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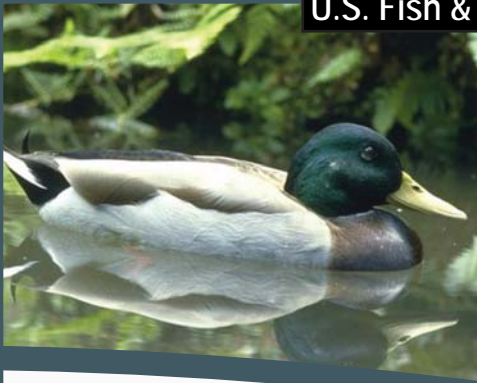


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2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation



2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation



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Secretary

U.S. Fish and Wildlife Service
H. Dale Hall,
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Administration**

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Dirk Kempthorne,
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U.S. Fish and Wildlife Service
H. Dale Hall,
Director



Wildlife and Sport Fish Restoration
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Assistant Director

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated Island Communities.

The mission of the Department's U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish, wildlife, and their habitats for the continuing benefit of the American people. The Service is responsible for national programs of vital importance to our natural resources, including administration of the Wildlife and Sport Fish Restoration Programs. These two programs provide financial assistance to the States for projects to enhance and protect fish and wildlife resources and to assure their availability to the public for recreational purposes. Multistate grants from these programs fund the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.

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Foreword

I find duck hunting with friends in a bottomland hardwood swamp or fishing with my kids on an Oregon river bolsters my spirit and reminds me why I care about conservation and our wildlife heritage.

But wildlife-associated and vital recreation—activities such as hunting, fishing, and birding—also provide significant financial support for wildlife conservation in our Nation's economy. According to information from the newest National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, 87.5 million Americans spent more than \$122 billion in 2006 on wildlife-related recreation. And this spending supports hundreds of thousands of jobs in industries and businesses.

The Survey is conducted every five years at the request of State fish and wildlife agencies to measure the importance of wildlife-based recreation to the American people. The 2006 Survey represents the 11th in a series that began in 1955. Developed in collaboration with the States, the Association of Fish and Wildlife Agencies, and national conservation organizations, the Survey has become one of the most important sources of information on fish and wildlife-related recreation in the United States.

In the 75-year history of the Sport Fish and Wildlife Restoration Programs, excise taxes on firearms, ammunition, archery, and angling equipment have generated a cumulative total of more than \$10 billion for wildlife conservation efforts by State and Territorial wildlife agencies for fish and wildlife management.

My thanks go to the men and women who took time to participate in the survey, as well as to the State fish and wildlife agencies for their financial support through the Multistate State Conservation Grant Programs. Without that support, the 2006 Survey would never have been possible.

I am comforted to know that my children and all Americans will have the opportunity to appreciate our Nation's rich wildlife tradition. Along with a record number of Americans, we continue to enjoy wildlife. We are laying the foundation for conservation's future.



H. Dale Hall
Director, U.S. Fish and Wildlife Service

Survey Background and Method

The National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (Survey) has been conducted since 1955 and is one of the oldest and most comprehensive continuing recreation surveys. The Survey collects information on the number of anglers, hunters, and wildlife watchers; how often they participate; and how much they spend on their activities in the United States.

Preparations for the 2006 Survey began in 2004 when the Association of Fish and Wildlife Agencies (AFWA) recommended that the Fish and Wildlife Service conduct the eleventh Survey of wildlife-related recreation. Funding came from the Multistate Conservation Grant Programs, authorized by Sport Fish and Wildlife Restoration Acts, as amended.

We consulted with State and Federal agencies and nongovernmental organizations such as the Wildlife Management Institute and American Sportfishing Association to determine survey content. Other sportspeople's organizations and conservation groups, industry representatives, and researchers also provided valuable advice.

Four regional technical committees were set up under the auspices of the AFWA to ensure that State fish and wildlife agencies had an opportunity to

participate in all phases of survey planning and design. The committees were made up of agency representatives.

Data collection for the Survey was carried out by the U.S. Census Bureau in two phases. The first phase was the screen which began in April 2006. During this phase the Census Bureau interviewed a sample of 85,000 households nationwide to determine who in the household had fished, hunted, or wildlife watched in 2005, and who had engaged or planned to engage in those activities in 2006. In most cases, one adult household member provided information for all members. The screen primarily covered 2005 activities while the next, more in-depth phase covered 2006 activities. For more information on 2005 data, refer to Appendix B.

The second phase of data collection consisted of three detailed interview waves. The first began in April 2006 concurrent with the screen, the second in September 2006, and the last in January 2007. Interviews were conducted with samples of likely anglers, hunters, and wildlife watchers who were identified in the initial screening phase. Interviews were conducted primarily by phone, with in-person interviews for respondents who could not be reached by phone. Respondents in the second survey phase were limited to those who were

at least 16 years old. Each respondent provided information pertaining only to his or her activities and expenditures. Sample sizes were designed to provide statistically reliable results at the state level. Altogether, interviews were completed with 21,938 anglers and hunters and 11,279 wildlife watchers. More detailed information on sampling procedures and response rates is found in Appendix D.

Comparability With Previous Surveys

The 2006 survey questions and methodology were similar to those used in the 2001, 1996, and 1991 Surveys. Therefore, the estimates are comparable.

The methodology of these Surveys did differ importantly from the 1985 and 1980 Surveys, so these estimates are not directly comparable to those of earlier surveys. Changes in methodology included reducing the recall period over which respondents had to report their activities and expenditures. Previous Surveys used a 12-month recall period, which resulted in greater reporting bias. Research found that the amount of activity and expenditures reported in 12-month recall surveys was overestimated in comparison with that reported using shorter recall periods.



Highlights

Introduction

The National Survey of Fishing, Hunting, and Wildlife-Associated Recreation reports results from interviews with U.S. residents about their fishing, hunting, and wildlife watching. This report focuses on 2006 participation and expenditures of persons 16 years of age and older.

However, in addition to 2006 estimates, we also provide trend information in the Highlights section and Appendix C of the report. The 2006 numbers reported can be compared with those in the 1991, 1996, and 2001 Survey reports because they used similar methodologies. However, 2006 estimates should not be directly compared with results from Surveys conducted earlier than 1991 because of changes in methodology to improve accuracy.

The report also provides information on participation in wildlife recreation in 2005, particularly of persons 6 to 15 years of age. The 2005 information is provided in Appendix B. Information about the Survey's scope and coverage is in Appendix D. The remainder of this section defines important terms used in the Survey.

Wildlife-Associated Recreation

Wildlife-associated recreation is fishing, hunting, and wildlife-watching activities. These categories are not mutually exclusive because many individuals participated in more than one activity. Wildlife-associated recreation is reported in two major categories: (1) fishing and hunting and (2) wildlife watching, which includes observing, photographing, and feeding fish or wildlife.

Fishing and Hunting

This Survey reports information about residents of the United States who fished or hunted in 2006, regardless of

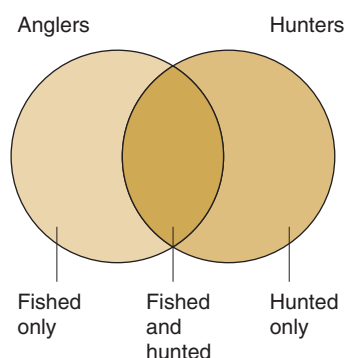
whether they were licensed. The fishing and hunting sections report information for three groups: (1) sportspersons, (2) anglers, and (3) hunters.

Sportspersons

Sportspersons are those who fished or hunted. Individuals who fished or hunted commercially in 2006 are reported as sportspersons only if they also fished or hunted for recreation. The sportspersons group is composed of three subgroups as shown in the diagram below: (1) those that fished and hunted, (2) those that only fished, and (3) those that only hunted.

The total number of sportspersons is equal to the sum of people who only fished, only hunted, and both hunted and fished. It is not the sum of all anglers and all hunters because those people who both fished and hunted are included in both the angler and hunter population and would be incorrectly counted twice.

Sportspersons



Anglers

Anglers are sportspersons who only fished plus those who fished and hunted. Anglers include not only licensed hook and line anglers, but also those who have no license and

those who use special methods such as fishing with spears.

Three types of fishing are reported: (1) freshwater, excluding the Great Lakes, (2) Great Lakes, and (3) saltwater. Since many anglers participated in more than one type of fishing, the total number of anglers is less than the sum of the three types of fishing.

Hunters

Hunters are sportspersons who only hunted plus those who hunted and fished. Hunters include not only licensed hunters using rifles and shotguns but also those who had no license and those who hunted with a bow and arrow, primitive firearm, or pistol or handgun.

Four types of hunting are reported: (1) big game, (2) small game, (3) migratory bird, and (4) other animals. Since many hunters participated in more than one type of hunting, the sum of hunters for big game, small game, migratory bird, and other animals exceeds the total number of hunters.

Wildlife Watchers

Since 1980, the National Survey has included information on wildlife-watching activities in addition to fishing and hunting. The 1991, 1996, 2001, and 2006 Surveys, unlike the 1980 and 1985 Surveys, collected data only for activities where the *primary* purpose was wildlife watching. The 1980 and 1985 Surveys included estimates of unplanned wildlife watching around the home and while on trips taken for another purpose.

The 2006 Survey uses a strict definition of 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, is not included.

Two types of wildlife watching are reported: (1) away-from-home (formerly nonresidential) activities and (2) around-the-home (formerly residential) activities. Because some people participated in more than one type of wildlife watching, the sum of participants in each type will be greater than the total number of wildlife watchers. The two types of wildlife-watching activity are explained next.

Away-From-Home Wildlife Watching

This group includes persons who took trips or outings of at least 1 mile from home for the primary purpose of observing, feeding, or photographing fish and wildlife. Trips to fish, hunt, or scout and trips to zoos, circuses, aquariums, and museums are not considered wildlife-watching activities.

Around-The-Home Wildlife Watching

This group includes those who participated within 1 mile of home and involves one or more of the following:

(1) closely observing or trying to identify birds or other wildlife; (2) photographing wildlife; (3) feeding birds or other wildlife; (4) maintaining natural areas of at least 1/4 acre where benefit to wildlife is the primary concern; (5) maintaining plantings (shrubs, agricultural crops, etc.) where benefit to wildlife is the primary concern; or (6) visiting public parks within 1 mile of home for the primary purpose of observing, feeding, or photographing wildlife.

Summary

The 2006 Survey found that 87.5 million U.S. residents 16 years old and older participated in wildlife-related recreation. 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.

The focus of the National Survey is to estimate participation and expenditures of persons 16 years old and older in a single year. These estimates are based on data collected in the detailed phase of the 2006 Survey. They are comparable to estimates from the 1991, 1996, and 2001 Surveys but not with earlier ones because of changes in methodology. A complete explanation of the change is provided in Appendix C.

While the focus of the Survey is to estimate wildlife-related recreationists 16 years old and older and their associated expenditures in a single year, information collected in the survey screen can be used to estimate the number of anglers and hunters who were active over a five-year window of time. Because many do not participate every year, the following estimates may be more representative of the number of individuals considered to be anglers and hunters in the United States: 44.4 million individuals fished and 18.6 million hunted in the United States over the five-year period from 2002 to 2006.

The survey screen also provides some information about 6-to-15-year-olds' participation. Assuming their proportion of participation was the same in 2006 as in 2005, the following estimates were calculated: of the 6-to-15-year-olds in the United States, 1.6 million hunted, 8.3 million fished, and 12 million wildlife watched in 2006. More information about this age group

is provided in Appendix B. For the rest of this report, all information pertains to participants 16 years old and older.

There was a considerable overlap in activities among anglers, hunters, and wildlife watchers. In 2006, 68 percent of all hunters also fished and 29 percent of all anglers also hunted. In addition, 52 percent of anglers and 57 percent of hunters wildlife watched, while 25 percent of all wildlife watchers reported hunting and/or fishing during the year.

Wildlife recreationists' avidity also is reflected in the \$122.3 billion they spent in 2006 on their activities, which equated to 1 percent of the Gross Domestic Product. Of the total amount

spent, \$37.4 billion was trip-related, \$64.1 billion was spent on equipment, and \$20.7 billion was spent on other items such as licenses and land leasing and ownership.

Sportspersons spent a total of \$76.6 billion in 2006—\$42.2 billion on fishing, \$22.9 billion on hunting, and \$11.6 billion on items used for both hunting and fishing. Wildlife watchers spent \$45.7 billion on their activities around the home and on trips away from home.

Fishing and Hunting

In 2006, 33.9 million U.S. residents 16 years old and older went fishing and/or

Total Wildlife-Related Recreation

Participants	87.5 million
Expenditures	\$122.3 billion

Sportspersons

Total participants*	33.9 million
Anglers	30.0 million
Hunters	12.5 million

Total days	737 million
Fishing	517 million
Hunting	220 million

Total expenditures	\$76.6 billion
Fishing	42.2 billion
Hunting	22.9 billion
Unspecified	11.6 billion

Wildlife Watchers

Total participants**	71.1 million
Around the home	67.8 million
Away from home	23.0 million

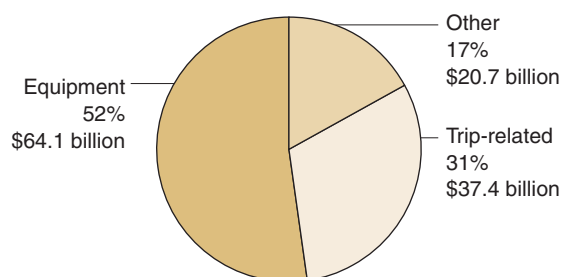
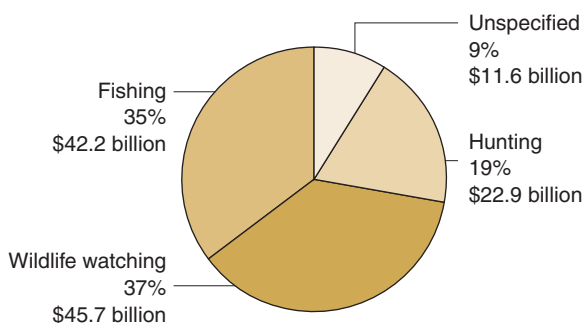
Total expenditures	\$45.7 billion
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* 8.5 million both fished and hunted.

** 19.7 million both wildlife watched around the home and away from home.

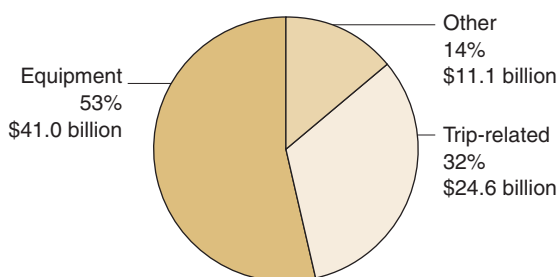
Expenditures for Wildlife-Related Recreation

(Total expenditures: \$122.3 billion)



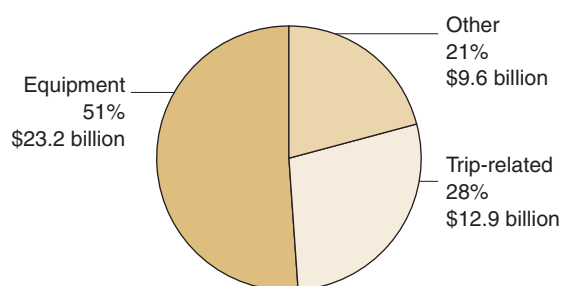
Expenditures by Sportspersons

(Total expenditures: \$76.6 billion)



Expenditures by Wildlife-Watching Participants

(Total expenditures: \$45.7 billion)



hunting. This includes 30.0 million who fished and 12.5 million who hunted—8.5 million both fished and hunted.

In 2006, expenditures by sportspersons totaled \$76.6 billion. Trip-related expenditures, including food, lodging, and transportation, were \$24.6 billion—32 percent of all fishing and hunting expenditures. Total equipment expenditures amounted to \$41.0 billion, 53 percent of the total. Other expenditures—magazines, membership dues, contributions, land leasing and ownership, and licenses, stamps, tags, and permits—accounted for \$11.1 billion, or 14 percent of all sportspersons' expenditures.

Wildlife-Watching Recreation

Observing, feeding, or photographing wildlife was enjoyed by 71.1 million people 16 years old and older in 2006. Among this group, 23.0 million people took trips away from home for the primary purpose of enjoying wildlife, while 67.8 million stayed within a

mile of home to participate in wildlife-watching activities.

In 2006, wildlife watchers spent \$45.7 billion. Trip-related expenses, including food, lodging, and transportation, totaled \$12.9 billion, 28 percent of all expenditures. A total of \$23.2 billion was spent on equipment, 51 percent of all wildlife-watching expenses. The remaining \$9.6 billion, 21 percent of the total, was spent on magazines, membership dues, and contributions made to conservation or wildlife-related organizations, plantings, and land leasing and ownership for the purpose of wildlife watching.

2001 and 2006 Comparison

Six percent more people 16 years of age and older participated in wildlife-related recreation in 2006 than in 2001. Although 5.2 million more people participated, there were declines in some activities.

The number of sportspersons fell from 37.8 million in 2001 to 33.9 million in

2006. Their expenditures decreased from \$79.7 billion (in 2006 dollars) in 2001 to \$76.6 billion in 2006.

In 2006, 30.0 million U.S. residents 16 years of age and older fished compared to 34.1 million who fished in 2001, a drop of 12 percent. The 4 percent drop in the number of hunters, 13.0 million in 2001 to 12.5 million in 2006, is not statistically significant.

Although fishing participation declined from 2001 to 2006, overall expenditures for fishing held steady. Trip-related expenditures went up 7 percent and equipment expenditures went down 3 percent.

Hunting participation and overall hunting expenditures stayed about the same from 2001 to 2006. As was the case with anglers, hunters spent more on trips, an increase of 12 percent, and less on equipment, which dropped 9 percent.

The increase in wildlife-related recreation participation from 2001 to 2006 was due to wildlife watching (observing, feeding, and photographing wildlife). During this period, the number of people wildlife watching

increased by 8 percent. Although their overall expenditures showed little change, they did spend 38 percent more on trips, 18 percent more on bird food and wildlife-watching equipment (such as binoculars, cameras, bird feeders),

and 26 percent more on auxiliary equipment. Total expenditures over the five-year period showed little change because wildlife watchers spent 30 percent less on special equipment in 2006 than in 2001.

2001–2006 Wildlife-Associated Recreation Comparison of Participants

(Numbers in thousands)

	2001		2006	
	Number	Percent	Number	Percent
Total wildlife-related recreationists	82,302	100	87,465	100
Total sportspersons	37,805	46	33,916	39
Anglers	34,071	41	29,952	34
Hunters	13,034	16	12,510	14
Total wildlife-watching participants	66,105	80	71,132	81
Around the home	62,928	76	67,756	77
Away from home	21,823	27	22,977	26

2001–2006 Wildlife-Associated Recreation Comparison of Expenditures

(Numbers in billions of 2006 dollars)

	2001		2006	
	Number	Percent	Number	Percent
Total wildlife-related recreation expenditures	123.4	100	122.3	100
Total fishing and hunting expenditures	79.7	100	76.6	100
Angling expenditures, total	40.6	100	42.2	100
Trip-related	16.7	41	17.9	42
Equipment, total	19.3	48	18.8	45
Fishing equipment	5.3	13	5.3	13
Auxiliary equipment	0.8	2	0.8	2
Special equipment	13.2	33	12.6	30
Other	4.6	11	5.5	13
Hunting expenditures, total	23.5	100	22.9	100
Trip-related	6.0	26	6.7	29
Equipment, total	11.8	50	10.7	47
Hunting equipment	5.2	22	5.4	24
Auxiliary equipment	1.4	6	1.3	6
Special equipment	5.2	22	4.0	17
Other	5.7	24	5.5	24
Wildlife-watching expenditures, total	43.7	100	45.7	100
Trip-related	9.3	21	12.9	28
Equipment, total	26.8	61	23.2	51
Wildlife-watching equipment	8.4	19	9.9	22
Auxiliary equipment	0.8	2	1.0	2
Special equipment	17.6	40	12.3	27
Other	7.7	17	9.6	21

Fishing



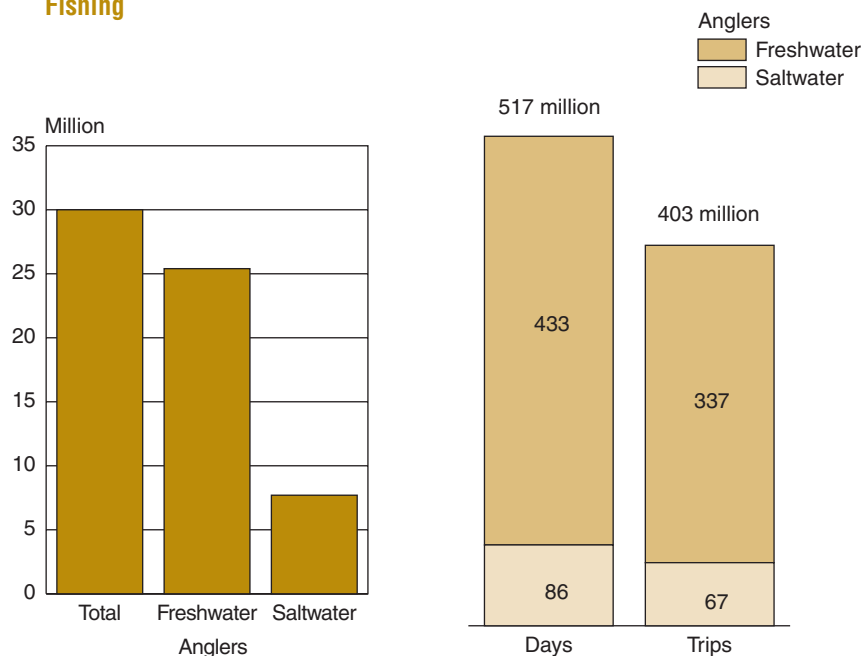
Fishing Highlights

In 2006, 30.0 million U.S. residents 16 years old and older enjoyed a variety of fishing opportunities throughout the United States. Anglers fished 517 million days and took 403 million fishing trips. They had \$42.2 billion

in fishing-related expenses during the year. Freshwater anglers numbered 25.4 million. They fished 433 million days and took 337 million trips to freshwater in 2006. Freshwater anglers spent \$26.3 billion on freshwater

fishing trips and equipment. Saltwater fishing attracted 7.7 million anglers who enjoyed 67 million trips on 86 million days. They spent \$8.9 billion on their saltwater trips and equipment.

Fishing



Note: Detail does not add to total because of multiple responses and nonresponse.

Total Fishing

Anglers 30.0 million
 Freshwater 25.4 million
 Saltwater 7.7 million

Days 516.8 million
 Freshwater 433.3 million
 Saltwater 85.7 million

Trips 403.5 million
 Freshwater 336.5 million
 Saltwater 67.0 million

Expenditures . . . \$42.2 billion
 Freshwater 26.3 billion
 Saltwater 8.9 billion
 Nonspecific 7.0 billion

Note: Detail does not add to total because of multiple responses and nonresponse.

Source: Tables 1, 12, 13, and 16.

Fishing Expenditures

Anglers spent \$42.2 billion in 2006 including \$17.9 billion on travel-related items—42 percent of all fishing expenditures. Food and lodging accounted for \$6.3 billion, 35 percent of all trip-related costs. Spending on transportation totaled \$5.0 billion, 28 percent of trip-related expenditures. Other trip expenditures, such as land use fees, guide fees, equipment rental, boating expenses, and bait, cost anglers \$6.6 billion—37 percent of all trip expenses.

Fishing equipment expenditures totaled \$18.8 billion in 2006, 44 percent of all fishing expenditures. Anglers spent \$5.3 billion on fishing equipment, such as rods, reels, tackle boxes, depth finders, and artificial lures and flies. This amounted to 28 percent of all equipment expenditures. Auxiliary equipment expenditures, which includes camping equipment, binoculars, and special fishing clothing, totaled \$779 million—4 percent of equipment costs. Expenditures for special equipment, such as boats, vans, and cabins, were \$12.6 billion—67 percent of all equipment expenditures.

Anglers also spent a considerable amount on other fishing-related items, such as land leasing and ownership, membership dues, contributions, licenses, stamps, and permits. Land leasing and ownership spending totaled \$4.6 billion, which is 11 percent of all expenditures. Expenditures on magazines, books, membership dues, contributions, licenses, stamps, tags, and permits were \$921 million.

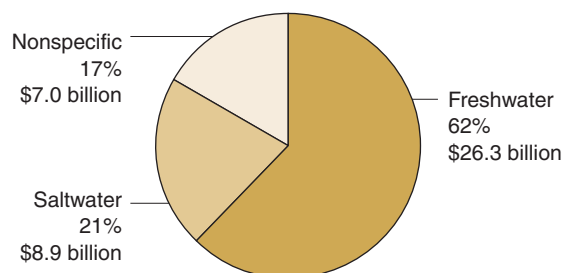
Total Fishing Expenditures

Total fishing expenditures	\$42.2 billion
Total trip-related	\$17.9 billion
Food and lodging	6.3 billion
Transportation	5.0 billion
Other trip costs	6.6 billion
Total equipment expenditures	\$18.8 billion
Fishing equipment	5.3 billion
Auxiliary equipment	0.8 billion
Special equipment	12.6 billion
Total other fishing expenditures	\$5.5 billion
Magazines, books	0.1 billion
Membership dues and contributions	0.2 billion
Land leasing and ownership	4.6 billion
Licenses, stamps, tags, and permits	0.6 billion

Source: Table 12.

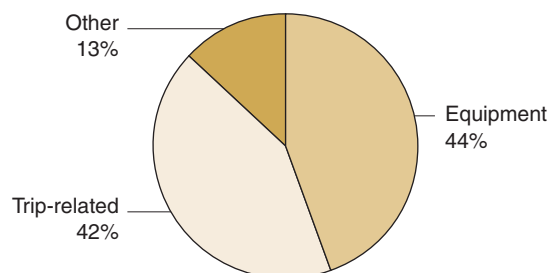
Fishing Expenditures by Type of Fishing

(Total expenditures: \$42.2 billion)



Percent of Total Fishing Expenditures

(Total expenditures: \$42.2 billion)



Freshwater Fishing

Anglers	25.4 million
Freshwater except Great Lakes	25.0 million
Great Lakes	1.4 million
Days	433.3 million
Freshwater except Great Lakes	419.9 million
Great Lakes	18.0 million
Trips	336.5 million
Freshwater except Great Lakes	323.3 million
Great Lakes	13.3 million
Trip and equipment expenditures	\$26.3 billion
Freshwater except Great Lakes	24.6 billion
Great Lakes	1.5 billion

Note: Detail does not add to total because of multiple response and nonresponse.

Source: Tables 1, 13, 14, and 15.

Freshwater Fishing Highlights

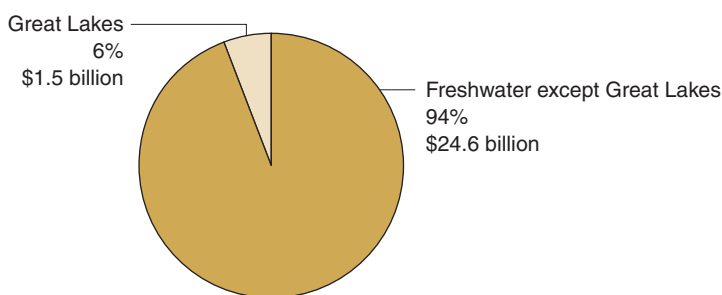
Freshwater fishing was the most popular type of fishing. In 2006, 25.4 million anglers went freshwater fishing for 433 million days and 337 million trips. Their expenditures for trips and equipment totaled \$26.3 billion for the year. Freshwater fishing can be separated into Great Lakes and freshwater other than the Great Lakes.

There were 25.0 million anglers who fished for 420 million days on 323 million trips to freshwater other than the Great Lakes. Trip and equipment expenditures for non-Great Lakes freshwater fishing totaled \$24.6 billion for an average of \$982 per angler. Total trip expenditures were \$11.5 billion. Food and lodging composed \$4.2 billion or 37 percent of total trip expenditures. Transportation costs were \$3.7 billion or 32 percent. Other trip expenses, which include guide fees, equipment rental, and bait, were \$3.6 billion or 31 percent.

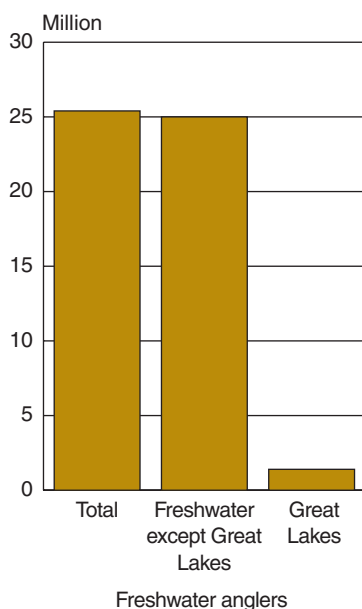
Anglers spent \$13.1 billion on equipment for non-Great Lakes freshwater fishing. Expenditures for fishing equipment, such as rods and reels, tackle boxes, depth finders, and artificial lures and flies, totaled \$3.4 billion. Expenditures for auxiliary equipment such as binoculars and camping equipment were \$601 million. Expenditures for

Freshwater Fishing Trip and Equipment Expenditures

(Total expenditures: \$26.3 billion)



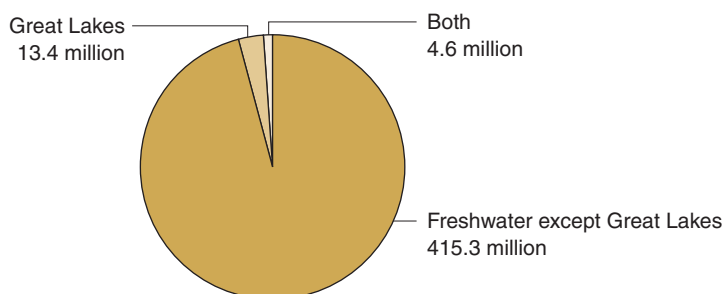
Freshwater Fishing



Note: Detail does not add to total because of multiple responses and nonresponse.

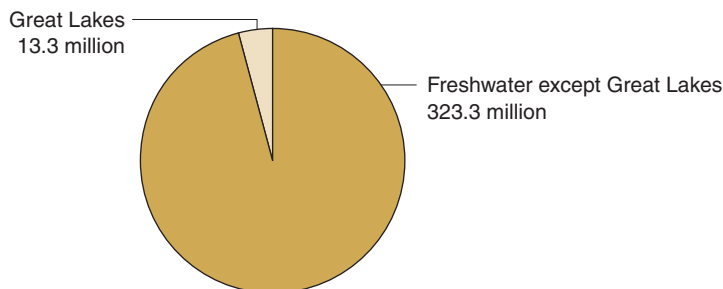
Days

(Total: 433.3 million)



Trips

(Total: 336.5 million)



special equipment such as boats, vans, and cabins accounted for \$9.1 billion.

There were 1.4 million people who fished 18 million days on 13 million trips to the Great Lakes in 2006. Their Great Lakes-related expenditures totaled \$1.5 billion. Trip-related expenses totaled \$1.1 billion. Of these expenditures, \$375 million was spent on food and lodging, 35 percent of trip costs; \$238 million went for transportation, 22 percent of trip costs; and \$453 million, or 43 percent, was spent on other items such as guide fees, equipment rental and bait. Equipment expenditures totaled \$442 million. Of

this \$442 million, \$165 million was for fishing equipment (rods, reels, etc.), \$18 million was for auxiliary equipment (camping equipment, binoculars, etc.), and \$258 million was for special equipment (boats, vans, etc.).

Saltwater Fishing Highlights

In 2006, 7.7 million anglers enjoyed saltwater fishing on 67 million trips totaling 86 million days. Overall, they spent \$8.9 billion during the year on trips and equipment for saltwater fishing. Trip-related expenditures accounted for \$5.3 billion or 60 percent of the total. Spending for food and

lodging was \$1.7 billion or 32 percent of trip expenditures. Transportation spending totaled \$1.1 billion, 20 percent of trip expenditures. Other trip expenditures, such as equipment rental, bait, and guide fees, were \$2.5 billion (48 percent).

Anglers spent a total of \$3.6 billion on equipment for saltwater fishing. Of the \$3.6 billion, \$1.3 billion was for fishing equipment (rods, reels, etc.), \$108 million was for auxiliary equipment (camping equipment, binoculars, etc.), and \$2.2 billion was for special equipment (boats, vans, etc.).

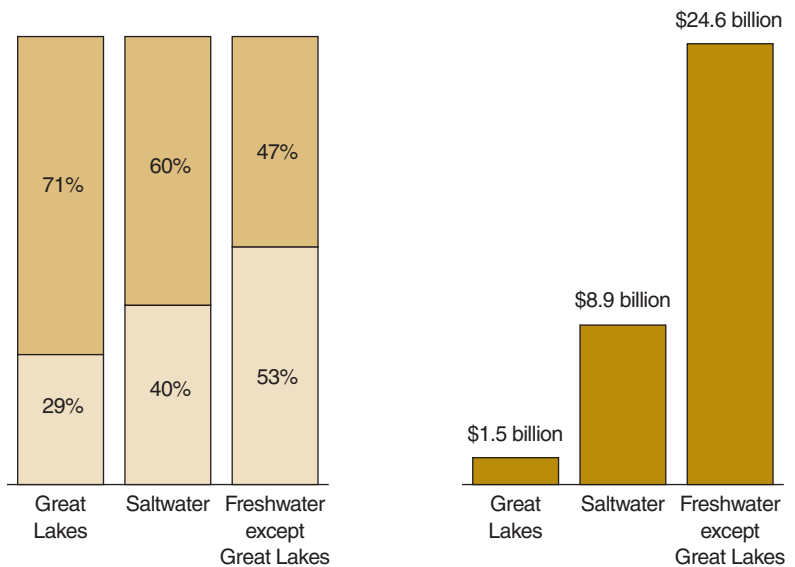
Saltwater Fishing

Anglers	7.7 million
Days	85.7 million
Trips	67.0 million
Trip and equipment expenditures . . .	\$8.9 billion

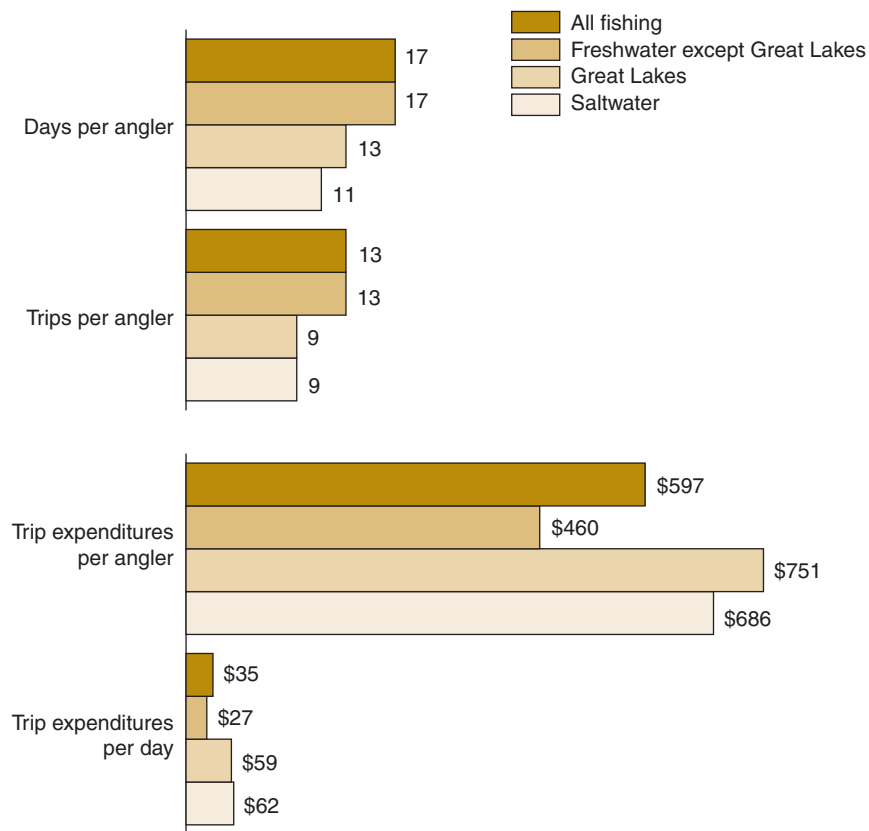
Source: Tables 1 and 16.

