


IRIS
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American Birders
Their Numbers and Outdoor Activity Profiles
A RECREATION Research Report in the IRIS Series¹

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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>

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American Birders

A Research Report in the IRIS Series

Executive Summary

“What is a birder?” As one might imagine, there are many answers to this question. There are many answers because birding and birders are highly diverse. This report is Part I of a three-part report series that reviews the latest statistics on birders. The source is the National Survey on Recreation and the Environment (NSRE). In surveying Americans over the last nine years, respondents 16 years old or older were asked the following questions: *“During the past 12 months, did you view, identify, or photograph birds outdoors?”* And, for a subsample of those who said “Yes”, *“On how many different days did you view, identify or photograph birds outdoors (in the last 12 months?)”*

The NSRE is conducted by the Forest Service research group located in Athens, Georgia. The project is a partnership between the Forest Service, the University of Georgia and the University of Tennessee. The Athens research group has been collecting data and producing reports about the recreation activities, environmental attitudes and natural resource values of Americans since the 1980s. The NSRE has provided federal and state agencies, educational institutions, and the private sector, with outdoor recreation trend and demand data on local, regional and national scales since the first NRS in 1960.

For the period 2004 – 2007, the NSRE survey found that 35.4 percent of people 16 or older in America participated in birding. With almost 82 million participants averaging almost 100 days per year, the result is a huge. It is estimated that total number of days on which birding occurs is over 8 billion per year. In comparison to the 1999-2000 period, the estimated number of people birding grew by over 8 million.

Based on number of days per year, three groupings of birders can be identified. The people who participate least, the *Occasionals*, do some birding on between 1 and 6 days per year. In terms of demographics, this group tends to be equally male and female, there are proportionately more Blacks and Hispanics, and they are a little younger. They account for just 1.1 percent of the total birding days. As other activities, this group favors gardening or landscaping, participating in outdoor family gatherings, walking for pleasure (91 percent), viewing and photographing flowers, viewing and photographing wildlife, visiting nature centers and other nature information sites, and viewing and photographing natural scenery. This group, however, also favors some of the more active and physically challenging activities such as cross-country skiing, scuba diving, caving, sledding, mountain biking, snow shoeing, and snorkeling.

The *Actives* birding group participates 7 to 60 days per year. These birders account for 7.9 percent of birding days across all three groups. This Actives group of birders have a higher proportion among their ranks in the middle-age range, 80 percent are White, and

they are a little better educated than other birders. Their activity profiles tend toward more passive activities, meaning they are not very physically challenging. Other than viewing and photographing activities, outdoor activities in which over two-thirds of Actives participate include picnicking, sightseeing, visiting nature centers, participating in outdoor family gatherings, and walking for pleasure (92 percent).

The *Enthusiasts* are the most active birders, participating an estimated 61 to 365 days per year. Even though they number just one-third of all birders, Enthusiasts account for *91 percent of birding days*. Sixty-two percent are female, almost 84 percent are white, over one-half are over 55, 32 percent are 65 or older, a higher percentage have no college and the majority have incomes less than \$50,000. The most popular activities among Enthusiast birders are viewing and photographing flowers, wildlife, and natural scenery; gardening or landscaping; visiting nature centers; walking; and attending outdoor family gatherings. Birding Enthusiasts, as a group, do not generally participate in physically challenging activities, such as downhill skiing.

Overall, birding participation continues to grow as an outdoor interest among Americans. The gains in number of people and number of days of participation are impressive. Americans participate in many different ways, and at different levels. *Birding Enthusiasts* are by far the most active among all who participate in birding. In Parts II and III of this IRIS report series, we will cover in more detail the demographic profiles of birders and present results of a market segmentation analysis.

Introduction

Birding has not always been widely popular with the population at large. However, research in the last 20 years is showing that birding has now become widely popular and includes people who occasionally participate, as well as those we would label as birding enthusiasts. This report adds to the research about birders. It is recent and is based on a national survey, the National Survey on Recreation and the Environment.

What is Birding--Birding and the World of Infinite Niches

By Ted Eubanks, President, Fermata Inc.

The *2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*, conducted by the U.S. Fish and Wildlife Service (USFWS 2006), found that 87.5 million U.S. residents 16 years old and older participated in wildlife-related recreation in 2006. During that year, 30.0 million people fished, 12.5 million hunted, and 71.1 million participated in at least one type of wildlife-watching activity, such as observing, feeding, or photographing fish and other wildlife in the United States.

Based on the USFWS survey, of all the wildlife in the United States, birds attract the biggest following. Approximately 47.7 million people observed birds around the home and on trips in 2006. A large majority of these people, 88 percent (41.8 million), observed wild birds around the home, while 42 percent, 19.9 million, took trips away from home to observe and photograph wild birds. Participants averaged 115 days of birding in 2006, due mainly to the 124 days of around-the-home birding. Away-from-home birders averaged 14 days.

The USFWS uses a specific definition of wildlife watching, including birds. According to the 2006 report, to be counted wildlife-watching participants must either take a “special interest in wildlife around their homes, or take a trip for the “primary purpose” of wildlife watching. Secondary wildlife watching, such as incidentally observing wildlife while pleasure driving or hiking, is not included. Cross-recreational trips are excluded from the FWS survey. The 2006 survey report explains that “trips to fish, hunt, or scout and trips to zoos, circuses, aquariums, and museums are not considered wildlife-watching activities.” Thus, birding by birders who also hunt, or hunters who photograph, or photographers who fish is not counted in multiple wildlife-related recreation activities, unless birding is the main activity?

The data provided by the USFWS survey assesses the general scope of wildlife watching, but it is not comprehensive. It does not shed light on those who participate in birding that occurs along with other outdoor activities. This brings up the question, “What is a birder?” Secondly, the question arises as to whether the UFWS’s estimate of 71.1 million American wildlife watchers represent a homogenous population, or do they represent some broader, diverse group made up of people with differing interests and outdoor recreation preferences?

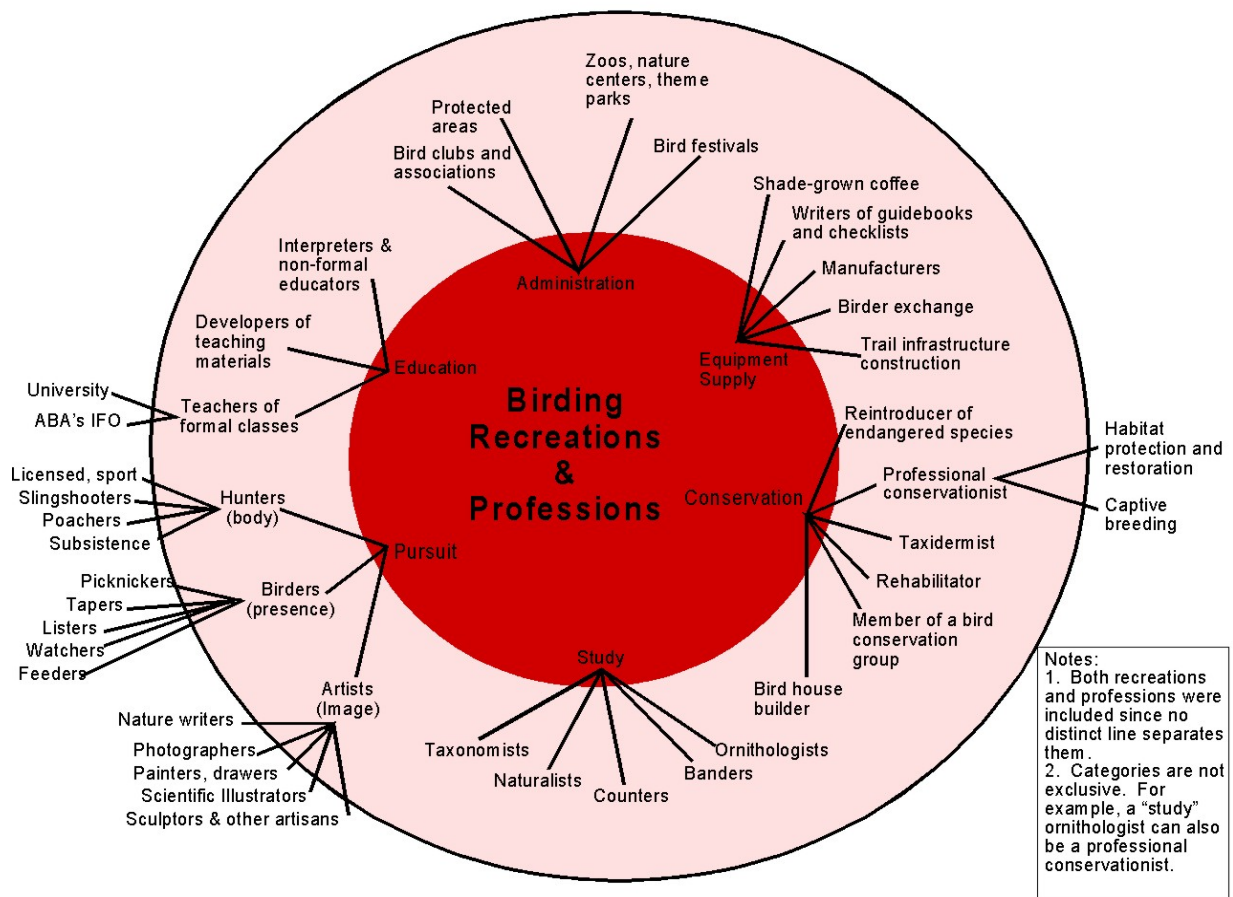
Our research (and experience) suggests that birding and wildlife viewing are, in fact, highly diverse. Birders may be unified by a common interest (birds), but there are multiple and diverse pathways that birders use in approaching this interest. We find it useful to define birders as simply people who view, photograph, study, identify, or otherwise take interest in wild birds in the out of doors, no matter the approach they take, how often they participate, or whether it is their primary pursuit. We see this broader definition of birders as complementary to the USFWS survey and as adding greater depth to the interpretation of birding in America.

