

# Long-term Outdoor Recreation Participation Trends<sup>1</sup>

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**Abstract.**—The National Survey on Recreation and the Environment has enabled identification of recreation trends over a 30-year period. Data from the 1994-95 surveys, focusing on 62 outdoor recreation activities, is examined in regard to participation by age, income level, and sex. While the popularity of some activities such as tennis has decreased, other activities such as bird watching, hiking, and backpacking are growing rapidly as are some newly emerging activities such as jet skiing. Managing for outdoor recreation will become more challenging as the size of the market rises and the mix of activities and participants diversifies.

## INTRODUCTION

The National Survey on Recreation and the Environment (NSRE) is a nationwide cooperative research effort involving a variety of public agencies and private organizations. The goals of the NSRE were to establish benchmark and trend data to help policymakers and decisionmakers better understand recreational use of and public attitudes toward our nation's natural resources.

The NSRE has been developed as a compatible, but expanded, "next-generation" National Recreation Survey (NRS). As such, the NSRE enables identification of recreation trends over a 30-year period. Begun in 1960 by the congressionally created Outdoor Recreation Resources Review Commission (ORRRC), the first NRS was a four-season, in-the-home survey of outdoor recreation participation in the United States. Since then, five additional NRSs have been conducted in 1965, 1970, 1972, 1977, and 1982-83.

NSRE data are generated for a variety of agency and private sector needs. The USDA Forest Service will use NSRE data in their Congressionally mandated Resources Planning Act (RPA) Assessment of Outdoor Recreation and Wilderness. NSRE data will also be used to assist recreation planners and managers at federal and state levels and will guide policy decisions in land and water management issues. Other uses of NSRE data include the assessment of the role of local, state, federal, and private providers of outdoor recreation, and methods of financing publicly provided outdoor recreation areas. NSRE data will also be used to generate information about future

outdoor recreation markets. University researchers and graduate students will use the NSRE to develop and test theoretically grounded hypotheses, and specialized analyses will provide a range of information relating outdoor recreation participation to a host of theoretically related variables.

The 1994-95 NSRE consisted of two separate random-digit-dialing (RDD) telephone surveys. For survey one, a stratified national sample of 12,000 people in the United States was polled on four general areas: (1) participation in recreation activities measured in number of days and trips; (2) characteristics of recreation trips; (3) barriers and constraints to outdoor recreation; and (4) alternative recreation user fee strategies. The average length of this survey is 20 minutes.

For survey two, a national sample of 5,000 people in the United States was asked about: (1) participation in outdoor recreation activities; (2) benefits of participation; (3) favorite activities and barriers and constraints to participation; (4) wilderness issues; (5) wildlife issues; (6) awareness of public land management agencies; and (7) freshwater-based trips. All respondents were asked modules (1) and (2), but subsamples were randomly assigned three of the remaining five modules. For each of the randomly assigned modules, the sample size was approximately 2,500.

Within these two surveys, participation focused on 62 outdoor recreation activities. For the 32 activities where natural resources was the focus, number of days and trips were collected. Additional information was collected

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about resource-related issues such as wilderness and wildlife. Further, analysis of barriers and constraints to participation will shed light on how various segments of the population are affected.

For NSRE surveys one and two, an additional set of questions was used to collect information about disabled user access to recreation areas. These questions were asked only of respondents who indicated they have a disability. If a respondent indicated that a disabled person lived in the home, that person also was interviewed, but later when the disabled respondent was available.

### OUTDOOR RECREATION TRENDS

Overall in 1994-95, an estimated 94.5 percent of United States citizens participate in some form of outdoor recreation at some time during the year. It is likely that the percentage participating is even higher than 94.5 percent given that some persons interviewed may not fully have understood the breadth of our definition of outdoor recreation. Participation cuts across all age and income classes and both sexes.

#### Outdoor Recreation by Age, Income, and Sex

Increasingly, persons of all ages participate in outdoor activities, though that participation is at decreasing rates among older age groups (table 1). The effect of aging is less pronounced in some activities (bicycling, walking, and cross-country skiing), but very pronounced among others (rock climbing, running and jogging, downhill skiing, and backpacking).