Comparative Trip and Equipment Expenditures

Total expenses
 Trip-related
 Equipment



Comparative Fishing by Type of Fishing



Comparative Fishing Highlights

In 2006, anglers spent an average of 17 days fishing and took an average of 13 fishing trips. Similarly, in freshwater excluding the Great Lakes, anglers fished an average of 17 days and took 13 trips. For Great Lakes fishing, participants averaged 13 days of fishing on an average of 9 trips. Saltwater anglers fished fewer days, averaging 11 days of fishing on 9 saltwater trips.

Overall, anglers spent an average of \$1,407 on fishing-related expenses in 2006. They averaged \$597 per angler on their trips, or about \$35 per day. For freshwater fishing excluding the Great Lakes, participants averaged \$460 in trip-related expenses in 2006, equaling \$27 per day. For fishing in the Great Lakes, participants averaged \$751 in trip-related expenses, equaling \$59 per day. Anglers in saltwater averaged trip expenditures of \$686 per participant, which amounts to approximately \$62 per day.

Fishing for Selected Fish

The most popular fish species among the 25.0 million anglers who fished freshwater other than the Great Lakes was black bass. Ten million spent 161 million days fishing for black bass. Following black bass in popularity were several species with a similar number of anglers and days of fishing. Panfish were pursued by 7.5 million anglers on 102 million days. Catfish and bullheads drew 7.0 million anglers on 98 million days. About 6.8 million anglers fished for trout on 76 million days. Crappie fishing attracted 6.2 million anglers on 91 million days.

Three species were very close in popularity among Great Lakes anglers. Walleye and sauger attracted nearly 500 thousand anglers, as did perch. Anglers fished for walleye and sauger for 4.9 million days and for perch, 5.5 million days. Salmon followed closely with 418 thousand anglers fishing for 5.7 million days. Lake trout, black bass and steelhead were also popular Great Lakes species, as they were pursued by 328 thousand, 298 thousand, and 201 thousand anglers, respectively.

Among the 7.7 million saltwater anglers, 2.1 million fished for flatfish, which includes flounder and halibut, on 21 million days. Redfish (red drum) followed in popularity with 1.8 million

Selected Fish by Type of Fishing

(In millions)

Type of fishing	Anglers	Days
Freshwater except Great Lakes, total	25.0	419.9
Black bass.	10.0	161.0
Panfish	7.5	101.6
Catfish/bullhead	7.0	98.2
Trout	6.8	75.5
Crappie	6.2	90.7
White bass, striped bass, and striped bass hybrids. .	4.8	65.2
Great Lakes, total	1.4	18.0
Walleye, sauger	0.5	4.9
Perch.	0.5	5.5
Salmon	0.4	5.7
Lake trout	0.3	4.4
Black bass.	0.3	2.9
Steelhead	0.2	1.9
Saltwater, total	7.7	85.7
Flatfish (flounder, halibut)	2.1	20.5
Redfish (red drum)	1.8	20.2
Sea trout (weak fish).	1.5	18.2
Striped bass	1.4	15.4
Bluefish	1.0	9.9
Salmon	0.6	3.4

Source: Tables 3, 4, and 5.

anglers fishing for 20 million days. Also popular were sea trout and striped bass with 1.5 and 1.4 million anglers who fished for 18.2 and 15.4 million days, respectively. Other prominent saltwater species were bluefish with 1.0 million anglers and salmon with nearly 600 thousand anglers.

Participation by Geographic Region

In 2006, 229 million people 16 years old and older lived in the United States and 1 of every 8 of these U.S. residents went fishing. While the national participation rate was 13 percent, the regional rates ranged from 8 percent in the Middle Atlantic and Pacific to 21 percent in the West North Central. The West North Central, East North Central, East South Central, West South Central, and South Atlantic all reported participation rates above the national rate. The Mountain region tied the national rate at 13 percent, and New England was below the national rate at 11 percent.

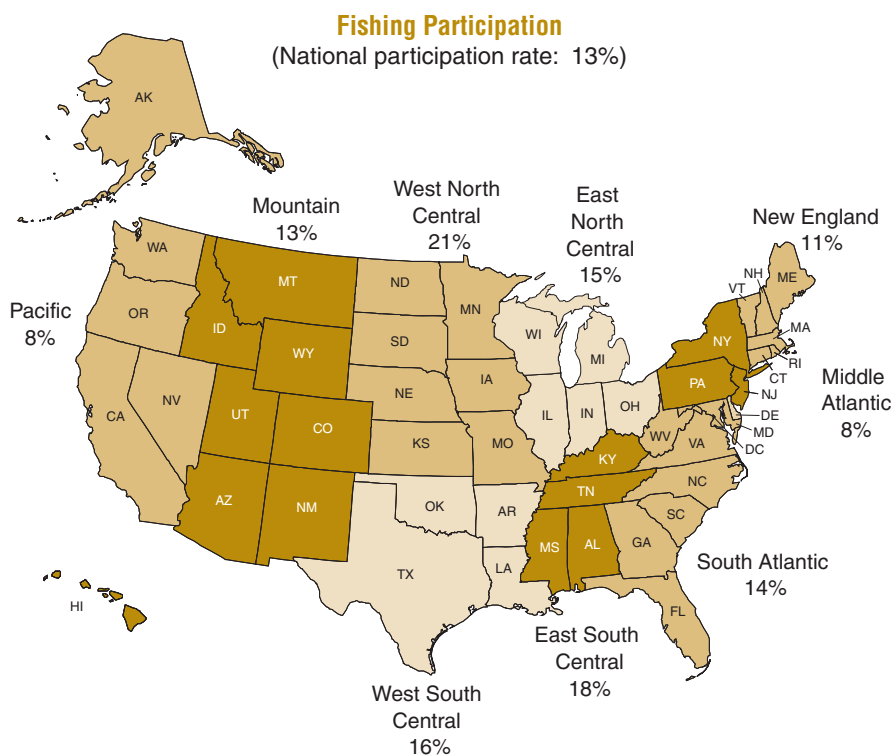
Fishing in State of Residence and in Other States

A large majority of the 30.0 million anglers who fished in 2006 did so within their home state. Approximately 27.6 million participants, 92 percent of all anglers, fished in their resident state. Nearly 6.5 million, 22 percent, fished out of state. Percentages do not add to 100 because those anglers who fished both in state and out of state were included in both categories.

Of the 25.0 million non-Great Lakes freshwater anglers, 93 percent, 23.3 million, fished within their resident state. About 4.6 million, 18 percent, of these freshwater anglers fished out of state.

Eighty-three percent, 1.2 million, of all Great Lakes anglers enjoyed fishing within their home state in 2006. Twenty-two percent, 306 thousand, of all Great Lakes anglers fished out of state.

Of the three different types of fishing, saltwater fishing had both the highest percentage of anglers fishing outside their resident state, 28 percent, and the lowest percentage fishing within their resident state, 79 percent. Nonresident saltwater anglers numbered 2.2 million and resident anglers 6.1 million.



Fishing in State of Residence and in Other States

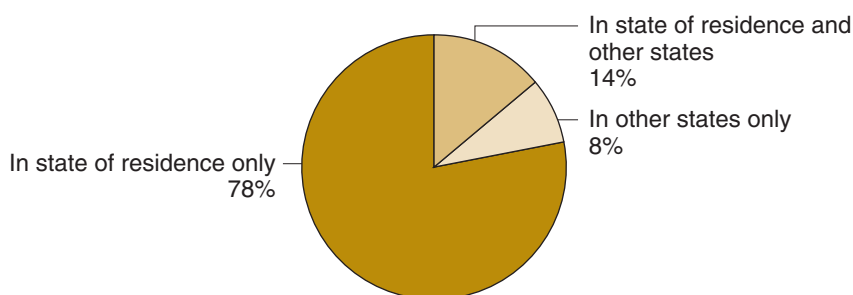
(In millions)

	In state	Out of state
Total anglers	27.6	6.5
Freshwater except		
Great Lakes . . .	23.3	4.6
Great Lakes	1.2	0.3
Saltwater	6.1	2.2

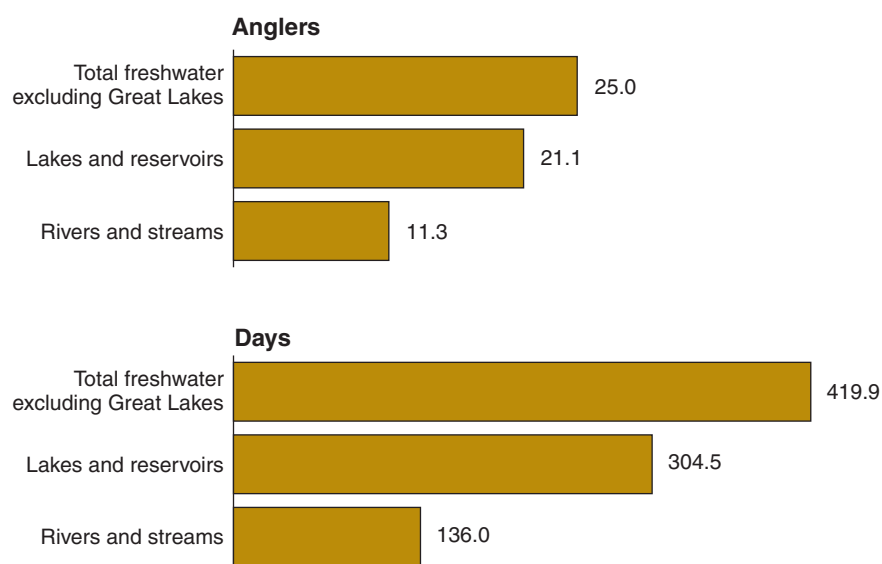
Source: Table 2.

Percent of All Fishing—in State of Residence and in Other States

(Total: 30.0 million participants)



Types of Freshwater Fished, Excluding Great Lakes (In millions)



Types of Freshwater Fished, Excluding Great Lakes

Excluding the Great Lakes, 84 percent or 21.1 million of all freshwater anglers fished in reservoirs, lakes, and ponds. Forty-five percent or 11.3 million fished in rivers and streams. They spent 304 million days fishing in lakes, reservoirs, and ponds and 136 million days fishing in rivers and streams.

Great Lakes Anglers

Great Lakes fishing includes not only the Great Lakes, but also their tributaries—bodies of water that connect the Great Lakes—and the St. Lawrence River south of the bridge at Cornwall. The most popular of the Lakes among anglers was Lake Erie, attracting 37 percent of all the Great Lakes anglers. They averaged 9 days of fishing in Lake Erie during 2006. Lake Michigan ranked second in popularity, hosting 33 percent of Great Lakes anglers who fished there for an average of 12 days. Lake Ontario attracted 15 percent of the anglers, 218 thousand, who averaged 6 fishing days. The tributaries to the Lakes drew 9 percent of Great Lakes anglers who averaged 9 days per angler. Lake Huron drew 7 percent, 93 thousand anglers, who averaged 9 days of fishing.

Great Lakes Fishing

	Anglers (thousands)	Percentage of all Great Lakes anglers
Total, all Great Lakes	1,420	100
Lake Erie	526	37
Lake Michigan	474	33
Lake Ontario	218	15
Tributaries to the Great Lakes	134	9
Lake Huron	*93	7
Lake Superior	*89	6
St. Lawrence River .....	...	...
Lake St. Clair .....	...	...

* Estimate based on a sample size of 10–29.

... Sample size too small to report data reliably.

Source: Table 26.

Sex and Age of Anglers

Although more men than women fished in 2006, a substantial number of women fished as well. Twenty percent of all males 16 years and older went fishing, while 6 percent of females fished. Of the 30.0 million anglers who fished in the United States, 75 percent, 22.3 million, were male and 25 percent, 7.6 million, were female.

Of the age categories, 7.5 million anglers, 25 percent of all anglers, were 35 to 44 years old. Their participation rate was also the highest at 17 percent. They were followed by 6.6 million anglers 45 to 54 years old who composed 22 percent of all anglers and had a participation rate of 15 percent. Next came the 25-to-34-year-old age group with 4.9 million participants who accounted for 16 percent of all anglers and had a participation rate of 13 percent. The 16- and 17-year-olds added 1.1 million individuals to the angler population. They made up 4 percent of the total angler population and had a 13 percent participation rate. The 4.6 million 55-to-64-year-olds who fished accounted for 15 percent of all anglers and had a participation rate of 14 percent. Anglers 65 years old and older numbered 2.8 million, 10 percent of total anglers, and had a 7 percent participation rate. The 2.4 million anglers 18 to 24 years old made up 8 percent of the angler population, and they had a participation rate of 10 percent. The 16- and 17-year-olds added 1.1 million individuals to the angler population. They made up 4 percent of the total angler population and had a 13 percent participation rate.

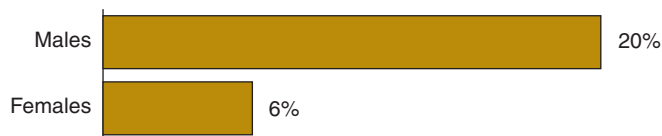
Anglers by Sex and Age

Total, both sexes . . . 30.0 million
 Male 22.3 million
 Female 7.6 million

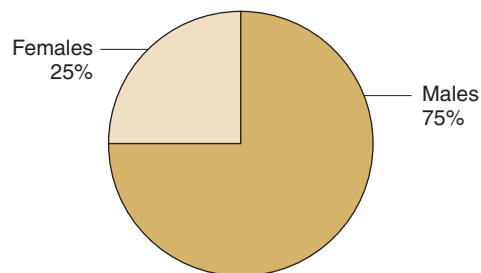
Total, all ages 30.0 million
 16 and 17 1.1 million
 18 to 24 2.4 million
 25 to 34 4.9 million
 35 to 44 7.5 million
 45 to 54 6.6 million
 55 to 64 4.6 million
 65 and older 2.8 million

Source: Table 9.

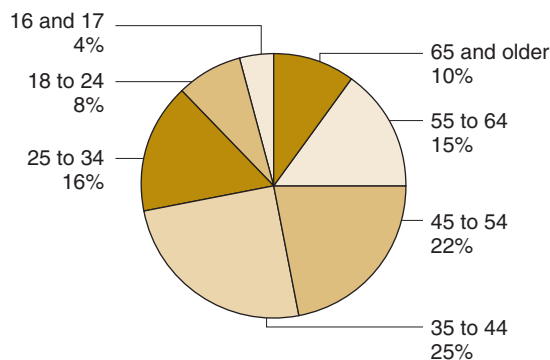
Percent of Males and Females Who Fished in the United States



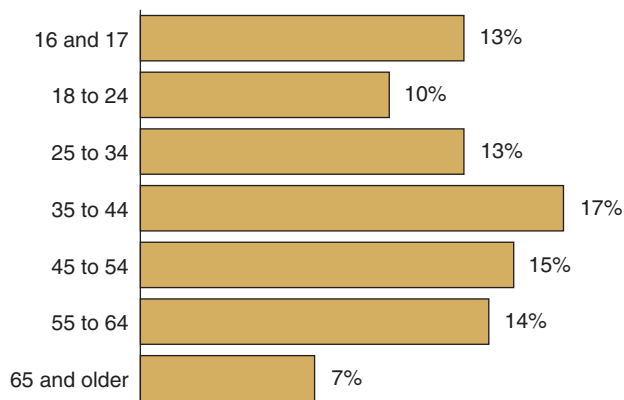
Percent of Anglers by Sex



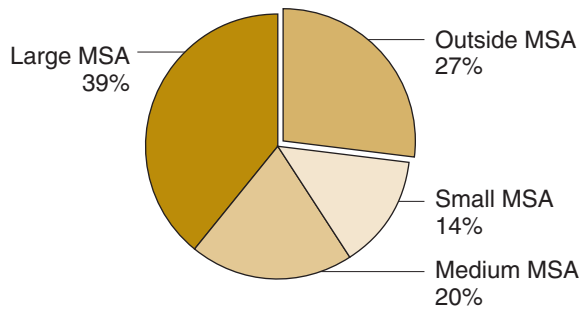
Percent of Anglers by Age



Percent of U.S. Population Who Fished by Age

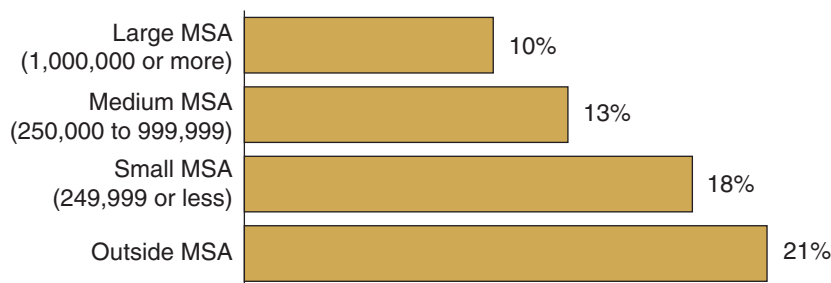


Percent of Anglers by Residence

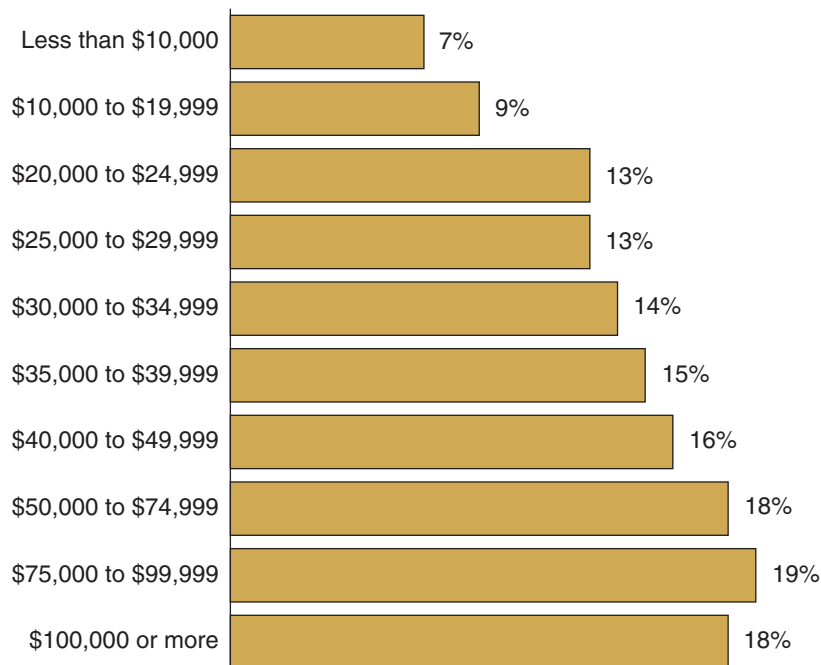


Percent of U.S. Population Who Fished by Residence

(Total U.S. population that fished: 13%)



Percent of U.S. Population Who Fished by Household Income



Metropolitan and Nonmetropolitan Anglers

While residents of metropolitan statistical areas (MSAs)¹ had lower participation rates in fishing than non-MSA residents, they still accounted for the majority of anglers. Eleven percent of all MSA residents fished in 2006, but they composed 73 percent of all anglers. By comparison, non-MSA residents composed 27 percent of all anglers, but their participation rate was more than twice as high at 21 percent.

Larger MSAs had lower participation rates in fishing than smaller MSAs but composed more of the angler population. Large MSAs with populations of 1,000,000 or more had the lowest participation rate at 10 percent, but they made up 39 percent of all anglers. Medium MSAs with a population of 250,000 to 999,999 had a 13 percent participation rate and represented 20 percent of all anglers. Those MSAs with populations under 250,000 had a participation rate of 18 percent and composed 14 percent of all anglers.

Household Income of Anglers

The participation rate in fishing tended to increase as household income increased. The participation rate is the percent of each income group that fished. The rate for those who reported incomes of \$75,000 to \$99,999 was the highest at 19 percent. Those with incomes of \$50,000 to \$74,999 and \$100,000 or more had a slightly lower rate at 18 percent. The participation rate declined as income decreased. Those with incomes \$40,000 to \$49,999 participated at a 16 percent rate, and it declined steadily to 15 percent among those with incomes \$35,000 to \$39,999, 14 percent among those with incomes \$30,000 to \$34,999, and 13 percent among those with incomes \$20,000 to \$29,999. Those with incomes under \$20,000 had the lowest participation rates at under 10 percent.

The majority of anglers had household incomes of \$50,000 or more. Among anglers who reported income, 59 percent were from households with incomes of \$50,000 or more and 41 percent were from households with incomes of less than \$50,000.

¹ See Appendix A for definition of metropolitan statistical area.

Education, Race, and Ethnicity

People of all educational backgrounds had similar participation rates. Those with 11 years of education or less and those with 5 years of college or more had participation rates of 12 percent. Those with 12 years of education and those with 4 years of college had participation rates of 13 percent. Those with 1 to 3 years of college had the highest participation rate at 14 percent.

While the highest participation rate is among those with 1 to 3 years of college, those with 12 years of education make up the largest share of anglers. Thirty-four percent or 10.3 million anglers have 12 years of education.

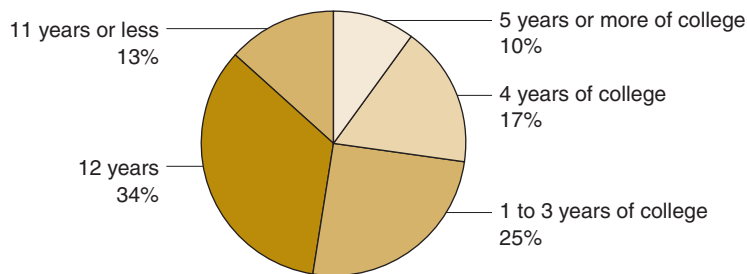
Fishing was most popular among Whites and those identified as other races. Whites participated at a 15 percent rate. Other races, which include Native Americans, Pacific Islanders, and those of mixed race, participated at a 16 percent rate. Blacks and Asians participated at comparatively lower rates at 6 percent and 3 percent, respectively. Of all anglers, 92 percent were White, 5 percent were Black, 1 percent was Asian, and 2 percent were other races.

Hispanics, who represent a growing percentage of the U.S. population,

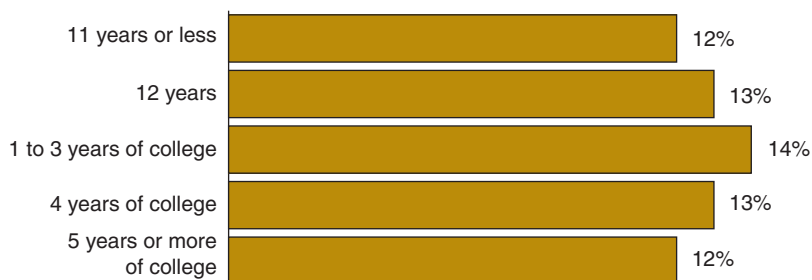
fished at a much lower rate than non-Hispanics. Five percent of Hispanics fished in 2006 compared to 14 percent

of non-Hispanics. The 1.6 million Hispanics who fished in 2006 made up 5 percent of all anglers.

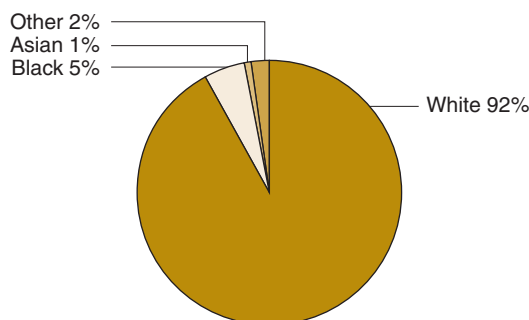
Percent of Anglers by Education



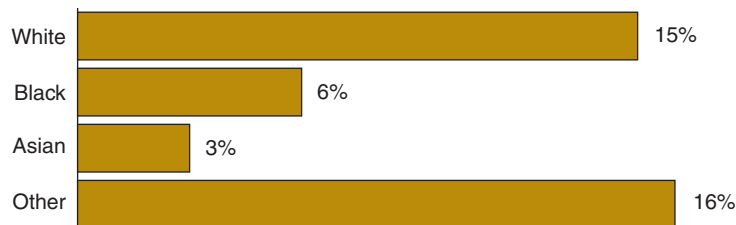
Percent of U.S. Population Who Fished by Education



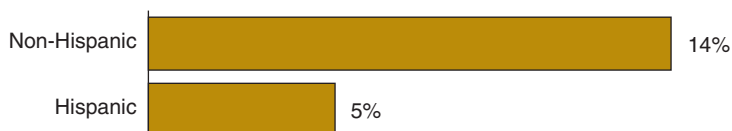
Percent of Anglers by Race



Percent of U.S. Population Who Fished by Race



Percent of U.S. Population Who Fished by Ethnicity



Anglers by Education, Race, and Ethnicity (In millions)

Total anglers 30.0

Education

11 years or less	4.0
12 years	10.3
1 to 3 years	7.6
4 years of college	5.1
5 years or more of college	2.9

Race

White	27.5
Black	1.5
Asian	0.3
Other	0.6

Ethnicity

Hispanic	1.6
Non-Hispanic	28.4

Source: Table 9.

1996–2006 Comparison of Fishing Activity

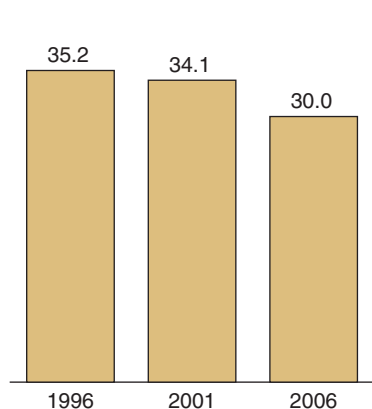
In 2006, participation for all types of fishing was down significantly from both 1996 and 2001. The majority of the downturn occurred over the five-year period from 2001 to 2006. As a result, the percent changes from 1996 to 2006 and 2001 to 2006 are similar. The total number of anglers fell 15 percent from 1996 to 2006 and 12 percent from 2001 to 2006. Over the ten years from 1996 to 2006 and the five years between 2001 and 2006, fishing in the Great Lakes experienced the greatest downturn at 30 percent and 23 percent, respectively. Fishing in freshwater other than the Great Lakes fared the best with a decline of only 13 percent between 1996 and 2006 and a decline of only 10 percent between 2001 to 2006. The decline in saltwater fishing was between these two with an 18 percent decline from 1996 to 2006 and a 15 percent decline from 2001 to 2006.

The trend in fishing days was similar to that of total participants. For all types of fishing, there was a decline of 7 percent in the number of fishing days from 2001 to 2006. As with anglers, the decline in days from 2001 to 2006 was sharpest for Great Lakes fishing at 22 percent, which was followed by saltwater fishing at 6 percent. The decline among freshwater other than Great Lakes fishing was the least at 5 percent. Overall, the decline in days from 2001 to 2006 was not as large as the decline in the number of anglers. This indicates that the average number of days fishing by anglers increased over the period.

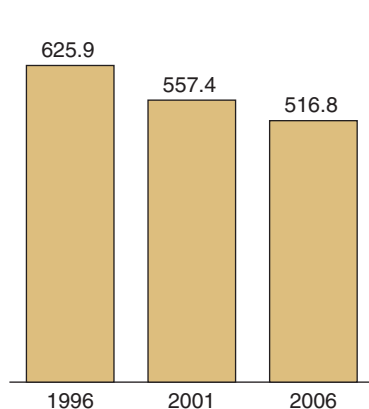
The trend in fishing expenditures is different from that of total participants. Fishing-related expenditures declined significantly from 1996 to 2006 but remained roughly the same from 2001 to 2006. Total fishing expenditures fell 13 percent from 1996 to 2006 and increased 4 percent from 2001 to 2006,

but this is not a statistically significant change. Trip-related expenditures were up 7 percent from 2001 to 2006, and other expenditures, which include land leasing, ownership, memberships dues, and contributions, were up 21 percent. These increases were countered by a 5 percent decrease in spending for auxiliary equipment, such as tents and clothing, and a 4 percent decrease in spending for special equipment. Special equipment includes big ticket items such as boats, campers, and cabins. Expenditures for fishing equipment, such as rods, reels, and fishing tackle, increased 1 percent from 2001 to 2006. However, with the exception of the 21 percent increase in expenditures on other items, none of the changes from 2001 to 2006 were significant.

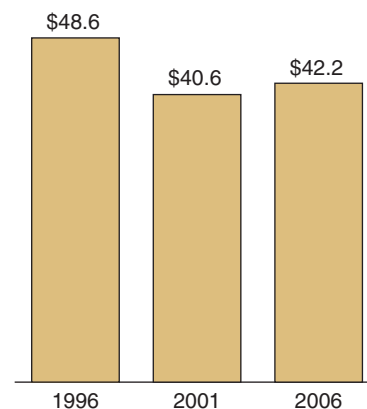
Number of Anglers
(Millions)



Days of Fishing
(Millions)



Fishing Expenditures
(Billions of 2006 dollars)



1996–2006 Fishing Participants, Days, and Expenditures

(U.S. population 16 years old and older. Numbers in thousands)

	1996		2006		1996–2006 percent change
	Number	Percent	Number	Percent	
Anglers, total	35,246	100	29,952	100	–15
All freshwater.	29,734	87	25,431	85	–14
Freshwater, except Great Lakes . .	28,921	85	25,035	84	–13
Great Lakes	2,039	7	1,420	5	–30
Saltwater.	9,438	25	7,717	26	–18
Days, total	625,893	100	516,781	100	–17
All freshwater.	515,115	82	433,337	84	–16
Freshwater, except Great Lakes . .	485,474	78	419,942	81	–13
Great Lakes	20,095	3	18,016	3	–10
Saltwater.	103,034	16	85,663	17	–17*
Fishing, total (2006 dollars)	\$48,565,444	100	\$42,156,092	100	–13
Trip-related.	19,763,326	41	17,878,560	42	–10*
Equipment	24,636,355	51	18,757,370	44	–24
Fishing equipment.	6,821,115	14	5,332,401	13	–22
Auxiliary equipment	1,332,134	3	778,740	2	–42
Special equipment.	16,483,106	34	12,646,229	30	–23*
Other.	4,165,763	9	5,520,162	13	33

* Not different from zero at the 5 percent level of significance.

2001–2006 Fishing Participants, Days, and Expenditures

(U.S. population 16 years old and older. Numbers in thousands)

	2001		2006		2001–2006 percent change
	Number	Percent	Number	Percent	
Anglers, total	34,071	100	29,952	100	–12
All freshwater.	28,439	83	25,431	85	–11
Freshwater, except Great Lakes . .	27,913	82	25,035	84	–10
Great Lakes	1,847	5	1,420	5	–23
Saltwater	9,051	27	7,717	26	–15
Days, total	557,394	100	516,781	100	–7
All freshwater.	466,984	84	433,337	84	–7
Freshwater, except Great Lakes . .	443,247	80	419,942	81	–5*
Great Lakes	23,138	4	18,016	3	–22*
Saltwater	90,838	16	85,663	17	–6*
Fishing, total (2006 dollars)	\$40,560,198	100	\$42,156,092	100	4*
Trip-related.	16,682,925	41	17,878,560	42	7*
Equipment	19,309,578	48	18,757,370	44	–3*
Fishing equipment.	5,256,228	13	5,332,401	13	1*
Auxiliary equipment	820,770	2	778,740	2	–5*
Special equipment.	13,232,580	33	12,646,229	30	–4*
Other	4,567,694	11	5,520,162	13	21

* Not different from zero at the 5 percent level of significance.

Hunting



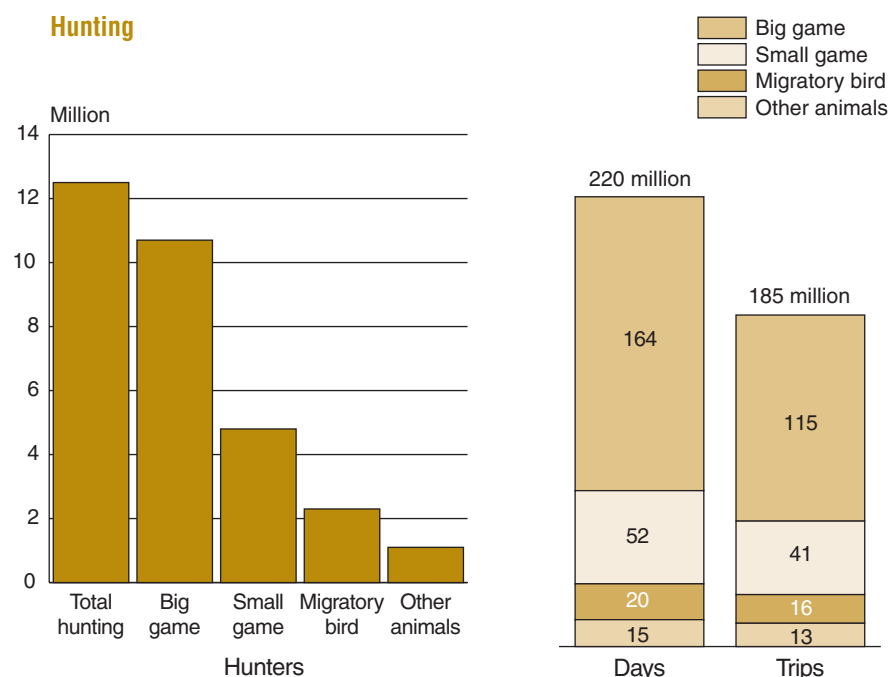
Hunting Highlights

In 2006, 12.5 million people 16 years old and older enjoyed hunting a variety of animals within the United States. They hunted 220 million days and took 185 million trips. Hunting expenditures totaled \$22.9 billion.

Big game hunting was the most popular type of hunting. An estimated 10.7 million hunters pursued big game, such

as deer and elk, on 164 million days. Big game related-expenditures on trips and equipment totaled \$11.8 billion. There were 4.8 million hunters of small game including squirrels and rabbits. They hunted small game on 52 million days and spent \$2.4 billion on small game hunting trips and equipment. Migratory bird hunters numbered 2.3 million. They spent 20.0 million days

hunting birds such as waterfowl and dove. Migratory bird-related trip and equipment expenditures totaled \$1.3 billion. About 1.1 million hunters sought other animals, such as raccoons and groundhogs, on 15 million days, and their expenditures on trips and equipment were \$208 million.



Total Hunting

Hunters 12.5 million

Big game	10.7 million
Small game	4.8 million
Migratory bird	2.3 million
Other animal	1.1 million

Days 220 million

Big game	164 million
Small game	52 million
Migratory bird	20 million
Other animal	15 million

Trips 185 million

Big game	115 million
Small game	41 million
Migratory bird	16 million
Other animal	13 million

Expenditures \$22.9 billion

Big game	11.8 billion
Small game	2.4 billion
Migratory bird	1.3 billion
Other animal	0.2 billion
Nonspecific	7.1 billion

Source: Tables 1 and 17–21.

Hunting Expenditures

Of the \$22.9 billion spent by hunters in 2006, 29 percent, \$6.7 billion, was spent on trip-related expenses. Food and lodging totaled \$2.8 billion, 42 percent of all trip-related expenses. Transportation spending was \$2.7 billion, 40 percent of trip expenditures. Other trip expenses, such as guide fees, land use fees, and equipment rental, were \$1.2 billion or 18 percent of all trip-related expenses.

Total equipment expenditures for hunting were \$10.7 billion in 2006, 47 percent of all hunting expenses. Hunting equipment, such as guns and rifles, telescopic sights, and ammunition, composed \$5.4 billion or 50 percent of all equipment costs. Expenditures for auxiliary equipment, including camping equipment, binoculars, and special hunting clothing, accounted for \$1.3 billion or 12 percent of all equipment expenses. Special equipment, such as campers or all-terrain vehicles, amounted to \$4.0 billion or 38 percent of all equipment expenditures.