An analogy would be to consider shoppers entering a “big-box” store. All entering have a common general interest, shopping in that particular establishment. Each shopper, however, is looking for different items to purchase, or maybe just browsing. They may enter through the same door, they may all grab a shopping cart on the way in, they may each pause to look at the daily specials listed, but they will leave with different items and shopping experiences. Birders may experience nature through birds, but each will have their own unique set of interests, desires, expectations and experiences.

Birding has evolved (greatly influenced by technology and more abundant information) into a 21st Century recreation activity. It seems it can be characterized as an array of seemingly endless niches, a concept recently espoused by Chris Anderson in *The Long Tail* (2006). To the question, “What is a birder?”, we must first consider the vast diversity of interests that apparently draw people to birds.

For example, there are people who travel to watch and photograph birds. Many of these birding travelers (avistourists) are highly skilled and significantly invested in the activity. However, there are also those (a larger segment of the population) who connect with birds and nature through feeding wildlife in backyards. There are people with specific interests in waterfowl, hummingbirds, shorebirds, or raptors. There are birders who also camp, campers who also photograph, anglers who birdwatch, and birders who fish.

The chart on the next page illustrates some of the diversity of ways in which people approach birding. Each manifestation of birding shown represents a definable segment of the birding market (defined to include all who have an interest in wild birds). Some of these segments are well organized and offer their own set of activities and programs. Each represents an opportunity for expanding wildlife viewing and birding and their benefits for nature conservation, environmental education and industry.



This Report and Its Data

This report presents the latest statistics from the National Survey on Recreation and the Environment (NSRE) that describe American Birders. This IRIS report will be presented in three parts to represent American's participation, trends and avidity in birding; to identify what other recreation activities attract birders; to overview demographic profiles of birders; and present results of a market segmentation analysis. It is divided into three parts to keep the reading more focused and shorter.

IRIS is an acronym for the Internet Research Information Series (IRIS). IRIS is designed to be 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 report on American Birding is a collaborative effort between the USDA Forest Service's Southern Research Station and its Forestry Sciences Laboratory in Athens, Georgia; Fermata Inc. in Houston, Texas; the University of Georgia and its Warnell School of Forestry and Natural Resources in Athens; and the University of Tennessee and its

Department of Forestry, Wildlife and Fisheries in Knoxville, Tennessee. Reports in the IRIS series can be found at <http://warnell.forestry.uga.edu/nrrt/nsre/IrisReports.html>.

The data for this report were obtained from the National Survey on Recreation and the Environment (NSRE). NSRE is conducted by the Forest Service research group located in Athens, Georgia and is a partnership between the Forest Service, the University of Georgia and the University of Tennessee. The Athens research group has been collecting data and producing reports about the recreation activities, environmental attitudes and natural resource values of Americans since the 1980s.

The NSRE (<http://warnell.forestry.uga.edu/nrrt/nsre/Nsre/nsre2.html>) is an ongoing series of surveys that began in 1960 as the National Recreation Survey (NRS). The U.S. Department of Interior managed the NRS between 1965 and the mid-1980s. In the early 1990s, the U.S. Forest Service assumed science management of this nationwide research project in collaboration with other federal agencies and universities. In particular, the National Oceanic and Atmospheric Administration closely collaborated in the project, co-managing it across most of its applications. The NSRE has provided federal and state agencies, educational institutions, and the private sector, with outdoor recreation trend and demand data on local, regional and national scales since the first NRS in 1960.

The NSRE, as an interagency effort, meets the data needs of several sponsoring agencies and organizations. These typically include the Forest Service (Department of Agriculture), the Bureau of Land Management and National Park Service (Department of the Interior), the National Oceanic and Atmospheric Administration (Department of Commerce), the United States Coast Guard, and the Environmental Protection Agency. State, local, and special purpose governments with missions related to recreation and natural resources management are also users of NSRE. Many state governments use NSRE data for their respective Statewide Comprehensive Outdoor Recreation Plans (SCORP).

The most recent rounds (versions) of the NSRE were conducted between late fall of 2006 and December 2007. This most recent surveying is part of a long-term data collection effort that has been almost continuous since the fall of 1999. The ‘core’ of the NSRE covers recreational activity participation and personal demographics. Across all survey versions since 1999, a total of 87,319 respondents 16 years old or older were asked the following questions: ***“During the past 12 months, did you view, identify, or photograph birds outdoors?”*** And if ***“Yes”***, ***“On how many different days did you view, identify or photograph birds outdoors?”*** The data generated by these questions is the primary focus of this report. Over 80 other outdoor activities were asked at varying times during the surveying to permit profiling the full scope of recreation activity participation of birders.

The large sample size for the NSRE provides sound statistical estimates for the nation, regions and states. No state had fewer than 500 respondents. The overall large sample also allowed spreading the number of respondents fairly evenly across the years between 1999 and 2007. This allows tracking of short-term trends in birding participation.

The NSRE is a general population, random-digit-dialed household telephone survey. Telephoning is accomplished by calling a random, cross-sectional sample of non-institutionalized residents of the United States, 16 years of age or older. The Human Dimensions Research Laboratory at the University of Tennessee-Knoxville, an on-going NSRE cooperator, conducts the NSRE survey almost daily. The system is computer-assisted (CATI) so the trained interviewers work from a computer monitor and the data are automatically entered as telephone interviews are conducted. The average length of an interview is restricted to 14 minutes.

All data used in this report were weighted to assure the demographic profiles of survey respondents match those of the temporally concurrent U.S. population 16 years old or older. Weighting improves the representativeness of the sample by accounting for over or under representation of different demographic groups in the sample. Respondents are selected by first making contact with a household whose phone number is included within a randomized listing of household phone numbers from across the U.S. The phone numbers have already been screened to remove most business or institution numbers. Once contacted, further randomization occurs by asking how many persons in the household are 16 years old or older. The NSRE interviewer then asks to speak to the person of that age category who had the last birthday. Using a random list of phone numbers, interviewing the person with the last birthday, and weighting the resulting data better assures representation of people of all socioeconomic status across the country. All regions, states, time zones, cities and rural areas are sampled.

Data were analyzed using the SAS statistical package. Percentages and numbers of American birders were estimated based on the samples of members of households as described above. Confidence intervals are provided within the tables presenting these estimates. Confidence intervals indicate the reliability of a sample and the estimate resulting. These confidence intervals were computed at the 95 percent level of confidence.

