Fish Viewing	13.7	9.4	13.0	5.5	12.9	6.2	15.3	6.4
Other Wildlife Viewing	11.9	8.2	14.7	6.2	13.3	6.3	16.5	6.9
Sightseeing	54.3	37.3	56.4	23.7	57.5	27.4	59.6	25.0
Visiting a Beach or Waterside	60.4	41.5	64.3	27.0	61.3	29.3	63.7	26.7
Water-based Nature Study	26.6	18.3	28.3	11.9	26.2	12.5	30.4	12.7
<b>Hunting</b>	<b>10.6</b>	<b>7.3</b>	<b>6.7</b>	<b>2.8</b>	<b>11.3</b>	<b>5.4</b>	<b>7.3</b>	<b>3.1</b>
Big game	8.0	5.5	5.7	2.4	8.3	4.0	5.6	2.3
Small game	7.9	5.4	4.4	1.8	8.0	3.8	4.3	1.8
Migratory bird	2.5	1.7	1.3	0.5	2.3	1.1	2.2	0.9
<b>Fishing</b>	<b>32.0</b>	<b>22.0</b>	<b>23.8</b>	<b>10.0</b>	<b>31.5</b>	<b>15.0</b>	<b>25.6</b>	<b>10.7</b>
Freshwater	26.2	18.0	18.4	7.7	29.4	14.0	21.1	8.8
Saltwater	13.4	9.2	11.2	4.7	3.3	1.6	8.8	3.7
Warmwater	24.3	16.7	14.7	6.2	27.2	13.0	11.0	4.6
Coldwater	8.0	5.5	11.1	4.7	8.4	4.0	15.9	6.7
Ice	0.3	0.2	1.6	0.7	5.3	2.5	1.2	0.5
Anadromous	4.0	2.8	4.7	2.0	4.0	1.9	5.8	2.4
Catch and Release	9.0	6.2	5.7	2.4	8.0	3.8	7.3	3.0

**Table 1.4 -- Forest Service Nine Region Participation, 1994-95.**

Activity	North		South		Rockies		Northern Region		South Western		Intermountain Region		Pacific Southwest Region		Pacific Northwest Region		Alaska	
	Percent	Number millions	Percent	Number millions	Percent	Number millions	Percent	Number millions	Percent	Number millions	Percent	Number millions	Percent	Number millions	Percent	Number millions	Percent	Number millions
<b>Viewing Activities</b>	76.69	70.5	73.8	46	78.88	5.3	77.77	0.9	80.62	3.3	81.62	2.4	76.53	18.9	82.26	5.1	82.03	0.3
Visiting a Nature Center	47.31	43.5	42.82	26.7	50.27	3.4	43.46	0.5	51.35	2.1	48.36	1.4	48.95	12.1	53.17	3.3	39.78	0.2
Visiting a Visitor Center	34.82	32	33.09	20.6	35.18	2.4	35.38	0.4	37.53	1.5	40.61	1.2	34.32	8.5	42.94	2.7	37.86	0.2
Visit a Prehistoric Site	16.13	14.8	16.13	10	24.31	1.6	20.5	0.2	32.64	1.3	29.5	0.9	19.04	4.7	19.43	1.2	22.75	0.1
Visit a Historic Site	44.44	40.8	43.21	26.9	47.25	3.2	47.87	0.5	42.68	1.7	46.71	1.4	43.31	10.7	47.77	3	45.79	0.2
Bird-Watching	28.49	26.2	26.36	16.4	28.36	1.9	28	0.3	28.46	1.2	25.88	0.8	21.99	5.4	28.29	1.7	41.75	0.2
Wildlife Viewing	32.45	29.8	28.61	17.8	36.68	2.5	44.4	0.5	33.16	1.4	39.02	1.1	27.53	6.8	39.25	2.4	50.99	0.2
Fish Viewing	12.98	11.9	13.81	8.6	11.98	0.8	13.42	0.2	12.07	0.5	14.58	0.4	15.44	3.8	17.63	1.1	28.84	0.1
Other Wildlife Viewing	13.99	12.9	11.88	7.4	13	0.9	10.68	0.1	13.29	0.5	14.15	0.4	16.48	4.1	19.39	1.2	15.57	0.1
Sightseeing	56.96	52.3	54.38	33.9	58.32	3.9	56.28	0.6	58.52	2.4	58.93	1.7	58.56	14.5	62.07	3.8	61.54	0.3
Visiting a Beach or Waterside	62.79	57.7	60.55	37.7	54.75	3.7	54.25	0.6	53.38	2.2	61.16	1.8	65.13	16.1	70.02	4.3	63.9	0.3
Studying Nature near Water	27.27	25.1	26.65	16.6	25.05	1.7	24.15	0.3	22.71	0.9	28.36	0.8	30.13	7.4	38.31	2.4	40.46	0.2
<b>Hunting</b>	9.11	8.4	10.51	6.5	13.03	0.9	24.22	0.3	7.89	0.3	16.03	0.5	4.1	1	10.25	0.6	18.96	0.1
Big game	7.24	6.7	7.81	4.9	8.52	0.6	23.17	0.3	6.68	0.3	13.55	0.4	2.28	0.6	8.76	0.5	17.02	0.1
Small game	6.27	5.8	7.84	4.9	9.55	0.6	12.66	0.1	5.21	0.2	8.33	0.2	3.14	0.8	4.06	0.3	9.5	0
Migratory bird	1.71	1.6	2.55	1.6	4.24	0.3	6.65	0.1	2.11	0.1	3.63	0.1	1.51	0.4	2.6	0.2	4.93	0
<b>Fishing</b>	27.89	25.6	32.38	20.2	31.39	2.1	40.13	0.5	25.95	1.1	32.3	1	22.39	5.5	28.02	1.7	53.52	0.2
Freshwater	24.12	22.2	26.67	16.6	29.39	2	37.96	0.4	24.02	1	30.5	0.9	16.55	4.1	24.26	1.5	41.81	0.2
Saltwater	7.49	6.9	13.41	8.4	2.63	0.2	2.14	0	3.34	0.1	3.34	0.1	10.2	2.5	10.55	0.7	36.6	0.2
Warmwater	21.22	19.5	24.93	15.5	19.55	1.3	19.65	0.2	17.23	0.7	13.53	0.4	10.16	2.5	9.21	0.6	6.7	0
Coldwater	10.02	9.2	7.4	4.6	15.96	1.1	25.87	0.3	14.66	0.6	26.82	0.8	11.12	2.7	21.23	1.3	33.1	0.1
Ice	3.4	3.1	0.3	0.2	4.21	0.3	10.49	0.1	0.74	0	3.98	0.1	0.18	0	0.5	0	9.67	0
Anadromous	4.62	4.2	3.68	2.3	2.96	0.2	3.23	0	2.18	0.1	4.92	0.1	4.87	1.2	11.38	0.7	34.95	0.1
Catch and Release	6.75	6.2	9.21	5.7	12.78	0.9	15.41	0.2	8.76	0.4	11.58	0.3	5.02	1.2	8.45	0.5	14.18	0.1



## **II. Fish and Wildlife Activity Group Demographics**

This report provides a descriptive statistical analysis of fishing, hunting, and non-consumptive activities associated with fish and wildlife resources in the United States. Each category is examined both nationally and by four regions--the Midwest, Northeast, South, and West.

Descriptive statistics are provided and discussed focusing on different fish and wildlife user groups including hunters, fishermen, those who hunt **and** fish, and those who fish **and** view wildlife. Demographic variables examined include race, gender, age, education, income, number of cars in household, number in household, household members age 16 and over, household members age 6 and under, number of family members in household, and employment status.

Preference and attitude variables examined include responses to questions which elicit intensity of agreement or disagreement with statements about wildlife and wilderness and the management of these resources. Also examined are the demographic, preference and attitude differences between fish and wildlife user groups across the four regions.

### **Hunting**

In this section, the term hunting refers to big game, small game, and migratory bird hunting. The data collected refers to the period of 1994-95 and includes those who said they hunted or fished in the previous twelve months.

As can be seen in Table 2.1, most of the people who hunt are Caucasian, especially in the Midwest and the Northeast. However, the hunting public in the South and the West is more representative of other races. In the South, 7.9 percent of the hunters are African American. This is not really a surprise because there is a higher percentage of African Americans in the South than

in the other regions of the country. Meanwhile in the West, there are more significant numbers of Hispanics, American Indians, and Eskimos. These numbers are also expected because of the demographics of the West itself.

The gender of hunters in all regions of the country is overwhelmingly male. As can be seen from the table, the percentage of hunters is highest in the Northeast as compared to the other regions and the nation as a whole (Table 2.1).

Hunters in the U.S. are primarily below 40, with 30-39 being the highest percentages age category across all regions. The 16-24 slot is also well represented among hunters. While the other age categories are significant, they are fairly uniformly distributed to the age of 60 after which the number of hunters drops off (Table 2.1).

As is seen in Table 2.1, hunters have primarily completed high school, with a significant percent having gone on to complete at least some college. The only discrepancy in the above is in the South where only 18 percent have completed college while over 20 percent of Southern hunters have only “some high school.” This is nearly twice the percentage found in the other regions.

Nationally, the highest percentage of hunters have incomes between \$25,000 and \$50,000. The South has the highest percentage between \$15,000 and \$25,000 and has the lowest percentage of hunters with incomes between \$25,000 and \$50,000 (Table 2.1). A significant percentage of hunters in each of the regions refused to respond to this question.

**TABLE 2.1 -- Percentage of U.S. population participating in hunting activities by race, gender, and age, 1994-95.**

	National	Midwest	Northeast	South	West
<b>Race</b>					
Caucasian	92.0	95.1	97.2	90.2	86.1
African American	4.0	2.3	0	7.9	1.1
Hispanic	1.0	0.7	0.9	0.5	2.5
American Indian	1.0	0.7	0	0	4.6
Eskimo	2.1	1.2	1.9	1.3	5.6
<b>Gender</b>					
Male	84.9	84.8	90.8	84.2	81.9
Female	15.1	15.2	9.2	15.8	18.1
<b>Age</b>					
16-24	24.3	22.1	18.0	29.6	21.3
25-29	14.3	15.5	13.7	13.3	15.5
30-39	26.0	27.3	27.8	23.9	27.0
40-49	15.9	16.5	14.1	15.8	16.4
50-59	10.7	9.3	15.3	9.4	12.7
60+	8.7	9.4	11.1	8.0	7.2
<b>Education</b>					
College graduate	21.1	21.6	23.9	18.0	25.2
Completed high school	34.2	36.6	36.1	33.7	29.3
Some college	29.8	31.3	29.6	27.7	32.1
Some high school	14.9	10.5	10.4	20.6	13.4
<b>Income</b>					
Less than 15K	4.4	4.0	3.2	4.7	5.5
15-25K	13.5	11.9	11.8	16.7	10.4
25-50K	36.9	43.2	38.3	32.4	35.0
50-75K	17.2	17.8	18.7	15.1	19.7
75-100K	6.9	6.2	4.7	7.5	8.8
Greater than 100K	4.1	3.1	2.6	5.0	5.2
Refused, Don't Know, Not Available	17.0	13.9	20.7	18.8	15.4

The number of cars in hunter households varied from 1 to 3, with most households owning at least 2. As compared to other regions, a greater percentage of households with hunters in the Northeast have only 1 car and a smaller percentage have 3 cars. This could be due to more extensive mass transportation systems in the cities of the Northeast (Table 2.2).

The number of household members includes boarders or roommates as well as family members. Most hunter households have 2 members, although 3 and 4 members combined constituted around 40 percent of all households. Within these households, most have two members 16 or over, while a quarter of them had 3 and around a fifth had only 1. Three quarters of the households had no members under the age of 6, with the rest only having 1 child under that age (Table 2.2).

Immediate family members in hunter households is spread fairly evenly across the categories. Surprisingly, household with 4 or more members represents the largest percentage at one-third of U.S. households.

Over two thirds of hunters are employed full-time nationally, although the hunting public in the South has a somewhat lower percentage of full-time workers as compared to other regions. Around 14 percent of hunters are students, 7 percent are retired, another 6 percent are homemakers, and about 2 percent work part-time. Of the student hunters, the South has 17.4 percent, at least 3 or 4 percent higher than the other regions.

**TABLE 2.2 -- Percentage of households displaying the listed household characteristics, 1994-95.**

	National	Midwest	Northeast	South	West
<b>Number of vehicles</b>					
1	12.9	11.7	18.4	12.1	12.3
2	41.8	41.6	44.6	42.6	38.0
3 or more	45.3	46.7	37.0	45.3	49.7
<b>Number in Household</b>					
1	13.2	14.2	16.0	11.3	13.5
2	28.0	31.1	24.5	26.8	28.1
3	22.9	19.4	23.6	25.4	22.7
4	21.2	20.2	20.0	23.1	19.5
5 or more	14.8	15.1	15.9	13.5	16.2
<b>Household members 16 and over</b>					
1	18.5	20.2	18.8	17.1	18.7
2	54.1	58	55	51.2	53.2
3 or more	27.4	21.8	26.2	31.7	28.2
<b>Household members 6 and under</b>					
0	18.5	20.2	18.8	17.1	18.7
1 or more	24.8	26.3	23.2	24.1	25.1
<b>Family members</b>					
1	19.0	20.2	19.0	17.0	21.6
2	25.2	28.7	22.9	24.1	23.2
3	22.1	19.4	24.3	23.8	20.7
4 or more	33.8	31.7	33.7	35.1	34.5

Table 2.2 continued

	National	Midwest	Northeast	South	West
<b>Employment Status</b>					
Full-time	71.3	72.8	72.6	68.3	74.4
Homemaker	5.6	5.9	5.6	5.0	6.6
Not Employed	0.1	0	0	0.2	0
Part-time	2.2	2.7	1.1	2.1	2.9
Retired	7.0	7.5	7.4	7.0	5.5
Student	13.7	11.0	13.3	17.4	10.6

Table 2.3 shows the percentage of participation in other outdoor activities of hunters. These are popular outdoor activities in which hunters participate in addition to hunting. Some of the more popular outdoor activities for hunters include fresh and warm water fishing, wildlife viewing, primitive camping, developed camping, nature watching, hiking, and bird watching.