Land leasing and ownership for hunting was a large expenditure category. Hunters spent \$4.4 billion on land leasing and ownership, which was 19 percent of all hunting-related expenditures. Expenditures for magazines, books, membership dues, contributions, licenses, stamps, tags, and permits totaled \$1.1 billion or 5 percent.

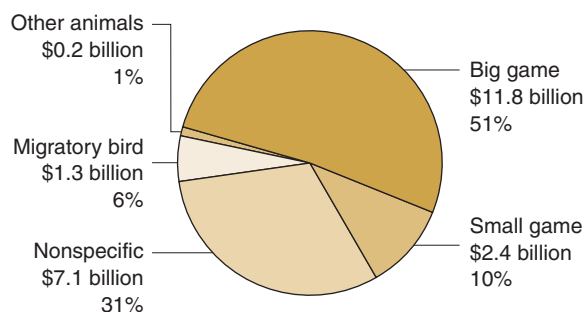
Total Hunting Expenditures

Total hunting expenditures	\$22.9 billion
Total trip-related expenditures	\$6.7 billion
Food and lodging	2.8 billion
Transportation	2.7 billion
Other trip costs	1.2 billion
Total equipment expenditures	\$10.7 billion
Hunting equipment	5.4 billion
Auxiliary equipment	1.3 billion
Special equipment	4.0 billion
Total other hunting expenditures	\$5.5 billion
Magazines, books	0.1 billion
Membership dues and contributions	0.3 billion
Land leasing and ownership	4.4 billion
Licenses, stamps, tags, and permits	0.7 billion

Source: Table 17.

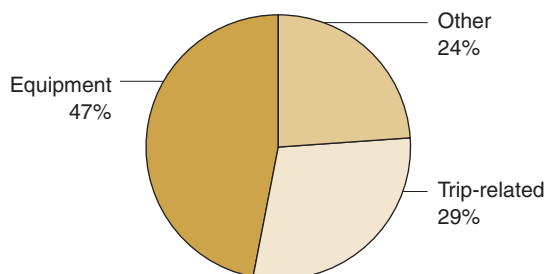
Hunting Expenditures by Type of Hunting

(Total expenditures: \$22.9 billion)



Percent of Total Hunting Expenditures

(Total expenditures: \$22.9 billion)



Big Game Hunting

In 2006, a majority of hunters, 10.7 million, devoted 164 million days to hunting big game including deer, elk, bear, and wild turkey. They took 115 million trips and spent an average of 15 days hunting big game.

Trip and equipment expenditures for big game hunting totaled \$11.8 billion. Trip-related expenses were \$4.6 billion. Of that amount, food and lodging accounted for \$2.0 billion or 42 percent of all trip-related costs. Transportation costs reached \$1.8 billion, 39 percent of trip costs. Other trip-related expenses amounted to \$868 million or 19 percent of trip costs.

Sixty percent of big game-related expenditures was on equipment, which totaled \$7.1 billion. Hunting

equipment, which includes firearms, ammunition, bows, and arrows, accounted for \$3.0 billion or 42 percent of all equipment. Purchases of auxiliary equipment, such as tents and binoculars, totaled \$1.1 billion (15 percent). Special equipment, such as campers and all-terrain vehicles, accounted for \$3.0 billion (43 percent).

Small Game Hunting

Small game, such as rabbits, squirrels, pheasants, quail, and grouse, was also popular with 4.8 million hunters who pursued small game on a total of 52 million days. They took 41 million trips and averaged 11 days in the field hunting small game.

These hunters spent \$2.4 billion on trips and equipment for small game hunting. Trip-related expenditures

totaled \$1.2 billion. Spending on food and lodging was \$510 million or 43 percent of all trip expenditures. Transportation costs totaled \$535 million or 45 percent of small game trip expenses. Other trip-related expenditures were \$151 million or 13 percent of all trip costs.

Equipment expenditures for small game hunting were \$1.2 billion. Of that amount, hunting equipment accounted for \$776 million (66 percent), auxiliary equipment accounted for \$62 million (5 percent), and special equipment accounted for \$331 million (28 percent).

Big Game

Hunters	10.7 million
Days	164 million
Trips	115 million
Trip and equipment expenditures . . .	\$11.8 billion

Source: Tables 1 and 18.

Big Game Hunting Trip and Equipment Expenditures

(Total expenditures: \$11.8 billion)



Small Game

Hunters	4.8 million
Days	52 million
Trips	41 million
Trip and equipment expenditures . . .	\$2.4 billion

Source: Tables 1 and 19

Small Game Hunting Trip and Equipment Expenditures

(Total expenditures: \$2.4 billion)



Migratory Bird Hunting

In 2006, 2.3 million migratory bird hunters devoted 20 million days on 16 million trips for hunting birds, such as doves, ducks, and geese. Hunters averaged 9 days pursuing migratory birds for the year.

Migratory bird-related spending for trips and equipment was \$1.3 billion in 2006. Of this amount, \$691 million was spent on hunting trips. An estimated \$261 million or 38 percent of all trip expenditures were on food and lodging, and \$266 million (38 percent) were on transportation. Other trip expenses were \$165 million (24 percent) of the total trip-related expenditures for migratory bird hunters.

Equipment purchases for migratory bird hunting totaled \$658 million in 2006. Of this amount, \$416 million,

or 63 percent, was spent on hunting equipment (firearms, ammunition, etc.). Spending on auxiliary equipment was \$68 million (10 percent) and \$174 million (26 percent) was spent on special equipment.

Hunting Other Animals

Over 1.1 million hunters reported spending 15 million days on 13 million trips pursuing other animals, such as groundhogs, raccoons, foxes, and coyotes. They averaged 13 days of hunting.

These hunters spent \$208 million in 2006 on trips and equipment for the pursuit of other animals. Trip-related costs totaled \$143 million. Of that, food and lodging was \$52 million or 36 percent of all trip costs; transportation was \$84 million, 59 percent of trip expenses; and other trip expenses were \$7 million, 5 percent of all trip costs.

Equipment expenditures for hunting other animals totaled \$65 million. For the pursuit of other animals, hunters spent \$51 million on hunting equipment (firearms, ammunition, etc.) and \$15 million on auxiliary equipment.

Comparative Hunting Highlights

In 2006, big game hunters pursued big game an average of 15 days and 11 trips. Small game hunters pursued small game an average of 11 days and 9 trips. Migratory bird hunters hunted migratory birds an average of 9 days and 7 trips. Individuals hunting other animals did so an average of 13 days and 11 trips.

Average spending on trips and equipment was about twice as high for big game hunting than for other types of hunting. For hunting big game, participants spent an average of \$1,100 for the year. By comparison, spending

Migratory Bird

Hunters	2.3 million
Days	20 million
Trips	16 million
Trip and equipment expenditures ..	\$1.3 billion

Source: Tables 1 and 20.

Other Animals

Hunters	1.1 million
Days	15 million
Trips	13 million
Trip and equipment expenditures ..	\$208 million

Source: Tables 1 and 21.

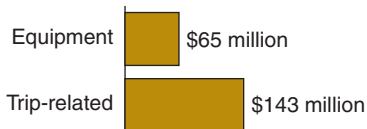
Migratory Bird Hunting Trip and Equipment Expenditures

(Total expenditures: \$1.3 billion)

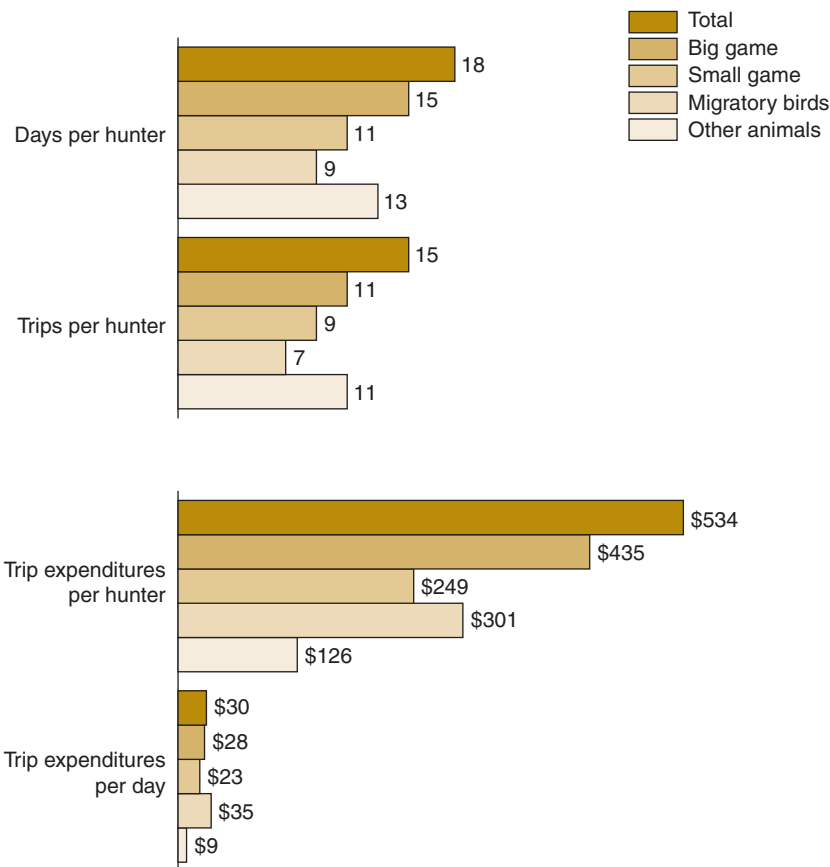


Trip and Equipment Expenditures for Hunting Other Animals

(Total expenditures: \$208 million)



Comparative Hunting by Type of Hunting



on small game hunting by participants averaged \$493, spending on migratory bird hunting by participants averaged \$588, and spending on other animal hunting averaged \$184.

During 2006, trip expenditures for all hunting averaged \$534 per hunter, a daily average of \$30. In pursuit of big game, hunters averaged trip expenditures of \$435, which was \$28 per day. Hunters spent an average of \$249 while seeking small game (\$23 per day) and spent an average of \$301 (\$35 per day) while pursuing migratory birds. Hunters averaged \$126 (\$9 per day) while pursuing other animals.

Hunting for Selected Game

Among big game species, deer was the most popular animal pursued, attracting 10.1 million hunters on 132 million days. Wild turkey attracted 2.6 million hunters on 26 million days, while elk drew 799 thousand on 7 million days, and bear 399 thousand on 3 million days. In addition, 578 thousand hunters spent 6 million days hunting other big game animals.

Among small game species, rabbit was the most popular quarry with nearly 2 million small game hunters pursuing rabbits on 21 million days. Squirrels were hunted by 1.8 million participants on 19 million days, and pheasants attracted 1.6 million hunters on 12 million days. Quail was flushed by 1.0 million hunters on 8 million days, while grouse and prairie chicken were pursued by 800 thousand hunters on 7 million days. In addition, 325 thousand hunters spent 4 million days hunting other small game animals.

Among those hunting migratory birds, 1.1 million pursued duck on 12 million days. There were 1.2 million hunters who pursued dove on 6 million days. On 6 million days, 700 thousand hunters hunted geese in 2006. Other migratory bird species attracted 150 thousand people who hunted on 1 million days.

Hunting for Selected Game

(In millions)

Type of hunting	Hunters	Days
Big game, total	10.7	164
Deer	10.1	132
Wild turkey	2.6	26
Elk	0.8	7
Bear	0.4	3
Small game, total	4.8	52
Rabbit and hare	1.9	21
Squirrel	1.8	19
Pheasant	1.6	12
Grouse/prairie chicken	0.8	7
Quail	1.0	8
Migratory birds, total	2.3	20
Doves	1.2	6
Ducks	1.1	12
Geese	0.7	6

Source: Table 7.

Participation by Geographic Regions

Regionally, participation rates in hunting ranged from 2 percent in the Pacific Region to 12 percent in the West North Central Region. The East North Central, East South Central, West South Central, and Mountain Regions also had participation rates above the national average of 5 percent. The participation rates in the South Atlantic and New England Regions were below the national average at 4 percent and 3 percent, respectively. The rate in the Middle Atlantic was equal to the average at 5 percent.

Hunting in State of Residence and in Other States

A large majority of participants, 96 percent or 12.0 million, hunted within their resident state. Only 1.8 million, 15 percent, hunted in another state. Percentages do not add to 100 because those who hunted both in state and out of state were included in both categories.

The overall resident/nonresident division is relatively constant across all types of hunting. About 10.3 million big game hunters, 96 percent of all big game hunters, hunted within their state of residence, while 12 percent, 1.3 million people, traveled to another state

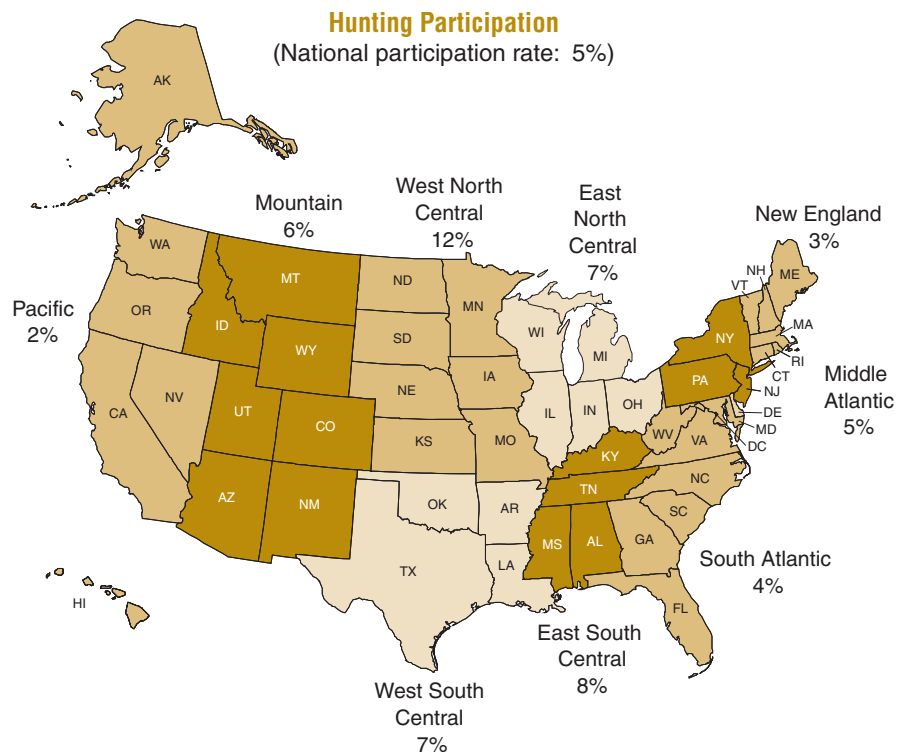
to hunt big game. About 4.5 million small game hunters, 93 percent of all small game hunters, pursued game in their resident state. About 625 thousand, 13 percent, ventured across state lines to hunt small game. Ninety-five percent of all migratory bird hunters, 2.2 million participants, hunted within their resident state. Thirteen percent or 291 thousand hunted out of state. Among sportspeople who hunted other animals, 96 percent, 1.1 million, hunted in-state and 10 percent, 112 thousand participants, hunted out of state.

Hunting in State of Residence and in Other States

(In millions)

	In state	Out of state
All hunters	12.0	1.8
Big game	10.3	1.3
Small game	4.5	0.6
Migratory bird	2.2	0.3
Other animal	1.1	0.1

Source: Table 6.



Hunting on Public and Private Lands

In 2006, 12.5 million hunters 16 years old and older hunted on public land, private land, or both. Of this number, 4.9 million or 39 percent hunted on publicly owned lands compared to 10.2 million or 82 percent who hunted on privately owned land. Some hunters hunted exclusively on public land and others hunted exclusively on private land—1.9 million, 15 percent of all hunters, used public lands only, and 7.2 million hunted only on private land, 58 percent of all hunters. Slightly over 3

million hunters, 24 percent, hunted on both public and private lands.

During 2006, 4.9 million hunters used public lands on 54 million days, which represents 25 percent of all hunting days. Thirty-five percent of big game hunters pursued big game on public land for 37 million days. Thirty-five percent of all small game hunters, 1.7 million, pursued small game on public land for 13 million days. Nearly 800 thousand migratory bird hunters, 35 percent, hunted migratory birds on public lands for 6 million days. Twenty-eight percent, 311 thousand,

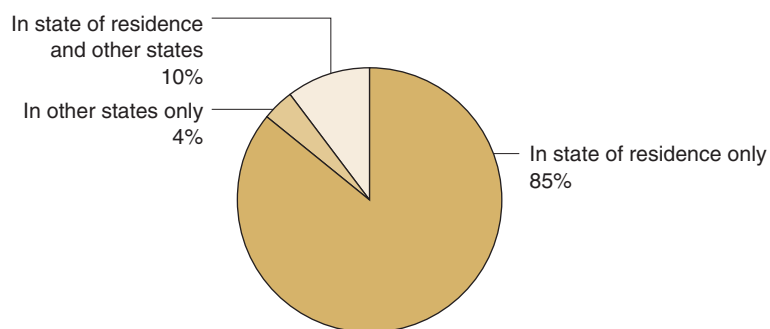
of other animal hunters pursued their game on public land for 3 million days.

The percent of hunters on private land differs little among different types of hunting. Eighty percent of big game hunters hunted on private land, which compares to 79 percent seeking small game, 76 percent seeking migratory birds, and 82 percent seeking other animals.

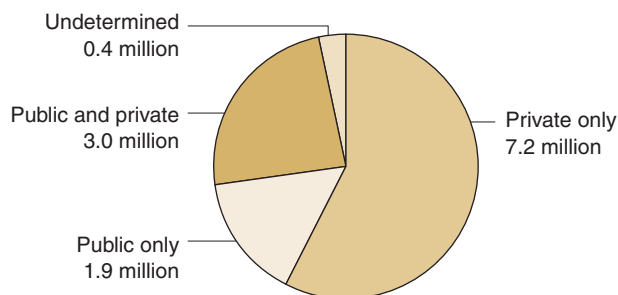
Of all days hunting, 75 percent or 164 million were on private land. The percent of hunting days on private land varied more among types of hunting than the percent of hunters. Seventy-three percent of big game and small game hunting days, 68 percent of migratory bird days, and 81 percent of other animal days were on private land. Total hunting days pursuing these species on private land were as follows: big game, 120 million; small game, 38 million; migratory birds, 13 million; and other animals, 12 million.

Percent of All Hunting—in State of Residence and in Other States

(Total: 12.5 million participants)



People Hunting on Public and Private Lands



Sex and Age of Hunters

Of the U.S. population 16 years old and older, 10 percent of males and 1 percent of females enjoyed hunting in 2006. Of the 12.5 million participants who hunted, 91 percent (11.4 million) were male and 9 percent (1.2 million) were female.

The participation rate in hunting tended to increase with age until individuals reached 35 to 44 years of age, and thereafter it declined. During 2006, 6 percent or 501 thousand 16- and 17-year-olds hunted. The participation rate climbed from 4 percent of individuals 18 to 24 years old to 7 percent of those 35 to 44. After age 44 the rate declined to 6 percent of those 45 to 64 and 3 percent of those 65 and over.

The majority of hunters were 35 to 44 years old. An estimated 3.1 million hunters, which was 25 percent of all hunters, were 35 to 44 years old. Individuals aged 45 to 54 were close in total number of hunters at 2.9 million.

Hunters by Sex and Age

Total, both sexes .. 12.5 million

Male 11.4 million

Female 1.2 million

Total, all ages 12.5 million

16 and 17 0.5 million

18 to 24 1.0 million

25 to 34 2.1 million

35 to 44 3.1 million

45 to 54 2.9 million

55 to 64 1.9 million

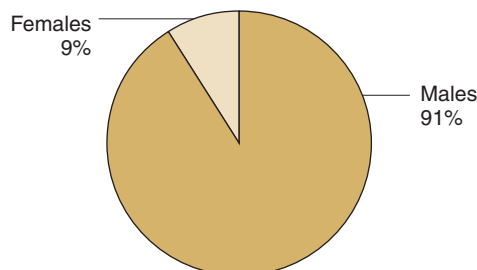
65 and older 1.2 million

Source: Table 10.

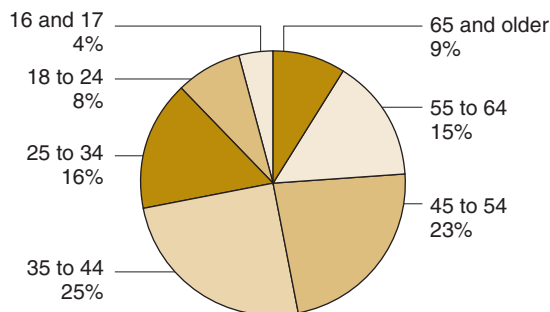
Percent of Males and Females Who Hunted in the United States



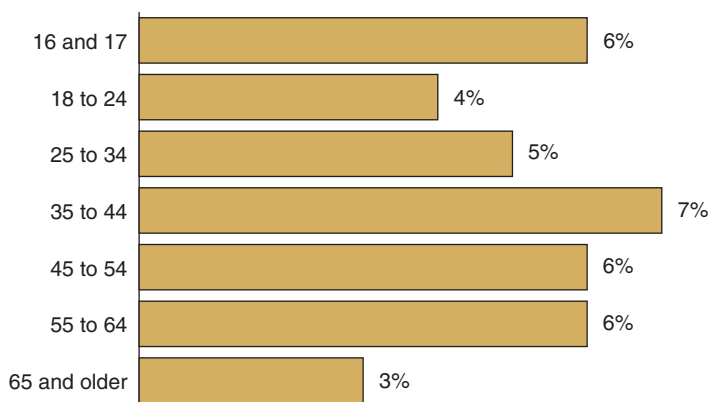
Percent of Hunters by Sex



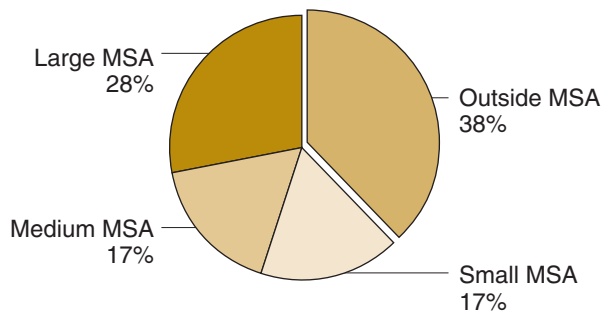
Percent of Hunters by Age



Percent of U.S. Population Who Hunted by Age

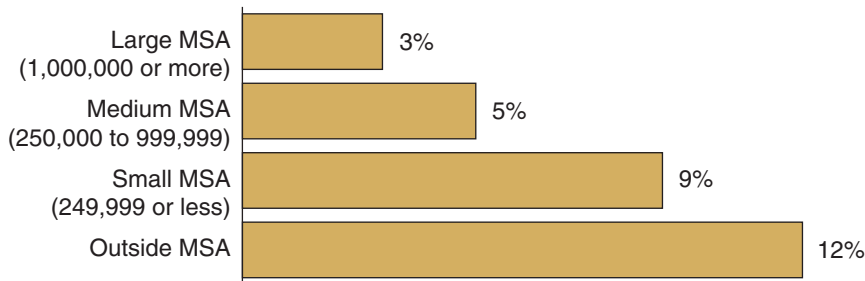


Percent of Hunters by Residence

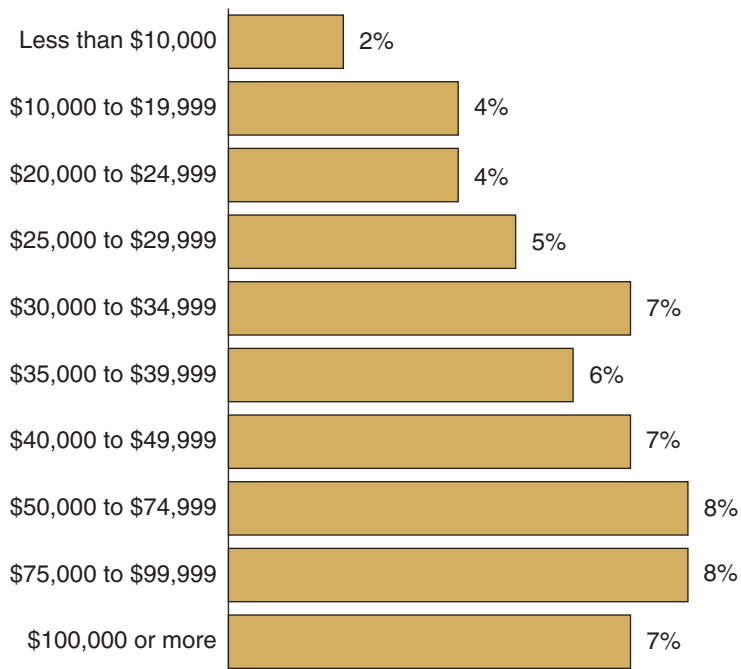


Percent of U.S. Population Who Hunted by Residence

(Total U.S. population that hunted: 5%)



Percent of U.S. Population Who Hunted by Household Income



Metropolitan and Nonmetropolitan Hunters

As was the case for fishing, participation rates for hunting were the lowest among residents of the largest metropolitan statistical areas (MSAs)¹ and were the highest among non-MSA residents. Residents of MSAs with a population of 1 million or more hunted at a 3 percent rate, which compares to 12 percent of those who resided outside MSAs. Furthermore, the smaller the MSA the higher was the participation rate. The rate among residents of MSAs of 249,999 or less was 9 percent and among residents of MSAs with 250,000 to 999,999 inhabitants, the rate was 5 percent.

Despite the lower participation rates among MSA residents, they still made up the majority of hunters. Sixty-two percent of hunters were MSA residents, 28 percent were from the largest MSAs, and 34 percent were from smaller to mid-sized MSAs.

Household Income of Hunters

The participation rate in hunting tended to increase as household income increased. Participation rates for those who reported incomes of \$50,000 to \$99,000 were the highest at 8 percent. Those with incomes of \$40,000 to \$49,999 and \$100,000 or more had a slightly lower rate at 7 percent. Those with incomes of \$35,000 to \$39,999 also had a participation rate of 7 percent, and it declined to 5 percent among those with incomes \$25,000 to \$29,999, 4 percent among those with incomes \$10,000 to \$24,999, and 2 percent among those with incomes of under \$10,000.

The majority of hunters had household incomes of \$50,000 or more. Among hunters who reported income, 59 percent had household incomes of \$50,000 or more and 41 percent had household incomes of less than \$50,000. Fishing had the exact same percentages of participants with over and under \$50,000 in household income.

¹ See Appendix A for definition of MSA.

Education and Race of Hunters

Participation rates were highest among those with 12 years of education and those with 1 to 3 years of college. Those with 11 years of education or less had a slightly lower participation rate at 5 percent, and those with 4 years of college or more participated at a 4 percent rate.

The largest category of education was 12 years, which accounted for 39 percent of the hunting population. This was followed by those with 1 to 3 years of college at 26 percent. Those with 11 years or less of education and those with 4 years of college each composed 14 percent of hunters. Individuals with 5 years or more of college made up 7 percent of all hunters.

While people of all races participate in hunting, the majority are White. Six percent of the nation's White population, 1 percent of the Black population, 6 percent of those identified as other races, and less than 0.5 percent of the Asian population went hunting in 2006.

Hunters by Education, Race, and Ethnicity

(In millions)

Total hunters 12.5

Education

11 years or less	1.7
12 years	4.9
1 to 3 years of college . .	3.2
4 years of college	1.8
5 years or more of college	0.9

Race

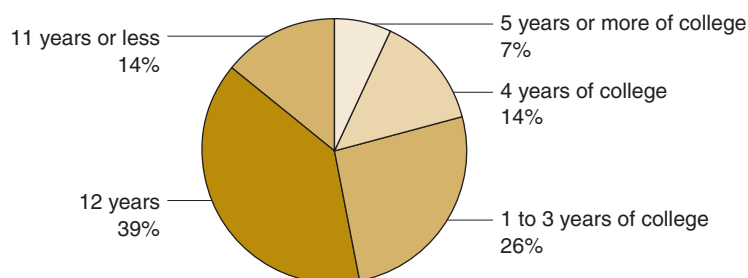
White	12.0
Black	0.2
Other	0.2
Asian	0.1

Ethnicity

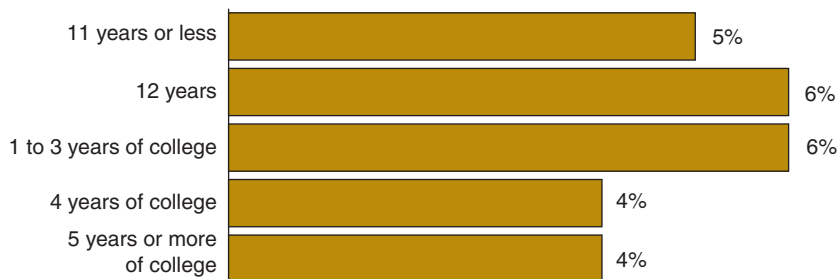
Hispanic	0.4
Non-Hispanic	12.1

Source: Table 10.

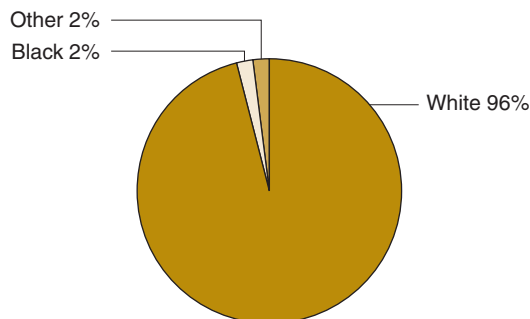
Percent of Hunters by Education



Percent of U.S. Population Who Hunted by Education



Percent of Hunters by Race



Percent of U.S. Population Who Hunted by Race



Percent of U.S. Population Who Hunted by Ethnicity



1996–2006 Comparison of Hunting Activity

The overall number of hunters in the United States declined from 1996 to 2006, but the latest results for 2006 indicate that the sharp downturn experienced in the 1990s may be abating. The downturn from 1996 to 2001 was 7 percent, a statistically significant change. The downturn from 2001 to 2006 was 4 percent and is not significant.

All types of hunting had significant declines in participation from 1996 to 2006; however, only some types had significant declines from 2001 to 2006. Big game hunting has remained relatively stable over time. The decline of 2 percent from 2001 to 2006, is not significant. However, some types of hunting have not remained stable.

From 2001 to 2006, the decline of 12 percent for small game hunting and 22 percent for migratory bird hunting are both significant.

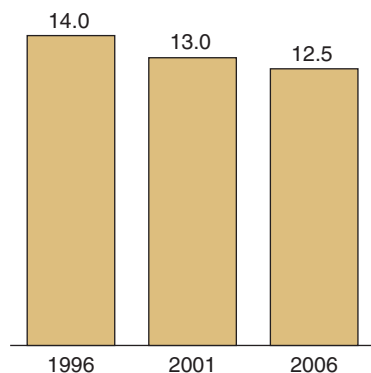
Among the different types of hunting, the trend in hunting days was similar to that of total participants. There was a 14 percent decline in the number of hunting days for all types of hunting from 1996 to 2006 and a decline of 4 percent from 2001 to 2006. The decline from 2001 to 2006 is not significant. Big game hunting days actually went up 7 percent from 2001 to 2006. Over the same period, small game hunting days declined 13 percent and migratory bird hunting declined 33 percent.

The trend in hunting expenditures is similar to that of total participants.

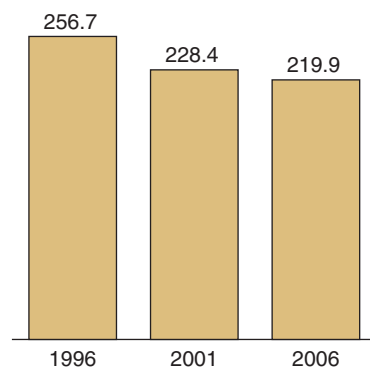
While the number of hunters declined 10 percent from 1996 to 2006, hunting-related expenditures declined 14 percent. Additionally, from 2001 to 2006 the number of hunters declined 4 percent (not significant), and hunting-related expenditures declined 2 percent (not significant).

Some expenditure categories did experience notable change from 2001 to 2006. Trip-related expenditures were up 12 percent. This increase was countered by a 23 percent decline in spending on special equipment, which includes boats, campers, and cabins. However, neither of these changes were significant.

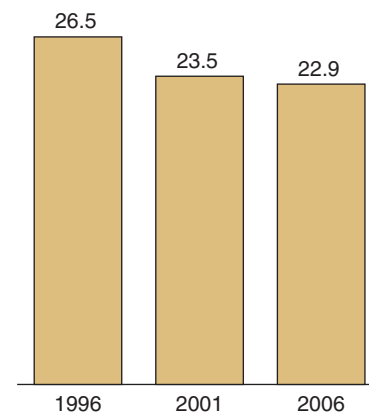
Number of Hunters
(Millions)



Days of Hunting
(Millions)



Hunting Expenditures
(Billions of 2006 dollars)



1996–2006 Hunting Participants, Days, and Expenditures

(U.S. population 16 years old and older. Numbers in thousands)

	1996		2006		1996–2006 percent change
	Number	Percent	Number	Percent	
Hunters, total.	13,975	100	12,510	100	-10
Big game	11,288	81	10,682	85	-5*
Small game.	6,945	50	4,797	38	-31
Migratory bird	3,073	22	2,293	18	-25
Other animal.	1,521	11	1,128	9	-26
Days, total	256,676	100	219,925	100	-14
Big game	153,784	60	164,061	75	7*
Small game.	75,117	29	52,395	24	-30
Migratory bird	26,501	10	19,770	9	-25
Other animal.	24,522	10	15,205	7	-38
Hunting, total (2006 dollars)	\$26,486,173	100	\$22,893,156	100	-14
Trip-related.	6,624,069	25	6,678,614	29	1*
Equipment	14,484,381	55	10,731,501	47	-26
Hunting equipment	7,091,539	27	5,366,357	23	-24
Auxiliary equipment	1,584,433	6	1,330,216	6	-16*
Special equipment.	5,808,408	22	4,034,928	18	-31*
Other	5,377,723	20	5,483,041	24	2*

* Not different from zero at the 5 percent level of significance.

2001–2006 Hunting Participants, Days, and Expenditures

(U.S. population 16 years old and older. Numbers in thousands)

	2001		2006		2001–2006 percent change
	Number	Percent	Number	Percent	
Hunters, total.	13,034	100	12,510	100	-4*
Big game	10,911	84	10,682	85	-2*
Small game.	5,434	42	4,797	38	-12
Migratory bird	2,956	23	2,293	18	-22
Other animal.	1,047	8	1,128	9	8*
Days, total	228,368	100	219,925	100	-4*
Big game	153,191	67	164,061	75	7*
Small game.	60,142	26	52,395	24	-13*
Migratory bird	29,310	13	19,770	9	-33
Other animal.	19,207	8	15,205	7	-21*
Hunting, total (2006 dollars)	\$23,461,530	100	\$22,893,156	100	-2*
Trip-related.	5,978,797	25	6,678,614	29	12*
Equipment	11,794,490	50	10,731,501	47	-9*
Hunting equipment	5,192,593	22	5,366,357	23	3*
Auxiliary equipment	1,369,198	6	1,330,216	6	-3*
Special equipment.	5,232,699	22	4,034,928	18	-23*
Other	5,688,242	24	5,483,041	24	-4*

* Not different from zero at the 5 percent level of significance.



Wildlife Watching

Wildlife-Watching Highlights

Nearly a third of the U.S. population enjoyed wildlife watching in 2006. Wildlife watching is defined here as closely observing, feeding, and photographing wildlife, visiting public parks around the home because of wildlife, and maintaining plantings and natural areas around the home for the benefit of wildlife. These activities are categorized as around the home (within a mile of home) or away from home (at least one mile from home).

The 2006 Survey counts as wildlife-watching, recreational activities in which the primary objective was to watch wildlife, as defined above. Secondary or incidental participation, such as observing wildlife while doing something else, was not included in the Survey.