Two additional reports based on NSRE birding data, Parts II and III, will be written and made available in the near future. These reports will cover the demographic, recreation activity and market segmentation profiles of American birders.

The Numbers

This section covers current birding participation and birding trends. Reported are percentages of the population, number of birders in millions and days birding in millions.

Current Birding Participation

Table 1 shows the estimated current percentage of Americans who indicated they participated in birding outdoors as a recreational activity in the 12 months just prior to their being interviewed as part of the NSRE survey. The data included in this estimate was collected from 2004 through to 2007. After weighting, the data indicated that the percentage of people 16 or older who did any amount of birding for these years was 35.4 percent. This is based on a sample of over 17,600 contacted persons. The population of

non-institutionalized persons 16 or older in the U.S. as of July 2006 was just under 231 million. Thus, 35.4 percent represents approximately 81.8 million persons in the U.S. who reported some level of birding in the past 12 months.

Table 1—Percent and number of people age 16 and older in the United States who participated in birding, and mean and total annual birding days, 2004-2007.

Percent Participating¹	Sample Size	Mean Annual Birding Days Per Participant¹	Sample Size Birding Days	Millions of birding participants	Millions Annual Birding Days
35.4 (34.7, 36.1)	17,624	99.8 (96.3,103.2)	6,301	81.8	8,159.9

¹95% confidence interval in parentheses.

Source: NSRE 2004-2007. Based on the national population age 16 and older: 230.9 million (2006 Census estimate). No birding days data were collected in 2004.

Among persons who did outdoor birding, the average number of days on which they participated in the activity was almost 100 days over a year’s time. Of course, many participated on only a few days, while others participated almost every day. **Table 2** shows the percentage of birders arrayed by the range in number of days during the year they participated. Just over one-third participated 6 or fewer times per year during the period 2004 – 2007. Over 26 percent participated between 7 and 30 days during a year. Over 28 percent did some birding on over 100 days per year. Those very devoted to birding participated every day of the year, 365. (Groupings of birders by their level of participation will be revisited later in this report.)

Table 2—Percentage of birders age 16 and older in the United States by number of days on which they watched birds during the year, 2004-2007.

Annual birding days	Percent	Cumulative Percent
1-6	33.8	33.8
7-30	26.5	60.3
31-60	6.9	67.2
61-100	4.7	71.8
101-200	6.3	78.2
201-300	4.4	82.6
301-364	1.2	83.8
365	16.2	100.0

Source: NSRE 2004-2007. N=6,301.

While this may seem to be a high number of days on which participants did some birding, one should keep in mind that the NSRE definition of birding is the most inclusive of any outdoor survey. It includes highly devoted birders who are striving to build a life list, to

spot a rare species, or to refine song identification skills. It also includes casual birders who may participate in birding as one of a number of activities done during a single outing.

With almost 82 million participants averaging almost 100 days per year the result is a huge total number of days on which birding occurs across Americans who participate. Over 8 billion birding days *per year* were logged by persons 16 or older between 2004 and 2007. In comparison, the National Survey of Fishing, Hunting and Wildlife-Associated Recreation estimated 47.7 million birders for 2006 (USDI 2006). The FWS survey is limited to birding trips and closely observing birds to identify species or otherwise study their habits around home.

Recent Birding Trends

In recent years, birding has been reported as one of the fastest growing recreational activities in the United States (Cordell and Herbert, 2002). But the question often comes up as to whether birding participation is still increasing in this country. The statistics in **Table 3** report recent nationwide trends in birding participation. Participation is reported for 4 time periods from 1994 to the winter of 2007. Also given are trends in days of participation, number of birders and total annual days of participation.

Table 3—Trends percent and number participating in birding and annual birding days in the United States, 1994 to 2007

Interview Period	Percent Participating ¹	Sample Size	Mean Annual Birding Days Per Participant ¹	Sample Size Birding Days	Millions of birding participants	Millions Annual Birding Days
1994-1995	27.0 (26.4, 27.7)	17,216	87.7 (83.5, 92.0)	3,626	54.4	4,774.9
1999-2000	33.2 (32.6, 33.7)	28,327	81.9 (79.0, 84.7)	8,602	71.0	5,811.0
2001-2003	31.6 (31.2, 32.1)	41,822	92.9 (90.3, 95.5)	11,423	69.7	6,469.8
2004-2005	36.4 (35.4, 37.4)	8,986	100.2 (95.3, 105.1)	2,954	83.1	8,321.2
2006-2007	34.4 (33.4, 35.4)	8,638	99.4 (94.7, 104.2)	3,347	79.3	7,887.3

¹95% confidence interval in parentheses.

Source: NSRE 1994-1995, NSRE 2000-2004, NSRE 2005-2007. Based on the following national age 16+ populations. 1994-1995: 201.3 million (1995 Woods & Poole, Inc.). 1999-2000: 214.0 million (2000 Census). 2001-2003: 220.1 million (2002 Census estimate). 2004-2005: 228.0 million (2005 Census estimate). 2006-2007: 230.9 million (2006 Census estimate).

In 1994-1995, the estimate of proportion of population who participated in birding was 27 percent. This represented over 54 million people doing some amount of birding. In 1999-2000, the estimated percentage had risen to 33.2 percent of Americans 16 or older.

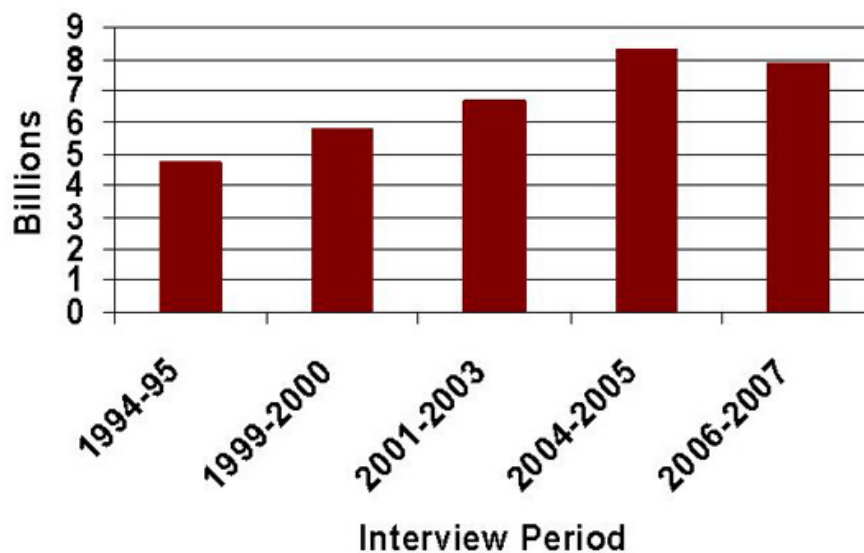
This increase represented a gain of almost 16 million in five years. The estimated total number at that time reached almost 71 million people who averaged almost 82 days of birding per year. In the period 2001-2003, the estimated percentage participating dropped somewhat to 31.6 percent. Number of people birding dropped slightly also to 69.7 million. This decrease in number of people birding was not as noticeable as the drop in percentage, however, because it was offset by rising population during this same time period.

In the period 2004-2005, the percentage participating rebounded from the drop in 2001-2002 with a rise to 36.4 percent. When combined with population growth, this percentage growth resulted in an estimated 83.1 million people birding. This rise represented a growth of 17 percent over the number of people birding in 1999-2000, an average growth of just over 3 percent per year. This growth rate is faster than the rate of U.S. population growth during the same period.

Between 2004-2005 and 2006-2007, the estimated percentage of 16-or-older people birding again fell somewhat, from 36.4 to 34.4 percent. Number of participants fell back also to just over 79 million. In comparison to the 1999-2000 time period, however, estimated number of people birding still showed a growth of over 8 million.

Total annual number of days of participation rose from 5.8 billion in 1999 to almost 7.9 billion in 2007 (**Figure 1**). This is growth of nearly 36 percent in participation days in an 8-year period.

Figure 1. – Billions of birding days by interview period.



Part of the reason for the substantial increase in total annual days of birding is the rise of average number of days (mean) per participant from the 1990s to current time. In 1994-1995, participants averaged 87.7 days per year. In 2001-2003, participants averaged 92.9 days. By 2006-2007, the average days per year per birder was up to almost 100. While percentages and numbers have both risen and fallen between 1994 and 2007, overall there has been a rising trend in birding participation.