**Table 1.** Percent of US population participating in physical outdoor activities by age and activity, 1994-95.

Activity	16-24	25-29	30-39	40-49	50-59	60+
Bicycling	37.9	36.1	37.4	30.7	21.8	10.6
Rock climbing	8.3	5.4	3.9	2.9	1.8	0.7
Mtn. climbing	8.2	6.2	5.2	3.6	2.3	1.7
Caving	8.0	7.0	5.3	4.3	2.9	1.6
Running/jogging	50.4	33.2	28.3	23.3	17.4	8.1
Walking	68.1	72.4	74.6	71.9	65.4	51.5
Downhill skiing	15.5	14.2	9.9	8.1	3.8	1.0
X-country skiing	3.5	3.5	3.7	4.4	4.0	1.2
Hiking	31.5	30.1	29.4	27.0	18.0	9.6
Backpacking	14.3	11.8	8.2	7.0	4.4	1.4
Canoeing	10.6	8.8	7.8	7.0	4.7	1.8
Kayaking	1.3	1.0	0.7	0.7	0.4	0.05

Income level is also related to outdoor recreation participation, with popularity of some activities more associated with income level than others. In table 2, a definite upward trend is shown for bicycling, downhill skiing, and cross-country skiing with higher levels of income. Rock climbing, caving, and walking are much less influenced by income level.

**Table 2.** Percent of US population participating in selected outdoor activities by income and activity, 1994-95.

Activity	Less than 25,000	25,000 - 50,000	50,000 - 75,000	75,000 - 100,000	More than 100,000	Refused Don't know
Bicycling	20.2	31.2	35.9	37.0	39.1	24.1
Rock climbing	2.9	3.6	5.7	2.8	5.1	3.3
Mountain climbing	3.4	4.6	5.9	6.1	6.7	3.4
Caving	3.7	5.1	5.5	5.2	5.1	4.3
Running/jogging	19.9	26.5	29.6	30.9	38.1	25.9
Walking	57.1	71.9	74.9	77.1	74.8	59.0
Downhill skiing	4.3	7.8	11.8	14.8	20.7	6.5
Cross-country skiing	1.8	3.2	5.3	5.9	6.2	2.0
Hiking	17.3	26.3	30.7	30.5	32.8	18.6
Backpacking	5.9	7.8	9.9	8.8	10.1	6.3
Canoeing	3.8	6.9	10.4	9.7	8.6	5.2
Kayaking	0.3	0.6	1.0	1.3	1.4	0.5

Participation in the United States is consistently related to sex across most activities, generally showing more males participating. Table 3 shows that for all activities, except walking, more males participate than females. Particularly strong sex differences are shown for golfing, running and jogging, and backpacking.

**Table 3.** Percent of US population participating in outdoor activities by activity and sex, 1994-95.

Activity	Male	Female
Golf	22.4	7.9
Tennis	11.7	9.5
Outdoor team sports	31.3	18.6
Baseball	9.7	4.0
Softball	16.3	10.2
Football	11.9	2.0
Basketball	18.6	7.5
Soccer	6.2	3.4
Volleyball	16.7	12.2
Handball	6.3	5.1
Bicycling	31.0	26.5
Rock climbing	5.1	2.5
Mountain climbing	5.8	3.3
Caving	5.7	3.3
Running/jogging	31.7	21.1
Walking	65.0	68.3
Downhill skiing	10.4	6.5
Cross-country skiing	3.5	3.0
Hiking	27.1	20.9
Backpacking	10.2	5.1
Canoeing	8.5	4.9
Kayaking	0.9	0.5

### **Participation in Some Activities Is Increasing Rapidly**

The fastest-growing activities among those included both in the 1982-83 NRS and in the 1994-95 NSRE are shown in table 4. The fastest-growing activities—bird watching, hiking, and backpacking—are for the most part low impact and nature appreciating. Only motor boating is nature dominating. Several of these fastest-growing activities are passive.

### **Participation in Some Activities Is Decreasing**

Participation actually decreased for seven outdoor activities (table 5). The popularity enjoyed by tennis in the 1970s and early 1980s has greatly diminished. The consumptive activities, hunting and fishing, have probably decreased mostly because of shrinking access. The decline of participation among the activities listed in table 5 represents the "natural" trend in popularity of

activities as society's tastes change, new opportunities emerge, and fads come and go.

**Table 4.** Ten fastest-growing outdoor activities among persons 16 years or older in the United States, 1982-1995.

Activity	Number 16 years + 1982-83 (millions)	Number 16 years + 1994-95 (millions)	Percentage growth
Birdwatching	21.2	54.1	155.2
Hiking	24.7	47.7	93.0
Backpacking	8.8	15.2	72.7
Downhill skiing	10.6	16.8	58.5
Primitive camping	17.7	28.0	58.2
Walking	93.6	133.6	42.7
Motor boating	33.6	46.9	39.9
Sightseeing	81.3	113.4	39.5
Developed camping	30.0	41.5	38.3
Swimming in natural waters	56.5	78.1	38.2