During 2006, 71 million U.S. residents, 31 percent of the U.S. population 16 years old and older, participated in

wildlife-watching activities. People who took an interest in wildlife around their homes numbered 68 million, while those who took trips away from their homes to wildlife watch numbered 23 million people.

Wild Bird Observers

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

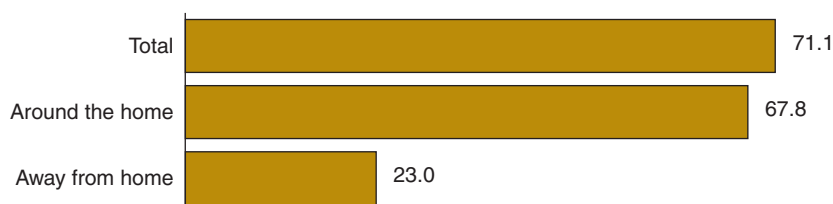
Wildlife-Watching Participants by Activity

(In millions)

Total wildlife-watching participants	71.1
Away from home	23.0
Observers	21.5
Photographers	11.7
Feeders	7.1
Around the home.	67.8
Feeders	55.5
Observers	44.5
Photographers	18.8
Maintainers of plantings or natural areas	14.5
Visitors of public parks or areas	13.3

Source: Table 39.

Wildlife-Watching Participants (In millions)



Wildlife-Watching Expenditures

Thirty-seven percent of all the dollars spent in 2006 for all wildlife-related recreation was due to wildlife watching. Wildlife-watching participants 16 years old and older spent \$45.7 billion, an average of \$816 per spender. Seventy-nine percent of all wildlife watchers spent money on their avocation.

Wildlife watchers spent \$12.9 billion on trips pursuing their activities. Food and lodging accounted for \$7.5 billion (58 percent of all trip-related expenditures), transportation expenses totaled \$4.5 billion (35 percent), and other trip costs, such as land use fees and equipment rental, amounted to \$903 million (7 percent) for the year.

These recreationists purchased \$23.2 billion worth of equipment for wildlife watching. They spent \$9.9 billion (43 percent of all equipment expenditures) on wildlife-watching equipment including binoculars, cameras, bird food, and special clothing. Expenditures for auxiliary equipment, such as tents and backpacking equipment, totaled \$1.0 billion (4 percent) for the year. Participants spent \$12.3 billion (53 percent) on special equipment, including off-road vehicles, campers, and boats.

Also for the year, wildlife watchers spent \$6.6 billion on land leasing and owning; \$1.6 billion on plantings for the benefit of wildlife; \$1.1 billion on membership dues and contributions; and \$360 million on magazines and books.

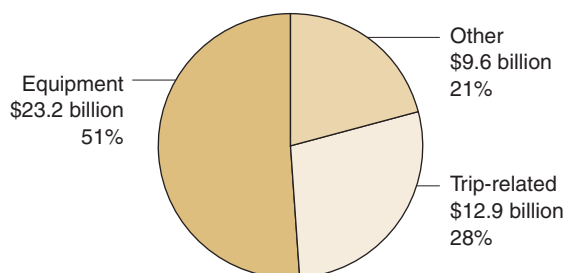
Total Wildlife-Watching Expenditures

Total wildlife-watching expenditures	\$45.7 billion
Total trip-related	\$12.9 billion
Food and lodging	7.5 billion
Transportation	4.5 billion
Other trip costs	0.9 billion
Total equipment expenditures	\$23.2 billion
Wildlife-watching equipment	9.9 billion
Auxiliary equipment	1.0 billion
Special equipment	12.3 billion
Total other expenditures	\$9.6 billion
Land leasing and owning	6.6 billion
Plantings	1.6 billion
Membership dues and contributions	1.1 billion
Magazines, books	0.4 billion

Source: Table 44.

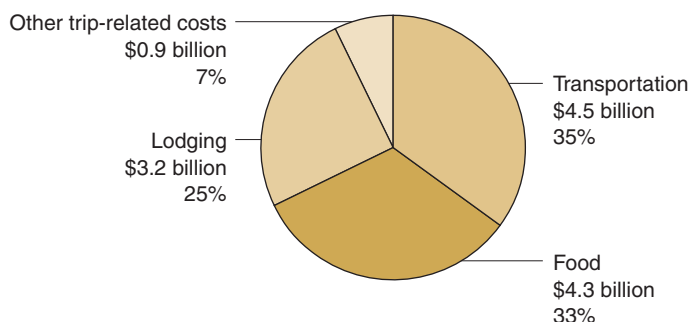
Wildlife-Watching Expenditures

(Total expenditures: \$45.7 billion)



Trip-Related Expenditures

(Total expenditures: \$12.9 billion)

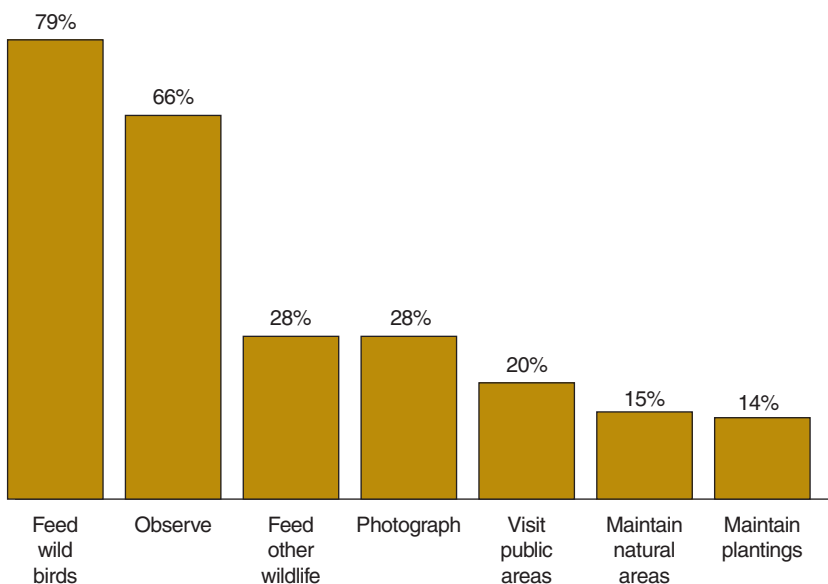


Around-The-Home Wildlife-Watching Highlights

In 2006 around-the-home participants 16 years old and older numbered 67.8 million—95 percent of all wildlife-watching recreationists. The most popular activity, feeding birds and other wildlife, accounted for 55.5 million wildlife watchers, 82 percent of all around-the-home participants. About 44.5 million people observed wildlife, representing 66 percent of all around-the-home participants.

Approximately 18.8 million recreationists (28 percent of all around-the-home wildlife watchers) photographed wildlife. About 14.5 million maintained plantings or natural areas for the benefit of wildlife. They made up 21 percent of all around-the-home participants. Finally, 13.3 million people visited public areas within a mile of their homes for wildlife watching. They comprised 20 percent of all around-the-home participants.

Percent of Total Around-The-Home Participants by Activity
(Total: 67.8 million participants)



Around-The-Home Participants

(In millions)

Total participants	67.8
Feed wild birds	53.4
Observe wildlife	44.5
Feed other wildlife	19.2
Photograph wildlife	18.8
Visit public areas	13.3
Maintain natural areas	10.2
Maintain plantings	9.6

Source: Table 41.

Wildlife Fed, Observed, or Photographed by Around-The-Home Participants

Of the 55.5 million people feeding wildlife around their homes in 2006, 96 percent (53.4 million) fed wild birds while 35 percent (19.2 million) fed other wildlife.

Approximately 44.5 million participants closely observed wildlife around their homes, of which 41.8 million observed birds. Observing mammals was undertaken by 36.6 million participants. Insects and spiders attracted the attention of 16.0 million people; 12.8 million observed amphibians or reptiles; and 9.1 million people observed fish or other wildlife. The median days of around-the-home observation for all animals was a little over 80 days in 2006.

About 18.8 million people photographed wildlife around their homes. The median number of days people took pictures of wildlife around their homes in 2006 was 5 days, although 2.9 million people (15 percent) photographed wildlife 21 days or more.

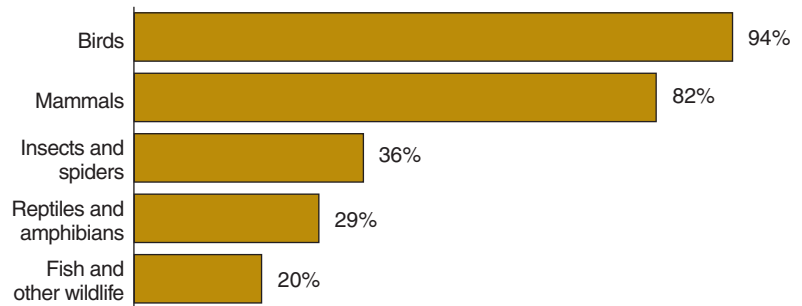
Around-The-Home Wildlife Watchers by Geographic Region

In 2006, 229 million people 16 years old and older lived in the United States. Of those, 30 percent wildlife watched around their homes. The participation rates of these around-the-home participants varied by region.

The percentages of regional populations that wildlife watched around their homes ranged from 24 percent in the Pacific Region to 42 percent in the West North Central Region. The New England, East North Central, West North Central, and East South Central Regions had participation rates above the national average of 30 percent.

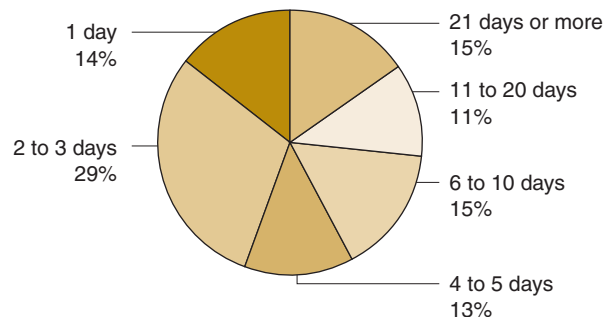
Percent of Around-The-Home Observers by Type of Wildlife Observed

(Total wildlife observers: 44.5 million)



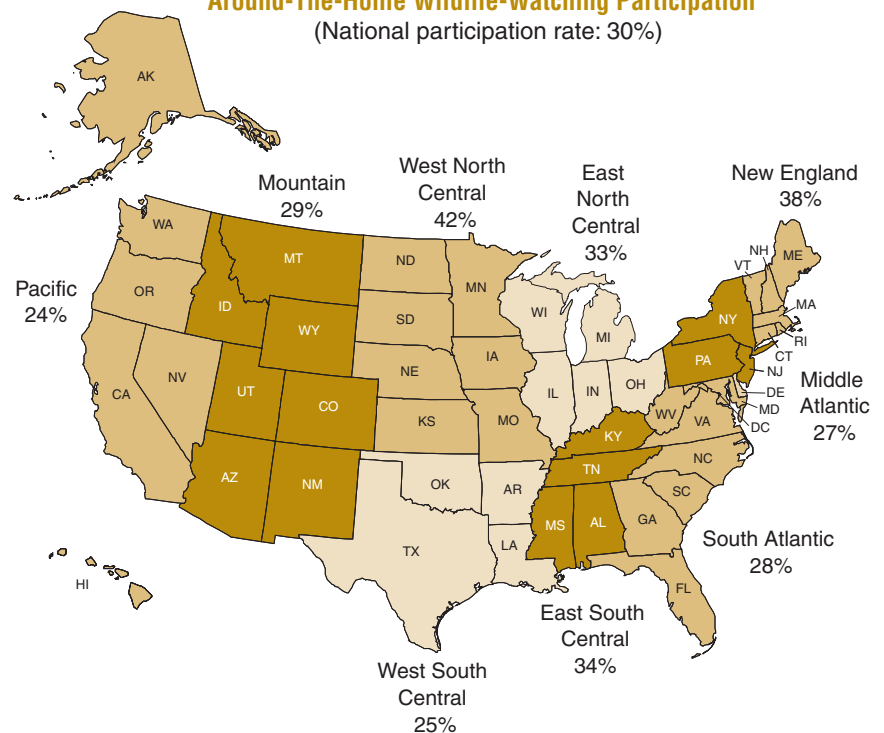
Percent of Around-The-Home Photographers by Days Spent Photographing Wildlife

(Total wildlife photographers: 18.8 million)



Around-The-Home Wildlife-Watching Participation

(National participation rate: 30%)

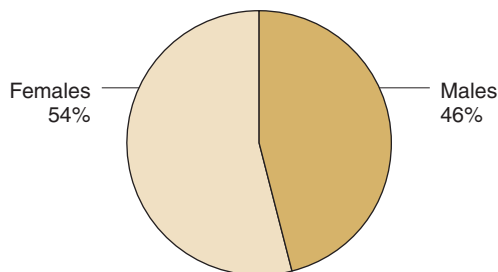


Percent of U.S. Males and Females Who Participated



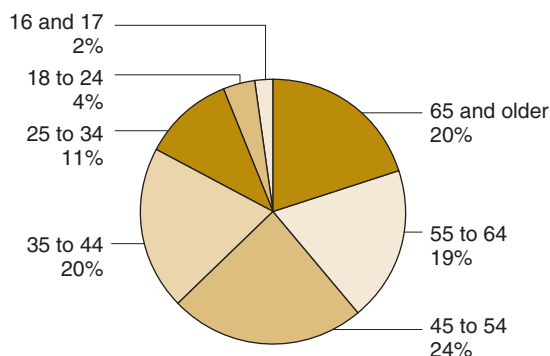
Percent of Around-The-Home Wildlife Watchers by Sex

(Total participants: 67.8 million)

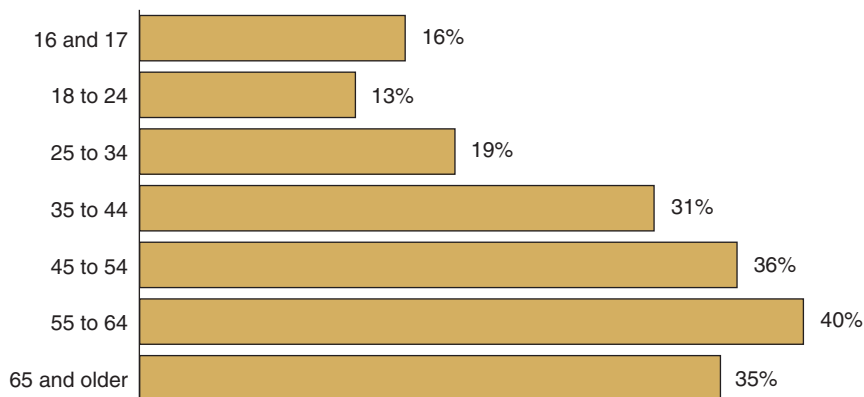


Percent of Around-The-Home Wildlife Watchers by Age

(Total participants: 67.8 million)



Percent of U.S. Population Who Participated by Age



Sex and Age of Around-The-Home Wildlife Watchers

Females and males had similar participation rates for around-the-home wildlife watching. In 2006, 31 percent of females and 29 percent of males enjoyed around-the-home activities. Of the 67.8 million around-the-home wildlife watchers, 54 percent (36.3 million) were females and 46 percent (31.5 million) were males.

People in the 55-to-64-year-old age group were most likely to participate at 40 percent (13.0 million). People in the 18-to-24-year-old age group were least likely to participate, with 13 percent (3.0 million). The disparity in participation rates between people 16 to 34 years old (17 percent) and those 35 years old and older (35 percent) is striking.

Around-The-Home Participants by Sex and Age

Total, both sexes . . . 67.8 million

Male 31.5 million

Female 36.3 million

Total, all ages 67.8 million

16 and 17 1.3 million

18 to 24 3.0 million

25 to 34 7.1 million

35 to 44 13.8 million

45 to 54 16.1 million

55 to 64 13.0 million

65 and older 13.5 million

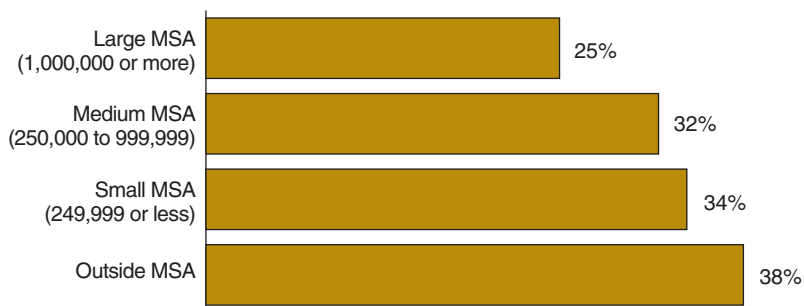
Source: Table 46.

Metropolitan and Nonmetropolitan Around-The-Home Participants

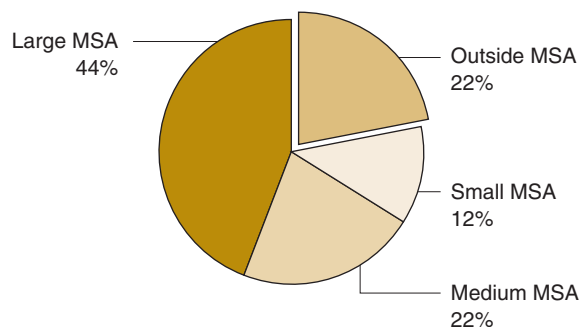
Approximately 78 percent of around-the-home wildlife watchers lived in metropolitan areas, as defined by the U.S. Census Bureau. Metropolitan statistical areas, or MSAs (see Appendix A), with populations of 1 million or more had a participation rate of 25 percent, lower than any smaller MSA or non-MSA. Nonetheless, recreationists from the most populous MSAs comprised 44 percent of all around-the-home wildlife watchers. In MSAs of 250,000 to 999,999, the participation rate was 32 percent and they made up 22 percent of all around-the-home recreationists. About 12 percent of around-the-home wildlife watchers lived in MSAs with a population less than 250,000. The population of these areas had a participation rate of 34 percent.

The participation rate for nonmetropolitan populations was 38 percent, higher than for any MSA. Seventeen percent of the total U.S. population lived outside MSAs in 2006 and represented 22 percent of all around-the-home wildlife watchers.

Percent of U.S. Population Who Participated by Residence



Percent of Around-The-Home Wildlife Watchers by Residence (Total participants: 67.8 million)



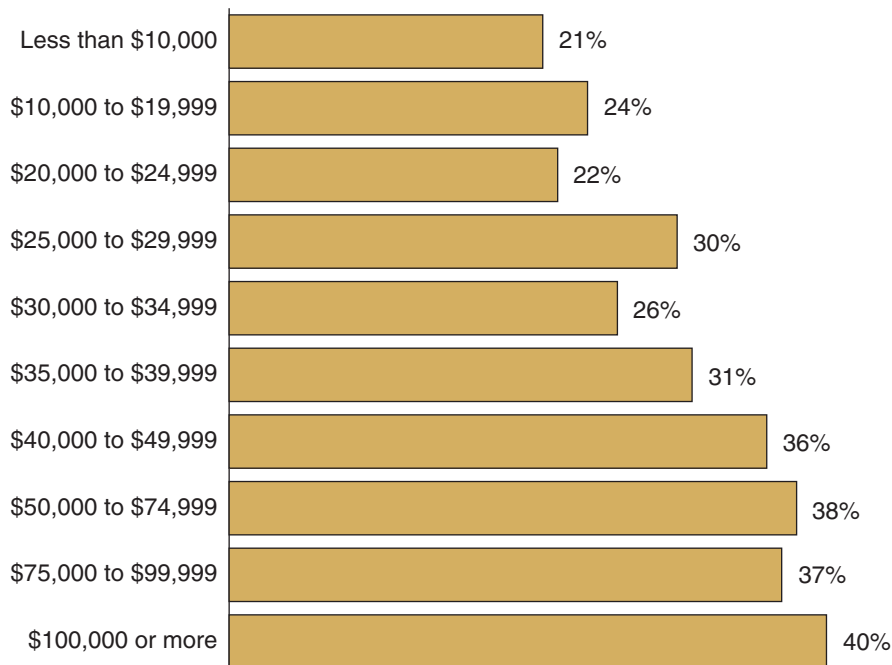
Household Income of Around-The-Home Participants

Participation rates ranged from 21 percent among U.S. residents living in households earning less than \$10,000 per year to 40 percent among participants living in households earning \$100,000 or more annually. These groups represented 3 percent and 17 percent, respectively, of all around-the-home wildlife watchers.

Participants in households earning \$10,000 to \$19,999 a year constituted 5 percent of all around-the-home recreationists. The recreationists with incomes of \$20,000 to \$24,999 made up 4 percent of all around-the-home participants. People with incomes of \$25,000 to \$29,999 accounted for 5 percent. Those people with incomes of \$30,000 to \$34,999 constituted 4 percent. Recreationists whose incomes totaled \$35,000 to \$39,999 represented

5 percent. People from households with annual incomes of \$40,000 to \$49,999 constituted 9 percent of all around-the-home participants. Approximately 19 percent of around-the-home participants had incomes of \$50,000 to \$74,999. Recreationists with incomes of \$75,000 to \$99,999 accounted for 12 percent.

Percent of U.S. Population Who Participated by Household Income



Education, Race, and Ethnicity of Around-The-Home Participants

Looking at the educational background of participants, the highest rate of participation was found among recreationists with 5 years or more of college, 42 percent. They made up 15 percent of all around-the-home wildlife watchers. The lowest participation rate, 19 percent, was among people with less than 12 years of education—10 percent of all around-the-home participants. Recreationists with 12 years of education, 31 percent of all around-the-home participants, had a participation rate of 27 percent. Participants with 1 to 3 years of college had a participation rate of 32 percent, while those with 4 years of college had a participation rate of 34 percent. Those groups represented 25 percent and 20 percent of all around-the-home wildlife watchers, respectively.

A wide range of participation rates was found among the different races and ethnic groups. About 33 percent of the White population engaged in around-the-home wildlife watching, contrasted with 10 percent of the Black population, 12 percent of the Asian population, and 29 percent of individuals comprising the “other” race category. Of the total number of around-the-home participants, 93 percent were White, 4 percent were Black, 2 percent were Asian, and 2 percent were all other races.

Around-The-Home Participants by Education, Race, and Ethnicity (In millions)

Total participants 67.8

Education Level

11 years or less	6.6
12 years	20.9
1 to 3 years of college . .	17.0
4 years of college	13.2
5 years or more of college	10.0

Race

White	62.9
Black	2.5
Asian	1.3
Other	1.1

Ethnicity

Hispanic	3.6
Non-Hispanic	64.2

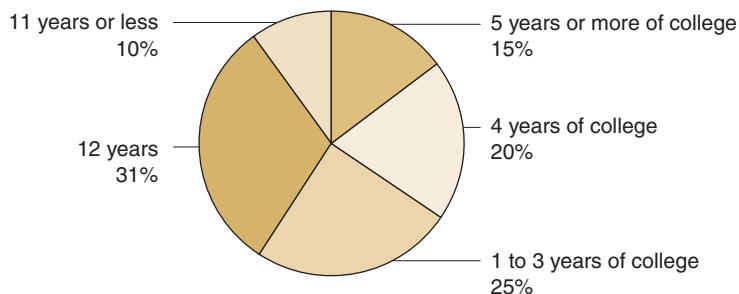
Source: Table 46.

Approximately 12 percent of the U.S. Hispanic population engaged in wildlife watching around their homes in comparison with 32 percent of the non-Hispanic population. The 64.2 million

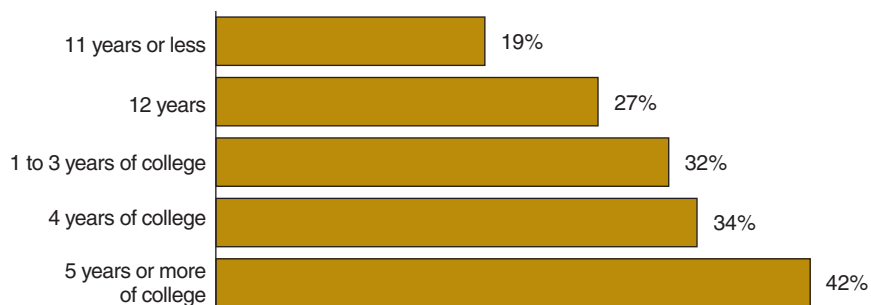
non-Hispanic participants comprised 95 percent of all around-the-home wildlife watchers and the 3.6 million Hispanic participants made up 5 percent.

Percent of Around-The-Home Wildlife Watchers by Education

(Total: 67.8 million participants)

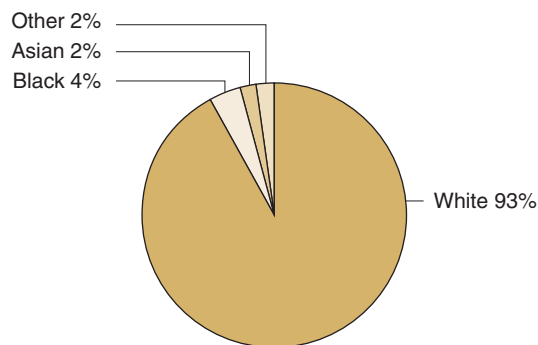


Percent of U.S. Population Who Participated by Education

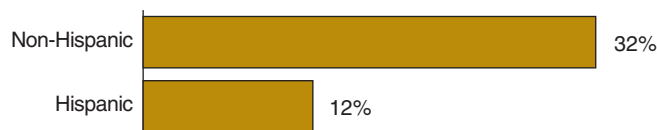


Percent of Around-The-Home Wildlife Watchers by Race

(Total: 67.8 million participants)



Percent of U.S. Population Who Participated by Ethnicity



Away-From-Home Wildlife-Watching Highlights

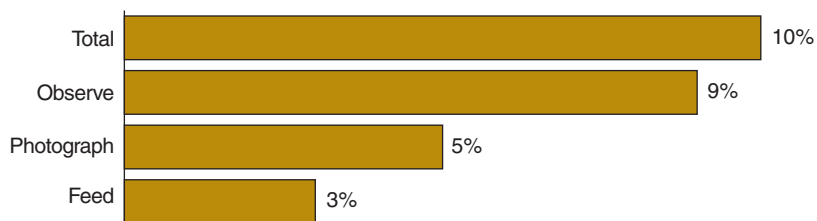
In 2006, 23 million people 16 years old and older took trips away from home to feed, observe, or photograph wildlife. They comprised 32 percent of all wildlife watchers. Most popular with away-from-home participants was closely observing wildlife. About 21.5 million participants, 9 percent of the U.S. population, observed wildlife

an average of 14 days in 2006. Photographing wildlife was enjoyed by 11.7 million people, 5 percent of the U.S. population. They averaged 9 days per photographer. Approximately 7.1 million people fed wildlife an average of 11 days and comprised 3 percent of the U.S. population.

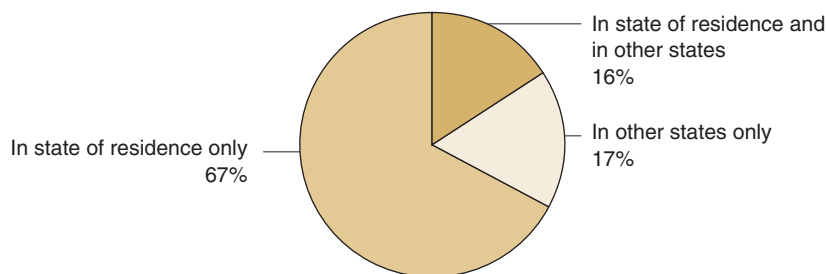
About 83 percent of all away-from-home participants took trips within

their resident state to participate in wildlife watching. Approximately 67 percent took trips only in their resident state, 16 percent took trips both inside and outside their resident state, and 17 percent took trips only to other states. Altogether, 33 percent of all away-from-home participants took at least some of their trips to other states.

Percent of U.S. Population Who Participated by Type of Activity
(Total: 23 million participants)



**Percent of Away-From-Home Wildlife Watchers—
in State of Residence and in Other States**
(Total participants: 23 million)



Away-From-Home Participants (In millions)

Total participants	23.0
Observers	21.5
Photographers	11.7
Feeders	7.1
Total days	352
Observing	291
Photographing	104
Feeding	77

Source: Table 40.

Away-From-Home Participants by Type of Wildlife Observed, Fed, or Photographed

(In millions)

Total participants	23.0
Birds, total	20.0
Waterfowl	15.4
Birds of prey	14.0
Songbirds	13.7
Water birds	11.5
Other birds	8.8
Land mammals, total	16.2
Small land mammals . . .	13.4
Large land mammals . . .	12.8
Fish	6.8
Marine mammals	3.4
Other (turtles, butterflies, etc.)	10.4

Source: Table 42.

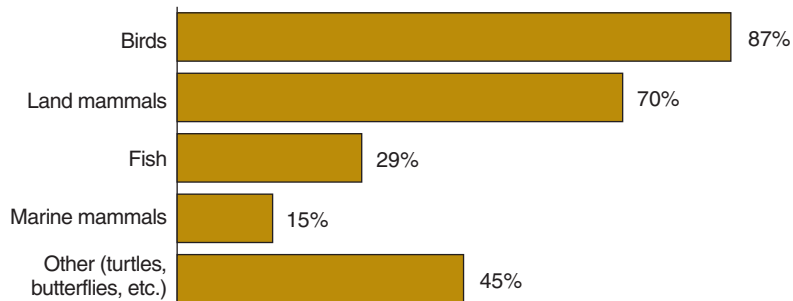
Wildlife Observed, Fed, or Photographed by Away-From-Home Participants

Wild birds attracted the most interest from wildlife watchers on their trips—20.0 million people or 87 percent of all away-from-home participants. The most-watched birds, waterfowl (ducks and geese, primarily), were watched by 15.4 million people. Next on the list of most-watched were birds of prey which drew 14.0 million trip-takers, followed by songbirds with 13.7 million watchers. Herons, shore birds, and other water birds attracted 11.5 million recreationists. Lastly, other birds, such as road runners and turkeys, attracted 8.8 million wildlife watchers.

Land mammals, such as deer, bears, and coyotes, were observed, fed, or photographed by 16.2 million people—70 percent of all away-from-home participants. Fish attracted the attention of 6.8 million people or 29 percent of all away-from-home recreationists.

About 3.4 million people or 15 percent of all away-from-home participants observed, fed, or photographed marine mammals, such as whales, seals, and dolphins. Other wildlife, such as butterflies, snakes, and turtles, appealed to 10.4 million people or 45 percent of all away-from-home wildlife watchers.

Percent of Away-From-Home Wildlife Watchers Who Observed, Fed, or Photographed Wildlife
(Total: 23 million participants)

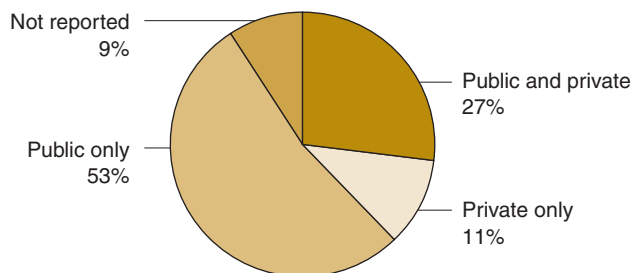


Area Visited by Away-From-Home Participants

In 2006, the most visited areas for Americans to observe, feed, or photograph wildlife were publicly owned. Approximately 80 percent of all trip-taking wildlife watchers used public areas while just 38 percent used private areas. About 27 percent of all away-from-home participants, 6.2 million, visited both public and private areas. Approximately 12.2 million, 53 percent, visited only public areas to engage in their activities while 2.5 million, 11 percent, visited only private areas.

Percent of Away-From-Home Wildlife Watchers by Public and Private Land

(Total participants: 23 million)



Away-From-Home Participants by Public and Private Land

(In millions)

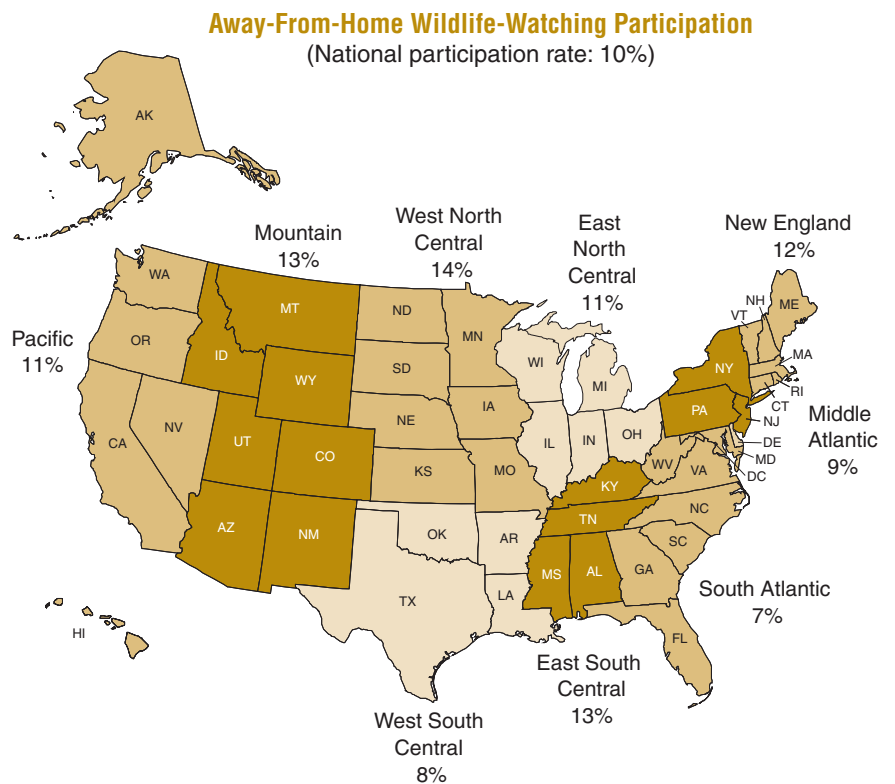
Total participants	23.0
Public land only	12.2
Private land only	2.5
Public and private land . .	6.2
Not reported	2.1

Source: Table 40.

Away-From-Home Wildlife Watchers by Geographic Region

In 2006, 229 million people 16 years old and older lived in the United States—10 percent of whom took trips to wildlife watch.

Away-from-home participation rates ranged from 7 percent in the South Atlantic Region to 14 percent in the West North Central Region. The regions that had participation rates higher than the national average were New England, East North Central, West North Central, East South Central, Mountain, and Pacific.

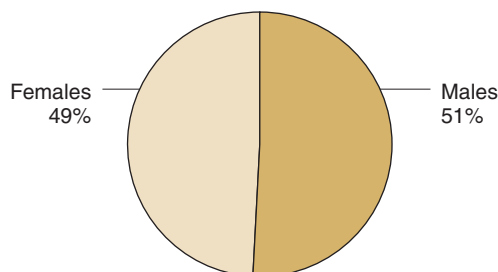


Percent of U.S. Males and Females Who Participated



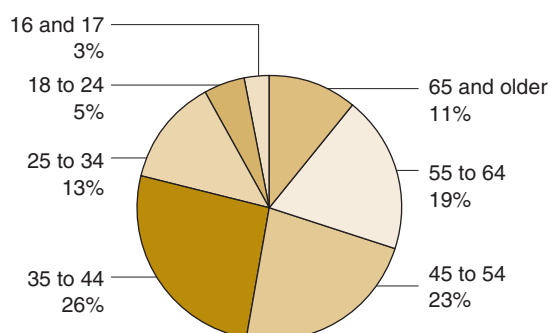
Percent of Away-From-Home Wildlife Watchers by Sex

(Total participants: 23 million)

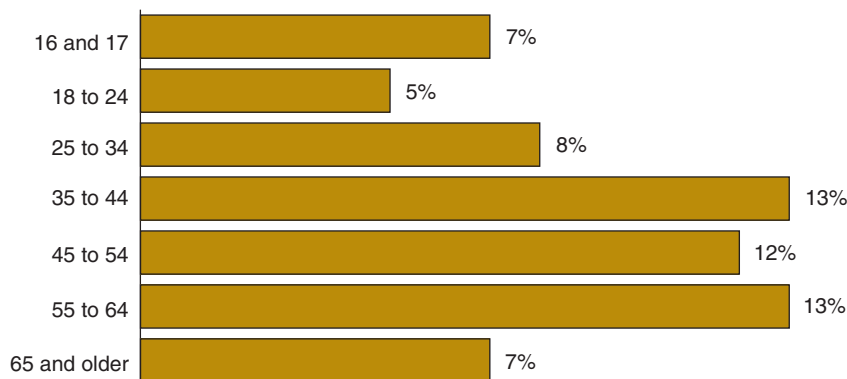


Percent of Away-From-Home Wildlife Watchers by Age

(Total participants: 23 million)



Percent of U.S. Population Who Participated by Age



Sex and Age of Away-From-Home Wildlife Watchers

A similar number of males and females participated in away-from-home wildlife watching in 2006. 51 percent (11.8 million) of all participants were males and 49 percent (11.2 million) were females. 11 percent of males and 9 percent of females in the U.S. enjoyed observing, feeding, or photographing wildlife away from home.

