


IRIS
Internet Research
Information
Series



Long-Term National Trends in Outdoor Recreation Activity Participation---1980 to Now

A RECREATION Research Report in the IRIS Series¹

May, 2009

H. Ken Cordell², Gary T. Green³ and Carter J. Betz

¹ The Internet Research Information Series (IRIS) is an internet accessible science report series covering outdoor recreation statistics (RECSTATS), wilderness research (WILDERNESS) and other human-dimension and demographics research (DEMOSTATS) related to natural resources. This research is a collaborative effort between the USDA Forest Service's Southern Research Station and its Forestry Sciences Laboratory in Athens, Georgia; the University of Georgia in Athens; and the University of Tennessee in Knoxville, Tennessee. <http://warnell.forestry.uga.edu/nrrt/nsre/IrisReports.html>

² The authors are H. Ken Cordell, Pioneering Scientist, and Carter J. Betz, Outdoor Recreation Planner, USDA Forest Service, Athens, GA.

³ Gary T. Green is Assistant Professor, University of Georgia, Athens, GA.

Long-Term National Trends from the 1980s to Now

The NSRE.—Nationwide Recreation Surveys (NRS) were conducted in the United States in 1960, 1965 and in 1982-83 (USDI 1986). Results from those surveys have provided the opportunity to view trends in American’s outdoor recreation activity participation because the survey data were collected in a consistent way over those years. In 1994 the name of the Nationwide Recreation Survey was changed to the National Survey on Recreation and the Environment (NSRE). Recreation activity participation data has continued to be collected in a consistent and comparable way as was done with the former Nationwide Recreation Survey (the way questions are worded, etc.). Thus, by comparing participation estimates between the NRS and the NSRE, we are able to track trends up to the present time.

For this paper we start with the 1982-83 NRS. The listing of activities in that earlier survey was much shorter than is found in the current NSRE. As well, some activity definitional changes have occurred, often because of new activities people have taken up, or because of the emergence of components of a former activity grouping as major activities in themselves. A good example of the latter is the activity called “Bird watching and other nature study activities” in the 1982-83 NRS, which now has been split into bird watching, wildlife viewing, and other nature activities.

Findings.—Table 1 shows percentages of the U. S. population and number of participants in 33 outdoor recreation activities which could be compared over time (starting in 1982-83). These activities are in descending order according to change in total number of participants (shown in the last column of the table). These statistics are for the U.S. population 16 or older. The population numbers from the 1982-83 survey were for people 12 or older, but were adjusted to be comparable with the more recent surveys by reducing estimates of number of participants proportionate to the number of people between 12 and 15 years old from the 1982-83 NRS.

At the top of the list, as it typically has been over the years, is the activity of walking outdoors. Both the percentage of population and number of participants have steadily increased over time since 1982-83. Following in terms of growth of number of participants is viewing or photographing wild birds, attending outdoor sports events, day hiking, attending outdoor concerts/plays/other events, and visiting outdoor nature centers. The next activities in terms of growth of number of participants are swimming in natural waters, sightseeing, bicycling, running or jogging and picnicking. The next three activities involve use of motors and include boating, driving for pleasure, and driving off road. Four activities declined between 1982-83 and 2005-09---tennis, ice skating, cross-country skiing, and snowmobiling.

As with all social phenomena, there are cycles. Cycles can be driven by economic conditions, technology changes, population growth, cultural evolution, and other changes. This can be seen in long-term trend in hunting and fishing, which now shows short-term declines in some forms of these activities. Where these activities were once viewed as the primary recreational pursuits, now viewing and photographing birds has become the fastest long-term growing activity, growing 287 percent since 1982-83 and having more participants now than both hunting and fishing combined. Next fastest growing in terms of percentage increase is day hiking at almost 210 percent since 1982-83. The next four fastest percentage growth activities include

backpacking (+161%), off-road motor vehicle driving (+142%), walking outdoors (+111%), and canoeing/kayaking (+106%).

Table 1.—Trends in percentage of population and number participating in 33 outdoor recreation activities by activity and period in the U.S.

Activity	1982-1983		1994-1995		1999-2001		2005-2009		Trend	
	Percent of population participating	Total participants (millions)	Percent change in participants, 1982-1983 to 2005-2009	Change in number of participants (millions), '82-'83 to '05-'09						
Walk for pleasure	53.0	91.9	68.8	138.5	82.4	176.4	84.1	194.2	111.3	102.3
View/ photograph birds	12.0	20.8	27.0	54.3	31.8	68.0	34.9	80.5	287.0	59.7
Attend outdoor sports events	40.0	69.4	49.0	98.6	50.8	108.7	52.4	121.0	74.4	51.6
Day hiking	14.0	24.3	26.6	53.6	32.4	69.3	32.6	75.3	209.9	51.0
Outdoor concerts, plays, etc.	25.0	43.4	35.2	70.9	40.9	87.6	36.5	84.3	94.2	40.9
Visit nature centers, etc.	50.0	86.7	55.1	110.9	56.7	121.3	55.1	127.2	46.7	40.5
Swimming in lakes, streams, etc.	32.0	55.5	43.4	87.4	41.4	88.6	40.7	94.0	69.4	38.5
Sightseeing	46.0	79.8	58.4	117.5	50.8	108.7	50.5	116.6	46.1	36.8
Bicycling	32.0	55.5	38.7	77.8	39.6	84.7	39.2	90.4	62.9	34.9
Running or jogging	26.0	45.1	28.2	56.7	32.9	70.5	34.5	79.6	76.5	34.5
Picnicking	48.0	83.3	55.7	112.1	54.9	117.5	50.9	117.5	41.1	34.2
Boating	28.0	48.6	37.8	76.2	36.3	77.6	35.6	82.1	68.9	33.5
Driving for pleasure	48.0	83.3	.	.	50.3	107.7	48.8	112.7	35.3	29.4
Drive off-road	11.0	19.1	17.8	35.9	17.4	37.3	20.0	46.2	141.9	27.1
Developed camping	17.0	29.5	23.1	46.5	26.4	56.5	24.1	55.7	88.8	26.2
Swimming in an outdoor pool	43.0	74.6	49.2	99.1	41.7	89.1	43.1	99.5	33.4	24.9
Motorboating	19.0	33.0	29.6	59.5	24.3	52.1	23.3	53.8	63.0	20.8
Outdoor team sports	24.0	41.6	29.1	58.6	22.9	48.9	26.9	62.1	49.3	20.5