TABLE 2.3 -- Percentage of hunters participating in other outdoor recreation activities, 1994-95.

<b>Activity</b>	<b>National</b>	<b>Midwest</b>	<b>Northeast</b>	<b>South</b>	<b>West</b>
Big Game Hunting	56.6	54.51	64	55.87	55.83
Small Game Hunting	51.65	52.58	49.5	55.29	43.11
Migratory Bird Hunting	17.01	14.84	14.21	17.62	21.91
Freshwater Fishing	62.27	65.91	56.29	64.01	56.58
Saltwater Fishing	20.08	7.6	21.22	28.23	22.5
Warmwater Fishing	53.71	62.3	42.03	60.72	31.28
Coldwater Fishing	30.37	24.18	41.74	22.96	49.57
Anadromous Fishing	13.76	12.48	17.41	10.49	20.78
Catch/Release Fishing	19.94	17.23	20.77	21.13	21.37
Birdwatching	29.77	34.68	33.81	25.86	26.68
Wildlife viewing	50.67	55.18	51.84	47.35	49.36
Fish viewing	21.38	21.64	21.44	21.07	21.61
Nature watching	34.78	35.17	39.95	32.18	35.82
Hiking	36.33	34	38.13	31.08	51.57
Orienteering	5.73	5.02	6.26	5.44	7.28
Backpacking	16.11	11.85	18.96	13.58	27.48
Developed Camp	36.57	36.73	33.8	34.57	43.42
Primitive Camp	37.46	34.96	31.42	35.74	51.34
Horseback Riding	14.81	11.28	8.88	17.65	19.58
Canoeing	15.66	19.05	19.74	14.17	9.52
Kayaking	2.13	2.44	0.47	2.03	3.21

## **Angling**

Angling includes freshwater, warmwater, coldwater, saltwater, anadromous, and catch and release fishing. Table 2.4 begins to describe the people who participate in these activities. As is apparent in Table 2.4, the majority of the people who fish are Caucasian. The proportion of the fishing public who are Caucasian is slightly less than the proportion of the hunting public who are Caucasian. African Americans represent the second largest portion of the fishing public in all regions, especially in the South. In the West, the American Indian and the Eskimo also represent significant portions of the total fishing public.

Nationally, the gender of people who fish is slightly above 60 percent male. This percentage is approximately the same as in the Midwest, South, and West regions. However, in the Northeast the fishing public is almost 70 percent male. The most frequent age category for anglers is between 30 and 39 years, with 16 to 24 and 40-49 following closely behind. The other age groups are represented at about the same percentage. People in the 16 to 24 age group are high school and college age, perhaps reflecting the availability of more leisure time.

Nationally, the education level of the fishing public shows that over 30 percent completed high school, another 30 percent have had some college, and over 25 percent are college graduates. The Northeast and West have a higher percentage of college graduates, while the South has a higher percentage who have only some high school. Perhaps this can be explained by more coldwater fishing in the Northeast and West in the form of fly fishing, which is more expensive to begin and learn.

The income levels of the fishing public are predominantly in the \$25,000 to \$50,000 range on a national basis. The next highest range is \$50,000 to \$75,000 followed by \$15,000 to



\$25,000. The South and West have higher percentages of anglers with incomes less than \$15,000, although both, along with the Northeast, have higher percentages of anglers with income greater than \$75,000.

**TABLE 2.4 -- Percentage of U.S. population participating in fishing activities by race, gender, and age, 1994-95.**

	National	Midwest	Northeast	South	West
<b>Race</b>					
Caucasian	87.1	91.8	89.7	84.9	82.3
African American	7.5	5.2	6.1	11.7	3.5
Hispanic	0.7	0.7	0.2	0.7	1.4
American Indian	2.2	1.2	2.0	0.9	6.7
Eskimo	2.5	1.2	2.0	1.8	6.1
<b>Gender</b>					
Male	62.3	59.3	67.5	61.5	64.0
Female	37.7	40.7	32.5	38.5	36.0
<b>Age</b>					
16-24	20.9	18.3	21.7	22.7	20.4
25-29	13.1	12.5	13.0	12.7	14.7
30-39	25.6	26.4	25.1	25.3	25.7
40-49	17.9	17.9	18.0	17.7	18.1
50-59	9.7	11.1	9.5	9.1	9.0
60+	12.8	13.9	12.6	12.4	12.0

Table 2.4 continued

	National	Midwest	Northeast	South	West
<b>Education</b>					
College graduate	25.9	24.7	29.7	23.0	30.4
Completed high school	31.5	35.2	31.1	31.9	25.5
Some college	30.3	29.8	27.0	30.6	33.2
Some high school	12.3	10.4	12.1	14.5	10.9
<b>Income</b>					
Less than 15K	6.6	5.8	4.2	7.6	7.6
15-25K	12.2	13.0	10.1	13.2	10.7
25-50K	33.2	36.6	31.3	31.8	32.7
50-75K	17.6	18.0	18.5	16.8	17.6
75-100K	7.2	6.8	7.1	7.2	7.9
More than 100K	5.4	2.8	6.1	5.6	8.0
Refuse, Don't Know, Not Available	17.9	16.9	22.7	17.8	15.5

In Table 2.5 characteristics of angler households are reported. Nationally, most angler households have at least two cars while less than 20 percent have only one. The Northeast, however, has a higher percentage of one car households with anglers and a lower percentage of three car households with anglers as compared to other regions, which could be related to a well-developed public transportation systems in the Northeast.

In most angler households across the nation, there are at least two household members. The most frequent household size is two members, followed by four and three household members. Households with only one person make up the lowest percentage of any category.

Nationally, over 50 percent of angler households have two household members 16 years old or older. Another 25 percent have three members 16 years old or older. Over 75 percent of households with anglers have no children that are 6 and under. This can probably be related to the fact that most anglers are over the age of 30, and are most likely well established with families and careers.

Nationally, the number of immediate family members who reside in households with anglers is either four or two, about 35 percent and 25 percent, respectively. The number of one and three member families are about the same at approximately 20 percent each.

The figures in Table 2.5 indicate that nearly two-thirds of the people who fish are employed full-time. Another 14 percent are homemakers and 13.7 percent are students. The Midwest and South have higher percentages of homemakers, while the Northeast and South have a greater percentage of students.

**TABLE 2.5 -- Percentage of households with Anglers displaying the listed household characteristics, 1994-95.**

	National	Midwest	Northeast	South	West
<b>Number of vehicles</b>					
1	19.2	17.3	23.9	19.1	17.9
2	44.5	45.3	45.1	45.0	41.6
3 or more	36.3	37.3	31.0	35.9	40.5
<b>Household population</b>					
1	12.7	12.5	14.8	11.6	13.5
2	28.6	30.1	22.2	30.1	28.9
3	20.9	19.3	20.2	22.5	20.4
4	22.9	22.0	25.0	23.4	21.6
5 or more	14.9	16.1	17.8	12.5	15.6
<b>Household members 16 and over</b>					
1	19.4	19.5	21.3	18.4	19.9
2	54.8	58.4	48.3	55.4	53.8
3 or more	25.8	22.1	30.5	26.2	26.3
<b>Household members 6 and under</b>					
0	76.2	74.7	78.5	76.5	75.5
1 or more	23.8	25.3	21.5	23.5	24.5
<b>Family members</b>					
1	18.4	18.0	19.2	17.1	21.2
2	25.8	27.4	20.3	27.5	25.0
3	19.9	18.5	20.0	21.4	18.7
4 or more	35.8	36.1	40.4	33.9	35.1

Table 2.5 continued

	National	Midwest	Northeast	South	West
<b>Employment Status</b>					
Full-time	61.1	61.0	59.0	61.2	63.1
Homemaker	14.0	15.6	12.1	14.4	12.4
Not Employed	0.1	0	0	0.2	0.2
Part-time	3.0	3.0	4.1	2.5	3.3
Retired	8.1	8.8	8.5	7.5	7.7
Student	13.7	11.6	16.3	14.2	13.3

In addition to fishing, the national fishing public enjoys a wide array of non-consumptive recreation, as well as other consumptive recreational activities. The most frequent activities participated in by the fishing public in addition to fishing include wildlife viewing, birdwatching, nature watching, fish viewing, camping, hiking, and hunting (Table 2.6).

**TABLE 2.6 -- Percentage of anglers participating in other outdoor recreation activities, 1994-95.**

	<b>National</b>	<b>Midwest</b>	<b>Northeast</b>	<b>South</b>	<b>West</b>
Hunting	21.98	24.93	17.25	23.45	18.81
Big Game Hunting	16.92	18.49	14.52	17.86	14.77
Small Game Hunting	15.72	18.24	12.17	17.67	11.11
Migratory Bird Hunting	5.31	5.29	3.41	5.86	5.93
Freshwater Fishing	69.64	77.1	63.94	67.63	67.9
Saltwater Fishing	27.06	8.56	38.86	34.5	28.4
Warmwater Fishing	58.17	71.12	51.14	62.88	35.56
Coldwater Fishing	29.61	22.01	38.7	20.65	51.32
Anadromous Fishing	12.92	10.54	16.43	10.36	18.63
Catch/Release Fishing	22.09	20.8	19.98	23.25	23.46
Birdwatching	34.7	37.29	35.67	34.49	30.42
Wildlife viewing	44.16	47.72	43.04	41.14	46.19
Fish viewing	25.17	23.39	26.74	24.87	26.99
Nature watching	39.83	37.58	43.97	39.07	41.04
Hiking	33.46	32.32	33.07	27.05	48.84
Orienteering	4.41	3.97	6.32	3.42	5.39
Backpacking	12.24	8.52	14.3	9.45	21.68
Developed Camp	34.91	36.49	32.47	29.93	45.08
Primitive Camp	26.23	26.24	20.69	23.49	36.84
Horseback Riding	11.69	10.39	8.86	12.84	13.73
Canoeing	13.55	17.15	17.41	12.27	7.46
Kayaking	2.19	1.87	1.91	2.07	3.16

## **Fish Viewing**

Fish viewing is a non-consumptive activity with respect to fish resources. As can be seen in Table 2.7, nationally about 85 percent of fish viewers are Caucasian. The percentage of African Americans who view fish is about the same in all regions, except the South, which has a higher percentage. In the West, the percentage of fish viewers who are American Indian and Eskimo are higher as compared to other regions. Nationally, 51.2 percent of fish viewers are female. The only region that does not really reflect this pattern is the Northeast, where 53.2 percent were male.

The most common age group found in fish viewing is that from 30 to 39, at a little more than 25 percent. The next most frequent age group is from 40-49 at about 20 percent nationally and across regions, while 60 and over make up about 15 percent nationally and in each region. The age group of 25-29 makes up the smallest percentage of fish viewers nationally and in all regions, except the West, where the age group 50-59 represents the smallest percentage.

Table 12 shows the education and income characteristics of fish viewers. Nearly two thirds of the participants in this activity have attended at least some college, with over half of these reaching college graduation. The South has the lowest college graduation level, while it leads in completing high school or attending some college. In the West, more of the fish viewers have graduated from college, while less have had at least some high school education or completed high school than in any other region.

Nationally, around a third of fish viewers fall into the \$25,000 to \$50,000 income range. The next most frequent income category found is the \$50,000 to \$75,000 range where slightly less than 20 percent are included. The West region has the greatest percentage of fish viewers with incomes above \$75,000 and below \$25,000. The Midwest, on the other hand, has the smallest

percentage of fish viewers with incomes above \$75,000, as well as the least below \$25,000. This could be due to the higher cost of living in the West, as opposed to the Midwest.



**TABLE 2.7 -- Percentage of U.S. population participating in fish viewing activities by race, gender, and age, 1994-95.**

	National	Midwest	Northeast	South	West
<b>Race</b>					
Caucasian	85.9	90.3	89.5	85.3	79.4
African American	6.9	6.0	5.9	10.3	3.4
Hispanic	0.7	1.0	0.2	0.4	1.4
American Indian	3.5	1.0	1.4	1.9	10.0
Eskimo	3.0	1.7	2.9	2.1	5.7
<b>Gender</b>					
Male	48.8	45.8	53.2	48.3	48.9
Female	51.2	54.2	46.8	51.7	51.1
<b>Age</b>					
16-24	14.9	13.3	17.4	14.5	15.0
25-29	11.3	11.3	7.9	11.4	14.0
30-39	26.8	25.6	26.4	28.5	25.8
40-49	19.9	20.0	20.5	19.0	20.9
50-59	11.4	12.9	10.1	10.9	11.6
60+	15.7	16.9	17.8	15.7	12.6
<b>Education</b>					
College graduate	33.1	31.2	34.1	28.9	40.2
Completed high school	26.4	28.6	26.2	28.8	20.8
Some college	31.8	31.7	30.4	33.2	31.2
Some high school	8.7	8.5	9.4	9.1	7.7

Table 2.7 continued

	National	Midwest	Northeast	South	West
<b>Income</b>					
Less than 15K	5.2	4.1	4.8	5.4	6.3
15-25K	10.6	9.5	9.5	11.1	11.8
25-50K	33.7	37.6	34.2	33.0	30.2
50-75K	18.2	20.8	14.5	18.1	18.9
75-100K	8.1	6.7	7.9	9.3	8.1
More than 100K	6.5	3.2	5.3	6.9	10.4
Refuse, Don't Know, No Answer	17.7	18.1	23.8	16.2	14.4

The characteristics of households with fish viewers are listed in Table 2.8. The number of cars in households with fish viewers is predominately two cars, with three cars next frequent, and one car the least frequent. The South has less households with fish viewers having one car and more households with three cars than the other regions. The Northeast has less households with fish viewers having three cars and more households with only one car, as compared to other regions.