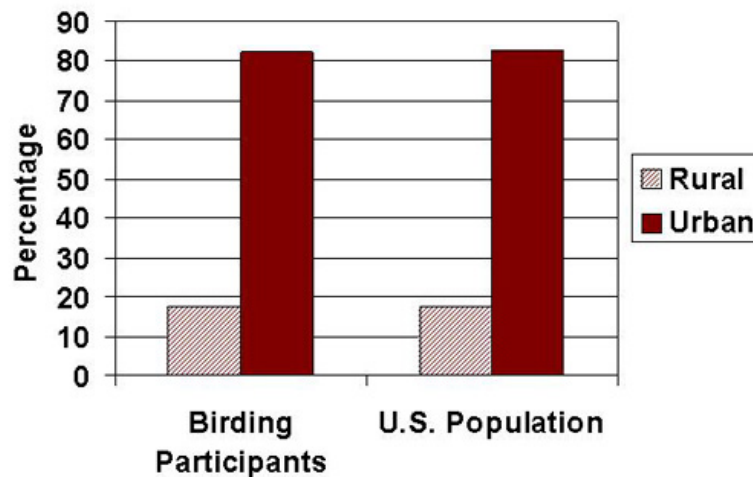
Who Are American Birders

Are Urban Residents Drawn More to Birding than Rural Residents

The U.S. Bureau of Census distinguishes metropolitan (medium to large cities and surrounding commuting areas) and non-metropolitan counties (smaller places where people do not live in or commute to the larger cities). For this report, the terms urban and rural will be used instead of metropolitan and non-metropolitan to differentiate counties containing or being near cities. Since urban residents make up over 80 percent of the U.S. population, actually 82.6 percent of persons 16 or older, one would expect that the birding participation rate of urbanites would closely parallel the participation rate for the overall U.S. population. But the question often comes up as to whether rural residents participate more or less than urban residents.

A comparison between rural and urban residents indicated no discernible difference. Across the country, 35 percent of both categories of U.S. residents participated in birding for the time period 2004-2007. **Figure 2** shows percentages of birders who are rural and urban residents. It also shows percentages of the U.S. population 16 or older who live in urban and rural counties. These percentages are virtually identical. Typically, there are

Figure 2. – Percentage of birding participants and U.S. population by rural and urban.



differences in participation rates between rural and urban residents for some outdoor activities (Cordell 2004). This apparently is not the case, however, for birding.

Does Birding Participation Differ by Region of the Country

The U.S. Bureau of Census divides the Country into four primary regions—the Northeast, South, Midwest and West (**Figure 3**). The Northeast stretches from Maine south to New Jersey and Pennsylvania. The South includes states from Delaware and Maryland to Texas. The Midwest ranges from Ohio to Kansas and then north to North Dakota. The West is the largest geographic area including vast areas from the eastern borders of Montana, Wyoming, Colorado and New Mexico west to the Pacific, including Alaska and Hawaii. These “macro” regions are very different in relief, vegetation, land ownership (much of the West being public land), and people.

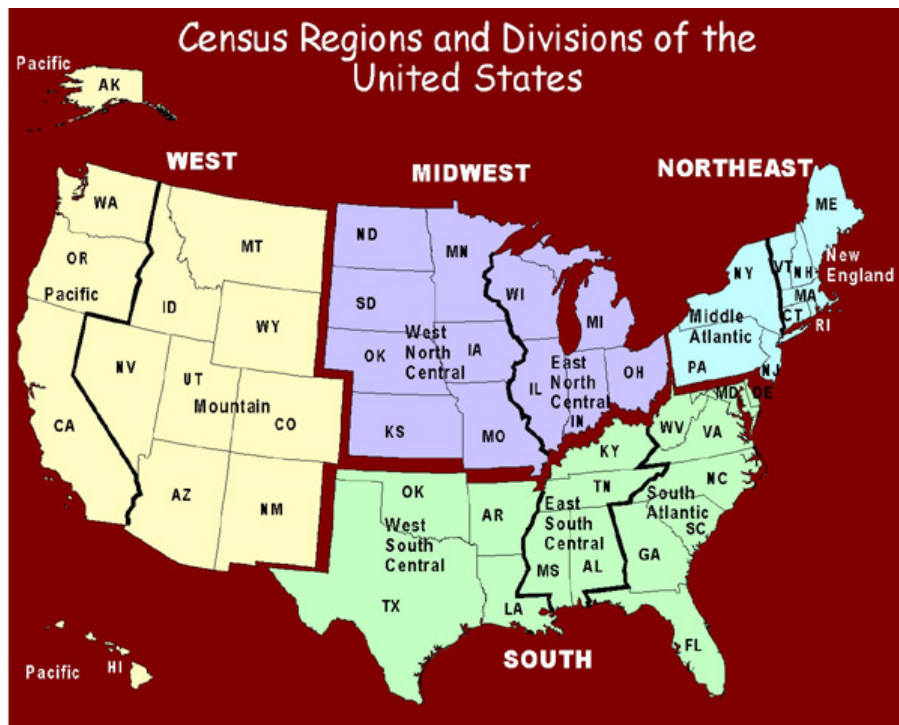


Figure 3. Census Regions.

Are there differences in birding participation between the people living in these different regions? Generally, the answer is yes, but not much (**Table 4**).

Generally, people living in the Northeast and Midwest regions participate on more days than do people living in the South or West. The percentages between the Northeast and Midwest are not significantly different. Nor are the percentages between the South and West significantly different from one another.

Table 4—Percentage of population 16 or older participating in birding by region of the country.

Region	Percentage	95% Confidence Intervals ¹
Northeast	38.3	36.6-40.0
Midwest	37.6	36.1-39.0
South	34.4	33.3-35.6
West	33.0	31.5-34.4

¹95% confidence interval in parentheses.

Source: NSRE 2004 – 2007.

Are There Differences by Level of Birding Participation

Three Levels of Participation and Their Demographics

Across the 82 million people who participate in birding during a year, there are differences in the number of days of participation (a day of participation is any amount of birding during a day counts as a day, i.e., a day on which some birding occurred). Also, there are differences between birders who participate at different levels during a year. Based on number of days per year, three groupings have been identified (**Table 5**). The range of days for lowest participation level is 1 to 6 days per year. This group tends to be equally male and female, they are made up of more Blacks and Hispanics than other birders, and they tend to be a little younger than others. We refer to this participant group as the “*Occasionals*”, that is, they occasionally do some birding during a year.

The middle range of days of birding, 7 to 60 days per year (**Table 5**), defines the middle one-third of birding participants. Most of these birders participate less than 30 days per year. Compared with other birders, smaller percentages of this group, the mid-level of participation, are Black, Native American or other non-white races. They tend to be a little older than other birders, and somewhat more of them are in higher income categories. We refer to this group as the “*Actives*”. They are active in birding, although they are not the most active birders.

Table 5--Definition of 3 birding groups based on annual birding days, 2004-2007.

Birding Group	Number of Annual Days
Occasionals	1 to 6
Actives	7 to 60
Enthusiasts	61 to 365

Source: NSRE 2004-2007. N=6,301

Birders in the group with the highest participation rate (upper one-third) participate between 61 and 365 days per year. We refer to this group as “*Birding Enthusiasts*”. About one-third of this group participates between 61 and 200 days per year. Around 18 percent participates between 201 to 364 days per year. Almost one-half participates every day of the year, 365. The demographic composition of this group is notably different than that of other birders. Well over 60 percent are female, over 83 percent are White, well over one-half are 55 or older (32 percent 65 or older), smaller percentages are in the

higher education categories (e.g., post graduate degrees), and somewhat higher percentages are in lower income categories. Two-thirds of those who reported participating in birding every day of the year are female, fewer of them (compared with other enthusiasts) have college degrees, and somewhat more of them are in lower income categories.