Activity	1982-1983		1994-1995		1999-2001		2005-2009		Trend	
	Percent of population participating	Total participants (millions)	Percent change in participants, 1982-1983 to 2005-2009	Change in number of participants (millions), '82-'83 to '05-'09						
Fishing	34.0	59.0	35.0	70.4	34.2	73.1	33.8	78.0	32.2	19.0
Primitive camping	10.0	17.3	15.6	31.4	15.9	34.0	14.2	32.8	89.6	15.5
Canoeing or kayaking	8.0	13.9	9.5	19.2	11.5	24.6	12.4	28.6	105.8	14.7
Backpacking	5.0	8.7	8.4	17.0	10.4	22.2	9.8	22.7	160.9	14.0
Golf	13.0	22.6	17.3	34.9	16.7	35.8	14.3	33.1	46.5	10.5
Sledding	10.0	17.3	13.7	27.7	15.1	32.3	11.6	26.8	54.9	9.5
Horseback riding	9.0	15.6	10.3	20.7	9.7	20.7	9.7	22.4	43.6	6.8
Hunting	12.0	20.8	12.5	25.3	11.1	23.9	11.5	26.6	27.9	5.8
Downhill skiing	6.0	10.4	11.3	22.8	8.6	18.3	6.4	14.8	42.3	4.4
Waterskiing	9.0	15.6	11.3	22.7	8.0	17.1	8.3	19.2	23.1	3.6
Snowmobiling	3.0	5.2	4.8	9.6	5.5	11.8	3.8	8.7	67.3	3.5
Sailing	6.0	10.4	6.0	12.1	5.1	10.9	4.5	10.3	-1.0	-0.1
Cross country skiing	3.0	5.2	4.4	8.8	3.8	8.2	2.1	4.9	-5.8	-0.3
Ice skating outdoors	6.0	10.4	7.1	14.2	6.7	14.3	4.2	9.6	-7.7	-0.8
Tennis outdoors	17.0	29.5	14.0	28.2	10.5	22.5	9.7	22.3	-24.4	-7.2

(Source: National Survey on Recreation and the Environment, USDA Forest Service and University of Georgia, Athens GA. Participation numbers and percentages reflect the population numbers estimated by the Bureau of Census for the years shown.)

Table 2 provides estimates of the number of days on which activity participants did each activity as reported in the 1982-83 Nationwide Recreation Survey and in the 2005-09 NSRE. Trends in annual activity days are provided for those activities which appeared in Table 7 of the 1982-1983 NRS report (USDI 1986), and for which annual days was also asked in NSRE 2005-09. Annual activity days for sports-related activities, such as golf and tennis, were not asked in the 2005-09 survey.

Activities listed in Table 2 are ordered in descending order by percent reporting more than 25 days of participation in 2005-09. Apparent changes for each activity are highlighted in yellow. For birding, pool swimming, motor boating, and developed camping, the percentages of participants by number of days of participation were pretty much consistent from the early 1980s to now (2005-09). For day hiking and backpacking, there was an increase in percentages of

activity participants spending more days per year participating. The same was true for driving motor vehicles off road, horseback riding on trails, sailing, primitive camping, and cross country skiing. For Snowmobiling, there was an increase in percentage spending 3 to 10 days and slight decreases in all the other categories of number of days.

Table 2.—Trend in percent of population 16 and older reporting number of days of participation by activity for the U.S., 1982-83 and 2005-09

Activity	1 to 2 days		3 to 10 days		11 to 25 days		More than 25 days	
	'82-'83	'05-'09	'82-'83	'05-'09	'82-'83	'05-'09	'82-'83	'05-'09
View or photograph birds	15	13	29	31	14	12	42	44
Swimming in outdoor pool	14	11	38	38	19	21	29	30
Drive off-road	23	23	39	38	21	16	17	24
Day hiking	28	19	47	44	14	17	12	20
Horseback riding on trails	47	41	27	34	8	10	17	16
Motorboating	33	30	39	40	17	16	12	14
Swimming in lakes, ponds, etc	19	18	42	50	20	19	19	14
Backpacking	39	28	47	46	9	15	6	10
Snowmobiling	40	39	36	42	14	10	10	8
Sailing	56	43	30	43	6	8	8	6
Developed camping	26	28	51	52	16	14	7	6
Canoeing or kayaking	51	44	39	42	8	9	3	5
Primitive camping	36	29	47	52	12	14	6	5
Downhill skiing	34	35	44	52	16	11	7	3
Cross country skiing	51	43	35	42	10	12	4	3

(Source: National Survey on Recreation and the Environment, USDA Forest Service and University of Georgia, Athens GA. Participation numbers and percentages reflect the population numbers estimated by the Bureau of Census for the years shown.)

Reference

USDI National Park Service. 1986. 1982-83 Nationwide Recreation Survey. U.S. Government Printing Office publication 1986-491-070/40078. Retrieved on May 12, 2009, from <http://www.srs.fs.usda.gov/trends/Nsre/nsre8283.html>