**Table 5.** Activities for which numbers of participants decreased in the United States, 1982-1995.

Activity	Number 16 years + 1982-83 (millions)	Number 16 years + 1994-95 (millions)	Percent decrease
Tennis	30.0	21.2	-29.3
Hunting	21.2	18.8	-11.4
Horseback riding	15.9	14.2	-10.7
Sailing	10.6	9.6	-9.4
Attending outdoor concerts or plays	44.2	41.5	-6.1
Fishing	60.1	58.3	-3.0
Ice skating	10.6	10.6	-1.9

### **The Current Participation Picture**

Table 6 lists the percentage and number of persons in the United States 16 years and older who participate among the 70 activities included in the NSRE. Overall, an estimated 189 million driving-aged persons participate in at least one outdoor activity during the year. The most popular activities are visiting nature centers, attending outdoor sports, family gatherings, pool swimming, natural water swimming, visiting historic sites, walking, and visiting a beach. The least popular are kayaking, sailboarding, surfing, and snowboarding. Newly emerging activities include orienteering, jet skiing, catch and release fishing, and snowboarding.

Table 6. Percent and number of persons 16 years and older in the United States by activity, 1994-95.

Activity	Percent	Number (millions)
Overall participation	94.5	189.0
Running/jogging	26.2	52.5
Golf	14.8	29.6
Tennis	10.6	21.2
Outdoor team sports	24.7	49.5
Baseball	6.8	13.6
Softball	13.1	26.2
Football	6.8	13.6
Basketball	12.8	25.6
Soccer	4.7	9.4
Volleyball	14.4	28.8
Handball	5.6	11.2
Yard games	36.9	73.9
Visiting a nature center	46.4	93.0
visiting a visitor center	34.6	69.4
Attending an outdoor concert	20.7	41.5
Attending an outdoor sports event	47.5	95.2
Picnicking	49.1	98.4
Gathering with family	61.8	123.8
Snow and ice activities	19.4	38.9
Ice skating	5.2	10.4
Snowboarding	0.8	1.6
Sledding	10.2	20.4
Downhill skiing	8.4	16.8
Cross-country skiing	3.3	6.6
Snowmobiling	3.5	7.0
Hunting	9.4	18.8
Big game	7.1	14.2
Small game	6.5	13.0
Migratory bird	2.1	4.2
Camping (overall)	26.8	53.7
Developed area	20.7	41.5
Primitive area	14.0	28.0
Fishing	29.1	58.3
Freshwater	24.4	48.9
Warmwater	20.4	40.9
Coldwater	10.4	20.8
Saltwater	9.5	19.0
Anadromous	4.5	9.0
Catch and release	7.7	15.4
Boating	30.0	60.1
Sailing	4.8	9.6
Canoeing	6.6	13.2
Kayaking	0.7	1.4
Rowing	4.2	8.4
Floating, rafting	7.6	15.2
Motor boating	23.4	46.9
Water skiing	8.9	17.8
Jet skiing	4.7	9.4
Sailboarding/windsurfing	1.1	2.2
Surfing	1.3	2.6
Swimming/pool	44.2	88.5
Swimming/nonpool	39.0	78.1

Activity	Percent	Number (millions)
Snorkeling	7.2	14.4
Visiting a prehistoric site	17.4	34.9
Visiting a historic site	44.1	88.3
Walking	66.7	133.6
Hiking	23.8	47.7
Orienteering	2.4	4.8
Backpacking	7.6	15.2
Mountain climbing	4.5	9.0
Rock climbing	3.7	7.4
Caving	4.7	9.4
Birdwatching	27.0	54.1
Wildlife viewing	31.2	62.5
Fish viewing	13.7	27.4
Off-road driving	13.9	27.8
Visiting a beach or waterside	62.1	124.4
Studying nature near water	27.6	55.3
Bicycling	28.6	27.3
Horseback riding	7.1	14.2

Outdoor recreation remains popular in this country and overall is growing as a popular form of entertainment, relaxation, and diversion. Many of the most popular activities of the past are still very popular. While some activities are decreasing in popularity, others are emerging, some of which are growing rapidly.

The 1984-85 President's Commission on Americans Outdoors concluded that outdoor recreation is a maturing industry destined to "level off" in popularity and market opportunities. The 1994-95 NSRE indicated that outdoor recreation is not only continuing to grow, but that growth of number of people participating has exceeded the rate of population growth, 13.4 percent.

Planning, managing, and investing for outdoor recreation will become ever more challenging as the size of the market rises and the mix of activities and participants diversifies. New outdoor recreation technologies are probing deeper and deeper into the natural world. More efficient transportation and road networks encourage more travel. The challenge for the rest of the 1990s and early 2000s will be to find means to continue to provide opportunities in the face of conservative politics, a rapidly changing population, and a finite outdoor resource.