The most frequent number of people in fishviewer households is two. Three and four persons per household are slightly less frequent. The West has the lowest percentage of four person fishviewer households and the South has the smallest percentage of five person fish viewer households. The Northeast, conversely, has a higher percentage of five person fish viewer households as compared to the other regions and the national average.

Nationally, over half of fish viewer households have two persons age 16 and over and another quarter have three age 16 and over. The Northeast has less than 50 percent with two persons age 16 and over, but have nearly 5 percent more with 3 persons age 16 and over than the other regions. All of the regions have about 80 percent of households reporting no persons age 6 and under, while the other 20 percent of households state that they have one person age 6 and under. Over 30 percent of fish viewer households report having four family members. Two, one, and three family member fish viewer households is the frequency order which follows highest to lowest.

Employment status of fish viewers is also listed in Table 2.8. Slightly less than 60 percent of fish viewers are employed full-time. About 20 percent are homemakers and around 12 percent are students. Retired, part-time employed, and not employed make up the remaining percentage of the fish viewing public. The Northeast has a slightly lower percentage of fish viewers employed full-time and as homemakers than the national average, but above the national average for those who are retired, part-time workers, and students. As compared to the national average, the West, has a higher percentage of fish viewers employed full-time, while the Midwest has a higher frequency of homemakers who are fish viewers.

**TABLE 2.8 -- Percentage of households with fish viewers displaying the listed household characteristics, 1994-95.**

	National	Midwest	Northeast	South	West
<b>Number of vehicles</b>					
1	21.9	23.2	28.6	18.0	20.7
2	42.5	40.8	42.9	43.5	42.6
3 or more	35.6	36.0	28.5	38.5	36.8
<b>Household population</b>					
1	14.7	13.6	16.8	13.7	15.8
2	31.6	33.7	26.4	33.2	31.8
3	20.5	16.6	17.7	23.2	22.9
4	18.8	22.0	19.5	18.7	15.3
5 or more	14.3	14.2	19.5	11.3	14.4
<b>Household members 16 and over</b>					
1	21.1	19.6	23	21	21.3
2	53.8	58.1	47.3	54.5	53.7
3 or more	25	22.3	29.7	24.4	25
<b>Household members 6 and under</b>					
0	79.2	77.7	78.1	81.7	77.9
1 or more	20.8	22.3	21.9	18.7	22.1
<b>Family population</b>					
1	21.1	19.9	20.7	20.2	24.0
2	28.6	29.9	25.5	30.3	27.4
3	19.3	15.4	16.7	22.2	21.2
4 or more	30.9	34.8	37.1	27.3	27.3

Table 2.8 continued

	<b>National</b>	<b>Midwest</b>	<b>Northeast</b>	<b>South</b>	<b>West</b>
<b>Employment status</b>					
Full-time	56.5	56.0	52.9	57.0	59.4
Homemaker	19.5	22.0	18.8	20.4	16.4
Not Employed	0.3	0.4	0.0	0.3	0.4
Part-time	3.8	2.3	4.5	3.6	5.0
Retired	8.2	8.6	9.9	7.4	7.5
Student	11.7	10.7	13.9	11.3	11.5

As can be seen in Table 2.9, the most popular activities fish viewers participate in other than fish viewing are other non-consumptive activities. These activities include wildlife viewing, bird watching, and nature watching. Other popular activities in which fish viewers participate include all types of fishing, hiking, and camping, especially developed camping. Many of the consumptive activities show relatively low participation rates, such as hunting and some types of fishing.

**TABLE 2.9 -- Percentage of fish viewers participating in other outdoor recreation activities, 1994-95.**

	<b>National</b>	<b>Midwest</b>	<b>Northeast</b>	<b>South</b>	<b>West</b>
Big Game Hunting	11.32	13.76	9.67	12.9	7.85
Small Game Hunting	10.07	13.75	7.68	11.61	6.01
Mig. Bird Hunting	3.19	3.24	1.47	4.32	2.86
Freshwater Fishing	43.86	54.88	35.03	46.83	35.52
Saltwater Fishing	23.3	8.3	27.24	33.19	20.55
Warmwater Fishing	37.16	50.72	28.93	44.44	19.32
Coldwater Fishing	21.15	18.11	22.46	17.66	28.33
Anadromous Fishing	11.5	10.33	13.29	9.99	13.43
Catch/Release Fishing	15.71	15.44	13.45	18.15	14.19
Birdwatching	56.7	60.36	60.43	55.99	51
Wildlife viewing	67.93	71.48	68.921	64.89	68.07
Fish viewing	100	100	100	100	100
Nature watching	64.11	60.58	66.53	63.97	65.91
Hiking	37.96	36.04	31.99	32.01	53.65
Orienteering	4.9	4.56	6.44	3.84	5.56
Backpacking	12.81	8.65	12.88	10.06	21.03
Developed Camp	32.72	33.22	27.87	30	40.22
Primitive Camp	22.79	23.03	16.63	19.89	31.89
Horseback Riding	10.59	10.41	8.11	10.3	13.26
Canoeing	13.4	17.24	15.75	12.87	8.38
Kayaking	2.41	2.71	0.94	2.17	3.66

## **Wildlife Viewing**

Wildlife viewing is another non-consumptive activity. It involves viewing wildlife in general as opposed to fish viewing or bird watching, which are more specific in nature.

Nevertheless, the results are comparable to those of fish viewers. The race, gender, and age data are shown in Table 2.10. Nationally, wildlife viewers are around 90 percent Caucasian. The Northeast and South have higher participation rates for African Americans as compared to other regions and the national average. The West has higher participation rates for Hispanics, American Indians, and Eskimos as compared to other regions and the national average. These observations are of no surprise because of the geographical and historical dispersion of these groups.

Nationally, slightly more than half of wildlife viewers are women. A similar result was observed for fish viewers. About 25 percent of wildlife viewers are age 30-39 across the nation, and another 20 percent are in the 40-49 age range. The next most frequent age is 16-24.

Nearly 40 percent of participants in wildlife viewing in the West and Northeast are college graduates, while only 30 percent in the Midwest and South are college graduates. About 30 percent of wildlife viewers in all regions have attended at least some college. Around 30 percent are at least high school graduates everywhere but the West, where there are higher rates of wildlife viewers with at least some college or college graduation. The South had the highest percentage of viewers with only some high school experience in their backgrounds.

The \$25,000 to \$50,000 income category is the most frequent for wildlife viewers nationally, at around 34 percent. The next most frequent category nationally is the \$50,000 to \$75,000 range, at about 18 percent, and then the \$15,000 to \$25,000 range at 12 percent. The Northeast has the highest percentage of wildlife viewers in the greater than \$75,000 income range.

The Midwest has the lowest percentage of wildlife viewers in the greater than \$75,000 income range and the highest percentage in the less than \$25,000 income range.



**TABLE 2.10--Percentage of U.S. population participating in wildlife viewing activities by race, gender, and age, 1994-95.**

	National	Midwest	Northeast	South	West
<b>Race</b>					
Caucasian	88.2	92.3	90.0	86.4	84.2
African American	6.4	4.6	7.1	9.8	3.1
Hispanic	0.7	0.6	0.3	0.3	1.9
American Indian	2.3	0.9	1.2	1.8	6.0
Eskimo	2.3	1.5	1.4	1.7	4.9
<b>Gender</b>					
Male	48.2	46.4	46.3	49.7	49.9
Female	51.8	53.6	53.7	50.3	50.1
<b>Age</b>					
16-24	15.8	14.9	15.4	17.3	15.2
25-29	11.4	11.4	9.9	11.7	12.5
30-39	25.7	26.8	24.5	24.5	27.1
40-49	19.9	19.6	19.9	19.7	20.5
50-59	11.9	12.5	13.1	11.8	10.2
60+	15.2	14.8	17.2	14.9	14.5
<b>Education</b>					
College graduate	33.5	29.2	36.6	31.9	38.2
Completed high school	27.2	31.4	27.3	28.7	19.8
Some college	30.9	31.0	29.0	29.7	34.1
Some high school	8.4	8.4	7.1	9.6	7.9

Table 2.10 continued

	<b>National</b>	<b>Midwest</b>	<b>Northeast</b>	<b>South</b>	<b>West</b>
<b>Income</b>					
Less than 15K	6.1	6.6	4.6	6.4	6.5
15-25K	11.6	12.5	10.8	11.4	11.4
25-50K	33.7	35.5	34.1	32.9	32.5
50-75K	17.9	16.8	18.4	18.1	18.6
75-100K	8.0	6.6	8.2	8.4	9.3
More than 100K	5.5	3.5	6.1	5.1	8.2
RDKNA	17.1	18.4	17.8	17.8	13.6

Table 2.11 lists the characteristics of households with wildlife viewers. About 43 percent of wildlife viewer households have two cars. Three cars is the next highest percentage at 36 percent, and 22 percent of wildlife viewer households had only one car. The only exception to this was the Northeast, where nearly as many households with wildlife viewers have one car as have three cars.

A third of wildlife viewer households have two persons in their household, and about 20 percent have three person households. Four person households also represent about 20 percent of the households with wildlife viewers throughout the nation. The Northeast and Midwest have higher percentages of five person households. The Northeast and West have higher rates of one person households, while the Northeast has the lowest percentage of two person households with wildlife viewers in the nation.

Over half of the wildlife viewer households have at least two persons in the age 16 and over category. The Northeast has the lowest percentage of households in this group, but has the

greatest frequency of households having three members 16 and over. Nearly 80 percent of wildlife viewer households have no members age 6 and under. The number of immediate family members in households with wildlife viewers is generally four, two, one, and three, from the highest percentage to the lowest. The South has slightly more households with wildlife viewers with two family members as compared to four family member households. The West has a higher percentage of households with wildlife viewers with only one immediate family member as compared to other regions.

The employment of the wildlife viewing population across the nation is just under 60 percent full-time workers and around 19 percent homemakers. The Midwest has the highest percentage of homemakers who are wildlife viewers and the West has the lowest. The Northeast has the highest percentage of retired wildlife viewers.

**TABLE 2.11 -- Percentage of households with wildlife viewers displaying the listed household characteristics, 1994-95.**

	National	Midwest	Northeast	South	West
<b>Number of vehicles</b>					
1	21.7	20.1	27.3	20.1	20.9
2	42.9	43.1	41.7	44.4	41.4
3 or more	35.5	36.8	30.9	35.6	37.7
<b>Number in household</b>					
1	13.7	12.7	15.4	12.0	16.0
2	33.3	34.8	29.0	35.2	32.6
3	20.0	18.2	19.6	21.4	20.2
4	19.7	19.5	20.2	20.5	18.4
5 or more	13.3	14.9	15.8	10.9	12.8
<b>Household members 16 and over</b>					
1	20.3	19.7	21.2	19	22.1
2	55.5	58.4	50.1	57	54.7
3 or more	24.2	22	28.8	24	23.2
<b>Household members 6 and under</b>					
0	78.3	77.0	80.0	78.2	78.7
1 or more	21.7	23.0	20.0	21.8	21.3
<b>Family population</b>					
1	20.1	19.2	19.8	18.1	24.3
2	30.1	30.6	27.9	32.5	27.9
3	18.8	17.0	18.1	20.6	19.2
4 or more	31.0	33.2	34.3	28.8	28.6

Table 2.11 continued

	<b>National</b>	<b>Midwest</b>	<b>Northeast</b>	<b>South</b>	<b>West</b>
<b>Employment</b>					
Full-time	57.7	56.2	55.5	58.3	60.8
Homemaker	19.3	22.3	18.9	18.9	16.6
Not Employed	0.2	0.1	0.0	0.2	0.3
Part-time	3.3	3.2	4.0	2.6	4.0
Retired	8.6	7.6	11.3	8.4	7.7
Student	10.9	10.6	10.3	11.6	10.6

In Table 2.12, other outdoor activities in which wildlife viewers participate are listed.

Wildlife viewers appear to participate in more non-consumptive outdoor activities than consumptive ones. Other non-consumptive viewing activities in which wildlife viewers participate include bird watching, fish viewing, and nature watching. Other activities enjoyed by wildlife viewers include hiking, camping (developed and primitive), freshwater and warmwater fishing.

**TABLE 2.12 -- Percentage of wildlife viewers participating in other outdoor recreation activities, 1994-95.**

	National	Midwest	Northeast	South	West
Big Game Hunting	12.23	14.2	9.91	13.71	9.67
Small Game Hunting	10.51	13.26	8.05	12.72	6
Migratory Bird Hunting	3.66	4	2.37	4.5	3.16
Freshwater Fishing	35.91	42.19	26.89	38.94	31.69
Saltwater Fishing	13.17	4.79	14.68	20.24	11.83
Warmwater Fishing	30.22	40.06	21.72	36.52	16.15
Coldwater Fishing	16.22	12.85	16.68	12.61	25.4
Anadromous Fishing	7.27	6.84	7.51	5.97	9.5
Catch/Release Fishing	11.88	11.28	9.63	13.98	11.54
Birdwatching	57.86	59.28	60.95	58.77	51.92
Wildlife viewing	100	100	100	100	100
Fish viewing	29.79	27.16	29.48	30.67	32.09
Nature watching	50	47.54	51.45	49.67	52.29
Hiking	39.44	36.88	36.16	33.19	54.88
Orienteering	4.73	4.12	5.71	4.49	4.99
Backpacking	13.12	9.52	13.1	10.34	21.79
Developed Camp	32.23	33.21	27.33	28.34	41.19
Primitive Camp	23.24	22.3	17.58	20.31	33.87
Horseback Riding	11.45	10.73	8.75	12.69	12.94
Canoeing	12.52	15.64	15.63	11.67	7.07
Kayaking	2.22	1.69	2.05	2.03	3.3

### III. Wildlife and Wilderness Attitudes

This section discusses the wildlife and wilderness attitudes of wildlife and fish viewers, hunters and anglers. The contributions of information sources and facilities to the overall satisfaction and enjoyment of fish and wildlife viewing are presented first. Brochures/maps and visitor centers are examples of information sources and facilities. Important goals and attributes of wilderness management are discussed next. Finally, reasons for preserving wilderness and wildlife are presented. This is done nationally for each category (hunters, etc.), and for the four subsections of the country, the Midwest, Northeast, South, and the West.