Three Levels and Their Outdoor Activity Profiles

Below we profile the outdoor recreation activities for each of the three levels of birding participants—the *Occasionals*, the *Actives*, and the *Birding Enthusiasts*. As much as demographics, the profile of outdoor activities these groups participate in define who they are. Two dimensions are shown in the tables referenced. First shown is the percent in the group that participates in each outdoor activity listed. Looking down the list, we will point out those in which two-thirds or more participate. Second we will show a ratio of the percent in the group who participate divided by the percent of U.S. population participating in the listed activities. This ratio is a quick visual way of comparing percentages of birders participating in a given activity with the percentage of the U.S. population overall participating in a listed activity. This helps to address the question of whether birders are more or less active in some activities. Activities in the tables are listed from highest to lowest ratio (see last column in Tables 6 through 8).

Occasionals.—This birding group participates an estimated 1 to 6 days per year. Although they comprise one-third of the people in the U.S. who participate in birding during the year, they account for only 1.1 percent of the total number of days on which members of this group participate (**Table 6**). This group of birders tends to be younger than the other two groups who are more active in birding. However, measured in terms of percent participating in other activities, Occasional birders are as active, and for some activities, seem to be more active than the population generally (**Table 7**).

Table 6--Number and percent of total annual birding days in the United States by birding avidity group, 2004-2007.

Birding Avidity Group	Definition: Number of Annual Days	Percent of Total Annual Days	Millions of Total Annual Days
Occasionals	1 to 6	1.1	90.8
Actives	7 to 60	7.9	640.4
Enthusiasts	61 to 365	91.0	7,428.7
<i>Total</i>		<i>100.0</i>	<i>8,159.9</i>

Source: NSRE 2004-2007. N=6,301

Activities in which over two-thirds of Occasionals participate include gardening or landscaping, participating in outdoor family gatherings, walking for pleasure (91 percent), viewing and photographing flowers, viewing and photographing wildlife, visiting nature centers and other nature information sites, and viewing and photographing

natural scenery. Viewing and photographing seems to be a strong category of activity interest for this group, even though their level of participation in birding itself (days per year) is relatively low.

Activities in which higher percentages of Occasionals participate than the population overall are indicated by ratios greater than or close to 1.5 in the right hand column of **Table 7**. This profile includes a number of activities that are somewhat physically challenging and require skill. This includes activities such as cross-country skiing, scuba diving, caving, sledding, mountain biking, snow shoeing, and snorkeling. These activities make for an interesting combination when viewed relative to the high percentages participating in nature viewing and photographing activities.

Table 7--Activity profiles of Occasional birders (percent participating), 2004-2007.

Activity	Percent in group participating¹ (n=1,947)	Percent in nation participating¹ (n=17,624)	Difference: (Group-Nation)	Group: Nation Ratio
Cross-country skiing	4.1 (2.8, 5.5)	2.3 (2.0, 2.6)	1.83	1.80
Scuba diving	2.6 (1.9, 3.3)	1.6 (1.4, 1.8)	1.04	1.66
Caving	6.8 (5.0, 8.5)	4.2 (3.8, 4.6)	2.56	1.61
Sledding	20.7 (17.9, 23.4)	13.1 (12.4, 13.8)	7.61	1.58
Attend outdoor concerts, etc.	55.1 (45.9, 64.2)	35.4 (32.9, 37.9)	19.66	1.56
Mountain biking	27.4 (24.1, 30.8)	18.5 (17.6, 19.3)	8.99	1.49
Snowshoeing	2.5 (1.4, 3.5)	1.7 (1.4, 1.9)	0.80	1.48
Snorkeling	9.5 (8.2, 10.8)	6.5 (6.1, 6.8)	3.00	1.47
Downhill skiing	9.8 (7.8, 11.8)	6.8 (6.3, 7.3)	2.99	1.44
Boat tours or excursions	28.4 (26.3, 30.5)	19.7 (19.0, 20.3)	8.68	1.44
Mountain climbing	7.0 (5.2, 8.9)	4.9 (4.4, 5.4)	2.08	1.42
Surfing	2.9 (2.2, 3.7)	2.1 (1.9, 2.3)	0.85	1.41
View/photograph other wildlife	69.8 (67.7, 72.0)	50.4 (49.7, 51.2)	19.43	1.39
View/photograph flowers, etc.	71.7 (69.7, 73.8)	51.7 (51.0, 52.4)	20.05	1.39
Visit prehistoric sites	27.5 (24.2, 30.8)	19.7 (18.8, 20.6)	7.76	1.39

Activity	Percent in group participating¹ (n=1,947)	Percent in nation participating¹ (n=17,624)	Difference: (Group-Nation)	Group: Nation Ratio
Yard games, e.g. croquet	56.1 (47.7, 64.5)	40.5 (38.0, 43.0)	15.59	1.38
View or photograph fish	36.7 (34.5, 38.8)	26.8 (26.2, 27.4)	9.85	1.37
Visit a wilderness	42.2 (38.5, 45.8)	31.0 (30.0, 32.1)	11.12	1.36
Visit nature centers, etc	76.9 (73.8, 80.1)	57.0 (55.9, 58.1)	19.94	1.35
Developed camping	35.1 (31.4, 38.9)	26.2 (25.1, 27.3)	8.93	1.34
Anadromous fishing	5.3 (4.3, 6.3)	4.0 (3.7, 4.2)	1.34	1.34
Sailing	6.0 (4.9, 7.0)	4.5 (4.2, 4.8)	1.51	1.34
Visit waterside besides beach	32.2 (30.1, 34.3)	24.0 (23.3, 24.6)	8.22	1.34
Visited farm or agric. setting	40.9 (35.7, 46.1)	30.6 (29.1, 32.0)	10.32	1.34
Day hiking	43.4 (39.7, 47.0)	32.6 (31.6, 33.7)	10.76	1.33
View/photograph natural scenery	83.0 (81.2, 84.7)	63.3 (62.6, 64.0)	19.66	1.31
Small game hunting	8.4 (6.5, 10.3)	6.4 (5.9, 7.0)	1.99	1.31
Rowing	4.9 (4.0, 5.9)	3.7 (3.5, 4.0)	1.17	1.31
Waterskiing	10.1 (8.8, 11.5)	7.7 (7.4, 8.1)	2.41	1.31
Ice skating	6.5 (4.8, 8.1)	4.9 (4.5, 5.4)	1.51	1.31
Coldwater fishing	15.8 (14.1, 17.4)	12.1 (11.7, 12.6)	3.62	1.30
Visit historic sites	55.0 (51.2, 58.7)	42.5 (41.3, 43.6)	12.49	1.29
Kayaking	6.9 (5.8, 8.1)	5.5 (5.2, 5.8)	1.46	1.27
Visit a beach	52.3 (50.1, 54.5)	42.6 (41.9, 43.3)	9.70	1.23
Canoeing	11.4 (10.0, 12.8)	9.3 (8.9, 9.7)	2.02	1.22
Motorboating	29.2 (27.2, 31.3)	23.9 (23.3, 24.5)	5.31	1.22

Activity	Percent in group participating¹ (n=1,947)	Percent in nation participating¹ (n=17,624)	Difference: (Group-Nation)	Group: Nation Ratio
Swimming in lakes, ponds, etc.	49.9 (47.7, 52.1)	40.8 (40.1, 41.5)	9.07	1.22
Windsurfing	0.7 (0.3, 1.1)	0.6 (0.5, 0.7)	0.12	1.21
Saltwater fishing	12.8 (11.3, 14.3)	10.6 (10.2, 11.1)	2.17	1.20
Orienteering	3.2 (1.2, 5.2)	2.7 (2.2, 3.1)	0.53	1.20
Swimming in an outdoor pool	50.4 (47.7, 53.1)	42.2 (41.3, 43.0)	8.23	1.20
Picnicking	59.3 (55.6, 63.0)	50.2 (49.1, 51.4)	9.09	1.18
Gardening or landscaping	78.1 (74.2, 82.1)	66.9 (65.4, 68.4)	11.24	1.17
Backpacking	11.5 (9.2, 13.8)	9.9 (9.3, 10.6)	1.56	1.16
Sightseeing	57.1 (47.4, 66.8)	49.6 (47.3, 51.8)	7.52	1.15
Driving for pleasure	60.7 (51.2, 70.3)	53.0 (51.3, 54.7)	7.73	1.15
Big game hunting	9.7 (7.7, 11.7)	8.7 (8.1, 9.3)	1.00	1.12
Family gathering	79.6 (75.2, 84.1)	71.1 (69.5, 72.7)	8.51	1.12
Rafting	9.0 (7.7, 10.2)	8.0 (7.7, 8.4)	0.94	1.12
Warmwater fishing	24.7 (22.8, 26.7)	22.4 (21.8, 23.0)	2.31	1.10
Primitive camping	15.9 (13.1, 18.8)	14.5 (13.7, 15.4)	1.37	1.09
Snowmobiling	4.4 (3.0, 5.8)	4.0 (3.7, 4.4)	0.37	1.09
Walk for pleasure	91.2 (89.9, 92.6)	83.7 (83.2, 84.3)	7.51	1.09
Use personal watercraft	9.5 (8.2, 10.8)	8.8 (8.4, 9.2)	0.67	1.08
Gather mushrooms, berries, etc.	33.0 (29.5, 36.5)	30.7 (29.6, 31.9)	2.28	1.07
Rock climbing	3.8 (2.5, 5.1)	3.6 (3.2, 4.0)	0.18	1.05
Snowboarding	5.2 (3.7, 6.7)	5.0 (4.6, 5.4)	0.21	1.04