The 35-to-44-year-old age group had the most away-from-home recreationists, 6.0 million. This age group and 55-to-64-year-olds had the highest participation rate, 13 percent. Another age group that had a high participation rate was the 45-to-54-year-old age group, 12 percent. The 18-to-24-year-old age group had the lowest participation rate, at 5 percent.

Away-From-Home Participants by Sex and Age

Total, both sexes . . . 23.0 million

Male 11.8 million

Female 11.2 million

Total, all ages 23.0 million

16 and 17 0.6 million

18 to 24 1.1 million

25 to 34 3.1 million

35 to 44 6.0 million

45 to 54 5.2 million

55 to 64 4.4 million

65 and older 2.6 million

Source: Table 45.

Metropolitan and Nonmetropolitan Away-From-Home Participants

In 2006, 9 percent of all people living in MSAs (see Appendix A for definition) took trips primarily to enjoy wildlife. MSA residents comprised 78 percent of all away-from-home participants. In contrast, 13 percent of all people living outside an MSA watched wildlife away from home.

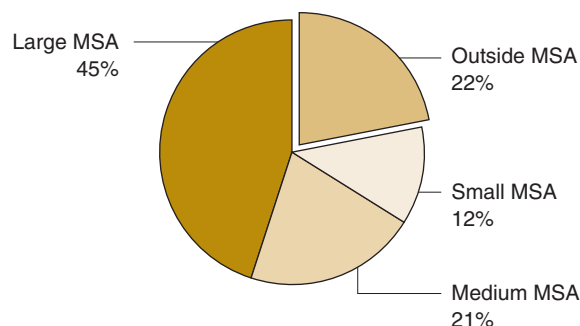
As was the case with around-the-home wildlife watching, the biggest MSA had both the lowest participation rate and the highest number of participants. Residents of non-MSAs made up 22 percent of both away-from-home and around-the-home participants.

Household Income of Away-From-Home Participants

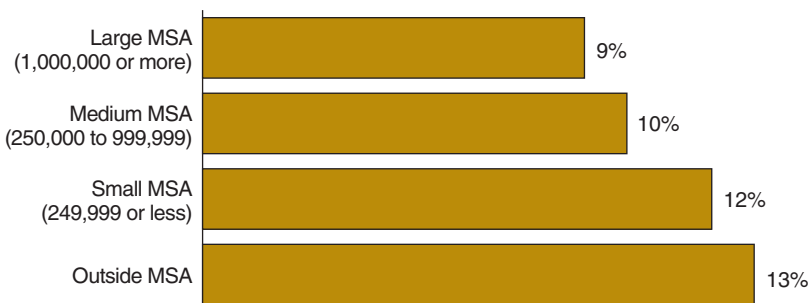
Participation rates ranged from 6 percent for those in households earning less than \$20,000 per year to 16 percent for those in households earning \$75,000 or more. There was a strong correlation between income and the likelihood to wildlife watch away from home, with an increase in one matched by an increase in the other. The income group that had the most participants was \$50,000 to \$74,999, with 4.7 million recreationists.

Median income was higher for away-from-home participants than for Americans as a whole, slightly over \$60,000 for recreationists compared to about \$50,000 for the U.S. population.

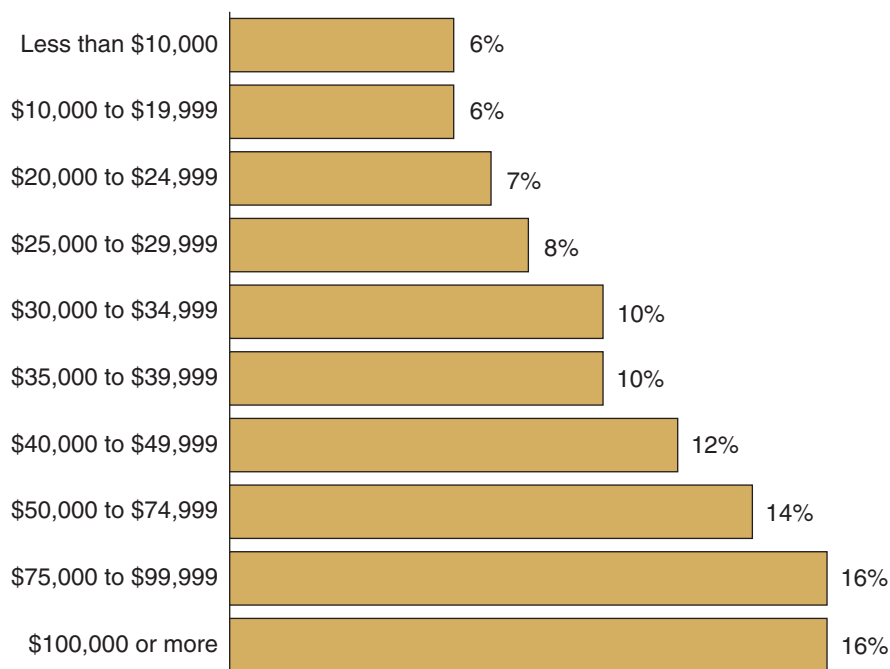
Percent of Away-From-Home Wildlife Watchers by Residence
(Total participants: 23 million)



Percent of U.S. Population Who Participated by Residence



Percent of U.S. Population Who Participated by Household Income



Education, Race, and Ethnicity of Away-From-Home Participants

As in the case of household income, educational achievement and participation in away-from-home wildlife watching have a direct correlation. About 4 percent of the U.S. population with 11 years of education or less participated, compared to 18 percent of the population with 5 years or more of college. The educational cohort with the most participants was 1 to 3 years of college, with 6.2 million recreationists. The educational cohort with the fewest recreationists was 11 years or less, with 1.4 million.

The participation rates by race varied greatly. Approximately 11 percent of Whites and 9 percent of other races except Blacks and Asians took trips to wildlife watch. In contrast, 3 percent of Blacks and 4 percent of Asians participated. Of the total 23 million away-from-home participants, 94 percent were White, 3 percent were Black, 2 percent were Asian, and 2 percent were other races.

Away-From-Home Participants by Education, Race, and Ethnicity (In millions)

Total participants 23.0

Education Level

11 years or less	1.4
12 years	6.1
1 to 3 years of college . .	6.2
4 years of college	4.9
5 years or more of college	4.4

Race

White	21.5
Black	0.7
Asian	0.4
Other	0.4

Ethnicity

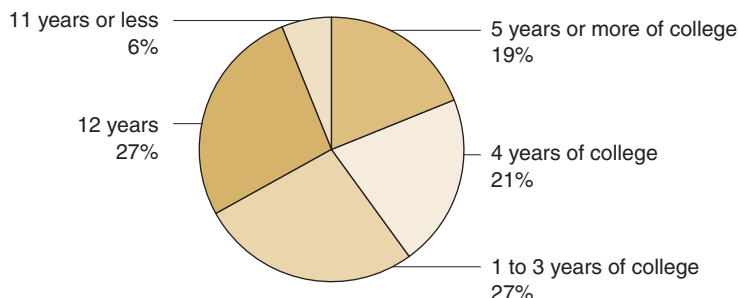
Hispanic	1.4
Non-Hispanic	21.6

Source: Table 45.

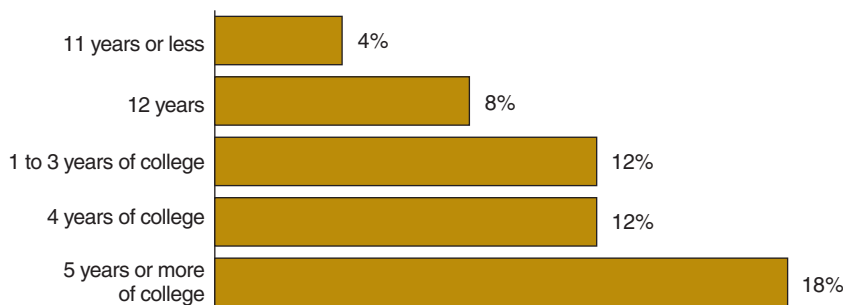
About 1.4 million recreationists were Hispanic, 6 percent of all participants. Approximately 5 percent of the U.S. Hispanic population took trips to engage in wildlife watching. Of the

non-Hispanic population, 11 percent (21.6 million participants) took trips to wildlife watch. They comprised 94 percent of all away-from-home wildlife watchers.

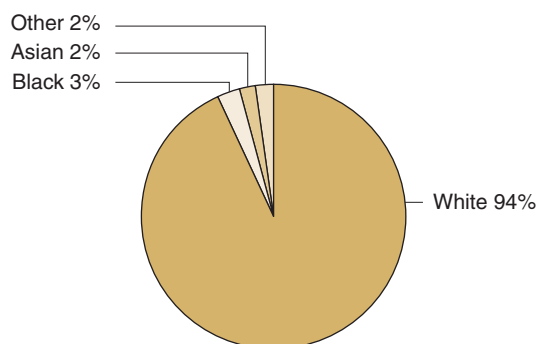
Percent of Away-From-Home Wildlife Watchers by Education
(Total participants: 23 million)



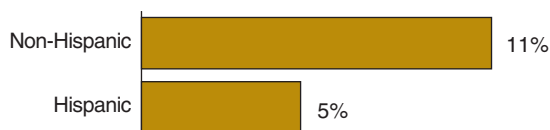
Percent of U.S. Population Who Participated by Education



Percent of Away-From-Home Wildlife Watchers by Race
(Total participants: 23 million)



Percent of U.S. Population Who Participated by Ethnicity



1996–2006 Comparison of Wildlife-Watching Participation

The number of all wildlife watchers increased 5 percent from 1996 to 2001 and 8 percent from 2001 to 2006, with 62.9 million participants in 1996, 66.1 million in 2001, and 71.1 million in 2006. Comparing the results from the last three Surveys finds differing trends for the two categories of wildlife watching: around the home and away from home.

Around-the-home wildlife watching, the most popular type of wildlife watching, led the overall upward trend with a 12 percent increase from 1996 to 2006. The upward trend from 1996 to 2006 was seen in all five types of around-the-home wildlife watching: feeding, observing, photographing, maintaining plantings or natural areas, and visiting public areas. The number of around-the-home feeders increased 3 percent (not a statistically significant change), from 54.1 million in 1996 to 55.5 million in 2006. The number of observers increased 1 percent (although this is not significant at the 5 percent level) from 44.1 million in 1996 to 44.5 million in 2006. The number of photographers increased 17 percent, from 16.0 million in 1996 to 18.8 million in 2006.

The number of people who maintained plantings or natural areas for the benefit of wildlife increased 8 percent (not a statistically significant difference) from 1996 to 2006, 13.4 million to 14.5 million. Finally, the number of visitors to public areas within a mile of home increased 21 percent, from 11.0 million to 13.3 million.

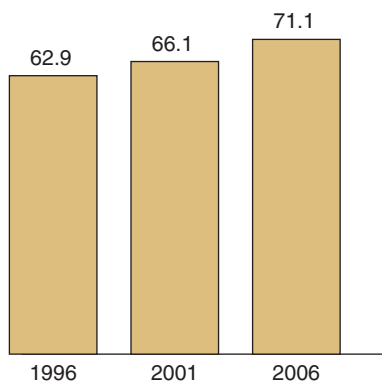
Unlike around-the-home wildlife watching, away-from-home wildlife watching did not increase from 1996 to 2006. There was a 3 percent drop, which is not statistically significant. From 1996 to 2001, participation decreased 8 percent, from 23.7 million to 21.8 million. From 2001 to 2006, the direction of the change in participation reversed, increasing 5 percent—from 21.8 million to 23.0 million—although not enough to match the level of participation in 1996. There are three categories of away-from-home wildlife watching: observing, photographing, and feeding. From 1996 to 2006, the number of observers decreased 6 percent (not a statistically significant difference), from 22.9 million to 21.5 million. The number of photographers decreased 3 percent (not a statistically significant change), from 12.0 million to 11.7 million. Lastly, the number of feeders decreased a whopping

29 percent, from 10.0 million to 7.1 million.

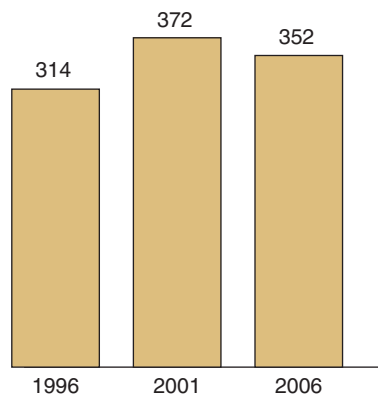
Days afield by away-from-home wildlife watchers increased 12 percent (not a statistically significant change) from 1996 to 2006, largely due to the efforts of photographers. Days afield in 2001 were even higher than in 1996 or 2006, 372 million compared to 314 million or 352 million, respectively (although the differences are not statistically significant).

Expenditures for wildlife watching increased 21 percent from 1996 to 2006. Trip-related expenditures increased 6 percent (this difference is not significant at the 5 percent level), and equipment and other expenditures increased 29 percent. Interestingly, the reason for the increase from 2001 to 2006 was the rise in trip-related expenditures (a 38 percent increase while equipment had a 14 percent decrease), whereas the reason for the increase from 1996 to 2001 was equipment expenditures (a 41 percent increase while trip-related expenditures underwent a 20 percent decrease).

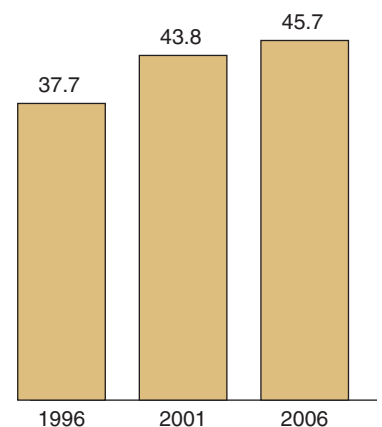
Number of Wildlife Watchers
(In millions)



Days of Away-From-Home Wildlife Watching
(In millions)



Wildlife-Watching Expenditures
(Billions of 2006 dollars)



1996–2006 Wildlife-Watching Participants, Days, and Expenditures

(U.S. population 16 years old and older. Numbers in thousands)

	1996		2006		1996–2006
	Number	Percent	Number	Percent	percent change
Wildlife-watching participants, total	62,868	100	71,132	100	13
Around the home	60,751	97	67,756	95	12
Observers	44,063	70	44,467	63	1*
Photographers	16,021	25	18,763	26	17
Feeders	54,122	86	55,512	78	3*
Visitors of public parks or areas .	11,011	18	13,271	19	21
Maintainers of plantings or natural areas	13,401	21	14,508	20	8*
Away from home	23,652	38	22,977	32	–3*
Observers	22,878	36	21,546	30	–6*
Photographers	12,038	19	11,708	16	–3*
Feeders	9,976	16	7,084	10	–29
Days, away from home	313,790	100	352,070	100	12*
Observing	278,683	89	291,027	83	4*
Photographing	79,342	25	103,872	30	31*
Feeding	89,606	29	77,329	22	–14*
Wildlife-watching expenditures, total (2006 dollars)	\$37,651,365	100	\$45,654,960	100	21
Trip-related	\$12,165,513	32	\$12,875,152	28	6*
Equipment, total	\$21,451,842	57	\$23,174,053	51	8*
Wildlife-watching equipment . .	\$10,601,546	28	\$9,869,727	22	–7*
Auxiliary equipment	\$1,105,724	3	\$1,033,060	2	–7*
Special equipment	\$9,744,572	26	\$12,271,266	27	26*
Other	\$4,034,010	11	\$9,605,755	21	138

* Not different from zero at the 5 percent level of significance.

2001–2006 Wildlife-Watching Participants, Days, and Expenditures

(U.S. population 16 years old and older. Numbers in thousands)

	2001		2006		2001–2006 percent change
	Number	Percent	Number	Percent	
Wildlife-watching participants, total. .	66,105	100	71,132	100	8
Around the home	62,928	95	67,756	95	8
Observers.	42,111	64	44,467	63	6*
Photographers	13,937	21	18,763	26	35
Feeders.	53,988	82	55,512	78	3*
Visitors of public parks or areas . .	10,981	17	13,271	19	21
Maintainers of plantings or natural areas	13,072	20	14,508	20	11*
Away from home	21,823	33	22,977	32	5*
Observers.	20,080	30	21,546	30	7*
Photographers	9,427	14	11,708	16	24
Feeders.	7,077	11	7,084	10	(Z)*
Days, away from home.	372,006	100	352,070	100	–5*
Observing	295,345	79	291,027	83	–1*
Photographing	76,324	21	103,872	30	36*
Feeding	103,307	28	77,329	22	–25*
Wildlife-watching expenditures, total (2006 dollars)	\$43,792,516	100	\$45,654,960	100	4*
Trip-related.	\$9,305,180	21	\$12,875,152	28	38
Equipment, total	\$26,835,136	61	\$23,174,053	51	–14
Wildlife-watching equipment	\$8,383,534	19	\$9,869,727	22	18
Auxiliary equipment	\$817,266	2	\$1,033,060	2	26*
Special equipment	\$17,634,336	40	\$12,271,266	27	–30*
Other.	\$7,652,201	17	\$9,605,755	21	26

* Not different from zero at the 5 percent level of significance.

(Z) Less than 0.5 percent.



Tables

Guide to Statistical Tables

Purpose and Coverage of Tables

The statistical tables of this report were designed to meet a wide range of needs for those interested in wildlife-related recreation. Special terms used in these tables are defined in Appendix A.

The tables are based on responses to the 2006 Survey, which was designed to collect data about participation in wildlife-related recreation. To have taken part in the Survey, a respondent must have been a U.S. resident (a resident of one of the 50 states or the District of Columbia). No one residing outside the United States (including U.S. citizens) was eligible for interviewing. Therefore, reported state and national totals do not include participation by those who were not U.S. residents or who were U.S. citizens residing outside the United States.

Comparability With Previous Surveys

The numbers reported can be compared with those in the 1991, 1996, and 2001 Survey Reports. The methodology used in 2006 was similar to that used in those Surveys. These results should not be directly compared to results from Surveys earlier than 1991 since there were major changes in methodology. These changes were made to improve accuracy in the information provided. Trends further back than 1991 are presented in Appendix C. These trends were developed using parts of the Surveys that were comparable.

Coverage of an Individual Table

Since the Survey covers many activities in various places by participants of different ages, all table titles, headnotes, stubs, and footnotes are designed to identify and articulate each item being reported in the table. For example, the title of Table 1 shows that data about anglers and hunters, their days of participation, and their number of trips are reported by type of activity. By contrast, the title of Table 3 indicates that it contains data on freshwater anglers and the days they fished for different species.

Percentages Reported in the Tables

Percentages are reported in the tables for the convenience of the user. When exclusive groups are being reported, the base of a percentage is apparent from its context because the percents add to 100 percent (plus or minus a rounding error). For example, Table 1 reports the number of trips taken by big game hunters (62 percent), those taken by small game hunters (22 percent), those taken by migratory bird hunters (9 percent), and those taken by hunters pursuing other animals (7 percent). These comprise 100 percent because they are exclusive categories.

Percents should not add to 100 when nonexclusive groups are being reported. Using Table 1 as an example again, note that adding the percentages associated with the total number of big game hunters (85 percent), total small game hunters (38 percent), total migratory bird hunters (18 percent), and total hunters of other animals (9 percent) will not yield total hunters (100 percent) because respondents could hunt for more than one type of game.

When the base of the percentage is not apparent in context, it is identified in a footnote. For example, Table 6 reports three percentages with different bases: one for the number of hunters, one for the number of trips, and one for days of hunting. Footnotes are used to clarify the bases of the reported percentages.

Footnotes to the Tables

Footnotes are used to clarify the information or items that are being reported in a table. Symbols in the body of a table indicate important footnotes. The following symbols are used in the tables to refer to the same footnote each time they appear:

- * Estimate based on a sample size of 10-29.
- ... Sample size too small to report data reliably.
- W Less than .5 dollars.
- Z Less than .5 percent.

X Not applicable.

NA Not available.

Estimates based upon fewer than ten responses are regarded as being based on a sample size that is too small for reliable reporting. An estimate based upon at least 10 but fewer than 30 responses is treated as an estimate based on a small sample size. Other footnotes appear, as necessary, to qualify or clarify the estimates reported in the tables. In addition, these two important footnotes appear frequently:

- Detail does not add to total because of multiple responses.
- Detail does not add to total because of multiple responses and nonresponse.

“Multiple responses” is a term used to reflect the fact that individuals or their characteristics fall into more than one category. Using Table 2 as an example, those who fished in saltwater and freshwater appear in both of these totals. Yet each angler is represented only once in the “Total, all fishing” column. Similarly, in Table 6, those who hunt for big game and small game are counted only once as a hunter in the “Total, all hunting” column. Therefore, totals will be smaller than the sum of subcategories when multiple responses exist.

“Nonresponse” exists because the Survey questions were answered voluntarily, and some respondents did not or could not answer all the questions. The effect of nonresponse is illustrated in Table 31, where the total for anglers who use boats is greater than the sum of anglers fishing from a motorboat and anglers fishing from a non-motor boat. This occurs because some respondents did not answer the motorboat/non-motorboat question. As a result, it is known how many anglers used a boat due to an earlier question but not known if it was a motorboat or non-motorboat. In this case, totals are greater than the sum of subcategories when nonresponses have occurred.

Table 1. Anglers and Hunters 16 Years Old and Older, Days of Participation, and Trips by Type of Fishing and Hunting: 2006

(Population 16 years old and older. Numbers in thousands)

Type of fishing and hunting	Participants		Days of participation		Trips	
	Number	Percent	Number	Percent	Number	Percent
Total sportspersons	33,916	100	736,707	100	588,891	100
FISHING						
Total, all fishing	29,952	100	516,781	100	403,492	100
Total, all freshwater	25,431	85	433,337	84	336,528	83
Freshwater, except Great Lakes	25,035	84	419,942	81	323,265	80
Great Lakes	1,420	5	18,016	3	13,264	3
Saltwater	7,717	26	85,663	17	66,963	17
HUNTING						
Total, all hunting	12,510	100	219,925	100	185,399	100
Big game	10,682	85	164,061	75	115,255	62
Small game	4,797	38	52,395	24	40,856	22
Migratory bird	2,293	18	19,770	9	16,390	9
Other animals	1,128	9	15,205	7	12,898	7

Note: Detail does not add to total because of multiple responses.

Table 2. Anglers, Trips, and Days of Fishing by Type of Fishing: 2006

(Population 16 years old and older. Numbers in thousands)

Anglers, trips, and days of fishing	Total, all fishing		Freshwater						Saltwater	
			Total, all freshwater		Freshwater, except Great Lakes		Great Lakes			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
ANGLERS										
Total in U.S.	29,952	100	25,431	100	25,035	100	1,420	100	7,717	100
In state of residence.....	27,641	92	23,639	93	23,266	93	1,182	83	6,089	79
In other states.....	6,494	22	4,749	19	4,604	18	306	22	2,185	28
TRIPS										
Total in U.S.	403,492	100	336,528	100	323,265	100	13,264	100	66,963	100
In state of residence.....	376,511	93	316,575	94	304,611	94	11,964	90	59,937	90
In other states.....	26,980	7	19,953	6	18,653	6	1,300	10	7,027	10
DAYS OF FISHING										
Total in U.S.	516,781	100	433,337	100	419,942	100	18,016	100	85,663	100
In state of residence.....	470,594	91	400,883	93	382,512	91	15,545	86	73,365	86
In other states.....	52,380	10	40,697	9	37,869	9	2,366	13	12,451	15
Average days per angler	17	(X)	17	(X)	17	(X)	13	(X)	11	(X)

(X) Not applicable.

Note: Detail for participants does not add to total because of multiple responses. Percents shown are based on the respective "Total in U.S." rows.

Table 3. Freshwater Anglers and Days of Fishing by Type of Fish: 2006

(Population 16 years old and older. Numbers in thousands. Excludes Great Lakes fishing)

Type of fish	Anglers		Days of fishing		Average days per angler
	Number	Percent	Number	Percent	
Total, all types of fish.....	25,035	100	419,942	100	17
Black bass (largemouth, smallmouth, etc.)	10,013	40	161,005	38	16
White bass, striped bass and striped bass hybrids	4,751	19	65,211	16	14
Panfish.....	7,534	30	101,569	24	13
Crappie	6,210	25	90,732	22	15
Catfish and bullheads.....	6,954	28	98,190	23	14
Walleye	2,672	11	39,117	9	15
Sauger.....	244	1	2,875	1	12
Northern pike, pickerel, muskie, muskie hybrids	1,788	7	24,762	6	14
Trout	6,750	27	75,485	18	11
Salmon	937	4	8,643	2	9
Steelhead.....	434	2	4,307	1	10
Anything ¹	4,000	16	35,507	8	9
Another type of freshwater fish.....	1,640	7	22,328	5	14

¹ Respondent fished for no specific species and identified “Anything” from a list of categories of fish.

Note: Detail does not add to total because of multiple responses.

Table 4. Great Lakes Anglers and Days of Fishing by Type of Fish: 2006

(Population 16 years old and older. Numbers in thousands)

Type of fish	Anglers		Days of fishing		Average days per angler
	Number	Percent	Number	Percent	
Total, all types of fish.....	1,420	100	18,016	100	13
Black bass (largemouth, smallmouth, etc.)	298	21	2,919	16	10
Walleye, sauger.....	480	34	4,890	27	10
Northern pike, pickerel, muskie, muskie hybrids	*111	*8	*1,818	*10	*16
Perch.....	461	32	5,549	31	12
Salmon	418	29	5,659	31	14
Steelhead.....	201	14	1,893	11	9
Lake trout	328	23	4,427	25	13
Other trout.....	170	12	2,231	12	13
Anything ¹	214	15	1,628	9	8
Another type of Great Lakes fish	*61	*4	*560	*3	*9

* Estimate based on a sample size of 10–29.

¹ Respondent fished for no specific species and identified “Anything” from a list of categories of fish.

Note: Detail does not add to total because of multiple responses.

Table 5. Saltwater Anglers and Days of Fishing by Type of Fish: 2006

(Population 16 years old and older. Numbers in thousands)

Type of fish	Anglers		Days of fishing		Average days per angler
	Number	Percent	Number	Percent	
Total, all types of fish.....	7,717	100	85,663	100	11
Salmon	582	8	3,379	4	6
Striped bass.....	1,424	18	15,411	18	11
Flatfish (flounder, halibut)	2,069	27	20,478	24	10
Bluefish	993	13	9,880	12	10
Red drum (redfish).....	1,831	24	20,247	24	11
Sea trout (weakfish).....	1,470	19	18,184	21	12
Mackerel	490	6	5,326	6	11
Shellfish	606	8	3,701	4	6
Anything ¹	2,424	31	20,774	24	9
Another type of saltwater fish	2,547	33	28,591	33	11

¹ Respondent fished for no specific species and identified "Anything" from a list of categories of fish.

Note: Detail does not add to total because of multiple responses.

Table 6. Hunters, Trips, and Days of Hunting by Type of Hunting: 2006

(Population 16 years old and older. Numbers in thousands)

Hunters, trips, and days of hunting	Total, all hunting		Big game		Small game		Migratory bird		Other animals	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
HUNTERS										
Total in U.S.	12,510	100	10,682	100	4,797	100	2,293	100	1,128	100
In state of residence.....	11,971	96	10,258	96	4,473	93	2,179	95	1,078	96
In other states.....	1,826	15	1,279	12	625	13	291	13	112	10
TRIPS										
Total in U.S.	185,399	100	115,255	100	40,856	100	16,390	100	12,898	100
In state of residence.....	175,360	95	109,172	95	38,520	94	15,348	94	12,319	96
In other states.....	10,039	5	6,083	5	2,336	6	1,042	6	579	4
DAYS OF HUNTING										
Total in U.S.	219,925	100	164,061	100	52,395	100	19,770	100	15,205	100
In state of residence.....	203,319	92	151,978	93	48,650	93	17,561	89	14,386	95
In other states.....	18,023	8	12,661	8	4,001	8	2,309	12	867	6
Average days per hunter	18	(X)	15	(X)	11	(X)	9	(X)	13	(X)

(X) Not applicable.

Note: Detail does not add to total because of multiple responses. Percents shown are based on the respective "Total in U.S." rows.

Table 7. Hunters and Days of Hunting by Type of Game: 2006

(Population 16 years old and older. Numbers in thousands)

Type of game	Hunters		Days of hunting		Average days per hunter
	Number	Percent	Number	Percent	
Total, all big game	10,682	100	164,061	100	15
Deer.....	10,062	94	132,194	81	13
Elk.....	799	7	6,675	4	8
Bear.....	399	4	3,471	2	9
Wild turkey.....	2,569	24	25,828	16	10
Other big game.....	578	5	6,324	4	11
Total, all small game	4,797	100	52,395	100	11
Rabbit, hare.....	1,923	40	20,513	39	11
Quail.....	1,046	22	7,688	15	7
Grouse/prairie chicken.....	800	17	6,960	13	9
Squirrel.....	1,845	38	18,534	35	10
Pheasant.....	1,632	34	11,940	23	7
Other small game.....	325	7	4,499	9	14
Total, all migratory birds	2,293	100	19,770	100	9
Waterfowl (geese and/or ducks).....	1,306	57	13,071	66	10
Geese.....	700	31	6,008	30	9
Ducks.....	1,147	50	12,173	62	11
Doves.....	1,238	54	5,893	30	5
Other migratory bird.....	150	7	1,052	5	7
Total, all other animals (fox, raccoon, groundhog, etc.)	1,128	100	15,205	100	13

Note: Detail does not add to total because of multiple responses.

Table 8. Selected Characteristics of Anglers and Hunters: 2006

(Population 16 years old and older. Numbers in thousands)

Characteristic	U.S. population		Sportspersons (fished or hunted)			Fished only		
	Number	Percent	Number	Percent who participated	Percent	Number	Percent who participated	Percent
Total persons	229,245	100	33,916	15	100	21,406	9	100
Population Density of Residence								
Urban	176,740	77	20,053	11	59	14,378	8	67
Rural	52,504	23	13,863	26	41	7,028	13	33
Population Size of Residence								
Metropolitan statistical area (MSA) . . .	190,425	83	24,178	13	71	16,393	9	77
1,000,000 or more	120,356	53	12,732	11	38	9,181	8	43
250,000 to 999,999	46,506	20	6,569	14	19	4,427	10	21
Less than 249,999	23,562	10	4,878	21	14	2,785	12	13
Outside MSA	38,820	17	9,738	25	29	5,014	13	23
Census Geographic Division								
New England	11,233	5	1,353	12	4	979	9	5
Middle Atlantic	31,518	14	3,214	10	9	1,694	5	8
East North Central	35,609	16	5,975	17	18	3,599	10	17
West North Central	15,458	7	3,836	25	11	2,056	13	10
South Atlantic	43,965	19	6,633	15	20	4,749	11	22
East South Central	13,722	6	2,689	20	8	1,588	12	7
West South Central	25,407	11	4,499	18	13	2,689	11	13
Mountain	15,651	7	2,372	15	7	1,504	10	7
Pacific	36,681	16	3,345	9	10	2,548	7	12
Age								
16 to 17 years	8,272	4	1,284	16	4	782	9	4
18 to 24 years	23,292	10	2,655	11	8	1,687	7	8
25 to 34 years	37,468	16	5,441	15	16	3,384	9	16
35 to 44 years	45,112	20	8,382	19	25	5,308	12	25
45 to 54 years	44,209	19	7,608	17	22	4,738	11	22
55 to 64 years	32,867	14	5,229	16	15	3,377	10	16
65 years and older	38,024	17	3,317	9	10	2,131	6	10
Sex								
Male, total	110,273	48	25,855	23	76	14,504	13	68
16 to 17 years	4,307	2	987	23	3	587	14	3
18 to 24 years	11,638	5	1,929	17	6	1,090	9	5
25 to 34 years	18,278	8	4,119	23	12	2,245	12	10
35 to 44 years	21,946	10	6,342	29	19	3,552	16	17
45 to 54 years	21,352	9	5,709	27	17	3,124	15	15
55 to 64 years	16,157	7	4,113	25	12	2,402	15	11
65 years and older	16,594	7	2,657	16	8	1,505	9	7
Female, total	118,972	52	8,061	7	24	6,902	6	32
16 to 17 years	3,965	2	297	7	1	196	5	1
18 to 24 years	11,655	5	726	6	2	597	5	3
25 to 34 years	19,189	8	1,323	7	4	1,139	6	5
35 to 44 years	23,166	10	2,040	9	6	1,755	8	8
45 to 54 years	22,857	10	1,899	8	6	1,614	7	8
55 to 64 years	16,710	7	1,116	7	3	975	6	5
65 years and older	21,430	9	659	3	2	626	3	3
Ethnicity								
Hispanic	29,218	13	1,732	6	5	1,308	4	6
Non-Hispanic	200,027	87	32,184	16	95	20,098	10	94
Race								
White	189,255	83	31,316	17	92	19,287	10	90
Black	25,925	11	1,577	6	5	1,383	5	6
Asian	10,104	4	344	3	1	294	3	1
All others	3,960	2	680	17	2	442	11	2
Annual Household Income								
Less than \$10,000	10,673	5	807	8	2	584	5	3
\$10,000 to \$19,999	15,373	7	1,590	10	5	1,010	7	5
\$20,000 to \$24,999	11,374	5	1,555	14	5	1,069	9	5
\$25,000 to \$29,999	10,524	5	1,503	14	4	936	9	4
\$30,000 to \$34,999	11,161	5	1,759	16	5	1,022	9	5
\$35,000 to \$39,999	10,349	5	1,794	17	5	1,124	11	5
\$40,000 to \$49,999	17,699	8	3,167	18	9	1,958	11	9
\$50,000 to \$74,999	33,434	15	6,811	20	20	4,057	12	19
\$75,000 to \$99,999	21,519	9	4,676	22	14	2,937	14	14
\$100,000 or more	29,159	13	5,671	19	17	3,694	13	17
Not reported	57,981	25	4,583	8	14	3,015	5	14
Education								
11 years or less	34,621	15	4,587	13	14	2,862	8	13
12 years	78,073	34	11,837	15	35	6,941	9	32
1 to 3 years college	53,019	23	8,595	16	25	5,360	10	25
4 years college	39,506	17	5,652	14	17	3,902	10	18
5 years or more college	24,025	10	3,245	14	10	2,342	10	11

See footnotes at end of table.