#### Wildlife and fish viewers

Most wildlife and fish viewers agree that information sources and facilities would make their experiences better (Table 3.1). Visitor centers and guided tours seem to be the least popular choices, although a substantial majority also agree that these information sources and facilities would improve the wilderness experience.

**TABLE 3.1 -- Percentage of agreement by wildlife and fish viewers to whether the following information sources and facilities would improve the wilderness experience, 1994-95.**

	Agree	Disagree	Don't Know	Refuse to Answer
Visitor Center	75.9	20.8	0.4	2.9
Brochures or Maps	85	12.7	0.4	1.9
Guided Tours	63.7	33.7	0.4	2.2
Maintained Trails	86.1	11.3	0.6	2
Signs or Displays	85.2	12.9	0.6	1.4

Respondents' level of agreement with respect to the importance of certain aspects of wildlife or wilderness area management are presented in Table 3.2. A large majority of respondents at least agreed with the importance of all aspects. However, about one quarter of respondents disagreed that interpretive signs are important aspects of wildlife or wilderness area management. Also, nearly 20 percent disagreed with contributing their own time, money, or both, to an organization that works to improve the quality of wetlands, streams, and lakes.

**TABLE 3.2 -- Percentage of wildlife and fish viewers stating different levels of agreement with respect to the importance of different aspects of wildlife and wilderness management, 1994-95.**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Refuse Answer</b>	<b>Don't Know</b>
Wildlife important to site	29.3	54.5	12.9	1.4	0.3	1.5
Contribute time & money	15.5	58.4	19.2	1.7	0.8	4.4
Interpretive signs important	9.8	58.7	25.5	1.1	0.7	4.3
Wildlife encounter satisfies	33	58.8	5.2	0.7	0.6	1.6

Wilderness areas provide different values for different people. These are represented in Table 3.3 and are ranked as to their importance for reasons to preserve wilderness and primitive areas. The reasons most frequently ranked as 'extremely important' are protecting water, protecting air, protecting habitat, protecting rare and endangered species, and protecting the wilderness area for future generations to enjoy. Some of the reasons ranked less important are providing recreation, spiritual inspiration, saving for scientific study, and providing income for the



tourism industry. These reasons all received less than 50 percent in the extremely and very important categories.

**TABLE 3.3 -- Percentage of wildlife and fish viewers ranking the importance of values as reasons to preserve wilderness and primitive areas, 1994-95.**

	<b>Extremely Important</b>	<b>Very Important</b>	<b>Important</b>	<b>Slightly Important</b>	<b>Not Important</b>	<b>Refuse to Answer</b>	<b>Don't Know</b>
Protect water	47.1	31.6	18.3	0.8	0.9	0.4	1.1
Protect for future	42.4	34.6	19.8	1.3	0.5	0.4	1.1
Provide recreation	19.1	29.9	39.5	7.2	2.8	0.4	1.1
Protect habitat	45	33.9	17.5	1.2	1	0.4	1
Provide inspiration	20.3	22.5	37.4	10.1	7	0.5	2.1
Science	18	27.9	38.1	8.9	4.8	0.4	1.9
Preserve uniqueness	33.7	29.9	27.6	4	2.2	0.4	2.1
Future options	29.3	30.5	31.7	3.7	3	0.4	1.5
Protect air	47.7	30	18.3	1.3	1	0.4	1.2
Provide tourism income	7.7	14.5	34.8	18	21.7	0.4	2.8
Rare & endangered species	43.3	29.7	20.2	2.6	2	0.4	1.8
Scenic beauty	29.8	29.9	33.6	3.7	1.3	0.4	1.3
To know it exists	29.4	27.1	36.2	4	1.5	0.4	1.3

### **Hunters**

Table 3.4 shows whether hunters believe the listed information sources and facilities would provide them with better experiences in wilderness areas. Most agree that these would make their

experiences more enjoyable. However, visitor centers and guided tours received only a slight majority of agree responses, while the others received about 80 percent agreement.

**TABLE 3.4 -- Percentage of agreement by hunters as to whether the following information sources and facilities would improve wilderness experience, 1994-95.**

	Agree	Disagree	Don't Know	Refuse to Answer
Visitor Center	58.5	39.6	0.3	1.7
Brochures or Maps	81.2	16.9	0.3	1.6
Guided Tours	55.6	42.5	0.3	1.6
Maintained Trails	83	15	1.1	0.9
Signs or Displays	78.7	19.3	1.1	0.9

Table 3.5 reports what is important to hunters in wildlife and wilderness management. The existence of wildlife in an area and actually having an encounter with wildlife during the trip had the most 'strongly agree' responses. Contributing time and money to aid in the management process is not as important as the previous management aspects, but was still important to respondents with 80 percent indicating some level of support for contributing time and money. Provision of interpretive signs had the least positive effect on the wilderness experience of hunters, with about 33 percent disagreeing to some degree.

**TABLE 3.5 -- Percentage of hunters stating different levels of agreement with respect to the importance of different aspects of wildlife and wilderness management, 1994-95.**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Refuse Answer</b>	<b>Don't Know</b>
Wildlife important to site	37.4	52	9.1	0.4	0.1	0.9
Contribute time & money	17.7	62.1	13.9	1.6	0.1	4.6
Interpretive signs important	8.6	55.4	31.5	1.9	0.4	2.1
Wildlife encounter satisfies	41	55.5	1.9	0.4	0.4	0.8

The most important reasons expressed by hunters for preserving wilderness areas are to protect water quality, protect use for future generations, provide habitat, protect rare and endangered species, and to protect air quality. Reasons that hunters seemed less inclined to deem as most important for preserving wilderness areas included spiritual inspiration, scientific study, and providing income for the tourism industry. These all received less than 50 percent in the extremely and very important categories (Table 3.6).

**TABLE 3.6 -- Percentage of hunters ranking the importance of values as reasons to preserve wilderness and primitive areas, 1994-95.**

	<b>Extremely Important</b>	<b>Very Important</b>	<b>Important</b>	<b>Slightly Important</b>	<b>Not Important</b>	<b>Refuse to Answer</b>	<b>Don't Know</b>
Protect water	43	35.6	18.7	1.1	0.5	0.4	0.7
Protect for future	40.5	37.4	20.5	1.3	0.2	0.1	0
Provide recreation	22.4	33.2	36.9	5.3	1.7	0.1	0.3
Protect habitat	44.9	32.3	20.6	0.6	0.8	0.1	0.6
Provide inspiration	19.4	19.1	37.2	14.2	8.5	0.1	1.3
Science	18.6	21.5	40.4	11.4	6.2	0.1	1.7
Preserve uniqueness	29.8	29	32.2	3.8	3.3	0.1	1.8
Future options	34.6	32.4	28.1	1.6	2.1	0.1	1
Protect air	44.3	29	23.2	1.7	1.3	0.1	0.3
Provide tourism income	10.7	15.6	36	13.9	22.3	0.1	1.3
Rare & endangered species	41.3	29.3	23.2	2.8	1.6	0.1	1.5
Scenic beauty	29	27.4	35.9	4.8	1.5	0.1	1.3
To know it exists	29.8	26.2	37.7	4.6	1	0.1	0.6

### **Anglers**

The majority of anglers agree that visitor centers, brochures or maps, maintained trails, and signs or displays would make their wilderness experiences more meaningful and enjoyable. Guided tours are not as popular among anglers as compared to other user groups, but still about 62 percent agree that guided tours would improve their wilderness experiences (Table 3.7).

**TABLE 3.7 -- Percentage of agreement by anglers to whether the following information sources and facilities would improve wilderness experiences, 1994-95.**

	Agree	Disagree	Don't Know	Refuse to Answer
Visitor Center	75.1	22.5	0.5	1.9
Brochures or Maps	86.4	11.6	0.5	1.5
Guided Tours	62.3	35.9	0.5	1.4
Maintained Trails	87	11.2	0.8	1
Signs or Displays	86.2	12.4	0.8	0.6

Table 3.8 reports rates of agreement or disagreement among anglers with respect to certain aspects of wildlife and wilderness management. Wildlife is important to target in management especially as a means of increasing the satisfaction of wildlife encounters by anglers to wilderness areas. Interpretive signs that explain any questions visitors may have are ranked least important in management, as are contributions of time and money to facilitate management.

**TABLE 3.8 -- Percentage of anglers stating different levels of agreement with respect to the importance of different aspects of wildlife and wilderness management, 1994-95.**

	Strongly Agree	Agree	Disagree	Strongly Disagree	Refuse Answer	Don't Know
Wildlife important to site	33.5	54	10.1	0.8	0.3	1.4
Contribute time & money	17	60.3	16.6	1.5	0.6	4
Interpretive signs important	10	59	25.1	1.5	0.7	3.6
Wildlife encounter satisfies	35.5	59.1	3	0.8	0.7	0.9

Table 3.9 reports how anglers rank reasons for preserving wilderness areas. Anglers report that some of the more important reasons to preserve wilderness areas are to protect water quality, protect for future generations' use, provide habitat, protect air quality, and preserve rare and endangered species. Some of the reasons ranked less important include providing spiritual inspiration, protecting for future scientific study, and providing income for the tourism industry.

**TABLE 3.9 -- Percentage of anglers ranking the importance of values as reasons to preserve wilderness and primitive areas, 1994-95.**

	Extremely Important	Very Important	Important	Slightly Important	Not Important	Refuse to Answer	Don't Know
Protect water	47.4	31.7	18.4	0.8	0.5	0.4	0.7
Protect for future	41.5	39.2	17.6	0.8	0.3	0.4	0.3
Provide recreation	21.4	32	37.4	5.9	2.4	0.4	0.6
Protect habitat	47.5	33.2	16.9	0.8	0.8	0.5	0.3
Provide inspiration	21.1	22	36.3	11.6	6.9	0.7	1.2
Science	18.1	27.3	37.5	9.6	4.9	0.4	2.2
Preserve uniqueness	33.9	30.1	27.5	3.6	2.2	0.4	2.2
Future options	32.8	32.8	28.4	2.7	2	0.4	1.1
Protect air	47.5	31.5	17.7	1.5	0.9	0.4	0.5
Provide tourism income	9.6	15	34.6	17.1	21.9	0.4	1.3
Rare & endangered species	44.2	31.5	19.1	2.2	1.6	0.4	1.1
Scenic beauty	31.4	30.3	32.7	3.2	1	0.4	0.8
To know it exists	30.8	29	34.7	2.9	1.4	0.4	0.8

#### **IV. Regional Analysis of Wildlife and Wilderness Attitudes**

Many of the national attitudes presented in the previous sections are reflected in each region. The tables that follow (Tables 4.1 - 4.36) show the regional information about wilderness and wildlife attitudes by user group. Some of the differences seen between regions and in the nation as a whole are highlighted here.

In the Midwest, hunters rank reasons wildlife and wilderness should be managed or preserved ‘very important’ more often than ‘extremely important.’ This differs from the national responses, as well as the other regions. The Northeast contains a higher frequency of hunters who believe that guided tours as part of management would increase the enjoyment of their wilderness experiences. Many more respondents in the Northeast believe contributing time and money is important to management as compared to national or other regional respondents. In the South, hunters are less likely to ‘strongly agree’ that wildlife, contributing time and money, and wildlife encounters are important aspects of management that improve their enjoyment of wilderness experiences. In the West, wildlife and fish viewers are less likely to ‘strongly agree’ that wildlife and wildlife encounters are important aspects of management.

Hunters in the West disagree as a majority that visitor centers and guided tours increase their wilderness experience. For Western hunters, wildlife and wildlife encounters are very important to their site experience. Also in the West, more disagree with the importance of interpretive signs. There are not as many ‘extremely important’ responses to the rankings of values of preserving wilderness and primitive areas in the West region. Instead, there are more ‘very important’ responses. The anglers in the West have a higher frequency of ‘strongly agree’



responses on the presence of wildlife on site and actually having wildlife encounters than in other regions or the nation.