Activity	Percent in group participating¹ (n=1,947)	Percent in nation participating¹ (n=17,624)	Difference: (Group-Nation)	Group: Nation Ratio
Ice fishing	2.2 (1.6, 2.9)	2.1 (1.9, 2.3)	0.09	1.04
Horseback riding on trails	6.8 (4.0, 9.6)	6.7 (6.0, 7.3)	0.11	1.02
Drive off-road	19.6 (16.7, 22.4)	19.8 (18.9, 20.6)	-0.21	0.99
Migratory bird hunting	1.7 (1.1, 2.2)	1.8 (1.6, 2.0)	-0.13	0.93

¹95% confidence interval in parentheses.

Source: NSRE 2004-2007.

Activities in which Occasionals participate at rates 10 percent or more above the national percentage is also interesting. Some of these have already been mentioned. They include:

- attending outdoor concerts
- viewing and photographing flowers
- viewing and photographing wildlife (other than birds)
- outdoor yard games (e.g., badminton)
- viewing and photographing fish
- visiting a wilderness area
- visiting nature centers
- visiting a farm or other agricultural setting
- day hiking
- viewing and photographing natural scenery
- visit historic sites
- visiting a beach, gardening or landscaping.

Actives.--This birding group participates an estimated 7 to 60 days per year. They account for 7.9 percent of birding days (as contrasted with just 1.1 percent for Occasionals). Actives tend to have a higher proportion of their members in the middle age range, 80 percent are White, and they are a little better educated.

As shown in **Table 8**, Active birders have a different outdoor activity profile than either of the other two birder groups. Many of their activities tend to be more passive, meaning they are not very physically demanding. Other than viewing and photographing activities, outdoor activities in which over two-thirds of Actives participate include picnicking, sightseeing, visiting nature centers, participating in outdoor family gatherings, and walking for pleasure (92 percent).

Activities in which higher percentages of Actives participate than the population overall are indicated by ratios greater than or close to 1.5 in the right hand column of **Table 8**. There are quite a few of these activities, but, several of them involve relatively small percentages of this birding group's members. The more physically demanding activities

include snowshoeing, rowing, cross-country skiing, migratory bird hunting, ice fishing, canoeing, kayaking, anadromous fishing, and orienteering.

Table 8--Activity profiles of Active birders (percent participating), 2004-2007.

Activity	Percent in group participating¹ (n=2,218)	Percent in nation participating¹ (n=17,624)	Difference: (Group-Nation)	Group: Nation Ratio
Snowshoeing	3.6 (2.3, 4.8)	1.7 (1.4, 1.9)	1.92	2.16
Rowing	7.9 (6.8, 9.0)	3.7 (3.5, 4.0)	4.18	2.12
Cross-country skiing	4.7 (3.3, 6.2)	2.3 (2.0, 2.6)	2.44	2.06
Migratory bird hunting	3.6 (2.8, 4.4)	1.8 (1.6, 2.0)	1.81	2.01
Ice fishing	3.9 (3.1, 4.7)	2.1 (1.9, 2.3)	1.76	1.83
Canoeing	16.9 (15.3, 18.5)	9.3 (8.9, 9.7)	7.56	1.81
Kayaking	9.4 (8.2, 10.7)	5.5 (5.2, 5.8)	3.96	1.72
Snorkeling	10.8 (9.5, 12.1)	6.5 (6.1, 6.8)	4.37	1.68
Attend outdoor concerts, etc.	58.2 (49.9, 66.5)	35.4 (32.9, 37.9)	22.82	1.64
View or photograph fish	43.0 (40.9, 45.1)	26.8 (26.2, 27.4)	16.20	1.60
View/photograph other wildlife	79.5 (77.8, 81.3)	50.4 (49.7, 51.2)	29.13	1.58
Visited farm or agric. setting	48.2 (43.3, 53.0)	30.6 (29.1, 32.0)	17.61	1.58
Gather mushrooms, berries, etc.	48.2 (44.6, 51.8)	30.7 (29.6, 31.9)	17.45	1.57
Anadromous fishing	6.2 (5.2, 7.2)	4.0 (3.7, 4.2)	2.24	1.57
Big game hunting	13.3 (11.0, 15.6)	8.7 (8.1, 9.3)	4.66	1.54
Visit waterside besides beach	36.9 (34.9, 38.9)	24.0 (23.3, 24.6)	12.95	1.54
Mountain biking	28.0 (24.7, 31.2)	18.5 (17.6, 19.3)	9.52	1.52
View/photograph flowers, etc.	78.5 (76.7, 80.2)	51.7 (51.0, 52.4)	26.78	1.52
Orienteering	4.0 (1.7, 6.3)	2.7 (2.2, 3.1)	1.30	1.49

Activity	Percent in group participating¹ (n=2,218)	Percent in nation participating¹ (n=17,624)	Difference: (Group-Nation)	Group: Nation Ratio
Boat tours or excursions	29.1 (27.1, 31.0)	19.7 (19.0, 20.3)	9.38	1.48
Primitive camping	21.2 (18.1, 24.2)	14.5 (13.7, 15.4)	6.62	1.46
Caving	6.1 (4.5, 7.7)	4.2 (3.8, 4.6)	1.91	1.46
Visit a wilderness	44.6 (41.0, 48.2)	31.0 (30.0, 32.1)	13.59	1.44
Motorboating	34.5 (32.5, 36.4)	23.9 (23.3, 24.5)	10.53	1.44
Ice skating	7.1 (5.3, 8.8)	4.9 (4.5, 5.4)	2.12	1.43
Visit prehistoric sites	28.1 (24.9, 31.4)	19.7 (18.8, 20.6)	8.39	1.43
Scuba diving	2.2 (1.6, 2.8)	1.6 (1.4, 1.8)	0.64	1.41
Sailing	6.3 (5.3, 7.3)	4.5 (4.2, 4.8)	1.80	1.40
Small game hunting	8.9 (7.0, 10.8)	6.4 (5.9, 7.0)	2.48	1.39
View/photograph natural scenery	87.0 (85.5, 88.4)	63.3 (62.6, 64.0)	23.66	1.37
Warmwater fishing	30.8 (28.9, 32.7)	22.4 (21.8, 23.0)	8.36	1.37
Rafting	11.0 (9.7, 12.3)	8.0 (7.7, 8.4)	2.94	1.37
Visit historic sites	58.1 (54.5, 61.7)	42.5 (41.3, 43.6)	15.63	1.37
Day hiking	44.7 (41.1, 48.3)	32.6 (31.6, 33.7)	12.10	1.37
Picnicking	68.1 (64.7, 71.6)	50.2 (49.1, 51.4)	17.90	1.36
Sledding	17.8 (15.2, 20.4)	13.1 (12.4, 13.8)	4.73	1.36
Developed camping	35.4 (31.8, 39.0)	26.2 (25.1, 27.3)	9.17	1.35
Coldwater fishing	16.2 (14.7, 17.8)	12.1 (11.7, 12.6)	4.08	1.34
Saltwater fishing	14.1 (12.6, 15.5)	10.6 (10.2, 11.1)	3.45	1.33
Swimming in lakes, ponds, etc.	53.7 (51.6, 55.8)	40.8 (40.1, 41.5)	12.87	1.32