Table 8. Selected Characteristics of Anglers and Hunters: 2006—Continued

(Population 16 years old and older. Numbers in thousands)

Characteristic	Hunted only			Fished and hunted		
	Number	Percent who participated	Percent	Number	Percent who participated	Percent
Total persons	3,964	2	100	8,546	4	100
Population Density of Residence						
Urban	1,750	1	44	3,925	2	46
Rural	2,213	4	56	4,621	9	54
Population Size of Residence						
Metropolitan statistical area (MSA) . . .	2,364	1	60	5,422	3	63
1,000,000 or more	996	1	25	2,554	2	30
250,000 to 999,999	680	1	17	1,462	3	17
Less than 249,999	687	3	17	1,405	6	16
Outside MSA	1,600	4	40	3,124	8	37
Census Geographic Division						
New England	107	1	3	267	2	3
Middle Atlantic	664	2	17	856	3	10
East North Central	785	2	20	1,591	4	19
West North Central	552	4	14	1,228	8	14
South Atlantic	516	1	13	1,368	3	16
East South Central	253	2	6	848	6	10
West South Central	547	2	14	1,263	5	15
Mountain	288	2	7	580	4	7
Pacific	252	1	6	546	1	6
Age						
16 to 17 years	181	2	5	321	4	4
18 to 24 years	249	1	6	719	3	8
25 to 34 years	584	2	15	1,474	4	17
35 to 44 years	906	2	23	2,168	5	25
45 to 54 years	960	2	24	1,910	4	22
55 to 64 years	613	2	15	1,239	4	15
65 years and older	470	1	12	716	2	8
Sex						
Male, total	3,518	3	89	7,833	7	92
16 to 17 years	134	3	3	266	6	3
18 to 24 years	219	2	6	621	5	7
25 to 34 years	512	3	13	1,362	7	16
35 to 44 years	814	4	21	1,976	9	23
45 to 54 years	850	4	21	1,735	8	20
55 to 64 years	536	3	14	1,174	7	14
65 years and older	453	3	11	699	4	8
Female, total	445	(Z)	11	713	1	8
16 to 17 years	*47	*1	*1	*54	*1	*1
18 to 24 years	*30	*(Z)	*1	98	1	1
25 to 34 years	*72	*(Z)	*2	112	1	1
35 to 44 years	92	(Z)	2	193	1	2
45 to 54 years	110	(Z)	3	175	1	2
55 to 64 years	*76	*(Z)	*2	*65	*(Z)	*1
65 years and older . . . . .	...	...	...	*16	*(Z)	*(Z)
Ethnicity						
Hispanic	157	1	4	268	1	3
Non-Hispanic	3,807	2	96	8,278	4	97
Race						
White	3,825	2	97	8,203	4	96
Black	*62	*(Z)	*2	132	1	2
Asian	*20	*(Z)	*1	*30	*(Z)	*(Z)
All others	*56	*1	*1	181	5	2
Annual Household Income						
Less than \$10,000	*73	*1	*2	150	1	2
\$10,000 to \$19,999	209	1	5	371	2	4
\$20,000 to \$24,999	127	1	3	359	3	4
\$25,000 to \$29,999	184	2	5	382	4	4
\$30,000 to \$34,999	249	2	6	487	4	6
\$35,000 to \$39,999	252	2	6	418	4	5
\$40,000 to \$49,999	401	2	10	808	5	9
\$50,000 to \$74,999	830	2	21	1,924	6	23
\$75,000 to \$99,999	602	3	15	1,137	5	13
\$100,000 or more	504	2	13	1,473	5	17
Not reported	532	1	13	1,036	2	12
Education						
11 years or less	547	2	14	1,178	3	14
12 years	1,571	2	40	3,325	4	39
1 to 3 years college	1,004	2	25	2,231	4	26
4 years college	538	1	14	1,213	3	14
5 years or more college	304	1	8	599	2	7

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably. (Z) Less than 0.5 percent.

Note: Percent who participated shows the percent of each row's population who participated in the activity named by the column. Percent columns show the percent of each column's participants who are described by the row heading.

Table 9. Selected Characteristics of Anglers by Type of Fishing: 2006

(Population 16 years old and older. Numbers in thousands)

Characteristic	U.S. population		Total, all fishing			Total freshwater		
	Number	Percent	Number	Percent who participated	Percent	Number	Percent who participated	Percent
Total persons	229,245	100	29,952	13	100	25,431	11	100
Population Density of Residence								
Urban	176,740	77	18,303	10	61	14,814	8	58
Rural	52,504	23	11,649	22	39	10,617	20	42
Population Size of Residence								
Metropolitan statistical area (MSA) . . .	190,425	83	21,815	11	73	17,936	9	71
1,000,000 or more	120,356	53	11,735	10	39	9,250	8	36
250,000 to 999,999	46,506	20	5,889	13	20	4,925	11	19
Less than 249,999	23,562	10	4,190	18	14	3,761	16	15
Outside MSA	38,820	17	8,138	21	27	7,496	19	29
Census Geographic Division								
New England	11,233	5	1,246	11	4	937	8	4
Middle Atlantic	31,518	14	2,550	8	9	1,848	6	7
East North Central	35,609	16	5,190	15	17	4,818	14	19
West North Central	15,458	7	3,284	21	11	3,248	21	13
South Atlantic	43,965	19	6,116	14	20	4,661	11	18
East South Central	13,722	6	2,436	18	8	2,315	17	9
West South Central	25,407	11	3,952	16	13	3,251	13	13
Mountain	15,651	7	2,084	13	7	2,028	13	8
Pacific	36,681	16	3,094	8	10	2,326	6	9
Age								
16 to 17 years	8,272	4	1,103	13	4	992	12	4
18 to 24 years	23,292	10	2,406	10	8	2,158	9	8
25 to 34 years	37,468	16	4,857	13	16	4,190	11	16
35 to 44 years	45,112	20	7,476	17	25	6,266	14	25
45 to 54 years	44,209	19	6,647	15	22	5,612	13	22
55 to 64 years	32,867	14	4,616	14	15	3,818	12	15
65 years and older	38,024	17	2,847	7	10	2,395	6	9
Sex								
Male	110,273	48	22,337	20	75	19,053	17	75
Female	118,972	52	7,615	6	25	6,378	5	25
Ethnicity								
Hispanic	29,218	13	1,576	5	5	1,158	4	5
Non-Hispanic	200,027	87	28,377	14	95	24,274	12	95
Race								
White	189,255	83	27,490	15	92	23,416	12	92
Black	25,925	11	1,515	6	5	1,265	5	5
Asian	10,104	4	324	3	1	241	2	1
All others	3,960	2	624	16	2	510	13	2
Annual Household Income								
Less than \$10,000	10,673	5	733	7	2	642	6	3
\$10,000 to \$19,999	15,373	7	1,380	9	5	1,260	8	5
\$20,000 to \$24,999	11,374	5	1,427	13	5	1,203	11	5
\$25,000 to \$29,999	10,524	5	1,319	13	4	1,192	11	5
\$30,000 to \$34,999	11,161	5	1,510	14	5	1,385	12	5
\$35,000 to \$39,999	10,349	5	1,543	15	5	1,375	13	5
\$40,000 to \$49,999	17,699	8	2,766	16	9	2,339	13	9
\$50,000 to \$74,999	33,434	15	5,981	18	20	5,222	16	21
\$75,000 to \$99,999	21,519	9	4,074	19	14	3,344	16	13
\$100,000 or more	29,159	13	5,167	18	17	4,063	14	16
Not reported	57,981	25	4,051	7	14	3,406	6	13
Education								
11 years or less	34,621	15	4,040	12	13	3,588	10	14
12 years	78,073	34	10,266	13	34	8,833	11	35
1 to 3 years college	53,019	23	7,590	14	25	6,439	12	25
4 years college	39,506	17	5,115	13	17	4,146	10	16
5 years or more college	24,025	10	2,941	12	10	2,425	10	10

See footnotes at end of table.

Table 9. Selected Characteristics of Anglers by Type of Fishing: 2006—Continued

(Population 16 years old and older. Numbers in thousands)

Characteristic	Freshwater						Saltwater		
	Freshwater, except Great Lakes			Great Lakes					
	Number	Percent who participated	Percent	Number	Percent who participated	Percent	Number	Percent who participated	Percent
Total persons	25,035	11	100	1,420	1	100	7,717	3	100
Population Density of Residence									
Urban	14,545	8	58	952	1	67	5,739	3	74
Rural	10,490	20	42	468	1	33	1,979	4	26
Population Size of Residence									
Metropolitan statistical area (MSA) . . .	17,606	9	70	1,133	1	80	6,664	3	86
1,000,000 or more	9,037	8	36	718	1	51	4,063	3	53
250,000 to 999,999	4,840	10	19	269	1	19	1,734	4	22
Less than 249,999	3,729	16	15	146	1	10	866	4	11
Outside MSA	7,429	19	30	287	1	20	1,053	3	14
Census Geographic Division									
New England	935	8	4	*11	*(Z)	*1	588	5	8
Middle Atlantic	1,770	6	7	297	1	21	901	3	12
East North Central	4,515	13	18	981	3	69	212	1	3
West North Central	3,244	21	13	*67	*(Z)	*5	80	1	1
South Atlantic	4,660	11	19	*20	*(Z)	*1	2,784	6	36
East South Central	2,313	17	9	...	...	...	315	2	4
West South Central	3,251	13	13	...	...	...	1,391	5	18
Mountain	2,028	13	8	...	...	...	167	1	2
Pacific	2,318	6	9	...	...	...	1,280	3	17
Age									
16 to 17 years	981	12	4	...	...	...	185	2	2
18 to 24 years	2,133	9	9	*103	*(Z)	*7	542	2	7
25 to 34 years	4,119	11	16	234	1	16	1,352	4	18
35 to 44 years	6,184	14	25	377	1	27	2,010	4	26
45 to 54 years	5,515	12	22	268	1	19	1,751	4	23
55 to 64 years	3,730	11	15	301	1	21	1,214	4	16
65 years and older	2,373	6	9	*94	*(Z)	*7	664	2	9
Sex									
Male	18,723	17	75	1,198	1	84	5,992	5	78
Female	6,312	5	25	222	(Z)	16	1,726	1	22
Ethnicity									
Hispanic	1,140	4	5	...	...	...	699	2	9
Non-Hispanic	23,895	12	95	1,395	1	98	7,018	4	91
Race									
White	23,054	12	92	1,290	1	91	6,897	4	89
Black	1,230	5	5	*69	*(Z)	*5	478	2	6
Asian	241	2	1	...	...	...	171	2	2
All others	510	13	2	...	...	...	171	4	2
Annual Household Income									
Less than \$10,000	621	6	2	...	...	...	102	1	1
\$10,000 to \$19,999	1,242	8	5	...	...	...	195	1	3
\$20,000 to \$24,999	1,192	10	5	...	...	...	295	3	4
\$25,000 to \$29,999	1,169	11	5	*46	*(Z)	*3	246	2	3
\$30,000 to \$34,999	1,373	12	5	*43	*(Z)	*3	212	2	3
\$35,000 to \$39,999	1,350	13	5	*91	*1	*6	346	3	4
\$40,000 to \$49,999	2,313	13	9	148	1	10	676	4	9
\$50,000 to \$74,999	5,136	15	21	345	1	24	1,397	4	18
\$75,000 to \$99,999	3,287	15	13	226	1	16	1,311	6	17
\$100,000 or more	4,005	14	16	218	1	15	1,904	7	25
Not reported	3,349	6	13	188	(Z)	13	1,034	2	13
Education									
11 years or less	3,503	10	14	*174	*1	*12	757	2	10
12 years	8,723	11	35	432	1	30	2,409	3	31
1 to 3 years college	6,340	12	25	367	1	26	2,071	4	27
4 years college	4,065	10	16	287	1	20	1,574	4	20
5 years or more college	2,403	10	10	160	1	11	906	4	12

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably. (Z) Less than 0.5 percent.

Note: Percent who participated shows the percent of each row's population who participated in the activity named by the column (the percent of those living in urban areas who fished in the Great Lakes, etc.). Percent columns show the percent of each column's participants who are described by the row heading (the percent of those Great Lakes anglers who lived in urban areas, etc.).

Table 10. **Selected Characteristics of Hunters by Type of Hunting: 2006**

(Population 16 years old and older. Numbers in thousands)

Characteristic	U.S. population		Total, all hunting			Big game		
	Number	Percent	Number	Percent who participated	Percent	Number	Percent who participated	Percent
Total persons	229,245	100	12,510	5	100	10,682	5	100
Population Density of Residence								
Urban	176,740	77	5,675	3	45	4,598	3	43
Rural	52,504	23	6,835	13	55	6,085	12	57
Population Size of Residence								
Metropolitan statistical area (MSA) . . .	190,425	83	7,785	4	62	6,478	3	61
1,000,000 or more	120,356	53	3,551	3	28	2,936	2	27
250,000 to 999,999	46,506	20	2,143	5	17	1,774	4	17
Less than 249,999	23,562	10	2,092	9	17	1,768	8	17
Outside MSA	38,820	17	4,724	12	38	4,205	11	39
Census Geographic Division								
New England	11,233	5	374	3	3	340	3	3
Middle Atlantic	31,518	14	1,520	5	12	1,447	5	14
East North Central	35,609	16	2,376	7	19	2,134	6	20
West North Central	15,458	7	1,779	12	14	1,359	9	13
South Atlantic	43,965	19	1,884	4	15	1,620	4	15
East South Central	13,722	6	1,101	8	9	986	7	9
West South Central	25,407	11	1,810	7	14	1,511	6	14
Mountain	15,651	7	868	6	7	669	4	6
Pacific	36,681	16	798	2	6	616	2	6
Age								
16 to 17 years	8,272	4	501	6	4	438	5	4
18 to 24 years	23,292	10	968	4	8	815	4	8
25 to 34 years	37,468	16	2,058	5	16	1,864	5	17
35 to 44 years	45,112	20	3,074	7	25	2,660	6	25
45 to 54 years	44,209	19	2,870	6	23	2,404	5	23
55 to 64 years	32,867	14	1,852	6	15	1,527	5	14
65 years and older	38,024	17	1,186	3	9	973	3	9
Sex								
Male	110,273	48	11,351	10	91	9,670	9	91
Female	118,972	52	1,159	1	9	1,013	1	9
Ethnicity								
Hispanic	29,218	13	424	1	3	337	1	3
Non-Hispanic	200,027	87	12,085	6	97	10,345	5	97
Race								
White	189,255	83	12,028	6	96	10,281	5	96
Black	25,925	11	194	1	2	158	1	1
Asian	10,104	4	50	(Z)	(Z)	*37	*(Z)	*(Z)
All others	3,960	2	238	6	2	207	5	2
Annual Household Income								
Less than \$10,000	10,673	5	223	2	2	192	2	2
\$10,000 to \$19,999	15,373	7	580	4	5	522	3	5
\$20,000 to \$24,999	11,374	5	486	4	4	437	4	4
\$25,000 to \$29,999	10,524	5	567	5	5	492	5	5
\$30,000 to \$34,999	11,161	5	737	7	6	659	6	6
\$35,000 to \$39,999	10,349	5	670	6	5	568	5	5
\$40,000 to \$49,999	17,699	8	1,209	7	10	1,042	6	10
\$50,000 to \$74,999	33,434	15	2,754	8	22	2,418	7	23
\$75,000 to \$99,999	21,519	9	1,739	8	14	1,435	7	13
\$100,000 or more	29,159	13	1,977	7	16	1,544	5	14
Not reported	57,981	25	1,568	3	13	1,375	2	13
Education								
11 years or less	34,621	15	1,724	5	14	1,543	4	14
12 years	78,073	34	4,896	6	39	4,335	6	41
1 to 3 years college	53,019	23	3,235	6	26	2,784	5	26
4 years college	39,506	17	1,750	4	14	1,346	3	13
5 years or more college	24,025	10	904	4	7	674	3	6

See footnotes at end of table.

Table 10. **Selected Characteristics of Hunters by Type of Hunting: 2006**—Continued

(Population 16 years old and older. Numbers in thousands)

Characteristic	Small game			Migratory bird			Other animals		
	Number	Percent who participated	Percent	Number	Percent who participated	Percent	Number	Percent who participated	Percent
Total persons	4,797	2	100	2,293	1	100	1,128	(Z)	100
Population Density of Residence									
Urban	2,186	1	46	1,268	1	55	370	(Z)	33
Rural	2,611	5	54	1,025	2	45	758	1	67
Population Size of Residence									
Metropolitan statistical area (MSA) . . .	2,942	2	61	1,570	1	68	594	(Z)	53
1,000,000 or more	1,347	1	28	767	1	33	281	(Z)	25
250,000 to 999,999	832	2	17	423	1	18	153	(Z)	14
Less than 249,999	762	3	16	380	2	17	160	1	14
Outside MSA	1,855	5	39	723	2	32	534	1	47
Census Geographic Division									
New England	129	1	3	52	(Z)	2	28	(Z)	2
Middle Atlantic	520	2	11	*116	*(Z)	*5	191	1	17
East North Central	886	2	18	284	1	12	146	(Z)	13
West North Central	865	6	18	279	2	12	150	1	13
South Atlantic	731	2	15	320	1	14	164	(Z)	15
East South Central	405	3	8	214	2	9	98	1	9
West South Central	638	3	13	641	3	28	211	1	19
Mountain	343	2	7	165	1	7	65	(Z)	6
Pacific	279	1	6	223	1	10	75	(Z)	7
Age									
16 to 17 years	144	2	3	75	1	3	*38	*(Z)	*3
18 to 24 years	419	2	9	182	1	8	150	1	13
25 to 34 years	811	2	17	436	1	19	252	1	22
35 to 44 years	1,204	3	25	642	1	28	249	1	22
45 to 54 years	1,151	3	24	458	1	20	190	(Z)	17
55 to 64 years	635	2	13	359	1	16	147	(Z)	13
65 years and older	431	1	9	141	(Z)	6	103	(Z)	9
Sex									
Male	4,520	4	94	2,162	2	94	1,059	1	94
Female	277	(Z)	6	131	(Z)	6	69	(Z)	6
Ethnicity									
Hispanic	203	1	4	118	(Z)	5	*36	*(Z)	*3
Non-Hispanic	4,594	2	96	2,176	1	95	1,092	1	97
Race									
White	4,596	2	96	2,239	1	98	1,079	1	96
Black	105	(Z)	2	...	...	...	...	...	...
Asian	*26	*(Z)	*1	...	...	...	...	...	...
All others	*70	*2	*1	*37	*1	*2	*24	*1	*2
Annual Household Income									
Less than \$10,000	77	1	2	*27	*(Z)	*1	...	...	...
\$10,000 to \$19,999	206	1	4	*57	*(Z)	*2	*70	*(Z)	*6
\$20,000 to \$24,999	166	1	3	*73	*1	*3	*26	*(Z)	*2
\$25,000 to \$29,999	207	2	4	*53	*1	*2	*69	*1	*6
\$30,000 to \$34,999	328	3	7	134	1	6	*65	*1	*6
\$35,000 to \$39,999	245	2	5	103	1	4	*75	*1	*7
\$40,000 to \$49,999	465	3	10	204	1	9	131	1	12
\$50,000 to \$74,999	996	3	21	503	2	22	258	1	23
\$75,000 to \$99,999	710	3	15	419	2	18	151	1	13
\$100,000 or more	858	3	18	514	2	22	165	1	15
Not reported	539	1	11	207	(Z)	9	110	(Z)	10
Education									
11 years or less	603	2	13	200	1	9	164	(Z)	15
12 years	1,789	2	37	733	1	32	460	1	41
1 to 3 years college	1,242	2	26	644	1	28	340	1	30
4 years college	741	2	15	455	1	20	103	(Z)	9
5 years or more college	421	2	9	261	1	11	61	(Z)	5

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably. (Z) Less than 0.5 percent.

Note: Percent who participated shows the percent of each row's population who participated in the activity named by the column (the percent of those living in urban areas who hunted big game, etc.). Percent columns show the percent of each column's participants who are described by the row heading (the percent of big game hunters who lived in urban areas, etc.).

Table 11. **Summary of Expenditures for Fishing and Hunting: 2006**

(Population 16 years old and older)

Expenditure item	Expenditures		Spenders		
	Amount (thousands of dollars)	Average per sportsperson (dollars)	Number (thousands)	Percent of sportspersons	Average per spender (dollars)
Total, all items.....	76,619,564	2,259	32,524	96	2,356
TRIP-RELATED EXPENDITURES					
Total trip-related.....	24,557,174	724	30,201	89	813
Food and lodging, total	9,093,769	268	26,381	78	345
Food	6,504,319	192	26,242	77	248
Lodging.....	2,589,450	76	6,465	19	401
Transportation, total	7,658,755	226	26,611	78	288
Public	738,243	22	1,509	4	489
Private.....	6,920,512	204	26,239	77	264
Other trip costs¹	7,804,650	230	23,416	69	333
EQUIPMENT EXPENDITURES					
Fishing equipment	5,365,933	158	19,337	57	277
Hunting equipment	5,716,758	169	10,107	30	566
Auxiliary equipment ²	2,969,992	88	9,749	29	305
Special equipment ³	26,910,442	793	3,203	9	8,402
OTHER EXPENDITURES					
Books, magazines	304,181	9	6,759	20	45
Membership dues and contributions	593,242	17	4,481	13	132
Land leasing and ownership.....	8,986,342	265	2,226	7	4,038
Licenses, stamps, tags, and permits.....	1,215,500	36	22,010	65	55

¹ Other trip costs include guide fees, pack trip or package fees, public and private land use fees, equipment rental, boating costs (which include launching, mooring, storage, maintenance, insurance, pumpout fees, and fuel), bait, ice, and heating and cooking fuel.

² Auxiliary equipment includes camping equipment, binoculars, special fishing and hunting clothing, etc.

³ Special equipment includes boats, campers, cabins, trail bikes, etc.

Note: Detail does not add to total because of multiple responses. Detail in subsequent tables may not add to totals shown here because of nonresponse to individual questions.

Table 12. **Expenditures for Fishing: 2006**

(Population 16 years old and older)

Expenditure item	Expenditures		Spenders		
	Amount (thousands of dollars)	Average per angler (dollars)	Number (thousands)	Percent of anglers	Average per spender (dollars)
Total, all items	42,156,092	1,407	28,401	95	1,484
TRIP-RELATED EXPENDITURES					
Total trip-related	17,878,560	597	26,318	88	679
Food and lodging, total	6,302,524	210	22,572	75	279
Food	4,327,090	144	22,415	75	193
Lodging	1,975,434	66	5,304	18	372
Transportation, total	4,961,830	166	22,361	75	222
Public	523,856	17	1,163	4	451
Private	4,437,974	148	21,979	73	202
Other trip costs, total	6,614,205	221	22,275	74	297
Guide fees, pack trip or package fees	832,476	28	2,307	8	361
Public land use fees	176,803	6	3,339	11	53
Private land use fees	143,543	5	1,041	3	138
Equipment rental	377,334	13	1,645	5	229
Boating costs ¹	3,408,623	114	7,405	25	460
Bait	1,183,332	40	18,224	61	65
Ice	378,190	13	11,168	37	34
Heating and cooking fuel	113,904	4	3,195	11	36
EQUIPMENT EXPENDITURES					
Fishing equipment, total	5,332,401	178	19,082	64	279
Rods, reels, poles, and rodmaking components	2,288,572	76	10,666	36	215
Lines and leaders	543,186	18	11,886	40	46
Artificial lures, flies, baits, and dressing for flies or lines.	906,951	30	13,624	45	67
Hooks, sinkers, swivels, and other items attached to a line, except lures and baits	387,836	13	13,885	46	28
Tackle boxes	127,197	4	3,819	13	33
Creels, stringers, fish bags, landing nets, and gaff hooks	107,108	4	3,154	11	34
Minnow traps, seines, and bait containers	61,267	2	2,481	8	25
Depth finders, fish finders, and other electronic fishing devices	514,423	17	1,140	4	451
Ice fishing equipment	105,335	4	663	2	159
Other fishing equipment	290,524	10	3,069	10	95
Auxiliary equipment, total	778,740	26	3,837	13	203
Camping equipment	404,240	13	1,756	6	230
Binoculars, field glasses, telescopes, etc.	42,639	1	414	1	103
Special fishing clothing, rubber boots, waders, and foul weather gear	239,687	8	1,971	7	122
Processing and taxidermy costs	42,183	1	188	1	225
Other	49,992	2	392	1	128
Special equipment²	12,646,229	422	1,818	6	6,957
OTHER EXPENDITURES					
Magazines, books	115,019	4	2,944	10	39
Membership dues and contributions	157,728	5	1,423	5	111
Land leasing and ownership	4,598,988	154	768	3	5,987
Licenses, stamps, tags, and permits, total	648,427	22	17,995	60	36
Licenses	605,234	20	17,660	59	34
Stamps, tags, and permits	43,194	1	3,011	10	14

¹ Boating costs include launching, mooring, storage, maintenance, insurance, pumpout fees, and fuel.² Special equipment includes boats, campers, cabins, trail bikes, etc.

Note: Detail does not add to total because of multiple responses. Detail in tables 13 to 16 may not add to totals shown here because of multiple responses and nonresponse.

Table 13. Trip and Equipment Expenditures for Freshwater Fishing: 2006

(Population 16 years old and older)

Expenditure item	Expenditures		Spenders		
	Amount (thousands of dollars)	Average per angler (dollars)	Number (thousands)	Percent of anglers	Average per spender (dollars)
Total, all items	26,348,217	1,036	23,414	92	1,125
TRIP-RELATED EXPENDITURES					
Total trip-related	12,587,930	495	22,713	89	554
Food and lodging, total	4,609,923	181	19,364	76	238
Food	3,287,225	129	19,246	76	171
Lodging	1,322,697	52	4,278	17	309
Transportation, total	3,905,885	154	19,204	76	203
Public	304,895	12	771	3	395
Private	3,600,990	142	18,901	74	191
Other trip costs, total	4,072,123	160	18,877	74	216
Guide fees, pack trip or package fees	308,275	12	1,235	5	250
Public land use fees	147,629	6	2,862	11	52
Private land use fees	84,679	3	817	3	104
Equipment rental	221,286	9	1,176	5	188
Boating costs ¹	2,094,418	82	6,005	24	349
Bait	844,211	33	15,646	62	54
Ice	269,037	11	9,131	36	29
Heating and cooking fuel	102,587	4	2,878	11	36
EQUIPMENT EXPENDITURES					
Fishing equipment, total	3,575,227	141	15,286	60	234
Rods, reels, poles, and rodmaking components	1,531,910	60	8,214	32	187
Lines and leaders	377,652	15	9,107	36	41
Artificial lures, flies, baits, and dressing for flies or lines.	679,266	27	10,854	43	63
Hooks, sinkers, swivels, and other items attached to a line, except lures and baits	273,047	11	10,823	43	25
Tackle boxes	92,173	4	2,854	11	32
Creels, stringers, fish bags, landing nets, and gaff hooks	64,423	3	2,228	9	29
Minnow traps, seines, and bait containers	38,202	2	1,741	7	22
Depth finders, fish finders, and other electronic fishing devices	280,597	11	806	3	348
Ice fishing equipment	100,437	4	635	2	158
Other fishing equipment	137,522	5	2,055	8	67
Auxiliary equipment, total	621,657	24	3,085	12	201
Camping equipment	342,465	13	1,522	6	225
Binoculars, field glasses, telescopes, etc.	27,233	1	250	1	109
Special fishing clothing, rubber boots, waders, and foul weather gear	183,947	7	1,536	6	120
Processing and taxidermy costs	34,127	1	156	1	219
Other	33,884	1	287	1	118
Special equipment²	9,563,402	376	1,444	6	6,622

¹ Boating costs include launching, mooring, storage, maintenance, insurance, pumpout fees, and fuel.

² Special equipment includes boats, campers, cabins, trail bikes, etc.

Note: Detail does not add to total because of multiple responses.

Table 14. Trip and Equipment Expenditures for Freshwater Fishing, Except Great Lakes: 2006

(Population 16 years old and over)

Expenditure item	Expenditures		Spenders		
	Amount (thousands of dollars)	Average per angler (dollars)	Number (thousands)	Percent of anglers	Average per spender (dollars)
Total, all items	24,581,671	982	22,898	91	1,074
TRIP-RELATED EXPENDITURES					
Total trip-related	11,521,818	460	22,193	89	519
Food and lodging, total	4,235,176	169	18,902	76	224
Food	3,038,376	121	18,789	75	162
Lodging	1,196,800	48	4,055	16	295
Transportation, total	3,667,944	147	18,737	75	196
Public	281,318	11	728	3	386
Private	3,386,626	135	18,442	74	184
Other trip costs, total	3,618,698	145	18,380	73	197
Guide fees, pack trip or package fees	272,634	11	1,075	4	254
Public land use fees	140,129	6	2,793	11	50
Private land use fees	67,391	3	763	3	88
Equipment rental	209,491	8	1,086	4	193
Boating costs ¹	1,798,118	72	5,697	23	316
Bait	785,113	31	15,260	61	51
Ice	250,365	10	8,842	35	28
Heating and cooking fuel	95,458	4	2,825	11	34
EQUIPMENT EXPENDITURES					
Fishing equipment, total	3,361,439	134	14,803	59	227
Rods, reels, poles, and rodmaking components	1,447,041	58	7,922	32	183
Lines and leaders	349,449	14	8,798	35	40
Artificial lures, flies, baits, and dressing for flies or lines.	648,870	26	10,454	42	62
Hooks, sinkers, swivels, and other items attached to a line, except lures and baits	257,959	10	10,464	42	25
Tackle boxes	89,756	4	2,762	11	32
Creels, stringers, fish bags, landing nets, and gaff hooks	60,014	2	2,131	9	28
Minnow traps, seines, and bait containers	37,016	1	1,658	7	22
Depth finders, fish finders, and other electronic fishing devices	259,122	10	746	3	347
Ice fishing equipment	81,329	3	566	2	144
Other fishing equipment	130,885	5	1,951	8	67
Auxiliary equipment, total	600,558	24	2,956	12	203
Camping equipment	337,021	13	1,472	6	229
Binoculars, field glasses, telescopes, etc.	26,365	1	243	1	109
Special fishing clothing, rubber boots, waders, and foul weather gear	174,772	7	1,466	6	119
Processing and taxidermy costs	32,581	1	133	1	244
Other	29,820	1	276	1	108
Special equipment²	9,097,856	363	1,409	6	6,457

¹ Boating costs include launching, mooring, storage, maintenance, insurance, pumpout fees, and fuel.

² Special equipment includes boats, campers, cabins, trail bikes, etc.

Note: Detail does not add to total because of multiple responses.

Table 15. Trip and Equipment Expenditures for Great Lakes Fishing: 2006

(Population 16 years old and older)

Expenditure item	Expenditures		Spenders		
	Amount (thousands of dollars)	Average per angler (dollars)	Number (thousands)	Percent of anglers	Average per spender (dollars)
Total, all items	1,507,656	1,062	1,346	95	1,120
TRIP-RELATED EXPENDITURES					
Total trip-related	1,066,113	751	1,315	93	811
Food and lodging, total	374,747	264	1,102	78	340
Food	248,849	175	1,092	77	228
Lodging	125,897	89	305	21	413
Transportation, total	237,941	168	1,168	82	204
Public	*23,577	*17	*85	*6	*277
Private	214,365	151	1,116	79	192
Other trip costs, total	453,424	319	1,131	80	401
Guide fees, pack trip or package fees	35,641	25	172	12	207
Public land use fees	7,501	5	91	6	82
Private land use fees	*17,288	*12	*58	*4	*299
Equipment rental	*11,795	*8	*93	*7	*127
Boating costs ¹	296,300	209	476	34	622
Bait	59,098	42	856	60	69
Ice	18,671	13	544	38	34
Heating and cooking fuel	7,129	5	89	6	80
EQUIPMENT EXPENDITURES					
Fishing equipment, total	165,403	116	521	37	317
Rods, reels, poles, and rodmaking components	54,602	38	259	18	210
Lines and leaders	23,081	16	246	17	94
Artificial lures, flies, baits, and dressing for flies or lines	23,673	17	358	25	66
Hooks, sinkers, swivels, and other items attached to a line, except lures and baits	13,639	10	316	22	43
Tackle boxes	*1,827	*1	*67	*5	*27
Creels, stringers, fish bags, landing nets, and gaff hooks	*4,110	*3	*84	*6	*49
Minnow traps, seines, and bait containers	*1,049	*1	*75	*5	*14
Depth finders, fish finders, and other electronic fishing devices	*20,140	*14	*51	*4	*392
Ice fishing equipment .....	...	...	...	...	...
Other fishing equipment	*6,420	*5	*96	*7	*67
Auxiliary equipment, total	18,386	13	117	8	157
Camping equipment .....	...	...	...	...	...
Binoculars, field glasses, telescopes, etc. ....	...	...	...	...	...
Special fishing clothing, rubber boots, waders, and foul weather gear	*8,427	*6	*63	*4	*134
Processing and taxidermy costs .....	...	...	...	...	...
Other .....	...	...	...	...	...
Special equipment²	*257,754	*182	*16	*1	*15,675

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

¹ Boating costs include launching, mooring, storage, maintenance, insurance, pumpout fees, and fuel.

² Special equipment includes boats, campers, cabins, trail bikes, etc.

Note: Detail does not add to total because of multiple responses.

Table 16. Trip and Equipment Expenditures for Saltwater Fishing: 2006

(Population 16 years old and older)

Expenditure item	Expenditures		Spenders		
	Amount (thousands of dollars)	Average per angler (dollars)	Number (thousands)	Percent of anglers	Average per spender (dollars)
Total, all items	8,879,948	1,151	6,836	89	1,299
TRIP-RELATED EXPENDITURES					
Total trip-related	5,290,630	686	6,730	87	786
Food and lodging, total	1,692,602	219	5,895	76	287
Food	1,039,865	135	5,803	75	179
Lodging	652,737	85	1,372	18	476
Transportation, total	1,055,945	137	5,551	72	190
Public	218,961	28	446	6	491
Private	836,984	108	5,304	69	158
Other trip costs, total	2,542,083	329	5,821	75	437
Guide fees, pack trip or package fees	524,202	68	1,236	16	424
Public land use fees	29,173	4	635	8	46
Private land use fees	58,864	8	251	3	235
Equipment rental	156,048	20	559	7	279
Boating costs ¹	1,314,205	170	1,845	24	712
Bait	339,122	44	4,228	55	80
Ice	109,153	14	3,200	41	34
Heating and cooking fuel	11,317	1	436	6	26
EQUIPMENT EXPENDITURES					
Fishing equipment, total	1,266,978	164	3,163	41	401
Rods, reels, poles, and rodmaking components	530,540	69	1,644	21	323
Lines and leaders	121,970	16	2,045	26	60
Artificial lures, flies, baits, and dressing for flies or lines.	156,892	20	1,886	24	83
Hooks, sinkers, swivels, and other items attached to a line, except lures and baits	84,690	11	2,230	29	38
Tackle boxes	20,389	3	541	7	38
Creels, stringers, fish bags, landing nets, and gaff hooks	33,666	4	640	8	53
Minnow traps, seines, and bait containers	16,382	2	467	6	35
Depth finders, fish finders, and other electronic fishing devices	178,220	23	218	3	817
Other fishing equipment	124,229	16	703	9	177
Auxiliary equipment, total	108,267	14	551	7	197
Camping equipment	37,924	5	148	2	256
Binoculars, field glasses, telescopes, etc.	13,918	2	134	2	104
Special fishing clothing, rubber boots, waders, and foul weather gear	35,647	5	308	4	116
Processing and taxidermy costs	*7,173	*1	*27	*(Z)	*264
Other	13,605	2	67	1	202
Special equipment²	2,214,073	287	262	3	8,454

* Estimate based on a sample size of 10–29. (Z) Less than 0.5 percent.

¹ Boating costs include launching, mooring, storage, maintenance, insurance, pumpout fees, and fuel.

² Special equipment includes boats, campers, cabins, trail bikes, etc.

Note: Detail does not add to total because of multiple responses.