## Wildlife and Wilderness Attitudes in the Midwest

### Wildlife and Fish Viewers - Midwest

**TABLE 4.1 -- Percentage of agreement by wildlife and fish viewers to whether the following information sources and facilities would improve wilderness experiences, MW 1994-95.**

	Agree	Disagree	Don't Know	Refuse to Answer
Visitor Center	74.2	22.5	0	3.3
Brochures or Maps	84.3	13.7	0	2
Guided Tours	62.2	35.7	0	2
Maintained Trails	88.1	9.2	0.7	2.1
Signs or Displays	81.5	16.7	0.7	1.1

**TABLE 4.2 -- Percentage of wildlife and fish viewers stating different levels of agreement with respect to the importance of different aspects of wildlife management, MW 1994-95.**

	Strongly Agree	Agree	Disagree	Strongly Disagree	Refuse Answer	Don't Know
Wildlife important to site	28.4	56.4	12.9	0.9	0.3	1.1
Contribute time & money	13.7	61.2	18.9	1.4	0.5	4.3
Interpretive signs important	8.1	59.3	26.9	0.5	1	4.2
Wildlife encounter satisfies	33.7	58.8	5.1	0.5	0.8	1.2

**TABLE 4.3 -- Percentage of wildlife and fish viewers ranking the importance of values as reasons to preserve wilderness and primitive areas, 1994-95.**

	<b>Extremely Important</b>	<b>Very Important</b>	<b>Important</b>	<b>Slightly Important</b>	<b>Not Important</b>	<b>Refuse to Answer</b>	<b>Don't Know</b>
Protect water	43.9	31.5	21.5	1	0.9	0.3	1
Protect for future	39.7	38.6	20.1	0.7	0	0.3	0.7
Provide recreation	21	30.5	39.4	7.1	0.6	0.3	1.1
Protect habitat	43.3	35.1	18.1	1.7	0	0.3	1.5
Provide inspiration	20.7	23.2	38.4	11	4.4	0.7	1.6
Science	13.6	26.3	42.2	10.8	3.5	0.5	3.1
Preserve uniqueness	28.8	31.8	29.7	4.5	2.2	0.3	2.8
Future options	26	32.7	33.6	2.8	2.7	0.3	1.9
Protect air	45.6	30	19.6	2	0.7	0.3	1.8
Provide tourism income	8	15.1	37.4	17.2	19	0.3	3.1
Rare & endangered species	41.4	32.2	21	3	1	0.3	1.2
Scenic beauty	27.8	32.4	33	4.1	0.9	0.3	1.5
To know it exists	27.1	27	39.6	3.2	1.8	0.3	0.9

Hunters - Midwest

**TABLE 4.4 -- Percentage of agreement by hunters as to whether the following information sources and facilities would improve wilderness experiences, MW 1994-95.**

	Agree	Disagree	Don't Know	Refuse to Answer
Visitor Center	63.3	34.5	0	2.2
Brochures or Maps	80.1	17.9	0	2
Guided Tours	54.7	43.4	0	2
Maintained Trails	84.3	13.4	2.4	0
Signs or Displays	78.7	18.9	2.4	0

**TABLE 4.5 -- Percentage of hunters stating different levels of agreement with respect to the importance of different aspects of wildlife management, MW 1994-95.**

	Strongly Agree	Agree	Disagree	Strongly Disagree	Refuse Answer	Don't Know
Wildlife important to site	44.8	49.4	4.7	0	0	1.1
Contribute time & money	17.9	65.7	10.2	0	0	5
Interpretive signs important	5.2	63.7	28.6	0.5	1	1.1
Wildlife encounter satisfies	47.3	51.3	1.4	0	0	0

**TABLE 4.6 -- Percentage of hunters ranking the importance of values as reasons to preserve wilderness and primitive areas, MW 1994-95.**

	<b>Extremely Important</b>	<b>Very Important</b>	<b>Important</b>	<b>Slightly Important</b>	<b>Not Important</b>	<b>Refuse to Answer</b>	<b>Don't Know</b>
Protect water	38.3	43.6	17.4	0	0.8	0	0
Protect for future	36.2	48.9	15	0	0	0	0
Provide recreation	18.4	34.1	36.5	8.2	1.7	0	1.1
Protect habitat	48.4	38.3	11.5	1.2	0	0	0.6
Provide inspiration	18	18.8	42.5	16.2	3.4	0	1.1
Science	15.1	26	37.3	15.9	4.6	0	1.1
Preserve uniqueness	31.3	38.8	26.4	3.5	0	0	0
Future options	30.2	35.3	31.6	2.2	0.8	0	0
Protect air	43.5	37.7	14.5	2.3	1	0	1.1
Provide tourism income	6.1	15.6	39.1	12.2	24.8	0	2.2
Rare & endangered species	48.2	29.9	20.7	1.2	0	0	0
Scenic beauty	30.7	29	35.1	4	1.2	0	0
To know it exists	30.6	29.1	35.2	4.1	1	0	0

Anglers - Midwest

**TABLE 4.7 -- Percentage of agreement by anglers as to whether the following information sources and facilities would improve wilderness experiences, MW 1994-95.**

	Agree	Disagree	Don't Know	Refuse to Answer
Visitor Center	73.4	22.8	0	3.8
Brochures or Maps	84.6	12.9	0	2.5
Guided Tours	58	39.5	0	2.5
Maintained Trails	83.9	13.3	1.1	1.6
Signs or Displays	80.8	17.1	1.1	1

**TABLE 4.8 -- Percentage of anglers stating different levels of agreement with respect as to the importance of different aspects of wildlife management, MW 1994-95.**

	Strongly Agree	Agree	Disagree	Strongly Disagree	Refuse Answer	Don't Know
Wildlife important to site	35.2	51	9.5	0.9	1	2.3
Contribute time & money	18.3	60	15.3	0.9	1.5	4
Interpretive signs important	8	58	28.4	0.7	1.9	3
Wildlife encounter satisfies	40.1	54.7	2.4	0.5	1.5	0.9

**TABLE 4.9 -- Percentage of anglers ranking the importance of values as reasons to preserve wilderness and primitive areas, MW 1994-95.**

	<b>Extremely Important</b>	<b>Very Important</b>	<b>Important</b>	<b>Slightly Important</b>	<b>Not Important</b>	<b>Refuse to Answer</b>	<b>Don't Know</b>
Protect water	44.7	34.5	18.2	0.4	0.8	1	0.5
Protect for future	39.8	44.1	14.4	0.4	0.4	1	0
Provide recreation	23	29.3	38.5	6.3	1.5	1	0.4
Protect habitat	47.1	35.4	14.1	1.8	0.3	1	0.2
Provide inspiration	20.8	21.3	35.6	14.5	5.2	1.8	0.8
Science	16.6	24.8	38.2	10.9	5.7	1	2.7
Preserve uniqueness	31.7	32.1	26.2	4.4	2.1	1	2.4
Future options	31.8	34.1	28.9	1.1	2.4	1	0.8
Protect air	44	33.2	17.3	2.8	1.1	1	0.4
Provide tourism income	9	16	34.5	17.5	21.6	1	0.4
Rare & endangered species	44.8	33.4	17.5	2	0.9	1	0.4
Scenic beauty	30	33.6	30.3	4	0.5	1	0.5
To know it exists	31	30.5	33.5	2.2	1.8	1	0

## Wildlife and Wilderness Attitudes in the Northeast

### Wildlife and Fish Viewers - Northeast

**TABLE 4.10 -- Percentage of agreement by wildlife and fish viewers as to whether the following information sources and facilities would improve wilderness experiences, NE 1994-95.**

	Agree	Disagree	Don't Know	Refuse to Answer
Visitor Center	75.3	21	0.8	2.9
Brochures or Maps	79.2	19.3	0.8	0.7
Guided Tours	61.6	35.5	0.8	2.1
Maintained Trails	78.5	18.2	0.8	2.4
Signs or Displays	79.8	18.6	0.8	0.7

**TABLE 4.11 -- Percentage of wildlife and fish viewers stating different levels of agreement with respect to the importance of different aspects of wildlife management, NE 1994-95.**

	Strongly Agree	Agree	Disagree	Strongly Disagree	Refuse Answer	Don't Know
Wildlife important to site	27.7	54.1	14.5	1.5	0.5	1.6
Contribute time & money	18.5	53	22.6	2.2	0.7	2.9
Interpretive signs important	10.7	57.8	26.7	0.6	0.4	3.8
Wildlife encounter satisfies	30.6	60	6.6	0.7	0.5	1.6



**TABLE 4.12 -- Percentage of wildlife and fish viewers ranking the importance of values as reasons to preserve wilderness and primitive areas, NE 1994-95.**

	<b>Extremely Important</b>	<b>Very Important</b>	<b>Important</b>	<b>Slightly Important</b>	<b>Not Important</b>	<b>Refuse to Answer</b>	<b>Don't Know</b>
Protect water	48.1	32.9	16.2	0.3	1.8	0.6	0
Protect for future	42.8	31.2	20.9	3	0.5	0.6	1.1
Provide recreation	16.7	29	42.3	7.9	3.6	0.6	0
Protect habitat	45.9	32.8	17.8	1.9	0.9	0.8	0
Provide inspiration	15.7	22.1	41.1	10.5	8.5	0.6	1.5
Science	18.8	27.1	38.3	8.8	5.7	0.6	0.6
Preserve uniqueness	36.6	28	27.7	4.1	1.7	0.6	1.3
Future options	25.4	25.8	35.6	7.9	4	0.6	0.7
Protect air	48.2	29	19.4	1.4	1.1	0.6	0.4
Provide tourism income	5.9	15.9	36.8	15.1	23.8	0.6	2
Rare & endangered species	45.3	28.9	19.7	2.8	1.8	0.6	1
Scenic beauty	30.1	29.8	34.3	3.8	0.8	0.6	0.6
To know it exists	26.3	27.6	38.5	4.3	2.4	0.6	0.4

Hunters - Northeast

**TABLE 4.13 -- Percentage of agreement by hunters to whether the following information sources and facilities would improve wilderness experiences, NE 1994-95.**

	Agree	Disagree	Don't Know	Refuse to Answer
Visitor Center	57.8	42.2	0	0
Brochures or Maps	77	23	0	0
Guided Tours	68.7	31.3	0	0
Maintained Trails	93	7	0	0
Signs or Displays	74.3	25.7	0	0

**TABLE 4.14 -- Percentage of hunters stating different levels of agreement with respect to the importance of different aspects of wildlife management, NE 1994-95.**

	Strongly Agree	Agree	Disagree	Strongly Disagree	Refuse Answer	Don't Know
Wildlife important to site	36.7	43	16.8	0	0	3.4
Contribute time & money	45.5	23.5	25.5	0	0	5.5
Interpretive signs important	12	54.8	29.5	3.7	0	0
Wildlife encounter satisfies	39.4	50.3	7.2	0	3.1	0

**TABLE 4.15 -- Percentage of hunters ranking of the importance of values as reasons to preserve wilderness and primitive areas, NE 1994-95.**

	<b>Extremely Important</b>	<b>Very Important</b>	<b>Important</b>	<b>Slightly Important</b>	<b>Not Important</b>	<b>Refuse to Answer</b>	<b>Don't Know</b>
Protect water	45	38.9	16	0	0	0	0
Protect for future	35.5	36.7	24.4	3.4	0	0	0
Provide recreation	25.7	35.1	31.9	4.5	2.8	0	0
Protect habitat	48.4	28.3	21.7	2.8	0	0	4
Provide inspiration	27.1	6.88	37.7	13.3	15.1	0	0
Science	20.7	19.7	35.4	10	14.2	0	0
Preserve uniqueness	39.6	13.8	33.5	4	8.9	0	0
Future options	20.9	46.1	29.3	0	3.7	0	0
Protect air	50.1	18.9	30.9	0	0	0	0
Provide tourism income	14.3	18.9	20.3	20.4	26.2	0	0
Rare & endangered species	40	31.6	21.1	4	0	0	3.4
Scenic beauty	34.8	32.5	25.8	6.8	0	0	0
To know it exists	28.3	27.8	29.4	10.7	3.7	0	0

Anglers - Northeast

**TABLE 4.16--Percentage of agreement by anglers to whether the following information sources and facilities would improve wilderness experiences, NE 1994-95.**

	Agree	Disagree	Don't Know	Refuse to Answer
Visitor Center	75.5	24.5	0	0
Brochures or Maps	80.6	19.4	0	0
Guided Tours	64.7	35.3	0	0
Maintained Trails	90.4	9.6	0	0
Signs or Displays	83.8	16.2	0	0

**TABLE 4.17 -- Percentage of anglers stating different levels of agreement with respect to the importance of different aspects of wildlife management, NE 1994-95.**

	Strongly Agree	Agree	Disagree	Strongly Disagree	Refuse Answer	Don't Know
Wildlife important to site	34.8	47.1	15	1.6	0	1.6
Contribute time & money	23.3	51.9	20.3	2.1	0	2.4
Interpretive signs important	11	55.9	25.5	0.8	0	6.7
Wildlife encounter satisfies	34.2	57.8	5.5	1	0.7	0.9

**TABLE 4.18 -- Percentage of hunters ranking the importance of values as reasons to preserve wilderness and primitive areas, NE 1994-95.**

	<b>Extremely Important</b>	<b>Very Important</b>	<b>Important</b>	<b>Slightly Important</b>	<b>Not Important</b>	<b>Refuse to Answer</b>	<b>Don't Know</b>
Protect water	53.8	26.7	17.8	0.8	0.8	0	0
Protect for future	45.8	32.6	19.4	2.2	0	0	0
Provide recreation	22	33.7	36.8	6.2	1.2	0	0
Protect habitat	51	33.7	14.6	0	0	0.7	0
Provide inspiration	21.1	18.6	40.9	8.7	10.7	0	0
Science	21.6	27.5	38.5	6.2	5.2	0	1
Preserve uniqueness	38.9	26.8	27.9	2.3	3.1	0	1
Future options	30.5	32.2	26.3	7.6	1.5	0	1.8
Protect air	52.4	28.8	17	0.8	0	0	1
Provide tourism income	9.7	18.7	33.4	14.6	21.9	0	1.8
Rare & endangered species	49	30.1	16.1	2.4	0.7	0	1.8
Scenic beauty	33.9	28.9	31.9	3.6	0.7	0	1
To know it exists	34	27	30.8	4.2	3	0	1

## Wildlife and Wilderness Attitudes in the South

### Wildlife and Fish Viewers - South

**TABLE 4.19 -- Percentage of agreement by wildlife and fish viewers to whether the following information sources and facilities would improve wilderness experiences, S 1994-95.**

	Agree	Disagree	Don't Know	Refuse to Answer
Visitor Center	78.1	18.9	0.6	2.4
Brochures or Maps	85.7	11.8	0.6	2
Guided Tours	66.5	30.5	0.6	2
Maintained Trails	88.4	9.4	0.6	2.4
Signs or Displays	89	8.8	0.6	1.6

**TABLE 4.20 -- Percentage of wildlife and fish viewers stating different levels of agreement with respect to the importance of different aspects of wildlife management, S 1994-95.**