Activity	Percent in group participating¹ (n=2,218)	Percent in nation participating¹ (n=17,624)	Difference: (Group-Nation)	Group: Nation Ratio
Surfing	2.7 (2.1, 3.4)	2.1 (1.9, 2.3)	0.65	1.31
Visit a beach	55.6 (53.5, 57.7)	42.6 (41.9, 43.3)	13.03	1.31
Windsurfing	0.8 (0.4, 1.1)	0.6 (0.5, 0.7)	0.17	1.29
Backpacking	12.8 (10.4, 15.1)	9.9 (9.3, 10.6)	2.81	1.28
Gardening or landscaping	85.3 (82.3, 88.4)	66.9 (65.4, 68.4)	18.44	1.28
Sightseeing	62.2 (51.4, 73.1)	49.6 (47.3, 51.8)	12.65	1.26
Swimming in an outdoor pool	52.3 (49.8, 54.8)	42.2 (41.3, 43.0)	10.15	1.24
Rock climbing	4.4 (3.1, 5.8)	3.6 (3.2, 4.0)	0.81	1.22
Snowmobiling	4.8 (3.4, 6.3)	4.0 (3.7, 4.4)	0.79	1.20
Waterskiing	9.3 (8.1, 10.5)	7.7 (7.4, 8.1)	1.56	1.20
Visit nature centers, etc	67.9 (64.5, 71.3)	57.0 (55.9, 58.1)	10.94	1.19
Drive off-road	23.2 (20.2, 26.2)	19.8 (18.9, 20.6)	3.42	1.17
Yard games, e.g. croquet	47.3 (39.1, 55.5)	40.5 (38.0, 43.0)	6.79	1.17
Mountain climbing	5.7 (4.1, 7.4)	4.9 (4.4, 5.4)	0.78	1.16
Family gathering	79.4 (75.3, 83.4)	71.1 (69.5, 72.7)	8.23	1.12
Walk for pleasure	92.3 (91.2, 93.4)	83.7 (83.2, 84.3)	8.56	1.10
Horseback riding on trails	7.0 (4.0, 10.1)	6.7 (6.0, 7.3)	0.37	1.06
Snowboarding	5.1 (3.6, 6.6)	5.0 (4.6, 5.4)	0.10	1.02
Driving for pleasure	53.5 (42.3, 64.7)	53.0 (51.3, 54.7)	0.53	1.01
Downhill skiing	6.6 (5.0, 8.3)	6.8 (6.3, 7.3)	-0.18	0.97
Use personal watercraft	8.5 (7.4, 9.7)	8.8 (8.4, 9.2)	-0.27	0.97

¹95% confidence interval in parentheses. Source: NSRE 2004-2007.

Activities in which Actives participate at rates 10 percent or more above the national population percentages include:

- attending outdoor concerts
- viewing and photographing fish
- viewing and photographing wildlife other than birds
- gathering mushroom, berries, or other natural products
- viewing and photographing flowers
- motor boating
- visiting wilderness and other primate areas
- day hiking
- visiting historic sites
- viewing and photographing natural scenery
- picnicking
- swimming
- visiting beaches
- gardening or landscaping
- sightseeing
- visiting nature centers

Enthusiasts.--This birding group participate an estimated 61 to 365 days per year. While they represent only one-third of birders, they are by far the most active of birders. Enthusiasts account for 91 percent of birding days (**Table 6**). Those who reported participating 365 days per year represent just over 16 percent of all birders. But, this group accounts for over 59 percent of all birding days.

Enthusiasts have a demographic profile that is quite different from the other two groups of birders. Sixty-two percent are female, almost 84 percent are white, over 1/2 (52 percent) is over 55, 32 percent is 65 or older, a higher percentage has not attended college (46 percent) and the majority (55 percent) have incomes less than \$50,000 per year. A somewhat higher percentage of birders participating 365 days per year are female and a somewhat higher percentage are in lower income categories.

The most popular activities among Enthusiast birders are viewing and photographing flowers, wildlife, and natural scenery; gardening or landscaping; visiting nature centers; walking, and attending outdoor family gatherings (**Table 9**).

The three activities in which higher percentages of Enthusiasts participate than the population overall are indicated by ratios greater than or close to 1.5 in the right hand column of **Table 9**. All three of these activities are viewing and photographing something natural. Activities in which Enthusiasts participate at rates 10 percent or more above the national percentage further highlight this group's interest in viewing and photographing nature, but this interest also includes gardening and landscaping.

Table 9--Activity profile of Enthusiast birders (percent participating), 2004-2007.

Activity	Percent in group participating¹ (n=2,136)	Percent in nation participating¹ (n=17,624)	Difference: (Group-Nation)	Group: Nation Ratio
View/photograph flowers, etc.	84.1 (82.6, 85.7)	51.7 (51.0, 52.4)	32.45	1.63
View or photograph fish	42.3 (40.2, 44.5)	26.8 (26.2, 27.4)	15.52	1.58
View/photograph other wildlife	78.7 (77.0, 80.5)	50.4 (49.7, 51.2)	28.33	1.56
Snowshoeing	2.4 (1.3, 3.5)	1.7 (1.4, 1.9)	0.74	1.45
Rowing	5.4 (4.4, 6.3)	3.7 (3.5, 4.0)	1.65	1.44
Gather mushrooms, berries, etc.	43.0 (39.2, 46.9)	30.7 (29.6, 31.9)	12.31	1.40
Visited farm or agric. setting	42.0 (36.8, 47.1)	30.6 (29.1, 32.0)	11.40	1.37
View/photograph natural scenery	84.4 (82.8, 86.0)	63.3 (62.6, 64.0)	21.08	1.33
Horseback riding on trails	8.8 (5.2, 12.3)	6.7 (6.0, 7.3)	2.09	1.31
Visit waterside besides beach	31.3 (29.3, 33.3)	24.0 (23.3, 24.6)	7.35	1.31
Orienteering	3.5 (1.2, 5.8)	2.7 (2.2, 3.1)	0.82	1.31
Boat tours or excursions	25.9 (24.0, 27.8)	19.7 (19.0, 20.3)	6.19	1.31
Canoeing	12.1 (10.7, 13.5)	9.3 (8.9, 9.7)	2.75	1.29
Gardening or landscaping	85.1 (82.0, 88.3)	66.9 (65.4, 68.4)	18.24	1.27
Kayaking	6.9 (5.8, 8.0)	5.5 (5.2, 5.8)	1.44	1.26
Rock climbing	4.6 (3.1, 6.1)	3.6 (3.2, 4.0)	0.96	1.26
Visit prehistoric sites	23.3 (20.1, 26.6)	19.7 (18.8, 20.6)	3.60	1.18
Visit historic sites	49.9 (46.0, 53.8)	42.5 (41.3, 43.6)	7.42	1.17
Sightseeing	57.7 (46.5, 68.8)	49.6 (47.3, 51.8)	8.06	1.16
Visit a wilderness	35.3 (31.6, 39.0)	31.0 (30.0, 32.1)	4.31	1.14
Picnicking	57.3 (53.4, 61.1)	50.2 (49.1, 51.4)	7.03	1.14