Table 17. **Expenditures for Hunting: 2006**

(Population 16 years old and older)

Expenditure item	Expenditures		Spenders		
	Amount (thousands of dollars)	Average per hunter (dollars)	Number (thousands)	Percent of hunters	Average per spender (dollars)
Total, all items	22,893,156	1,830	12,153	97	1,884
TRIP-RELATED EXPENDITURES					
Total trip-related	6,678,614	534	10,828	87	617
Food and lodging, total	2,791,245	223	9,567	76	292
Food	2,177,229	174	9,533	76	228
Lodging	614,016	49	1,599	13	384
Transportation, total	2,696,924	216	10,064	80	268
Public	214,387	17	401	3	535
Private	2,482,537	198	9,982	80	249
Other trip costs, total	1,190,445	95	3,416	27	348
Guide fees, pack trip or package fees	416,529	33	557	4	748
Public land use fees	47,268	4	564	5	84
Private land use fees	396,810	32	711	6	558
Equipment rental	80,729	6	313	2	258
Boating costs ¹	102,255	8	459	4	223
Heating and cooking fuel	146,853	12	2,132	17	69
EQUIPMENT EXPENDITURES					
Hunting equipment, total	5,366,357	429	9,287	74	578
Guns and rifles	2,452,285	196	2,992	24	820
Rifles	1,119,900	90	1,625	13	689
Shotguns	765,423	61	1,320	11	580
Muzzleloaders, primitive firearms	184,157	15	531	4	347
Pistols, handguns	382,805	31	636	5	602
Bows, arrows, archery equipment	674,117	54	1,940	16	348
Telescopic sights	404,866	32	1,471	12	275
Decoys and game calls	187,141	15	2,074	17	90
Ammunition	696,451	56	7,995	64	87
Hand loading equipment	140,072	11	929	7	151
Hunting dogs and associated costs	493,659	39	780	6	633
Other	317,765	25	2,312	18	137
Auxiliary equipment, total	1,330,216	106	4,196	34	317
Camping equipment	141,920	11	538	4	264
Binoculars, field glasses, telescopes, etc.	203,606	16	968	8	210
Special hunting clothing, rubber boots, waders, and foul weather gear	459,823	37	2,743	22	168
Processing and taxidermy costs	485,153	39	1,496	12	324
Other	39,714	3	290	2	137
Special equipment²	4,034,928	323	505	4	7,993
OTHER EXPENDITURES					
Magazines, books	83,524	7	1,767	14	47
Membership dues and contributions	269,660	22	1,707	14	158
Land leasing and ownership	4,387,354	351	1,606	13	2,732
Licenses, stamps, tags, and permits, total	742,503	59	9,862	79	75
Licenses	619,511	50	9,506	76	65
Federal duck stamps	22,934	2	1,529	12	15
Other stamps, tags, and permits	100,058	8	2,689	21	37

¹ Boating costs include launching, mooring, storage, maintenance, insurance, pumpout fees, and fuel.² Special equipment includes boats, campers, cabins, trail bikes, etc.

Note: Detail does not add to total because of multiple responses. Detail in tables 18 to 21 may not add to totals shown here because of multiple responses and nonresponse.

Table 18. Trip and Equipment Expenditures for Big Game Hunting: 2006

(Population 16 years old and older)

Expenditure item	Expenditures		Spenders		
	Amount (thousands of dollars)	Average per hunter (dollars)	Number (thousands)	Percent of hunters	Average per spender (dollars)
Total, all items	11,754,122	1,100	9,813	92	1,198
TRIP-RELATED EXPENDITURES					
Total trip-related	4,648,341	435	9,192	86	506
Food and lodging, total	1,967,680	184	8,066	76	244
Food	1,555,229	146	8,039	75	193
Lodging	412,451	39	1,205	11	342
Transportation, total	1,812,575	170	8,481	79	214
Public	119,956	11	263	2	457
Private	1,692,619	158	8,410	79	201
Other trip costs, total	868,086	81	2,689	25	323
Guide fees, pack trip or package fees	333,018	31	356	3	936
Public land use fees	28,061	3	387	4	73
Private land use fees	291,460	27	514	5	567
Equipment rental	47,420	4	198	2	239
Boating costs ¹	47,671	4	197	2	242
Heating and cooking fuel	120,456	11	1,886	18	64
EQUIPMENT EXPENDITURES					
Hunting equipment, total	2,986,381	280	6,583	62	454
Firearms	1,308,890	123	1,802	17	726
Rifles	809,254	76	1,117	10	724
Shotguns	192,840	18	406	4	475
Muzzleloaders	179,833	17	516	5	348
Pistols, handguns	126,964	12	166	2	767
Bows, arrows, archery equipment	628,426	59	1,795	17	350
Telescopic sights	307,014	29	1,102	10	279
Decoys and game calls	72,923	7	1,239	12	59
Ammunition	311,362	29	4,757	45	65
Hand loading equipment	78,053	7	677	6	115
Hunting dogs and associated costs	77,271	7	109	1	709
Other	202,442	19	1,526	14	133
Auxiliary equipment, total	1,073,737	101	3,443	32	312
Camping equipment	119,309	11	445	4	268
Binoculars, field glasses, telescopes, etc.	166,775	16	808	8	207
Special hunting clothing, rubber boots, waders, and foul weather gear	337,850	32	2,035	19	166
Processing and taxidermy costs	422,181	40	1,353	13	312
Other	27,621	3	175	2	158
Special equipment²	3,045,663	285	390	4	7,809

¹ Boating costs include launching, mooring, storage, maintenance, insurance, pumpout fees, and fuel.

² Special equipment includes boats, campers, cabins, trail bikes, etc.

Note: Detail does not add to total because of multiple responses.

Table 19. Trip and Equipment Expenditures for Small Game Hunting: 2006

(Population 16 years old and older)

Expenditure item	Expenditures		Spenders		
	Amount (thousands of dollars)	Average per hunter (dollars)	Number (thousands)	Percent of hunters	Average per spender (dollars)
Total, all items	2,365,778	493	4,027	84	587
TRIP-RELATED EXPENDITURES					
Total trip-related	1,196,318	249	3,783	79	316
Food and lodging, total	510,922	107	3,211	67	159
Food	371,352	77	3,193	67	116
Lodging	139,569	29	427	9	327
Transportation, total	534,603	111	3,364	70	159
Public	75,173	16	128	3	588
Private	459,430	96	3,290	69	140
Other trip costs, total	150,793	31	850	18	177
Guide fees, pack trip or package fees	56,869	12	171	4	333
Public land use fees	7,362	2	174	4	42
Private land use fees	38,405	8	148	3	260
Equipment rental	*19,811	*4	*87	*2	*227
Boating costs ¹	10,513	2	71	1	148
Heating and cooking fuel	17,833	4	428	9	42
EQUIPMENT EXPENDITURES					
Hunting equipment, total	776,420	162	2,032	42	382
Firearms	364,087	76	597	12	610
Rifles	123,341	26	217	5	569
Shotguns	203,440	42	369	8	552
Muzzleloaders .....	...	...	...	...	...
Pistols, handguns	36,270	8	72	2	503
Bows, arrows, archery equipment	*5,698	*1	*24	*1	*237
Telescopic sights	35,948	7	146	3	247
Decoys and game calls	11,737	2	190	4	62
Ammunition	93,878	20	1,461	30	64
Hand loading equipment	25,228	5	100	2	253
Hunting dogs and associated costs	219,403	46	355	7	617
Other	20,442	4	210	4	97
Auxiliary equipment, total	61,988	13	332	7	187
Camping equipment	*9,229	*2	*30	*1	*308
Binoculars, field glasses, telescopes, etc.	*6,418	*1	*46	*1	*141
Special hunting clothing, rubber boots, waders, and foul weather gear	23,340	5	227	5	103
Processing and taxidermy costs	*17,161	*4	*24	*1	*703
Other	*5,840	*1	*51	*1	*115
Special equipment²	*331,052	*69	*30	*1	*11,193

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

¹ Boating costs include launching, mooring, storage, maintenance, insurance, pumpout fees, and fuel.

² Special equipment includes boats, campers, cabins, trail bikes, etc.

Note: Detail does not add to total because of multiple responses.

Table 20. Trip and Equipment Expenditures for Migratory Bird Hunting: 2006

(Population 16 years old and older)

Expenditure item	Expenditures		Spenders		
	Amount (thousands of dollars)	Average per hunter (dollars)	Number (thousands)	Percent of hunters	Average per spender (dollars)
Total, all items	1,349,148	588	2,001	87	674
TRIP-RELATED EXPENDITURES					
Total trip-related	691,288	301	1,895	83	365
Food and lodging, total	260,690	114	1,650	72	158
Food	203,473	89	1,650	72	123
Lodging	57,217	25	202	9	283
Transportation, total	*265,875	*116	*1,716	*75	*155
Public	*14,771	*6	*57	*2	*258
Private	*251,104	*110	*1,699	*74	*148
Other trip costs, total	164,723	72	577	25	285
Guide fees, pack trip or package fees	25,267	11	89	4	284
Public land use fees	11,452	5	120	5	96
Private land use fees	65,155	28	92	4	707
Equipment rental	*12,396	*5	*39	*2	*319
Boating costs ¹	43,721	19	250	11	175
Heating and cooking fuel	6,732	3	153	7	44
EQUIPMENT EXPENDITURES					
Hunting equipment, total	416,107	181	1,029	45	404
Firearms	156,615	68	221	10	709
Rifles .....	...	...	...	...	...
Shotguns	143,235	62	216	9	662
Muzzleloaders .....	...	...	...	...	...
Pistols, handguns .....	...	...	...	...	...
Bows, arrows, archery equipment .....	...	...	...	...	...
Telescopic sights .....	...	...	...	...	...
Decoys and game calls	72,570	32	361	16	201
Ammunition	88,432	39	745	33	119
Hand loading equipment	*1,640	*1	*24	*1	*69
Hunting dogs and associated costs	79,707	35	153	7	521
Other	17,072	7	127	6	135
Auxiliary equipment, total	67,708	30	247	11	274
Camping equipment .....	...	...	...	...	...
Binoculars, field glasses, telescopes, etc.	*7,429	*3	*26	*1	*291
Special hunting clothing, rubber boots, waders, and foul weather gear	37,940	17	180	8	211
Processing and taxidermy costs	*19,274	*8	*59	*3	*326
Other .....	...	...	...	...	...
Special equipment²	*174,045	*76	*51	*2	*3,394

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

¹ Boating costs include launching, mooring, storage, maintenance, insurance, pumpout fees, and fuel.

² Special equipment includes boats, campers, cabins, trail bikes, etc.

Note: Detail does not add to total because of multiple responses.

Table 21. Trip and Equipment Expenditures for Hunting Other Animals: 2006

(Population 16 years old and older)

Expenditure item	Expenditures		Spenders		
	Amount (thousands of dollars)	Average per hunter (dollars)	Number (thousands)	Percent of hunters	Average per spender (dollars)
Total, all items	207,856	184	799	71	260
TRIP-RELATED EXPENDITURES					
Total trip-related	142,667	126	775	69	184
Food and lodging, total	51,953	46	592	52	88
Food	47,175	42	592	52	80
Lodging	*4,778	*4	*34	*3	*139
Transportation, total	*83,871	*74	*627	*56	*134
Public .....	...	...	...	...	...
Private .....	...	...	...	...	...
Other trip costs, total	6,842	6	127	11	54
Guide fees, pack trip or package fees .....	...	...	...	...	...
Public land use fees .....	...	...	...	...	...
Private land use fees .....	...	...	...	...	...
Equipment rental .....	...	...	...	...	...
Boating costs ¹ .....	...	...	...	...	...
Heating and cooking fuel	*1,832	*2	*74	*7	*25
EQUIPMENT EXPENDITURES					
Hunting equipment, total	50,527	45	154	14	328
Firearms	*27,563	*24	*36	*3	*762
Rifles	*18,167	*16	*18	*2	*1,002
Shotguns .....	...	...	...	...	...
Muzzleloaders .....	...	...	...	...	...
Pistols, handguns .....	...	...	...	...	...
Bows, arrows, archery equipment .....	...	...	...	...	...
Telescopic sights	*2,067	*2	*12	*1	*166
Decoys and game calls	*1,909	*2	*44	*4	*44
Ammunition	4,497	4	90	8	50
Hand loading equipment	*1,295	*1	*10	*1	*128
Hunting dogs and associated costs .....	...	...	...	...	...
Other	*2,192	*2	*15	*1	*142
Auxiliary equipment, total	*14,662	*13	*41	*4	*355
Camping equipment .....	...	...	...	...	...
Binoculars, field glasses, telescopes, etc. ....	...	...	...	...	...
Special hunting clothing, rubber boots, waders, and foul weather gear .....	...	...	...	...	...
Processing and taxidermy costs .....	...	...	...	...	...
Other .....	...	...	...	...	...
Special equipment² .....	...	...	...	...	...

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

¹ Boating costs include launching, mooring, storage, maintenance, insurance, pumpout fees, and fuel.

² Special equipment includes boats, campers, cabins, trail bikes, etc.

Note: Detail does not add to total because of multiple responses.

Table 22. Special Equipment Expenditures for Fishing and Hunting: 2006

(Population 16 years old and older)

Special equipment item	Expenditures		Spenders		
	Amount (thousands of dollars)	Average per sportsperson (dollars)	Number (thousands)	Percent of sportspersons	Average per spender (dollars)
Total, all items	26,910,442	793	3,203	9	8,402
Motorboat (other than bass boat)	4,555,033	134	505	1	9,013
Bass boat	1,748,529	52	222	1	7,885
Canoe, other non-motorboat	174,122	5	365	1	477
Boat motor, trailer or hitch, and other boat accessories	1,004,204	30	996	3	1,009
Travel or tent trailer, pickup, camper, van, motor home, recreational vehicle (RV), house trailer	13,838,464	408	952	3	14,537
Cabin	*1,897,951	*56	*31	*(Z)	*61,573
Trail bike, dune buggy, 4x4 vehicle, 4-wheeler, snowmobile ..	3,396,880	100	666	2	5,099
Other	295,259	9	234	1	1,263

* Estimate based on a sample size of 10–29. (Z) Less than 0.5 percent.

Note: Detail does not add to total because of multiple responses.

Table 23. Anglers and Hunters Who Purchased Licenses or Were Exempt: 2006

(Population 16 years old and older. Numbers in thousands)

Sportspersons	Anglers		Hunters	
	Number	Percent	Number	Percent
Total sportspersons	29,952	100	12,510	100
Total license purchasers ¹	19,498	65	10,054	80
Sportspersons purchasing licenses:				
In state of residence	18,070	60	9,591	77
In other states	3,435	11	1,286	10
Total exempt from purchasing licenses	4,725	16	2,288	18
Sportspersons exempt from license purchase:				
In state of residence	4,371	15	2,138	17
In other states	562	2	239	2
Other ²	7,456	25	1,233	10
Not reported	543	2	133	1

¹ Includes persons who had licenses bought for them. Does not include persons who purchased licenses and did not fish or hunt in 2006.

² Includes persons engaged in activities requiring no licenses or exemptions and those who failed to buy a license for activities requiring a license.

Note: Detail does not add to total because of multiple responses and nonresponse. Respondents could have been licensed in one state and exempt in another.

Table 24. **Selected Characteristics of Anglers and Hunters Who Purchased Licenses: 2006**

(Population 16 years old and older. Numbers in thousands)

Characteristic	Anglers						Hunters					
	Total		Purchased a license ¹		Did not purchase a license ²		Total		Purchased a license ¹		Did not purchase a license ²	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total persons	29,952	100	19,498	65	10,455	35	12,510	100	10,054	80	2,455	20
Population Density of Residence												
Urban.....	18,303	100	11,695	64	6,608	36	5,675	100	4,628	82	1,047	18
Rural.....	11,649	100	7,803	67	3,846	33	6,835	100	5,426	79	1,409	21
Population Size of Residence												
Metropolitan statistical area (MSA) ...	21,815	100	14,050	64	7,764	36	7,785	100	6,298	81	1,487	19
1,000,000 or more	11,735	100	7,264	62	4,472	38	3,551	100	2,798	79	752	21
250,000 to 999,999.....	5,889	100	3,830	65	2,059	35	2,143	100	1,673	78	470	22
Less than 249,999.....	4,190	100	2,957	71	1,234	29	2,092	100	1,827	87	265	13
Outside MSA.....	8,138	100	5,447	67	2,690	33	4,724	100	3,756	80	968	20
Census Geographic Division												
New England.....	1,246	100	722	58	524	42	374	100	329	88	45	12
Middle Atlantic.....	2,550	100	1,456	57	1,094	43	1,520	100	1,351	89	168	11
East North Central.....	5,190	100	3,702	71	1,488	29	2,376	100	2,057	87	318	13
West North Central.....	3,284	100	2,489	76	795	24	1,779	100	1,435	81	344	19
South Atlantic.....	6,116	100	3,290	54	2,827	46	1,884	100	1,300	69	584	31
East South Central.....	2,436	100	1,453	60	983	40	1,101	100	807	73	294	27
West South Central.....	3,952	100	2,376	60	1,576	40	1,810	100	1,348	74	462	26
Mountain.....	2,084	100	1,635	78	449	22	868	100	769	89	99	11
Pacific.....	3,094	100	2,375	77	719	23	798	100	658	83	139	17
Age												
16 to 17 years.....	1,103	100	565	51	538	49	501	100	400	80	101	20
18 to 24 years.....	2,406	100	1,499	62	907	38	968	100	777	80	191	20
25 to 34 years.....	4,857	100	3,407	70	1,450	30	2,058	100	1,717	83	341	17
35 to 44 years.....	7,476	100	4,844	65	2,632	35	3,074	100	2,526	82	548	18
45 to 54 years.....	6,647	100	4,635	70	2,013	30	2,870	100	2,384	83	485	17
55 to 64 years.....	4,616	100	3,295	71	1,322	29	1,852	100	1,540	83	312	17
65 years and older.....	2,847	100	1,253	44	1,594	56	1,186	100	710	60	476	40
Sex												
Male.....	22,337	100	15,170	68	7,167	32	11,351	100	9,223	81	2,128	19
Female.....	7,615	100	4,328	57	3,287	43	1,159	100	832	72	327	28
Ethnicity												
Hispanic.....	1,576	100	889	56	686	44	424	100	299	71	*125	*29
Non-Hispanic.....	28,377	100	18,608	66	9,769	34	12,085	100	9,755	81	2,330	19
Race												
White.....	27,490	100	18,144	66	9,346	34	12,028	100	9,716	81	2,313	19
Black.....	1,515	100	823	54	692	46	194	100	124	64	*70	*36
Asian.....	324	100	194	60	130	40	50	100	*47	*95	...	...
All others.....	624	100	337	54	287	46	238	100	168	71	70	29
Annual Household Income												
Less than \$10,000.....	733	100	395	54	338	46	223	100	161	72	62	28
\$10,000 to \$19,999.....	1,380	100	849	62	531	38	580	100	411	71	168	29
\$20,000 to \$24,999.....	1,427	100	804	56	623	44	486	100	356	73	130	27
\$25,000 to \$29,999.....	1,319	100	831	63	488	37	567	100	446	79	120	21
\$30,000 to \$34,999.....	1,510	100	1,006	67	503	33	737	100	609	83	128	17
\$35,999 to \$39,999.....	1,543	100	1,068	69	475	31	670	100	525	78	145	22
\$40,000 to \$49,999.....	2,766	100	1,903	69	863	31	1,209	100	968	80	241	20
\$50,000 to \$74,999.....	5,981	100	4,020	67	1,961	33	2,754	100	2,245	82	509	18
\$75,000 to \$99,999.....	4,074	100	2,782	68	1,293	32	1,739	100	1,437	83	302	17
\$100,000 or more.....	5,167	100	3,328	64	1,839	36	1,977	100	1,646	83	331	17
Not reported.....	4,051	100	2,511	62	1,540	38	1,568	100	1,248	80	319	20
Education												
11 years or less.....	4,040	100	2,307	57	1,733	43	1,724	100	1,336	77	389	23
12 years.....	10,266	100	6,938	68	3,329	32	4,896	100	3,930	80	966	20
1 to 3 years college.....	7,590	100	5,074	67	2,516	33	3,235	100	2,626	81	609	19
4 years college.....	5,115	100	3,293	64	1,822	36	1,750	100	1,431	82	319	18
5 or more years college.....	2,941	100	1,887	64	1,054	36	904	100	732	81	172	19
Days of Participation												
1 to 5 days.....	12,362	100	6,688	54	5,674	46	4,198	100	3,144	75	1,054	25
6 to 10 days.....	5,609	100	3,816	68	1,793	32	2,589	100	2,125	82	464	18
11 to 25 days.....	6,102	100	4,431	73	1,671	27	3,052	100	2,534	83	518	17
26 days or more.....	5,743	100	4,479	78	1,264	22	2,638	100	2,244	85	395	15

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

¹ Includes persons who purchased a license in 2006 in any state. Respondents could have been licensed in one state and exempt in another.² Includes those persons who did not purchase a license in any state in 2006 and those who did not specify a license purchase in 2006.

Table 25. Freshwater Anglers and Days of Fishing by Type of Water: 2006

(Population 16 years old and older. Numbers in thousands. Excludes Great Lakes fishing)

Type of water	Anglers		Days of fishing	
	Number	Percent	Number	Percent
Total, all types of water	25,035	100	419,942	100
Lakes, reservoirs, and ponds.....	21,129	84	304,452	72
Rivers and streams.....	11,253	45	135,950	32

Note: Detail does not add to total because of multiple responses and nonresponse.

Table 26. Great Lakes Anglers and Days of Fishing by Great Lake: 2006

(Population 16 years old and older. Numbers in thousands)

Great Lake	Anglers		Days of fishing	
	Number	Percent	Number	Percent
Total, all Great Lakes	1,420	100	18,016	100
Lake Ontario, including the Niagara River.....	218	15	1,245	7
Lake Erie, including the Detroit River.....	526	37	4,651	26
Lake Huron, including St. Mary's River System.....	*93	*7	*811	*5
Lake Michigan.....	474	33	5,647	31
Lake Superior.....	*89	*6	*2,123	*12
Lake St. Clair, including the St. Clair River.....	...	...	...	...
St. Lawrence River.....	...	...	...	...
Tributaries to the Great Lakes.....	134	9	1,204	7

* Estimate based on a sample size of 10-29. ... Sample size too small to report data reliably.

Note: Detail does not add to total because of multiple responses and nonresponse.

Table 27. Hunters and Days of Hunting on Public and Private Land by Type of Hunting: 2006

(Population 16 years old and older. Numbers in thousands)

Hunters and days of hunting	Total, all hunting		Big game		Small game		Migratory bird		Other animals	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
HUNTERS										
Total, all land	12,510	100	10,682	100	4,797	100	2,293	100	1,128	100
Public land, total	4,901	39	3,784	35	1,681	35	798	35	311	28
Public land only.....	1,888	15	1,717	16	824	17	412	18	149	13
Public and private land.....	3,013	24	2,066	19	857	18	386	17	162	14
Private land, total	10,206	82	8,571	80	3,795	79	1,740	76	928	82
Private land only.....	7,193	58	6,504	61	2,939	61	1,354	59	766	68
Private and public land.....	3,013	24	2,066	19	857	18	386	17	162	14
DAYS OF HUNTING										
Total, all land	219,925	100	164,061	100	52,395	100	19,770	100	15,205	100
Public land ¹	54,433	25	37,301	23	12,532	24	5,722	29	2,820	19
Private land ²	164,319	75	120,092	73	38,080	73	13,441	68	12,248	81

¹ Days of hunting on public land includes both days spent solely on public land and those spent on public and private land.

² Days of hunting on private land includes both days spent solely on private land and those spent on private and public land.

Note: Detail does not add to total because of multiple responses and nonresponse.

Table 28. Hunters and Days of Hunting on Public Land by Selected Characteristic: 2006

(Population 16 years old and older. Numbers in thousands)

Characteristic	Hunters				Days of hunting			
	Total hunters, public and private land	Hunters on public land ¹			Total days, public and private land	Days on public land ²		
		Number	Percent of total hunters	Percent of hunters using public land		Number	Percent of total days	Percent of days on public land
Total persons	12,510	4,901	39	100	219,925	54,433	25	100
Population Density of Residence								
Urban	5,675	2,572	45	52	80,603	25,563	32	47
Rural	6,835	2,328	34	48	139,323	28,870	21	53
Population Size of Residence								
Metropolitan statistical area (MSA) . . .	7,785	3,120	40	64	128,551	32,555	25	60
1,000,000 or more	3,551	1,391	39	28	58,281	14,289	25	26
250,000 to 999,999	2,143	911	43	19	36,109	9,233	26	17
Less than 249,999	2,092	818	39	17	34,162	9,033	26	17
Outside MSA	4,724	1,780	38	36	91,374	21,878	24	40
Census Geographic Division								
New England	374	159	43	3	6,653	1,680	25	3
Middle Atlantic	1,520	699	46	14	28,755	7,680	27	14
East North Central	2,376	869	37	18	41,709	8,469	20	16
West North Central	1,779	623	35	13	27,062	6,328	23	12
South Atlantic	1,884	571	30	12	35,332	6,642	19	12
East South Central	1,101	350	32	7	25,685	3,910	15	7
West South Central	1,810	398	22	8	34,237	5,487	16	10
Mountain	868	681	78	14	9,869	6,959	71	13
Pacific	798	551	69	11	10,625	7,278	69	13
Age								
16 to 17 years	501	188	38	4	6,277	1,646	26	3
18 to 24 years	968	382	39	8	18,312	3,960	22	7
25 to 34 years	2,058	959	47	20	36,459	10,047	28	18
35 to 44 years	3,074	1,294	42	26	54,330	13,105	24	24
45 to 54 years	2,870	1,035	36	21	51,817	12,382	24	23
55 to 64 years	1,852	685	37	14	31,946	8,257	26	15
65 years and older	1,186	357	30	7	20,784	5,036	24	9
Sex								
Male	11,351	4,568	40	93	208,244	51,674	25	95
Female	1,159	333	29	7	11,681	2,759	24	5
Ethnicity								
Hispanic	424	138	32	3	4,432	1,864	42	3
Non-Hispanic	12,085	4,763	39	97	215,494	52,569	24	97
Race								
White	12,028	4,710	39	96	211,524	52,234	25	96
Black	194	*33	*17	*1	3,281	*211	*6	*(Z)
Asian	50	*32	*65	*1	608	*417	*69	*1
All others	238	125	53	3	4,513	1,570	35	3
Annual Household Income								
Less than \$10,000	223	75	34	2	3,766	990	26	2
\$10,000 to \$19,999	580	204	35	4	9,134	1,992	22	4
\$20,000 to \$24,999	486	136	28	3	9,397	1,742	19	3
\$25,000 to \$29,999	567	211	37	4	9,214	2,538	28	5
\$30,000 to \$34,999	737	279	38	6	14,270	3,516	25	6
\$35,000 to \$39,999	670	239	36	5	12,997	2,315	18	4
\$40,000 to \$49,999	1,209	504	42	10	22,075	6,477	29	12
\$50,000 to \$74,999	2,754	1,129	41	23	48,999	11,742	24	22
\$75,000 to \$99,999	1,739	714	41	15	29,112	7,368	25	14
\$100,000 or more	1,977	784	40	16	33,008	8,395	25	15
Not reported	1,568	626	40	13	27,953	7,356	26	14
Education								
11 years or less	1,724	616	36	13	31,126	6,435	21	12
12 years	4,896	1,846	38	38	93,320	22,212	24	41
1 to 3 years college	3,235	1,341	41	27	56,700	16,334	29	30
4 years college	1,750	697	40	14	26,887	6,165	23	11
5 or more years college	904	400	44	8	11,893	3,287	28	6

* Estimate based on a sample size of 10–29. (Z) Less than 0.5 percent.

¹ Hunters on public land include those who hunted on both public and private land.

² Days of hunting on public land includes both days spent solely on public land and those spent on public and private land.

Note: Percent of total hunters and percent of total days are based on the total hunters and total days columns for each row. Percent of hunters using public land and percent of days on public land are based on the total number of hunters on public land and total number of days on public land, respectively.

Table 29. Hunters and Days of Hunting on Private Land by Selected Characteristic: 2006

(Population 16 years old and older. Numbers in thousands)

Characteristic	Hunters				Days of hunting			
	Total hunters, public and private land	Hunters on private land ¹			Total days, public and private land	Days on private land ²		
		Number	Percent of total hunters	Percent of hunters using private land		Number	Percent of total days	Percent of days on private land
Total persons	12,510	10,206	82	100	219,925	164,319	75	100
Population Density of Residence								
Urban	5,675	4,311	76	42	80,603	54,671	68	33
Rural	6,835	5,895	86	58	139,323	109,649	79	67
Population Size of Residence								
Metropolitan statistical area (MSA)	7,785	6,234	80	61	128,551	93,046	72	57
1,000,000 or more	3,551	2,818	79	28	58,281	44,195	76	27
250,000 to 999,999	2,143	1,709	80	17	36,109	23,816	66	14
Less than 249,999	2,092	1,707	82	17	34,162	25,035	73	15
Outside MSA	4,724	3,972	84	39	91,374	71,273	78	43
Census Geographic Division								
New England	374	314	84	3	6,653	4,689	70	3
Middle Atlantic	1,520	1,208	79	12	28,755	20,411	71	12
East North Central	2,376	2,039	86	20	41,709	32,062	77	20
West North Central	1,779	1,608	90	16	27,062	22,150	82	13
South Atlantic	1,884	1,655	88	16	35,332	27,688	78	17
East South Central	1,101	1,020	93	10	25,685	21,755	85	13
West South Central	1,810	1,573	87	15	34,237	28,236	82	17
Mountain	868	355	41	3	9,869	3,050	31	2
Pacific	798	436	55	4	10,625	4,278	40	3
Age								
16 to 17 years	501	392	78	4	6,277	4,592	73	3
18 to 24 years	968	787	81	8	18,312	14,092	77	9
25 to 34 years	2,058	1,697	82	17	36,459	27,087	74	16
35 to 44 years	3,074	2,501	81	25	54,330	39,891	73	24
45 to 54 years	2,870	2,326	81	23	51,817	39,447	76	24
55 to 64 years	1,852	1,502	81	15	31,946	23,618	74	14
65 years and older	1,186	1,002	84	10	20,784	15,593	75	9
Sex								
Male	11,351	9,288	82	91	208,244	155,560	75	95
Female	1,159	919	79	9	11,681	8,759	75	5
Ethnicity								
Hispanic	424	312	74	3	4,432	2,584	58	2
Non-Hispanic	12,085	9,894	82	97	215,494	161,735	75	98
Race								
White	12,028	9,835	82	96	211,524	158,186	75	96
Black	194	167	86	2	3,281	2,695	82	2
Asian	50	*22	*43	*(Z)	608	*265	*44	*(Z)
All others	238	182	77	2	4,513	3,173	70	2
Annual Household Income								
Less than \$10,000	223	185	83	2	3,766	2,581	69	2
\$10,000 to \$19,999	580	438	75	4	9,134	6,470	71	4
\$20,000 to \$24,999	486	421	87	4	9,397	7,787	83	5
\$25,000 to \$29,999	567	430	76	4	9,214	6,967	76	4
\$30,000 to \$34,999	737	611	83	6	14,270	10,451	73	6
\$35,000 to \$39,999	670	528	79	5	12,997	9,891	76	6
\$40,000 to \$49,999	1,209	964	80	9	22,075	15,836	72	10
\$50,000 to \$74,999	2,754	2,281	83	22	48,999	36,530	75	22
\$75,000 to \$99,999	1,739	1,377	79	13	29,112	22,090	76	13
\$100,000 or more	1,977	1,675	85	16	33,008	25,437	77	15
Not reported	1,568	1,297	83	13	27,953	20,280	73	12
Education								
11 years or less	1,724	1,413	82	14	31,126	24,345	78	15
12 years	4,896	3,928	80	38	93,320	68,000	73	41
1 to 3 years college	3,235	2,621	81	26	56,700	41,903	74	26
4 years college	1,750	1,503	86	15	26,887	20,780	77	13
5 or more years college	904	741	82	7	11,893	9,291	78	6

* Estimate based on a sample size of 10–29. (Z) Less than 0.5 percent.

¹ Hunters on private land include those who hunted on both private and public land.

² Days of hunting on private land includes both days spent solely on private land and those spent on private and public land.

Note: Percent of total hunters and percent of total days are based on the total hunters and total days columns for each row. Percent of hunters using private land and percent of days on private land are based on the total number of hunters on private land and total number of days on private land, respectively.

Table 30. Anglers Fishing From Boats and Days of Participation by Type of Fishing: 2006

(Population 16 years old and older. Numbers in thousands)

Participants and days of fishing	Total, all fishing		Freshwater, excludes Great Lakes		Great Lakes		Saltwater	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total anglers	29,952	100	25,035	100	1,420	100	7,717	100
Anglers fishing from boats.....	17,035	57	13,073	52	1,054	74	5,304	69
Total days of fishing	516,781	100	419,942	100	18,016	100	85,663	100
Days fishing from boats.....	246,038	48	185,074	44	10,728	60	50,236	59

Note: Detail does not add to total because of multiple responses and nonresponses.

Table 31. Anglers Fishing From Motorboats and Non-Motorboats: 2006

(Population 16 years old and older. Numbers in thousands)

Anglers	Number	Percent
Anglers who use boats, total	17,035	100
Anglers fishing most often from a motorboat	12,475	73
Anglers fishing most often from a non-motorboat	3,743	22

Note: Detail does not add to total because of nonresponses.

Table 32. Boats and Boat Launches Used by Anglers and Completion of Boating Safety Courses: 2006

(Population 16 years old and older. Numbers in thousands)

Boating facts	Number	Percent
LENGTH OF BOAT USED MOST OFTEN		
Total anglers using boats	17,035	100
Less than 13 feet	2,342	14
13 to 16 feet	4,697	28
17 to 19 feet	3,435	20
20 to 25 feet	3,163	19
26 to 30 feet	719	4
31 to 40 feet	454	3
41 feet or more	493	3
DISTANCE TO BOAT LAUNCH USED MOST OFTEN		
Total anglers using boats	17,035	100
Less than 1 mile	343	2
1 to 5 miles	1,366	8
6 to 10 miles	1,068	6
11 to 20 miles	1,413	8
21 to 30 miles	911	5
31 to 40 miles	609	4
41 to 50 miles	619	4
51 to 75 miles	665	4
76 to 100 miles	514	3
101 miles or more	1,415	8
Did not use a boat launch	7,882	46
COMPLETED A BOATING SAFETY COURSE		
Total anglers using boats	17,035	100
Completed course	3,489	20
Did not complete or attempt course	13,040	77

Note: Detail does not add to total because of nonresponses.

Table 33. Anglers Fishing Most Often From Boats Alone or With Others: 2006

(Population 16 years old and older. Numbers in thousands)

Anglers and their boating companions	Number	Percent
Total anglers using boats	17,035	100
Fished most often alone	1,854	11
Fished most often with friends	7,819	46
Fished most often with spouse/partner	5,042	30
Fished most often with children	3,746	22
Fished most often with parents	1,594	9
Fished most often with other family	3,897	23
Fished most often with other	611	4

Note: Detail does not add to total because of multiple responses and nonresponses. Adds to more than the total because anglers fished with people in more than one category.

Table 34. **Information Used by Anglers Fishing From Boats: 2006**

Information sources and types	Number	Percent
TYPES OF INFORMATION		
Total anglers using boats	17,035	100
Directions to boat launch	1,228	7
Directions to fishing sites	1,980	12
Boating rules and regulations	1,595	9
Fishing rules and regulations	2,686	16
Water attributes (e.g., depth)	1,960	12
Fish species	4,697	28
Weather conditions	4,029	24
Other	522	3
None	838	5
SOURCES OF INFORMATION		
Total anglers using boats	17,035	100
Published boating guide	1,086	6
Internet	2,795	16
TV or radio	1,922	11
Call-in service center	211	1
State fish and game agency	1,416	8
Magazines and newspapers	1,471	9
Boating, fishing, outdoor shows	365	2
Friends, family, other anglers/boaters	4,620	27
Bait and tackle shop	1,867	11
Other	1,119	7
None	6,619	39

Note: Detail does not add to total because of multiple responses and nonresponses.

Table 35. **Participation in Ice Fishing and Fly-Fishing: 2006**

(Population 16 years old and older. Numbers in thousands)

Anglers and days	Number	Percent
Total anglers	29,952	100
Ice anglers	1,723	6
Fly-anglers	3,012	10
Total days of fishing	516,781	100
Days of ice fishing	14,036	3
Days of fly-fishing	30,259	6

Note: Detail does not add to total because of multiple responses.

Table 36. **Participation in Catch-and-Release Fishing: 2006**

Anglers	Number	Percent
Total anglers	29,952	100
Anglers who caught fish	26,265	88
Anglers who caught fish they legally could have kept	24,133	81
Anglers who released some fish they legally could have kept	20,190	67
Anglers who released all fish they legally could have kept	6,114	20
Percent of fish caught that were released	50	(X)

(X) Not applicable.