	Strongly Agree	Agree	Disagree	Strongly Disagree	Refuse Answer	Don't Know
Wildlife important to site	25.5	57.5	12.9	1.9	0.2	2
Contribute time & money	12.6	60.9	18.5	1.6	0.8	5.5
Interpretive signs important	9.3	60.4	24.1	0.9	0.6	4.8
Wildlife encounter satisfies	28.9	63.6	4.6	0.7	0.6	1.6

**TABLE 4.21 -- Percentage of wildlife and fish viewers ranking the importance of values as reasons to preserve wilderness and primitive areas, S 1994-95.**

	<b>Extremely Important</b>	<b>Very Important</b>	<b>Important</b>	<b>Slightly Important</b>	<b>Not Important</b>	<b>Refuse to Answer</b>	<b>Don't Know</b>
Protect water	48.3	29.2	18.7	0.8	0.2	0.7	2.1
Protect for future	42.8	33.8	19.3	1.2	0.9	0.4	1.6
Provide recreation	18.9	31.9	37	7.6	2.1	0.4	2
Protect habitat	43.6	32.6	19.4	1.2	1.4	0.4	1.4
Provide inspiration	22	23.9	35.4	8.8	7.1	0.4	2.4
Science	19.9	29.5	36.8	7.2	4.3	0.4	1.8
Preserve uniqueness	33.5	27.2	29.4	3.9	2.7	0.4	2.9
Future options	31.5	29.9	31.3	2.5	2.5	0.4	1.9
Protect air	47.7	30.1	18	1.3	1	0.4	1.5
Provide tourism income	9	15.3	34.4	18.5	20.3	0.4	2.1
Rare & endangered species	43.2	28.5	21.3	1.9	2.6	0.5	1.9
Scenic beauty	30.1	28.2	34.9	3.4	1.8	0.4	1.2
To know it exists	30.5	26.3	36.2	3.5	1.4	0.4	1.7

Hunters - South

**TABLE 4.22 -- Percentage of agreement by hunters to whether the following information sources and facilities would improve wilderness experiences, S 1994-95.**

	Agree	Disagree	Don't Know	Refuse to Answer
Visitor Center	67.2	29.7	0	3.1
Brochures or Maps	82.2	14.7	0	3.1
Guided Tours	59	37.9	0	3.1
Maintained Trails	82.7	14.2	0	3.1
Signs or Displays	83.9	13	0	3.1

**TABLE 4.23 -- Percentage of hunters stating different levels of agreement with respect to the importance of different aspects of wildlife management, S 1994-95.**

	Strongly Agree	Agree	Disagree	Strongly Disagree	Refuse Answer	Don't Know
Wildlife important to site	27.8	61.1	9.5	1.1	0	0.5
Contribute time & money	11.3	69.5	13.6	2.4	0	3.1
Interpretive signs important	10.7	56.7	27.7	0.9	0	3.9
Wildlife encounter satisfies	32	63.4	1.7	1	0	1.9



**TABLE 4.24 -- Percentage of hunters ranking the importance of values as reasons to preserve wilderness and primitive areas, S 1994-95.**

	<b>Extremely Important</b>	<b>Very Important</b>	<b>Important</b>	<b>Slightly Important</b>	<b>Not Important</b>	<b>Refuse to Answer</b>	<b>Don't Know</b>
Protect water	48.3	24.6	22	2.4	0	1.1	1.7
Protect for future	46.5	26.6	24.6	1.8	0.5	0	0
Provide recreation	25.1	31.7	38.1	4.3	0.8	0	0
Protect habitat	47.8	20.4	31.2	0	0.5	0	0
Provide inspiration	21.1	20.9	35	13.2	9.9	0	0
Science	22.3	15.7	49.3	8	4	0	0.7
Preserve unique-ness	27.4	20.4	39.4	3.9	4.4	0	4.5
Future options	40.6	25.4	27.4	1.8	2.3	0	2.6
Protect air	42.4	23.1	30.4	2	2.1	0	0
Provide tourism income	14.2	13.4	43.1	11.8	17.5	0	0
Rare & endangered species	39.5	25.3	28.1	3.3	2.4	0	1.4
Scenic beauty	27.3	25.3	40.3	4.3	0.9	0	1.9
To know it exists	31.1	22.5	43.6	1.9	0.9	0	0

Anglers - South

**TABLE 4.25 -- Percentage of agreement by anglers to whether the following information sources and facilities would improve wilderness experiences, S 1994-95.**

	Agree	Disagree	Don't Know	Refuse to Answer
Visitor Center	77.4	19.9	1	1.6
Brochures or Maps	85.9	11.4	1	1.6
Guided Tours	66.2	31	1	1.8
Maintained Trails	90.5	7.4	1	1.1
Signs or Displays	92.6	5.4	1	1.1

**TABLE 4.26 -- Percentage of anglers stating different levels of agreement with respect to the importance of different aspects of wildlife management, S 1994-95.**

	Strongly Agree	Agree	Disagree	Strongly Disagree	Refuse Answer	Don't Know
Wildlife important to site	25.2	63.2	9.9	0.7	0	1
Contribute time & money	13.8	63.3	16	1.7	0.4	4.9
Interpretive signs important	10	62	21.9	2	0.4	3.7
Wildlife encounter satisfies	28.5	67.6	1.9	0.7	0.4	0.9

**TABLE 4.27 -- Percentage of anglers ranking the importance of values as reasons to preserve wilderness and primitive areas, S 1994-95.**

	<b>Extremely Important</b>	<b>Very Important</b>	<b>Important</b>	<b>Slightly Important</b>	<b>Not Important</b>	<b>Refuse to Answer</b>	<b>Don't Know</b>
Protect water	48.6	29.4	19.3	1.2	0	0	1.5
Protect for future	41.5	37.6	19.7	0.3	0.2	0	0.7
Provide recreation	21.2	34.5	35.3	6	2	0	1.1
Protect habitat	47.1	29.4	21.7	0.9	0.5	0	0.4
Provide inspiration	23	24.3	36.7	9.4	5.9	0	0.7
Science	18.9	29.5	38.3	8.2	3.7	0	1.5
Preserve unique-ness	33.9	25.9	31.4	3.4	1.8	0	3.6
Future options	34.2	31.6	29.4	1.9	1.5	0	1.4
Protect air	48.5	29.9	19.5	1	0.7	0	0.4
Provide tourism income	11.8	14.1	37.1	17	19.3	0	0.7
Rare & endangered species	44.3	30.5	20.8	1.7	1.6	0	1.1
Scenic beauty	33.8	27.3	34.3	2.4	1.2	0	1.1
To know it exists	32.2	28.7	35.5	1.8	0.7	0	1

## Wildlife and Wilderness Attitudes in the West

Wildlife and fish viewers - West

**TABLE 4.28 -- Percentage of agreement by wildlife and fish viewers to whether the following information sources and facilities would improve wilderness experiences, W 1994-95.**

	Agree	Disagree	Don't Know	Refuse to Answer
Visitor Center	75.5	21.3	0.2	2.9
Brochures or Maps	89.1	8.2	0.2	2.4
Guided Tours	63.2	34.4	0.2	2.1
Maintained Trails	87.3	10.3	0.2	2.2
Signs or Displays	87.8	10	0.2	1.9

**TABLE 4.29 -- Percentage of wildlife and fish viewers stating different levels of agreement with respect to the importance of different aspects of wildlife management, W 1994-95.**

	Strongly Agree	Agree	Disagree	Strongly Disagree	Refuse Answer	Don't Know
Wildlife important to site	36.9	48.5	11.7	1.2	0.5	1.2
Contribute time & money	18.9	56.6	17.6	1.6	1	4.3
Interpretive signs important	11.6	56.4	24.8	2.6	0.6	3.9
Wildlife encounter satisfies	40.4	50.8	5.2	1	0.6	1.9

**TABLE 4.30 -- Percentage of wildlife and fish viewers ranking the importance of values as reasons to preserve wilderness and primitive areas, W 1994-95.**

	<b>Extremely Important</b>	<b>Very Important</b>	<b>Important</b>	<b>Slightly Important</b>	<b>Not Important</b>	<b>Refuse to Answer</b>	<b>Don't Know</b>
Protect water	47.7	33.8	16	0.8	0.9	0.2	0.6
Protect for future	44.3	34.6	19	0.5	0.5	0.2	0.9
Provide recreation	19.4	27.2	40.7	6.3	5.2	0.2	0.9
Protect habitat	47.9	35.5	13.9	0	1.6	0.2	0.8
Provide inspiration	21.6	19.8	35.9	10.8	8.4	0.5	2.9
Science	19.3	27.9	35.4	9.4	5.9	0.2	1.8
Preserve uniqueness	36.5	33.4	22.8	3.7	2	0.5	1.1
Future options	33	33.2	26.7	2.7	3.2	0.2	1
Protect air	49.7	30.8	16.4	0.6	1.3	0.2	0.9
Provide tourism income	7.2	11.4	31.1	20.9	24.8	0.3	4.3
Rare & endangered species	43.6	29.4	18.2	2.9	2.5	0.3	3
Scenic beauty	31.3	29.6	31.7	3.5	1.5	0.3	2
To know it exists	33	27.7	30.7	5.5	0.8	0.3	2

Hunters - West

**TABLE 4.31 -- Percentage of agreement by hunters to whether the following information sources and facilities would improve wilderness experiences, W 1994-95.**

	Agree	Disagree	Don't Know	Refuse to Answer
Visitor Center	40.8	58	1.2	0
Brochures or Maps	83.4	15.4	1.2	0
Guided Tours	46.6	52.2	1.2	0
Maintained Trails	76.7	22.1	1.2	0
Signs or Displays	74.2	24.6	1.2	0

**TABLE 4.32 -- Percentage of hunters stating different levels of agreement with respect to the importance of different aspects of wildlife management to hunters, W 1994-95.**

	Strongly Agree	Agree	Disagree	Strongly Disagree	Refuse Answer	Don't Know
Wildlife important to site	46.6	41	11.7	0	0.8	0
Contribute time & money	16.3	60.4	14.8	1.3	0.8	6.5
Interpretive signs important	8	38.8	45.9	5.6	0.8	1
Wildlife encounter satisfies	51.5	47.8	0	0	0.8	0

**TABLE 4.33 -- Percentage of hunters ranking the importance of values as reasons to preserve wilderness and primitive areas, W 1994-95.**

	<b>Extremely Important</b>	<b>Very Important</b>	<b>Important</b>	<b>Slightly Important</b>	<b>Not Important</b>	<b>Refuse to Answer</b>	<b>Don't Know</b>
Protect water	38.1	44.7	15.1	0.8	1.3	0	0
Protect for future	37.3	42.4	18.6	1	0	0.8	0
Provide recreation	21.6	33.8	37.5	3.3	3.1	0.8	0
Protect habitat	33.6	50.4	12.1	0	3.1	0.8	0
Provide inspiration	13.8	22.2	33.1	13.8	10.8	0.8	5.5
Science	15.1	27.5	28.6	12.3	9.8	0.8	6
Preserve unique-ness	27.3	39.3	25.5	3.6	3.5	0.8	0
Future options	36.1	35.6	23	1.3	3.2	0.8	0
Protect air	46.9	32.4	17.7	1.3	1	0.8	0
Provide tourism income	3	18.6	23.5	18	26.7	0.8	3.4
Rare & endangered species	34.3	36.2	18.1	4	3.6	0.8	3
Scenic beauty	26.5	26.7	32.8	5.9	4.4	0.8	3
To know it exists	26.2	28.7	33.4	7.9	0	0.8	3

Anglers - West

**TABLE 4.34 -- Percentage of agreement by anglers to whether the following information sources and facilities would improve wilderness experiences, W 1994-95.**

	Agree	Disagree	Don't Know	Refuse to Answer
Visitor Center	74	24.3	0.5	1.2
Brochures or Maps	92.3	6.1	0.5	1
Guided Tours	60.6	38.5	0.5	0.5
Maintained Trails	84.2	14.8	0.5	0.6
Signs or Displays	85.3	14.2	0.5	0

**TABLE 4.35 -- Percentage of anglers stating different levels of agreement with respect to the importance of different aspects of wildlife management, W 1994-95.**

	Strongly Agree	Agree	Disagree	Strongly Disagree	Refuse Answer	Don't Know
Wildlife important to site	45.4	46.2	7.6	0	0.3	0.6
Contribute time & money	16.5	61.5	16.7	1.5	0.3	3.5
Interpretive signs important	11.7	57.2	26.5	2.3	0.3	2.1
Wildlife encounter satisfies	43.2	50.3	4.1	1.2	0.3	0.9



**TABLE 4.36 -- Percentage of anglers ranking the importance of values as reasons to preserve wilderness and primitive areas, W 1994-95.**

	<b>Extremely Important</b>	<b>Very Important</b>	<b>Important</b>	<b>Slightly Important</b>	<b>Not Important</b>	<b>Refuse to Answer</b>	<b>Don't Know</b>
Protect water	43.8	36.3	17.6	0.9	0.9	0.5	0
Protect for future	40.3	40.8	16.7	1.2	0.5	0.5	0
Provide recreation	19.2	29.6	40.1	5	5.2	0.5	0.3
Protect habitat	46.1	37	13.5	0	2.6	0.5	0.3
Provide inspiration	18.2	21.2	32.9	14.4	8.3	1.2	3.7
Science	16	26.5	34.6	12.8	5.7	0.5	4
Preserve uniqueness	33.1	37.8	21.9	3.9	2.3	0.5	0.4
Future options	33.1	33.7	27.3	2.4	2.6	0.5	0.3
Protect air	46.7	34.1	15.5	1.1	1.8	0.5	0.3
Provide tourism income	6.3	12.7	31.2	19.8	27.6	0.5	1.8
Rare & endangered species	39.8	31.7	20.4	3.4	2.9	0.5	1.3
Scenic beauty	27.1	32.5	33.7	3.3	1.5	0.5	1.3
To know it exists	25.4	29.1	37.8	4.9	1	0.5	1.3

## V. Cluster Analysis

People vary widely in the outdoor activities they pursue. Some like high energy, adventure recreation, while others prefer to stroll or sightsee and learn. One of the most important results of the NSRE is the division of the U.S. population into groups with similar outdoor recreation interests. These groups or activity clusters are meaningful for outdoor recreation research.