Activity	Percent in group participating¹ (n=2,136)	Percent in nation participating¹ (n=17,624)	Difference: (Group-Nation)	Group: Nation Ratio
Warmwater fishing	25.7 (23.8, 27.5)	22.4 (21.8, 23.0)	3.25	1.14
Visit nature centers, etc	63.3 (59.5, 67.1)	57.0 (55.9, 58.1)	6.33	1.11
Cross-country skiing	2.5 (1.4, 3.7)	2.3 (2.0, 2.6)	0.24	1.10
Visit a beach	45.9 (43.7, 48.0)	42.6 (41.9, 43.3)	3.28	1.08
Walk for pleasure	90.6 (89.4, 91.9)	83.7 (83.2, 84.3)	6.90	1.08
Primitive camping	15.6 (12.7, 18.5)	14.5 (13.7, 15.4)	1.08	1.07
Windsurfing	0.6 (0.3, 1.0)	0.6 (0.5, 0.7)	0.04	1.07
Snorkeling	6.9 (5.8, 8.0)	6.5 (6.1, 6.8)	0.46	1.07
Driving for pleasure	55.5 (44.3, 66.7)	53.0 (51.3, 54.7)	2.53	1.05
Motorboating	25.1 (23.3, 27.0)	23.9 (23.3, 24.5)	1.18	1.05
Day hiking	34.4 (30.7, 38.0)	32.6 (31.6, 33.7)	1.75	1.05
Coldwater fishing	12.6 (11.2, 14.0)	12.1 (11.7, 12.6)	0.49	1.04
Migratory bird hunting	1.8 (1.3, 2.4)	1.8 (1.6, 2.0)	0.05	1.03
Attend outdoor concerts, etc.	36.5 (28.0, 44.9)	35.4 (32.9, 37.9)	1.06	1.03
Sailing	4.6 (3.7, 5.5)	4.5 (4.2, 4.8)	0.09	1.02
Ice fishing	2.2 (1.5, 2.8)	2.1 (1.9, 2.3)	0.04	1.02
Swimming in lakes, ponds, etc.	40.7 (38.6, 42.8)	40.8 (40.1, 41.5)	-0.12	1.00
Saltwater fishing	10.6 (9.2, 11.9)	10.6 (10.2, 11.1)	-0.06	0.99
Rafting	8.0 (6.8, 9.1)	8.0 (7.7, 8.4)	-0.05	0.99
Family gathering	66.7 (61.5, 71.8)	71.1 (69.5, 72.7)	-4.46	0.94
Swimming in an outdoor pool	39.5 (37.0, 41.9)	42.2 (41.3, 43.0)	-2.70	0.94

Activity	Percent in group participating¹ (n=2,136)	Percent in nation participating¹ (n=17,624)	Difference: (Group-Nation)	Group: Nation Ratio
Mountain climbing	4.6 (3.0, 6.2)	4.9 (4.4, 5.4)	-0.34	0.93
Sledding	12.2 (9.8, 14.5)	13.1 (12.4, 13.8)	-0.92	0.93
Small game hunting	5.9 (4.2, 7.6)	6.4 (5.9, 7.0)	-0.54	0.92
Anadromous fishing	3.6 (2.8, 4.4)	4.0 (3.7, 4.2)	-0.33	0.92
Caving	3.8 (2.5, 5.2)	4.2 (3.8, 4.6)	-0.36	0.91
Snowmobiling	3.7 (2.3, 5.0)	4.0 (3.7, 4.4)	-0.39	0.90
Mountain biking	15.9 (13.1, 18.7)	18.5 (17.6, 19.3)	-2.55	0.86
Drive off-road	16.7 (13.9, 19.6)	19.8 (18.9, 20.6)	-3.05	0.85
Developed camping	22.0 (18.7, 25.3)	26.2 (25.1, 27.3)	-4.20	0.84
Scuba diving	1.3 (0.8, 1.8)	1.6 (1.4, 1.8)	-0.26	0.84
Yard games, e.g. croquet	34.2 (25.7, 42.6)	40.5 (38.0, 43.0)	-6.32	0.84
Backpacking	8.2 (6.1, 10.3)	9.9 (9.3, 10.6)	-1.74	0.82
Big game hunting	7.1 (5.2, 8.9)	8.7 (8.1, 9.3)	-1.60	0.82
Use personal watercraft	7.2 (6.1, 8.3)	8.8 (8.4, 9.2)	-1.60	0.82
Downhill skiing	5.3 (3.7, 6.9)	6.8 (6.3, 7.3)	-1.55	0.77
Surfing	1.6 (1.1, 2.1)	2.1 (1.9, 2.3)	-0.51	0.76
Waterskiing	5.6 (4.7, 6.6)	7.7 (7.4, 8.1)	-2.10	0.73
Ice skating	3.5 (2.2, 4.8)	4.9 (4.5, 5.4)	-1.43	0.71
Snowboarding	2.0 (1.0, 3.0)	5.0 (4.6, 5.4)	-3.04	0.39

¹95% confidence interval in parentheses.

Source: NSRE 2004-2007.

Unlike Occasionals or Actives, there is a long list of activities in which birding Enthusiasts participate *less* (fewer days, not more) than other, less devoted birders. Many of these activities that are less favored by birding Enthusiasts are somewhat physically active, such as mountain climbing, caving, snowmobiling, mountain biking, backpacking, downhill skiing, water skiing, and snowboarding. Hunting and motorized activities are among those activities in which Enthusiasts participate less.

Summary

We have explored the question, “What is a birder?” The simple answer is, there are many definitions because birding and birders are highly diverse. There are people who travel to see and photograph a particular migratory species. There are those whose connection is through feeding birds in the backyard. There are those who take binoculars on hiking trips or other outings, just in case. And there are many others participating in birding in their own ways.

In this, Part I of a three-part report series, we have reviewed the latest statistics on birders from the National Survey on Recreation and the Environment (NSRE). In surveying Americans over the last nine years, a total of 87,319 respondents 16 years old or older responded to the following question: *“During the past 12 months, did you view, identify, or photograph birds outdoors?” And, for a subsample of those who said “Yes”, “On how many different days did you view, identify or photograph birds outdoors?”*

For the period 2004 – 2007, the data from the NSRE survey indicated that 35.4 percent of people 16 or older participated in birding. This is based on a sample of over 17,600 contacted persons during these years alone. Of those who participated in birding, just over one-third participated 6 or fewer times per year, over 26 percent participated between 7 and 30 days, and over 28 percent participated in birding on over 100 days per year. With almost 82 million participants averaging almost 100 days per year, the result is a huge estimated total number of days on which birding occurs, over 8 billion per year. In comparison to the 1999-2000 time period, the estimated number of people birding grew by over 8 million.

Across the country, an estimated 35 percent of both urban and rural residents participate in birding. There are modest participation differences between regions of the country. People in the Northeast and Midwest regions participate on more days than people living in the South or West.

While rural/urban or regional differences were few, comparisons between birders who participated at different levels were more revealing. Based on number of days per year, three groupings of birders have been identified. Those people who participate, but do so only a few times per year fall into the category we call *Occasionals*. This group participates only 1 to 6 days per year. In terms of demographics, this group tends to be equally male and female, proportionately more of them are Black or Hispanic, and more of them are in younger age categories. Although they comprise one-third of the people in the U.S. who participate in birding during the year, they account for only 1.1 percent of

the total birding days. The activities in which over two-thirds of Occasionals participate include gardening or landscaping, participating in outdoor family gatherings, walking for pleasure (91 percent), viewing and photographing flowers, viewing and photographing wildlife, visiting nature centers and other nature information sites, and viewing and photographing natural scenery. This group, however, tends to be more active than other birders in more physically challenging activities, such as cross-country skiing, scuba diving, caving, sledding, mountain biking, snow shoeing, and snorkeling.

The **Actives** birding group participates at a higher rate, estimated at 7 to 60 days per year. These birders account for 7.9 percent of birding days (as contrasted with just 1.1 percent for Occasionals). Actives tend to have a higher proportion of their members in the middle-age range, 80 percent are White, and they are a little better educated than other birders. Their activity profiles tend toward more passive activities, meaning they are not very physically challenging. Other than viewing and photographing activities, outdoor activities in which over two-thirds of Actives participate include picnicking, sightseeing, visiting nature centers, participating in outdoor family gatherings, and walking for pleasure (92 percent).

The **Enthusiasts** are the most active birders, participating an estimated 61 to 365 days per year. Even though they number just one-third of all birders, Enthusiasts account for 91 percent of birding days. They have a demographic profile that is quite different. Sixty-two percent are female, almost 84 percent are white, over one-half are over 55, 32 percent are 65 or older, a higher percentage have no college and the majority have incomes less than \$50,000. The most popular other outdoor activities among Enthusiast birders are viewing and photographing flowers, wildlife, and natural scenery; gardening or landscaping; visiting nature centers; walking; and attending outdoor family gatherings. Birding Enthusiasts, as a group, do not generally participate in physically challenging activities, such as downhill skiing. Activities in which Enthusiasts participate at rates 10 percent or more above the national percentage highlights this group's interest in viewing and photographing natural things, but also includes gardening and landscaping.

Overall, birding participation continues to grow as an outdoor interest among Americans. The gains in number of people and number of days of participation are impressive. Americans participate in many different ways, and at different levels. **Birding Enthusiasts** are by far the most active among all who participate in birding.

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