The cluster analysis identified higher-than-average and lower-than-average participation rates across the various recreation activities. As the analysis proceeded, patterns emerged showing that people who participate in one type of recreation often participate in other, related activities.

Of the seven identified clusters, five, which are related to fish and wildlife, are presented below. Each cluster represents tens of millions of people, and the participation patterns of each are distinctive. The identified patterns suggest that people in different clusters seek different kinds of experiences. Individuals may be members of more than one segment, however, indicating multiple interest and motivations for outdoor recreation.

### **“Nature Lovers”**

About 26.6 million Americans—13.3 percent of the population over age 15—are Nature Lovers. Nature Lovers participate in walking, birdwatching, wildlife and fish viewing, nature study, sightseeing, and going to visitor centers. Nature Lovers seldom hunt or fish. Although they do not participate in rugged or challenging human powered activities, their interest in nature and the outdoors means that they need outdoor areas to enhance their enjoyment of nature. Over 9 of 10 Nature Lovers are walkers, and they participate often in viewing activities.

Most Nature Lovers are over age 54. Almost 13 percent are minority group members, and nearly two-thirds are female. Forty five percent have completed college and another 30 percent have attended or are attending college. Household incomes of members of this group are above average. A below-average proportion of people in this group live in households with four or more members, thus, an unusually high percentage are in households with just two members.

A high proportion of Nature Lovers feel constrained in pursuing their favorite activities. In addition to insufficient time and money, they are often constrained by lack of a person to do activities with, inadequate information, crowding of activity areas, concerns about personal safety, and perceived pollution problems.

High levels of participation suggest a great deal of interest in nature and nature-based activities. High education levels suggest that materials written for people in this group can be directed at a high technical level. High incomes and small household sizes suggest an ability to pay for experiences, equipment, and services.

### **“Fishin’ and Huntin’ Avids”**

About 8.2 percent of Americans over age 15 (16.4 million people) are what we call the “Fishin’ and Huntin’ Avids.” This group is among the most active of activity clusters across all types of outdoor recreation. We call them Fishin’ and Huntin’ Avids because they are so very avid in all forms of outdoor recreation and because they have the highest combined rates of participation in hunting and fishing. In addition to hunting and fishing, these people do a lot of camping, group activities, walking, and hiking.

Rates of hunting participation for members of this group are 30 percent for big game and 23.5 percent for small game. These are the highest rates among all of the market segments, but

they still represent well under half of the group members. Thus, hunters could be regarded as a separate subgroup within this group. They are included because so many enjoy fishing as well as hunting. Although they do not appear to be particularly interested in human performance activities, they still participate in some human powered activities. For example, almost 90 percent of them are walkers.

The distribution of Fishin' and Huntin' Avids is weighted toward middle-aged Caucasian males. Few people in this group are under 25 or over 55. Only 6 percent of the Avids are in minority groups. Fifty-eight percent are male. Education levels for members of this group are near the national averages. A high proportion of Avids are in households with just two people over age 15. The number of Avids in households with three or more cars is above average.

In addition to a love for freshwater fishing, it appears that members of this group share an interest in nature. That interest, however, is somewhat different from the interest of the Nature Lovers. The interest here leans more toward use and consumption of wildlife and fish rather than toward viewing and learning.

Only 13 percent of the members of this group reported a constraint on participation in their favorite activities. For those who reported a constraint, an unusually high proportion (93 percent) cited a lack of time as a constraint. As in other groups, many also cited a lack of money. Other frequently mentioned constraints were no one to do activities with, crowded activity areas, inadequate information, and pollution problems.

### **“The Bass Club”**

People in the Bass Club are primarily anglers. About 13.0 percent of Americans over age 15 (some 26.0 million people) make up the Bass Club. About 12 percent are minority group

members, and 35 percent are female. Numbers of Bass Club members who have attended college are below average. Their family incomes are also below average. Households of various sizes are well represented. Some 47 percent of households have two cars.

The separate identity of Bass Club members from the Fishin' and Huntin' Avids indicates a different pattern of activity participation. Freshwater fishing is enjoyed by members of both groups. Bass Club members, however, participate more in warmwater fishing and motorboating than in other activities.

About 12 percent of Bass Club members mentioned a constraint on activity participation. Almost a third of those who mentioned a constraint said they lacked activity companions. Crowding of activity areas also was often mentioned.

### **“The Passives”**

Almost 44 million Americans over age 15 (21.9 percent) do not participate in active outdoor pursuits. They go outdoors to sightsee, visit beaches, picnic, get together with family and friends, and walk. They seldom engage in more vigorous pursuits.

As one might expect, a lot of people who prefer passive pursuits are over 54 years old. A surprising 17 percent, however, are 16-24 years old. One would expect people in that age group to be more active in their recreation. The 24 percent minority group members among Passives is quite high. And the 57 percent females in this group is somewhat higher than the 52 percent for the population as a whole. Education levels and income levels are a little below those for the more active groups.

Since they are relatively inactive, the constraints on recreating for this group are of some interest. Some 19 percent mentioned personal health problems as a constraint on their activities.

Thirty-two percent said they lacked an activity companion. Crowding of activity areas and inadequate information also were often mentioned as problems.

### **“The Do Nothings”**

This is the largest of the identified groups. It includes about 22.8 percent of Americans over age 15 (some 45.7 million people).

The extremely low participation rates show that these people seldom recreate outdoors. About half of Do Nothings are over 54 years old. A fourth are minority group members, and 60 percent are female. Education levels and family incomes are far below average. As one might expect with so many people over age 50, households with one or two members predominate. Numbers of cars are clearly lower than for other groups. It is probable that low income and advancing age restrict the recreational activity of many Do Nothings.

These conclusions are supported by the constraints mentioned by members of this group. Only a little over half mentioned a lack of time as a constraint, while a relatively high 44 percent mentioned a lack of money. Thirty-five percent said that personal health problems limited their activities, and 18 percent cited a physically limiting condition. Twenty eight percent said they had no one with which to do activities.

**Table 5.1 -- Participation in each activity by market segment in 1994-95.**

	Nature Lovers		The Huntin' Fishin' Avids		The Bass Club		The Passives		The 'Do Nothings'	
	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number
Fitness Activities	88.01	23.45	88.92	14.61	77.8	20.26	84.17	36.93	9.67	4.42
Running/Jogging	20.01	5.33	33.01	5.42	21.84	5.69	26.63	11.68	2.4	1.1
Biking	31.93	8.51	48.85	8.02	25.85	6.73	23.32	10.23	1.45	0.66
Walking	91.24	24.31	89.53	14.71	74.8	19.48	82.53	36.21	7.95	3.63
Individual Sport Activities	20.78	5.54	28.11	4.62	23.16	6.03	20.11	8.82	2.08	0.95
Golf	13.17	3.51	21.3	3.5	19.36	5.04	13.37	5.86	1.52	0.7
Tennis	9.5	2.53	11.9	1.95	6.77	1.76	9.17	4.02	0.66	0.3
Outdoor Team Sport Activities	19.39	5.17	31.38	5.15	26.09	6.8	25.09	11.01	1.89	0.86
Baseball	3.52	0.94	6.46	1.06	5.91	1.54	4.67	2.05	0.42	0.19
Softball	7.71	2.05	12.19	2	11.91	3.1	10.55	4.63	0.57	0.26
Football	2.02	0.54	4.61	0.76	6.1	1.59	4.78	2.1	0.52	0.24
Basketball	5.99	1.59	9.53	1.57	9.66	2.51	10.96	4.81	0.97	0.44
Soccer	1.83	0.49	4.39	0.72	2.37	0.62	3.26	1.43	0.34	0.16
Volleyball	9.59	2.56	14.39	2.36	10.41	2.71	11.29	4.95	0.53	0.24
Handball	5.77	1.54	8.07	1.33	4.48	1.17	4.47	1.96	0.49	0.22
Outdoor Spectator Activities	77.79	20.73	83.6	13.73	65.65	17.1	62.6	27.46	3.85	1.76
Concerts	51.85	13.81	53.24	8.75	27.58	7.18	29.84	13.09	1.41	0.65
Attending Sporting Events	57.96	15.44	69.73	11.45	54.13	14.1	47.86	21	2.87	1.31

Table 5.1 continued

	Nature Lovers		The Huntin' Fishin' Avids		The Bass Club		The Passives		The 'Do Nothings'	
	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number
Viewing Activities	97.7	26.03	97.7	16.05	95.52	24.88	93.83	41.17	8.5	3.88
Visiting a Nature Center	80.94	21.57	84.47	13.88	40.62	10.58	38.45	16.87	1.41	0.64
Visiting a Visitor Center	71.25	18.98	74.53	12.24	26.94	7.02	19.46	8.54	0.85	0.39
Visiting a Prehistoric Site	32.42	8.64	48.3	7.93	10.65	2.77	8.85	3.88	0.51	0.23
Visiting a Historic Site	81.68	21.76	82.77	13.6	36.27	9.45	31.36	13.76	1	0.46
Bird-Watching	73.62	19.62	65.14	10.7	26.14	6.81	20.9	9.17	2.12	0.97
Wildlife Viewing	76.36	20.35	80.69	13.26	31.01	8.08	15.95	7	1.39	0.64
Fish Viewing	30.3	8.07	48.44	7.96	16.36	4.26	4.47	1.96	0.27	0.12
Other Nature Study	33.28	8.87	32.44	5.33	9.95	2.59	8	3.51	0.47	0.22
Sightseeing	91.53	24.39	90.38	14.85	59.42	15.48	59.79	26.23	2.48	1.13
Visiting a Beach or Waterside	86.95	23.17	92	15.11	75.98	19.79	63.99	28.08	2.29	1.05
Studying Nature near Water	64.58	17.21	70.39	11.56	23.51	6.12	13.83	6.07	0.39	0.18
Snow and Ice Activities	17.94	4.78	35.39	5.81	15.71	4.09	9.9	4.34	0.63	0.29
Ice Skating	4.34	1.16	10.93	1.8	3.18	0.83	1.95	0.85	0.06	0.03
Snowboarding	1.69	0.45	4.22	0.69	1.27	0.33	0.82	0.36	0.05	0.02
Sledding	10.41	2.77	21.34	3.51	7.72	2.01	4.34	1.91	0.23	0.1
Downhill Skiing	4.75	1.26	14.43	2.37	4.97	1.3	4.23	1.86	0.21	0.09
Cross-Country Skiing	3.59	0.96	8.52	1.4	1.76	0.46	1.33	0.58	0.03	0.01
Snowmobiling	1.8	0.48	10.51	1.73	4.33	1.13	0.92	0.4	0.11	0.05
Camping (overall)	20.22	5.39	68.18	11.2	34.09	8.88	10.39	4.56	1.36	0.62
Developed Area	16.98	4.52	54.79	9	23.28	6.06	7.96	3.49	1	0.46
Primitive Area	7.13	1.9	43.22	7.1	17.8	4.64	3.71	1.63	0.49	0.22



Table 5.1 continued

	Nature Lovers		The Huntin' Fishin' Avids		The Bass Club		The Passives		The 'Do Nothings'	
	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number
Hunting	2.22	0.59	26.2	4.3	24.15	6.29	3.7	1.62	0.86	0.39
Big game	1.39	0.37	21.31	3.5	18.78	4.89	2.17	0.95	0.69	0.32
Small game	1.38	0.37	19.35	3.18	16.99	4.43	2.39	1.05	0.44	0.2
Migratory bird	0.37	0.1	7.27	1.19	5.65	1.47	0.64	0.28	0.12	0.05
Fishing	12.35	3.29	81.05	13.31	82.94	21.6	6.79	2.98	2.36	1.08
Freshwater	5.23	1.39	77.52	12.74	80.59	20.99	1.09	0.48	1.99	0.91
Saltwater	7.15	1.91	27.07	4.45	16.19	4.22	4.63	2.03	0.35	0.16
Warmwater	3.71	0.99	65.42	10.75	69.59	18.12	1.03	0.45	1.33	0.61
Coldwater	1.85	0.49	41.56	6.83	27.98	7.29	0.78	0.34	0.47	0.21
Ice	0.31	0.08	8.82	1.45	5.62	1.46	0.09	0.04	0.07	0.03
Anadromous	1.35	0.36	18.96	3.12	9.7	2.53	0.69	0.3	0.15	0.07
Catch and Release	2.11	0.56	26.8	4.4	24.85	6.47	0.63	0.27	0.3	0.14
Boating	30.95	8.25	64.41	10.58	43.29	11.27	14.37	6.3	1.03	0.47
Sailing	7.66	2.04	10.28	1.69	2.54	0.66	2.41	1.06	0.07	0.03
Canoeing	6.05	1.61	23.69	3.89	6.49	1.69	0.92	0.4	0.01	0
Kayaking	1.24	0.33	3.25	0.53	0.89	0.23	0.28	0.12	0	0
Rowing	4.73	1.26	14.75	2.42	4.83	1.26	0.87	0.38	0	0
Floating, Rafting	4.46	1.19	22.79	3.74	5.35	1.39	1.61	0.7	0.09	0.04
Motor-boating	22.47	5.99	55.88	9.18	38.42	10.01	10.82	4.75	0.94	0.43
Water Skiing	3.22	0.86	19.75	3.24	9.82	2.56	2.42	1.06	0.15	0.07
Jet Skiing	1.64	0.44	10.28	1.69	3.54	0.92	1.54	0.68	0.05	0.02
Sailboarding/windsurfing	1.11	0.29	2.53	0.42	0.39	0.1	0.43	0.19	0	0
Swimming Activities	69.68	18.57	84.18	13.83	63.09	16.43	52.58	23.07	2.69	1.23
Surfing	0.57	0.15	3.64	0.6	0.49	0.13	0.1	0.05	0.02	0.01
Swimming/pool	56.13	14.96	68.61	11.27	45.52	11.85	41.91	18.39	1.97	0.9
Swimming/non-pool	47.19	12.57	72.99	11.99	43.33	11.29	27.27	11.96	1.05	0.48
Snorkeling/Scuba	7.33	1.95	18.66	3.07	5.5	1.43	2.94	1.29	0.03	0.01

Table 5.1 continued

	Nature Lovers		The Huntin' Fishin' Avids		The Bass Club		The Passives		The 'Do Nothings'	
	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number
Outdoor Adventure Activities	44.72	11.92	74.54	12.24	39.78	10.36	23.28	10.22	1.81	0.83
Hiking	30.66	8.17	58.54	9.62	16.93	4.41	11.39	5	0.52	0.24
Orienteering	2.35	0.63	7.96	1.31	1.16	0.3	0.64	0.28	0.01	0
Backpacking	5.18	1.38	22.87	3.76	3.54	0.92	1.73	0.76	0.13	0.06
Mountain Climbing	3.87	1.03	11.3	1.86	2.53	0.66	1.64	0.72	0.06	0.03
Rock Climbing	2.57	0.68	8.51	1.4	2.09	0.54	1.37	0.6	0.03	0.01
Caving	4.39	1.17	13.57	2.23	2.74	0.71	1.37	0.6	0.02	0.01
Off-Road Driving	12.56	3.35	33	5.42	18.9	4.92	8.07	3.54	0.78	0.36
Horseback Riding	6	1.6	14.96	2.46	6.72	1.75	3.7	1.63	0.41	0.19
Social Activities	87.84	23.41	89.73	14.74	83.82	21.83	81.65	35.82	6.53	2.98
Yard Games	45.03	12	66.42	10.91	43.74	11.39	27.87	12.23	1.47	0.67
Picnicking	73.33	19.54	76.79	12.61	54.19	14.11	51.86	22.75	2.38	1.09
Family Gathering	82.5	21.98	88.69	14.57	75.17	19.58	71.46	31.35	3.6	1.64

**Table 5.2 -- Percentage of population 16 and older by age, race and sex, groups for seven outdoor recreation market segments<sup>1</sup>, 1994-95.**

Demographics	The Nature Lovers	The Huntin' & Fishin' Avids	The Bass Club	The Passives	The Do Nothings
<b>Age</b>					
16-24	7.2	17.4	11.5	17.4	10.3
25-39	29.8	35.3	44.7	31.7	19.9
40-54	33.8	25.2	28.8	23.0	19.4
>54	29.1	22.2	14.9	27.9	50.4
<b>Race</b>					
Caucasian	87.5	87.6	94.0	76.5	73.9
Other <sup>2</sup>	12.5	12.4	6.0	23.5	26.1
<b>Sex</b>					
Male	33.7	64.8	58.5	43.3	39.6
Female	66.3	35.2	41.5	56.7	60.4

<sup>1</sup>Market segments were identified by a SAS cluster analysis of participation incidence across approximately 17,000 respondents to the National Survey on Recreation and the environment, 1994-95.

<sup>2</sup>The "other" race category includes African American, Asian American, Hispanic speaking and Native American respondents.

**Table 5.3 -- Percentage of population, 16 or older, by educational attainment and income level for seven outdoor recreation market segments<sup>1</sup>, 1994-95.**

Demographics	The Nature Lovers	The Huntin' & Fishin' Avids	The Bass Club	The Passives	The Do Nothings
<b>Education</b>					
Some High School	3.7	11.6	6.7	11.0	23.2
Completed High School	22.0	38.6	26.8	31.4	36.5
Some College	29.7	28.2	33.4	28.9	22.5
Completed College	44.5	20.7	33.1	28.7	17.9
<b>Household Income</b>					
<\$15,000	7.4	8.6	5.4	11.2	27.2
\$15,000 - 24,999	13.0	19.0	11.0	19.3	23.3
\$25,000 - 49,999	39.7	43.4	41.0	40.0	30.6
\$50,000 - 74,999	21.2	17.5	25.8	17.0	11.9
\$75,000 +	18.7	11.6	16.8	12.5	7.1

<sup>1</sup>Market segments were identified by a SAS cluster analysis of participation incidence across approximately 17,000 respondents to the National Survey on Recreation and the environment, 1994-95.

**Table 5.4 -- Percentage of population by number in household, family members in the household, and number in household over 16 and under 6 for seven outdoor recreation market segments<sup>1</sup>, 1994-95.**

Demographics	The Nature Lovers	The Huntin' & Fishin' Avids	The Bass Club	The Passives	The Do Nothings
<b>Number of People in Household</b>					
One	15.5	15.2	9.9	20.1	28.2
Two	40.3	31.5	31.2	30.9	34.8
Three	18.1	18.9	22.4	19.9	14.0
Four or more	26.1	34.4	36.5	29.1	22.9
<b>Number of Family Members in Household</b>					
One	20.9	15.7	20.0	25.0	32.1
Two	37.0	28.3	28.8	29.3	33.4
Three	17.7	21.3	19.0	18.6	12.9
Four or more	24.5	34.7	32.2	27.1	21.6
<b>Number in Household over age 16</b>					
One	20.8	20.9	17.3	27.4	35.2
Two	59.4	56.7	61.7	48.5	45.1
Three or more	19.7	22.4	21.0	24.1	19.7
<b>Number in Household under age 6</b>					
Zero	83.2	76.8	76.1	78.9	85.7
One or more	16.8	23.2	23.9	21.1	14.3

<sup>1</sup>Market segments were identified by a SAS cluster analysis of participation incidence across approximately 17,000 respondents to the National Survey on Recreation and the environment, 1994-95.

**Table 5.5 -- Percentage of population by number of cars in the household for seven outdoor recreation market segments<sup>1</sup>, 1994-95.**

Demographics	The Nature Lovers	The Huntin' & Fishin' Avids	The Bass Club	The Passives	The Do Nothings
Number of Cars Owned in Household					
Zero	2.4	1.3	1.1	4.9	11.1
One	23.9	18.1	15.3	29.7	37.3
Two	46.2	46.9	42.0	40.3	32.4
Three or more	27.6	33.8	41.6	25.1	19.3

<sup>1</sup>Market segments were identified by a SAS cluster analysis of participation incidence across approximately 17,000 respondents to the National Survey on Recreation and the environment, 1994-95.

**Table 5.6 -- Percentage of population by perceived constraint to participation in activities for seven outdoor recreation in market segments<sup>1</sup>, 1994-95.**

Respondent Constraints to participation	The Nature Lovers-84.08% responding	The Huntin' and Fishin' Avids-13.16% responding	The Bass Club-12.07% responding	The Passives-10.7% responding	The Do Nothings-84.08% responding
Not enough time	80.5	84.8	93.3	76.3	54.5
Not enough money	36.5	39.3	44.8	36.6	44.3
Personal health problems	16.0	14.5	8.1	19.1	35.4
No one to do activities with	26.5	32.6	23.5	31.5	28.3
Inadequate transportation	8.2	7.8	8.4	8.7	17.7
Crowded activity areas	19.8	21.2	24.6	19.1	20.3
Personal safety concerns	17.8	7.4	7.9	12.1	15.9
Inadequate facilities	14.3	14.2	18.7	11.6	18.1
Poorly maintained	9.5	10.9	12.7	12.5	15.3
Pollution problems	17.0	15.0	19.9	10.7	12.5
Inadequate info for activities	20.1	17.8	20.1	19.3	22.1
Physically limiting condition	2.9	4.0	1.3	8.0	18.1
Member of family with disability	1.6	1.3	0.8	4.9	7.8

<sup>1</sup>Market segments were identified by a SAS cluster analysis of participation incidence across approximately 17,000 respondents to the National Survey on Recreation and the environment, 1994-95.

**Table 5.7 -- Percentage of population by proportion of recreational trips that are day trips and by hours spent traveling for seven outdoor recreation market segments<sup>1</sup>, 1994-95.**

Demographics	The Nature Lovers	The Huntin' & Fishin' Avids	The Bass Club	The Passives	The Do Nothings
<b>Proportion of trips for one day only</b>					
0-25%	2.2	2.4	4.5	1.5	1.8
25-50%	13.0	9.6	12.3	8.6	8.5
50-75%	5.4	4.5	5.5	3.1	2.5
75-100%	79.4	83.5	77.7	86.8	87.2
<b>Hours spent traveling to site</b>					
0-1 hour	45.2	45.0	40.5	48.9	53.2
1.1-2 hours	18.2	22.4	19.9	19.6	14.9
2.1-5 hours	21.3	19.3	22.9	18.6	19.8
5.1-10 hours	9.2	9.3	11.5	8.4	8.9
> 10 hours	6.1	4.1	5.2	4.6	3.2

<sup>1</sup>Market segments were identified by a SAS cluster analysis of participation incidence across approximately 17,000 respondents to the National Survey on Recreation and the environment, 1994-95.



**Table 5.8 -- Percentage of population by number of others accompanying the respondent on a trip for seven outdoor recreation market segments<sup>1</sup>, 1994-95.**

Demographics	The Nature Lovers	The Huntin' & Fishin' Avids	The Bass Club	The Passives	The Do Nothings
<b>Number of others on trip</b>					
Zero	5.2	5.6	3.6	5.7	13.4
1-3 others	67.3	63.8	64.9	59.8	63.2
4-5 others	15.4	18.5	17.4	16.0	12.5
6-8 others	4.9	5.2	7.5	7.1	5.8
9 or more	7.1	7.0	6.6	11.4	5.2

<sup>1</sup>Market segments were identified by a SAS cluster analysis of participation incidence across approximately 17,000 respondents to the National Survey on Recreation and the environment, 1994-95.

**Table 5.9 -- Percentage of population by private or government ownership of area visited and by state in which visited area is located for seven outdoor recreation market segments<sup>1</sup>, 1994-95.**

Demographics	The Nature Lovers	The Huntin' & Fishin' Avids	The Bass Club	The Passives	The Do Nothings
<b>Percent Private/Public</b>					
Privately owned	27.0	31.8	27.2	29.3	36.5
Government owned	57.7	54.2	60.9	55.0	49.3
Refused to answer	0.0	0.4	0.0	0.0	0.0
Don't know	15.3	13.7	11.9	15.8	14.3
<b>State of Destination</b>					
1st	CA - 9.7	CA - 6.9	CA - 7.8	CA-11.3	CA - 12.0
2nd	NY - 9.1	NY - 4.9	NY - 5.9	PA -6.9	TN - 8.7
3rd	PA - 5.7	TX - 4.9	PA - 4.7	NY - 6.7	NC - 5.7
4th	FL - 5.6	GA - 4.8	MI - 4.3	FL - 5.1	NY - 5.4
5th	OH - 4.8	MI - 4.5	TX - 3.8	IL - 4.4	PA - 5.3

<sup>1</sup>Market segments were identified by a SAS cluster analysis of participation incidence across approximately 17,000 respondents to the National Survey on Recreation and the environment, 1994-95.

**Table 5.10 -- Percent of population by whether or not the trip involved wildlife in any way for seven outdoor recreation market segments<sup>1</sup>, 1994-95.**

Demographics	The Nature Lovers	The Huntin' & Fishin' Avids	The Bass Club	The Passives	The Do Nothings
<b>Percent involving wildlife</b>					
Yes	37.9	34.5	53.6	18.2	20.7
No	61.6	64.3	46.0	80.4	76.6
Refused	0.0	0.3	0.2	0.1	0.0
Don't Know	0.4	0.8	0.3	1.3	2.7

<sup>1</sup>Market segments were identified by a SAS cluster analysis of participation incidence across approximately 17,000 respondents to the National Survey on Recreation and the environment, 1994-95.

**Table 5.11 -- Percentage of population by type of transportation used to travel to the area visited for seven outdoor recreation market segments<sup>1</sup>, 1994-95.**

Demographics	The Nature Lovers	The Huntin' & Fishin' Avids	The Bass Club	The Passives	The Do Nothings
<b>Percent by travel means type</b>					
Car, Truck, Van	85.0	89.6	86.7	85.4	84.4
Camper van, Motorhome	2.1	2.2	5.2	1.0	2.5
Pulling a pop-up camper	0.9	0.4	0.4	0.6	0.7
Motorcycle	0.0	0.4	0.4	0.4	0.6
Train	0.2	0.2	0.6	0.8	1.7
Bus	2.5	1.2	1.1	3.8	1.6
Airplane	6.7	3.2	3.6	4.9	2.9
Ship, Boat, Ferry	0.7	0.5	0.7	0.3	0.3
Bicycle	0.8	0.6	0.4	1.4	1.2
Walking	0.6	0.7	0.7	0.5	2.7

<sup>1</sup>Market segments were identified by a SAS cluster analysis of participation incidence across approximately 17,000 respondents to the National Survey on Recreation and the environment, 1994-95

**Table 5.12 -- Percentage of population by primary setting where the main activity for the trip occurred for seven outdoor recreation market segments<sup>1</sup>, 1994-95.**

Demographics	The Nature Lovers	The Huntin' & Fishin' Avids	The Bass Club	The Passives	The Do Nothings
<b>Percent of Trips by Setting</b>					
Developed site - campground, recreation park	43.4	46.2	37.4	51.4	47.4
Near maintained roads for regular vehicles	25.1	22.7	24.4	22.9	20.1
Walking or riding away from maintained roads	23.4	20.0	31.3	16.5	17.7
Refused	0.4	1.0	0.3	0.9	0.9
Don't know	7.6	10.0	6.6	8.2	13.9

<sup>1</sup>Market segments were identified by a SAS cluster analysis of participation incidence across approximately 17,000 respondents to the National Survey on Recreation and the environment, 1994-95.