Note: Detail does not add to total because of multiple responses and nonresponse.

Table 37. **Hunters Using Bows and Arrows, Muzzleloaders, or Other Firearms: 2006**

Hunters	Number	Percent
Total hunters	12,510	100
Hunters using bow and arrow	3,501	28
Hunters using muzzleloader	2,484	20
Hunters using other firearm (e.g., shotgun, rifle)	11,633	93
Total days of hunting	219,925	100
With bow and arrow	50,027	23
With muzzleloader	16,787	8
With other firearm (e.g., shotgun, rifle)	147,176	67

Note: Detail does not add to total because of multiple responses and nonresponse.

Table 38. **Land Owned or Leased for the Primary Purpose of Fishing or Hunting: 2006**

(Population 16 years of age or older. Numbers in thousands)

Fishing and hunting	Number	Percent
LAND OWNERSHIP		
Sportspersons Owning Land		
Total sportspersons	2,132	100
Anglers	967	45
Hunters	1,336	63
Acres Owned		
Total acres owned	167,733	100
Acres for fishing	33,395	20
Acres for hunting	134,338	80
Expenditures for Land Owned		
Total expenditures	\$7,923,079	100
For fishing	\$4,276,492	54
For hunting	\$3,646,587	46
LAND LEASING		
Sportspersons Leasing Land		
Total sportspersons	1,055	100
Anglers	229	22
Hunters	860	82
Acres Leased		
Total acres leased	226,416	100
Acres for fishing	9,647	4
Acres for hunters	216,769	96
Expenditures for Land Leased		
Total expenditures	\$1,063,263	100
For fishing	\$322,496	30
For hunting	\$740,767	70

Note: Detail does not add to total because of multiple responses.

Table 39. Wildlife-Watching Participants by Type of Activity: 2006

(Population 16 years old and older. Numbers in thousands)

Activity	Number	Percent	Activity	Number	Percent
Total participants	71,132	100	Around the home	67,756	95
Away from home	22,977	32	Observe wildlife	44,467	63
Observe wildlife	21,546	30	Photograph wildlife	18,763	26
Photograph wildlife	11,708	16	Feed wildlife	55,512	78
Feed wildlife	7,084	10	Visit public parks or areas ¹	13,271	19
			Maintain plantings or natural areas ..	14,508	20

¹ Includes visits only to parks or publicly held areas within one mile of home.

Note: Detail does not add to total because of multiple responses.

Table 40. Participants, Area Visited, Trips, and Days of Participation in Wildlife Watching Away From Home: 2006

(Population 16 years old and older. Numbers in thousands)

Participants, area visited, trips, and days of participation	Number	Percent
PARTICIPANTS		
Total participants	22,977	100
Observe wildlife	21,546	94
Photograph wildlife	11,708	51
Feed wildlife	7,084	31
AREA VISITED		
Total, all areas	22,977	100
Public only	12,199	53
Private only	2,534	11
Public and private	6,175	27
Not reported	2,069	9
TRIPS		
Total trips	232,643	100
Average days per trip	2	(X)
DAYS		
Total days	352,070	100
Observing wildlife	291,027	83
Photographing wildlife	103,872	30
Feeding wildlife	77,329	22
Average days per participant	15	(X)
Observing wildlife	14	(X)
Photographing wildlife	9	(X)
Feeding wildlife	11	(X)

(X) Not applicable.

Note: Detail does not add to total because of multiple responses.

Table 41. Participation in Wildlife-Watching Activities Around the Home: 2006

(Population 16 years old and older. Numbers in thousands)

Activity	Number	Percent	Activity	Number	Percent
Total around the home	67,756	100	PHOTOGRAPH WILDLIFE		
Observe wildlife	44,467	66	Participants photographing:		
Photograph wildlife	18,763	28	Total, 1 day or more	18,763	100
Feed wildlife	55,512	82	1 day	2,671	14
Visit public parks or other public areas ¹	13,271	20	2 to 3 days	5,451	29
Maintain natural areas	10,248	15	4 to 5 days	2,446	13
Maintain plantings	9,587	14	6 to 10 days	2,846	15
			11 to 20 days	1,972	11
			21 days or more	2,866	15
OBSERVE WILDLIFE			FEED WILDLIFE		
Participants observing:			Participants feeding:		
Total, all wildlife	44,467	100	Total, all wildlife	55,512	100
Birds	41,821	94	Wild birds	53,350	96
Land mammals, all	36,644	82	Other wildlife	19,177	35
Large mammals	21,295	48			
Small mammals	33,934	76	MAINTAIN NATURAL AREAS		
Amphibians or reptiles	12,750	29	Participants maintaining:		
Insects or spiders	15,983	36	Total, all acreages	10,248	100
Fish or other wildlife	9,067	20	1 acre or less	6,379	62
Participants observing:			2 to 10 acres	2,625	26
Total, 1 day or more	44,467	100	11 to 50 acres	820	8
1 to 10 days	9,402	21	More than 50 acres	369	4
11 to 20 days	3,332	7			
21 to 50 days	5,437	12	MAINTAIN PLANTINGS		
51 to 100 days	6,516	15	Participants maintaining		
101 to 200 days	6,486	15	plantings	9,587	100
201 days or more	12,434	28	Participants spending:		
VISIT PUBLIC PARKS OR AREAS¹			Less than \$25	3,975	41
Participants visiting:			\$25 to \$75	2,283	24
Total, 1 day or more	13,271	100	More than \$75	2,833	30
1 to 5 days	6,406	48			
6 to 10 days	2,073	16	Average expenditure per		
11 days or more	4,595	35	participant for plantings	\$171	(X)

(X) Not applicable.

¹ Includes visits only to parks or publicly held areas within 1 mile of home.

Note: Detail does not add to total because of multiple responses and nonresponse.

Table 42. **Away-From-Home Wildlife Watchers by Wildlife Observed, Photographed, or Fed and Place: 2006**

(Population 16 years old and older. Numbers in thousands)

Wildlife observed, photographed, or fed	Total participants		Participation by place					
			Total		In state of residence		In other states	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total, all wildlife	22,977	100	22,977	100	19,095	83	7,530	33
Total birds	20,025	87	20,025	100	17,071	85	6,938	35
Songbirds (cardinals, robins, etc.) ...	13,715	60	13,715	100	11,874	87	4,500	33
Birds of prey (hawks, eagles, etc.) ...	14,018	61	14,018	100	11,544	82	5,129	37
Waterfowl (ducks, geese, etc.)	15,362	67	15,362	100	13,098	85	5,129	33
Other water birds (shorebirds, herons, cranes, etc.)	11,535	50	11,535	100	9,073	79	4,277	37
Other birds (pheasants, turkeys, road runners, etc.)	8,805	38	8,805	100	7,326	83	2,657	30
Total land mammals	16,192	70	16,192	100	13,630	84	5,611	35
Large land mammals (deer, bear, etc.)	12,761	56	12,761	100	10,478	82	4,340	34
Small land mammals (squirrel, prairie dog, etc.)	13,446	59	13,446	100	11,274	84	4,693	35
Fish (salmon, shark, etc.)	6,754	29	6,754	100	5,276	78	2,412	36
Marine mammals (whales, dolphins, etc.)	3,384	15	3,384	100	2,126	63	1,471	43
Other wildlife (turtles, butterflies, etc.) ..	10,358	45	10,358	100	8,697	84	3,430	33

Note: Detail does not add to total because of multiple responses. Column showing percent of total participants is based on the "Total, all wildlife" number. Participation by place percent columns are based on the total number of participants for each type of wildlife.

Table 43. **Wild Bird Observers and Days of Observation: 2006**

(Population 16 years old and older. Numbers in thousands)

Observers and days of observation	Number	Percent
OBSERVERS		
Total bird observers	47,693	100
Around-the-home observers	41,821	88
Away-from-home observers	19,860	42
DAYS		
Total days observing birds	5,473,398	100
Around the home.	5,202,536	95
Away from home.	270,861	5

Note: Detail does not add to total because of multiple responses.

Table 44. **Expenditures for Wildlife Watching: 2006**

(Population 16 years old and older)

Expenditure item	Expenditures (thousands of dollars)	Spenders		
		Number (thousands)	Percent of wildlife-watching participants ¹	Average per spender (dollars)
Total, all items²	45,654,960	55,979	79	816
TRIP-RELATED EXPENDITURES				
Total trip-related	12,875,152	19,443	85	662
Food and lodging, total	7,516,281	16,415	71	458
Food	4,298,403	16,261	71	264
Lodging	3,217,878	6,624	29	486
Transportation, total	4,456,013	18,329	80	243
Public	1,566,963	2,902	13	540
Private	2,889,050	17,447	76	166
Other trip costs, total	902,858	7,681	33	118
Guide fees, pack trip or package fees	250,047	1,570	7	159
Public land use fees	140,508	4,331	19	32
Private land use fees	66,145	1,173	5	56
Equipment rental	148,706	1,274	6	117
Boating costs ³	224,981	1,474	6	153
Heating and cooking fuel	72,470	1,885	8	38
EQUIPMENT AND OTHER EXPENSES				
Total	32,779,808	52,178	73	628
Wildlife-watching equipment, total	9,869,727	49,040	69	201
Binoculars, spotting scopes	656,462	5,269	7	125
Cameras, video cameras, special lenses, and other photographic equipment	3,078,089	6,832	10	451
Film and developing	767,465	9,842	14	78
Bird food, total	3,350,132	39,944	56	84
Commercially prepared and packaged wild bird food	2,707,601	37,332	52	73
Other bulk foods used to feed wild birds	642,531	11,448	16	56
Feed for other wildlife	664,554	10,341	15	64
Nest boxes, bird houses, feeders, baths	789,918	16,481	23	48
Day packs, carrying cases, and special clothing	451,524	3,388	5	133
Other wildlife-watching equipment (such as field guides and maps)	111,582	3,755	5	30
Auxiliary equipment, total	1,033,060	4,848	7	213
Tents, tarps	243,670	2,336	3	104
Frame packs and backpacking equipment	140,371	1,138	2	123
Other camping equipment	368,281	2,298	3	160
Other auxiliary equipment (such as blinds)	280,739	801	1	350
Special equipment, total	12,271,266	1,914	3	6,411
Off-the-road vehicle	3,819,030	586	1	6,520
Travel or tent trailer, pickup, camper, van, motor home, house trailer, recreational vehicle (RV)	5,329,261	567	1	9,402
Boats, boat accessories	1,824,071	779	1	2,341
Cabins .....	...	...	...	...
Other	*851,940	*205	*(Z)	*4,154
Magazines, books	359,681	9,490	13	38
Land leasing and ownership	6,551,517	871	1	7,524
Membership dues and contributions	1,052,496	7,932	11	133
Plantings	1,642,061	6,543	9	251

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably. (Z) Less than 0.5 percent.

¹ Percent of wildlife-watching participants column is based on away-from-home participants for trip-related expenditures. For equipment and other expenditures the percent of wildlife-watching participants is based on total participants.² Information on trip-related expenditures was collected for away-from-home participants only. Equipment and other expenditures are based on information collected from both away-from-home and around-the-home participants.³ Boating costs include launching, mooring, storage, maintenance, insurance, pumpout fees, and fuel.

Note: Detail does not add to total because of multiple responses and nonresponse.

Table 45. Selected Characteristics of Participants in Wildlife-Watching Activities Away From Home: 2006

(Population 16 years old and older. Numbers in thousands)

Characteristic	U.S. population		Total wildlife-watching participants			Total away-from-home participants		
	Number	Percent	Number	Percent who participated	Percent	Number	Percent who participated	Percent
Total persons	229,245	100	71,132	31	100	22,977	10	100
Population Density of Residence								
Urban	176,740	77	46,641	26	66	15,483	9	67
Rural	52,504	23	24,491	47	34	7,494	14	33
Population Size of Residence								
Metropolitan statistical area (MSA)	190,425	83	55,477	29	78	17,892	9	78
1,000,000 or more	120,356	53	31,523	26	44	10,294	9	45
250,000 to 999,999	46,506	20	15,483	33	22	4,870	10	21
Less than 249,999	23,562	10	8,471	36	12	2,729	12	12
Outside MSA	38,820	17	15,655	40	22	5,085	13	22
Census Geographic Division								
New England	11,233	5	4,489	40	6	1,340	12	6
Middle Atlantic	31,518	14	8,723	28	12	2,729	9	12
East North Central	35,609	16	12,215	34	17	3,792	11	17
West North Central	15,458	7	6,741	44	9	2,163	14	9
South Atlantic	43,965	19	12,862	29	18	3,208	7	14
East South Central	13,722	6	4,931	36	7	1,758	13	8
West South Central	25,407	11	6,764	27	10	2,127	8	9
Mountain	15,651	7	4,968	32	7	2,004	13	9
Pacific	36,681	16	9,439	26	13	3,856	11	17
Age								
16 to 17 years	8,272	4	1,441	17	2	583	7	3
18 to 24 years	23,292	10	3,279	14	5	1,083	5	5
25 to 34 years	37,468	16	7,813	21	11	3,053	8	13
35 to 44 years	45,112	20	14,881	33	21	6,045	13	26
45 to 54 years	44,209	19	16,542	37	23	5,225	12	23
55 to 64 years	32,867	14	13,544	41	19	4,437	13	19
65 years and older	38,024	17	13,633	36	19	2,551	7	11
Sex								
Male, total	110,273	48	33,397	30	47	11,819	11	51
16 to 17 years	4,307	2	756	18	1	231	5	1
18 to 24 years	11,638	5	1,517	13	2	470	4	2
25 to 34 years	18,278	8	3,561	19	5	1,469	8	6
35 to 44 years	21,946	10	7,291	33	10	3,350	15	15
45 to 54 years	21,352	9	8,242	39	12	2,716	13	12
55 to 64 years	16,157	7	6,203	38	9	2,320	14	10
65 years and older	16,594	7	5,827	35	8	1,262	8	5
Female, total	118,972	52	37,735	32	53	11,159	9	49
16 to 17 years	3,965	2	684	17	1	352	9	2
18 to 24 years	11,655	5	1,762	15	2	613	5	3
25 to 34 years	19,189	8	4,252	22	6	1,584	8	7
35 to 44 years	23,166	10	7,590	33	11	2,695	12	12
45 to 54 years	22,857	10	8,300	36	12	2,509	11	11
55 to 64 years	16,710	7	7,341	44	10	2,117	13	9
65 years and older	21,430	9	7,806	36	11	1,289	6	6
Ethnicity								
Hispanic	29,218	13	4,055	14	6	1,422	5	6
Non-Hispanic	200,027	87	67,077	34	94	21,556	11	94
Race								
White	189,255	83	65,961	35	93	21,525	11	94
Black	25,925	11	2,630	10	4	686	3	3
Asian	10,104	4	1,276	13	2	414	4	2
All others	3,960	2	1,264	32	2	353	9	2
Annual Household Income								
Less than \$10,000	10,673	5	2,284	21	3	623	6	3
\$10,000 to \$19,999	15,373	7	3,820	25	5	919	6	4
\$20,000 to \$24,999	11,374	5	2,616	23	4	776	7	3
\$25,000 to \$29,999	10,524	5	3,233	31	5	881	8	4
\$30,000 to \$34,999	11,161	5	3,115	28	4	1,115	10	5
\$35,000 to \$39,999	10,349	5	3,430	33	5	1,030	10	4
\$40,000 to \$49,999	17,699	8	6,623	37	9	2,145	12	9
\$50,000 to \$74,999	33,434	15	13,345	40	19	4,716	14	21
\$75,000 to \$99,999	21,519	9	8,623	40	12	3,449	16	15
\$100,000 or more	29,159	13	12,433	43	17	4,620	16	20
Not reported	57,981	25	11,609	20	16	2,704	5	12
Education								
11 years or less	34,621	15	6,920	20	10	1,406	4	6
12 years	78,073	34	21,818	28	31	6,102	8	27
1 to 3 years college	53,019	23	18,022	34	25	6,155	12	27
4 years college	39,506	17	13,781	35	19	4,905	12	21
5 or more years college	24,025	10	10,591	44	15	4,409	18	19

See footnotes at end of table.

Table 45. Selected Characteristics of Participants in Wildlife-Watching Activities Away From Home: 2006—Continued

(Population 16 years old and older. Numbers in thousands)

Characteristic	Away-from-home participants								
	Observe			Photograph			Feed		
	Number	Percent who participated	Percent	Number	Percent who participated	Percent	Number	Percent who participated	Percent
Total persons	21,546	9	100	11,708	5	100	7,084	3	100
Population Density of Residence									
Urban	14,594	8	68	7,787	4	67	4,877	3	69
Rural	6,952	13	32	3,922	7	33	2,206	4	31
Population Size of Residence									
Metropolitan statistical area (MSA)	16,792	9	78	9,285	5	79	5,535	3	78
1,000,000 or more	9,632	8	45	5,498	5	47	3,401	3	48
250,000 to 999,999	4,596	10	21	2,497	5	21	1,334	3	19
Less than 249,999	2,563	11	12	1,290	5	11	800	3	11
Outside MSA	4,754	12	22	2,423	6	21	1,548	4	22
Census Geographic Division									
New England	1,245	11	6	677	6	6	327	3	5
Middle Atlantic	2,517	8	12	1,552	5	13	873	3	12
East North Central	3,637	10	17	1,830	5	16	1,267	4	18
West North Central	2,075	13	10	1,057	7	9	686	4	10
South Atlantic	2,936	7	14	1,627	4	14	1,250	3	18
East South Central	1,652	12	8	769	6	7	612	4	9
West South Central	1,915	8	9	961	4	8	919	4	13
Mountain	1,899	12	9	1,088	7	9	409	3	6
Pacific	3,669	10	17	2,147	6	18	739	2	10
Age									
16 to 17 years	524	6	2	*289	*3	*2	*125	*2	*2
18 to 24 years	955	4	4	554	2	5	346	1	5
25 to 34 years	2,725	7	13	1,512	4	13	871	2	12
35 to 44 years	5,787	13	27	3,043	7	26	2,092	5	30
45 to 54 years	4,802	11	22	2,793	6	24	1,479	3	21
55 to 64 years	4,291	13	20	2,361	7	20	1,321	4	19
65 years and older	2,462	6	11	1,156	3	10	848	2	12
Sex									
Male, total	10,983	10	51	5,795	5	49	3,348	3	47
16 to 17 years	*217	*5	*1	*97	*2	*1	...	...	...
18 to 24 years	420	4	2	*169	*1	*1	*159	*1	*2
25 to 34 years	1,300	7	6	760	4	6	339	2	5
35 to 44 years	3,172	14	15	1,582	7	14	986	4	14
45 to 54 years	2,449	11	11	1,367	6	12	761	4	11
55 to 64 years	2,212	14	10	1,183	7	10	565	3	8
65 years and older	1,214	7	6	637	4	5	491	3	7
Female, total	10,562	9	49	5,914	5	51	3,735	3	53
16 to 17 years	*307	*8	*1	*192	*5	*2	...	...	...
18 to 24 years	535	5	2	385	3	3	*187	*2	*3
25 to 34 years	1,425	7	7	752	4	6	533	3	8
35 to 44 years	2,614	11	12	1,461	6	12	1,106	5	16
45 to 54 years	2,354	10	11	1,426	6	12	719	3	10
55 to 64 years	2,079	12	10	1,179	7	10	756	5	11
65 years and older	1,248	6	6	519	2	4	358	2	5
Ethnicity									
Hispanic	1,252	4	6	775	3	7	503	2	7
Non-Hispanic	20,293	10	94	10,933	5	93	6,581	3	93
Race									
White	20,239	11	94	10,901	6	93	6,496	3	92
Black	622	2	3	366	1	3	*183	*1	*3
Asian	392	4	2	*213	*2	*2	*232	*2	*3
All others	293	7	1	228	6	2	*173	*4	*2
Annual Household Income									
Less than \$10,000	611	6	3	*235	*2	*2	*214	*2	*3
\$10,000 to \$19,999	835	5	4	373	2	3	303	2	4
\$20,000 to \$24,999	719	6	3	373	3	3	357	3	5
\$25,000 to \$29,999	805	8	4	421	4	4	265	3	4
\$30,000 to \$34,999	1,011	9	5	586	5	5	525	5	7
\$35,000 to \$39,999	995	10	5	476	5	4	359	3	5
\$40,000 to \$49,999	1,946	11	9	1,066	6	9	669	4	9
\$50,000 to \$74,999	4,414	13	20	2,277	7	19	1,288	4	18
\$75,000 to \$99,999	3,296	15	15	1,804	8	15	1,176	5	17
\$100,000 or more	4,318	15	20	2,803	10	24	1,064	4	15
Not reported	2,596	4	12	1,295	2	11	863	1	12
Education									
11 years or less	1,266	4	6	669	2	6	499	1	7
12 years	5,581	7	26	2,651	3	23	2,057	3	29
1 to 3 years college	5,808	11	27	3,236	6	28	2,084	4	29
4 years college	4,667	12	22	2,574	7	22	1,297	3	18
5 or more years college	4,224	18	20	2,579	11	22	1,147	5	16

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

Note: Detail does not add to total because of multiple responses. Percent who participated columns show the percent of each row's population who participated in the activity named by the column. Percent columns show the percent of each column's participants who are described by the row heading.

Table 46. Selected Characteristics of Participants in Wildlife-Watching Activities Around the Home: 2006

(Population 16 years old and older. Numbers in thousands)

Characteristic	U.S. population		Total wildlife-watching participants			Total around-the-home participants		
	Number	Percent	Number	Percent who participated	Percent	Number	Percent who participated	Percent
Total persons	229,245	100	71,132	31	100	67,756	30	100
Population Density of Residence								
Urban	176,740	77	46,641	26	66	44,064	25	65
Rural	52,504	23	24,491	47	34	23,692	45	35
Population Size of Residence								
Metropolitan statistical area (MSA)	190,425	83	55,477	29	78	52,820	28	78
1,000,000 or more	120,356	53	31,523	26	44	30,000	25	44
250,000 to 999,999	46,506	20	15,483	33	22	14,763	32	22
Less than 249,999	23,562	10	8,471	36	12	8,057	34	12
Outside MSA	38,820	17	15,655	40	22	14,936	38	22
Census Geographic Division								
New England	11,233	5	4,489	40	6	4,310	38	6
Middle Atlantic	31,518	14	8,723	28	12	8,451	27	12
East North Central	35,609	16	12,215	34	17	11,845	33	17
West North Central	15,458	7	6,741	44	9	6,447	42	10
South Atlantic	43,965	19	12,862	29	18	12,432	28	18
East South Central	13,722	6	4,931	36	7	4,683	34	7
West South Central	25,407	11	6,764	27	10	6,319	25	9
Mountain	15,651	7	4,968	32	7	4,605	29	7
Pacific	36,681	16	9,439	26	13	8,664	24	13
Age								
16 to 17 years	8,272	4	1,441	17	2	1,285	16	2
18 to 24 years	23,292	10	3,279	14	5	2,969	13	4
25 to 34 years	37,468	16	7,813	21	11	7,149	19	11
35 to 44 years	45,112	20	14,881	33	21	13,800	31	20
45 to 54 years	44,209	19	16,542	37	23	16,051	36	24
55 to 64 years	32,867	14	13,544	41	19	13,042	40	19
65 years and older	38,024	17	13,633	36	19	13,460	35	20
Sex								
Male, total	110,273	48	33,397	30	47	31,456	29	46
16 to 17 years	4,307	2	756	18	1	692	16	1
18 to 24 years	11,638	5	1,517	13	2	1,369	12	2
25 to 34 years	18,278	8	3,561	19	5	3,258	18	5
35 to 44 years	21,946	10	7,291	33	10	6,632	30	10
45 to 54 years	21,352	9	8,242	39	12	7,947	37	12
55 to 64 years	16,157	7	6,203	38	9	5,816	36	9
65 years and older	16,594	7	5,827	35	8	5,742	35	8
Female, total	118,972	52	37,735	32	53	36,300	31	54
16 to 17 years	3,965	2	684	17	1	593	15	1
18 to 24 years	11,655	5	1,762	15	2	1,600	14	2
25 to 34 years	19,189	8	4,252	22	6	3,891	20	6
35 to 44 years	23,166	10	7,590	33	11	7,169	31	11
45 to 54 years	22,857	10	8,300	36	12	8,104	35	12
55 to 64 years	16,710	7	7,341	44	10	7,226	43	11
65 years and older	21,430	9	7,806	36	11	7,718	36	11
Ethnicity								
Hispanic	29,218	13	4,055	14	6	3,604	12	5
Non-Hispanic	200,027	87	67,077	34	94	64,152	32	95
Race								
White	189,255	83	65,961	35	93	62,872	33	93
Black	25,925	11	2,630	10	4	2,482	10	4
Asian	10,104	4	1,276	13	2	1,259	12	2
All others	3,960	2	1,264	32	2	1,144	29	2
Annual Household Income								
Less than \$10,000	10,673	5	2,284	21	3	2,218	21	3
\$10,000 to \$19,999	15,373	7	3,820	25	5	3,724	24	5
\$20,000 to \$24,999	11,374	5	2,616	23	4	2,538	22	4
\$25,000 to \$29,999	10,524	5	3,233	31	5	3,107	30	5
\$30,000 to \$34,999	11,161	5	3,115	28	4	2,893	26	4
\$35,000 to \$39,999	10,349	5	3,430	33	5	3,189	31	5
\$40,000 to \$49,999	17,699	8	6,623	37	9	6,415	36	9
\$50,000 to \$74,999	33,434	15	13,345	40	19	12,599	38	19
\$75,000 to \$99,999	21,519	9	8,623	40	12	7,996	37	12
\$100,000 or more	29,159	13	12,433	43	17	11,757	40	17
Not reported	57,981	25	11,609	20	16	11,322	20	17
Education								
11 years or less	34,621	15	6,920	20	10	6,621	19	10
12 years	78,073	34	21,818	28	31	20,876	27	31
1 to 3 years college	53,019	23	18,022	34	25	17,018	32	25
4 years college	39,506	17	13,781	35	19	13,246	34	20
5 or more years college	24,025	10	10,591	44	15	9,995	42	15

See footnotes at end of table.

Table 46. Selected Characteristics of Participants in Wildlife-Watching Activities Around the Home: 2006—Continued

(Population 16 years old and older. Numbers in thousands)

Characteristic	Around-the-home participants								
	Observe			Photograph			Feed wild birds		
	Number	Percent who participated	Percent	Number	Percent who participated	Percent	Number	Percent who participated	Percent
Total persons	44,467	19	100	18,763	8	100	53,350	23	100
Population Density of Residence									
Urban	28,296	16	64	11,622	7	62	33,540	19	63
Rural	16,171	31	36	7,141	14	38	19,810	38	37
Population Size of Residence									
Metropolitan statistical area (MSA)	34,307	18	77	14,639	8	78	40,866	21	77
1,000,000 or more	18,989	16	43	8,688	7	46	22,590	19	42
250,000 to 999,999	9,743	21	22	3,909	8	21	11,606	25	22
Less than 249,999	5,575	24	13	2,041	9	11	6,670	28	13
Outside MSA	10,159	26	23	4,125	11	22	12,484	32	23
Census Geographic Division									
New England	3,080	27	7	1,275	11	7	3,337	30	6
Middle Atlantic	5,375	17	12	2,127	7	11	6,668	21	12
East North Central	7,459	21	17	3,380	9	18	9,631	27	18
West North Central	4,472	29	10	1,597	10	9	5,190	34	10
South Atlantic	7,854	18	18	3,402	8	18	10,100	23	19
East South Central	3,225	23	7	1,074	8	6	3,956	29	7
West South Central	3,995	16	9	2,041	8	11	5,387	21	10
Mountain	3,093	20	7	1,312	8	7	3,096	20	6
Pacific	5,915	16	13	2,554	7	14	5,986	16	11
Age									
16 to 17 years	682	8	2	443	5	2	844	10	2
18 to 24 years	1,655	7	4	739	3	4	2,104	9	4
25 to 34 years	4,300	11	10	2,236	6	12	4,938	13	9
35 to 44 years	9,019	20	20	4,512	10	24	10,337	23	19
45 to 54 years	10,600	24	24	4,905	11	26	12,771	29	24
55 to 64 years	9,230	28	21	3,548	11	19	10,769	33	20
65 years and older	8,982	24	20	2,381	6	13	11,587	30	22
Sex									
Male, total	20,272	18	46	9,033	8	48	24,001	22	45
16 to 17 years	291	7	1	*230	*5	*1	456	11	1
18 to 24 years	758	7	2	406	3	2	1,009	9	2
25 to 34 years	2,022	11	5	1,018	6	5	2,087	11	4
35 to 44 years	4,333	20	10	2,185	10	12	4,892	22	9
45 to 54 years	5,093	24	11	2,479	12	13	5,998	28	11
55 to 64 years	4,027	25	9	1,539	10	8	4,686	29	9
65 years and older	3,747	23	8	1,176	7	6	4,873	29	9
Female, total	24,195	20	54	9,731	8	52	29,350	25	55
16 to 17 years	390	10	1	*212	*5	*1	388	10	1
18 to 24 years	897	8	2	333	3	2	1,095	9	2
25 to 34 years	2,278	12	5	1,219	6	6	2,851	15	5
35 to 44 years	4,686	20	11	2,327	10	12	5,445	24	10
45 to 54 years	5,506	24	12	2,425	11	13	6,773	30	13
55 to 64 years	5,202	31	12	2,009	12	11	6,083	36	11
65 years and older	5,235	24	12	1,206	6	6	6,714	31	13
Ethnicity									
Hispanic	2,042	7	5	708	2	4	2,459	8	5
Non-Hispanic	42,425	21	95	18,055	9	96	50,891	25	95
Race									
White	41,544	22	93	17,560	9	94	49,559	26	93
Black	1,511	6	3	546	2	3	1,931	7	4
Asian	662	7	1	402	4	2	953	9	2
All others	749	19	2	255	6	1	907	23	2
Annual Household Income									
Less than \$10,000	1,397	13	3	391	4	2	1,791	17	3
\$10,000 to \$19,999	2,192	14	5	705	5	4	3,135	20	6
\$20,000 to \$24,999	1,644	14	4	437	4	2	2,168	19	4
\$25,000 to \$29,999	1,832	17	4	778	7	4	2,368	22	4
\$30,000 to \$34,999	2,058	18	5	659	6	4	2,235	20	4
\$35,000 to \$39,999	2,106	20	5	714	7	4	2,475	24	5
\$40,000 to \$49,999	4,023	23	9	1,643	9	9	5,062	29	9
\$50,000 to \$74,999	8,349	25	19	3,961	12	21	10,264	31	19
\$75,000 to \$99,999	5,192	24	12	2,606	12	14	6,327	29	12
\$100,000 or more	8,133	28	18	4,078	14	22	8,758	30	16
Not reported	7,540	13	17	2,793	5	15	8,767	15	16
Education									
11 years or less	4,015	12	9	1,057	3	6	5,246	15	10
12 years	12,827	16	29	4,986	6	27	17,099	22	32
1 to 3 years college	11,316	21	25	5,092	10	27	13,556	26	25
4 years college	9,046	23	20	4,250	11	23	9,915	25	19
5 or more years college	7,262	30	16	3,378	14	18	7,534	31	14

* Estimate based on a sample size of 10–29.

Note: Detail does not add to total because of multiple responses and nonresponse. Percent who participated columns show the percent of each row's population who participated in the activity named by the column. Percent columns show the percent of each column's participants who are described by the row heading.

Table 47. Land Owned or Leased for the Primary Purpose of Wildlife Watching: 2006

(Population 16 years of age or older. Numbers in thousands)

Wildlife watching	Number	Average per person
Land Ownership for Wildlife Watching		
Participants owning land	1,121	(X)
Acres owned	38,276	34
Expenditures for owned land	\$6,235,351	\$5,562
Land Leasing for Wildlife Watching		
Participants leasing land	*192	(X)
Acres leased	*11,878	*62
Expenditures for leased land	*\$316,166	*\$1,646

* Estimate based on a sample size of 10–29. (X) Not applicable.

Note: Detail does not add to total because of multiple responses and nonresponse.

Table 48. Participation of Wildlife-Watching Participants in Fishing and Hunting: 2006

(Population 16 years old and older. Numbers in thousands)

Type of fishing and hunting	Total		Away from home		Around the home	
	Number	Percent	Number	Percent	Number	Percent
Total participants	71,132	100	22,977	100	67,756	100
Nonsportspersons	53,496	75	14,386	63	52,395	77
Sportspersons	17,636	25	8,591	37	15,361	23
Anglers	15,621	22	7,596	33	13,657	20
Hunters	7,149	10	3,705	16	6,195	9

Note: Detail does not add to total because of multiple responses and nonresponse.

Table 49. Participation of Sportspersons in Wildlife-Watching Activities: 2006

(Population 16 years old and older. Numbers in thousands)

Wildlife-watching activity	Sportspersons		Anglers		Hunters	
	Number	Percent	Number	Percent	Number	Percent
Total sportspersons	33,916	100	29,952	100	12,510	100
Sportspersons who:						
Did not engage in wildlife-watching activities . .	16,280	48	14,332	48	5,361	43
Engaged in wildlife-watching activities	17,636	52	15,621	52	7,149	57
Away from home	8,591	25	7,596	25	3,705	30
Around the home	15,361	45	13,657	46	6,195	50

Note: Detail does not add to total because of multiple responses and nonresponse.

Table 50. Participation in Wildlife-Associated Recreation by State Residents Inside and Outside Their Resident State: 2006

(Population 16 years old and older. Numbers in thousands)

Participant's state of residence	Population	Total participants		Sportspersons		Wildlife-watching participants	
		Number	Percent of population	Number	Percent of population	Number	Percent of population
United States, total	229,245	87,465	38	33,916	15	71,132	31
Alabama	3,550	1,417	40	707	20	1,006	28
Alaska	499	288	58	149	30	207	42
Arizona	4,585	1,233	27	418	9	988	22
Arkansas	2,156	1,082	50	551	26	859	40
California	27,299	6,804	25	1,783	7	5,799	21
Colorado	3,605	1,735	48	593	16	1,459	40
Connecticut	2,735	1,223	45	297	11	1,102	40
Delaware	669	256	38	85	13	212	32
Florida	14,233	4,626	33	2,004	14	3,520	25
Georgia	6,910	2,415	35	1,161	17	1,819	26
Hawaii	1,014	227	22	100	10	160	16
Idaho	1,102	564	51	259	24	432	39
Illinois	9,767	2,886	30	1,109	11	2,355	24
Indiana	4,799	2,279	47	822	17	1,825	38
Iowa	2,339	1,306	56	518	22	1,111	48
Kansas	2,110	979	46	425	20	787	37
Kentucky	3,260	1,667	51	670	21	1,341	41
Louisiana	3,433	1,106	32	678	20	712	21
Maine	1,074	717	67	266	25	600	56
Maryland	4,333	1,549	36	521	12	1,334	31
Massachusetts	5,032	1,931	38	472	9	1,725	34
Michigan	7,804	3,651	47	1,371	18	2,947	38
Minnesota	4,021	2,480	62	1,280	32	1,946	48
Mississippi	2,214	896	40	537	24	618	28
Missouri	4,521	2,496	55	1,096	24	2,059	46
Montana	753	510	68	232	31	412	55
Nebraska	1,359	552	41	234	17	438	32
Nevada	1,895	530	28	182	10	420	22
New Hampshire	1,044	527	51	141	14	471	45
New Jersey	6,734	1,826	27	562	8	1,537	23
New Mexico	1,500	601	40	224	15	490	33
New York	14,990	4,103	27	1,236	8	3,548	24
North Carolina	6,719	2,816	42	1,038	15	2,267	34
North Dakota	507	232	46	145	29	134	26
Ohio	8,889	4,022	45	1,488	17	3,379	38
Oklahoma	2,743	1,372	50	602	22	1,082	39
Oregon	2,889	1,531	53	550	19	1,266	44
Pennsylvania	9,793	4,165	43	1,415	14	3,638	37
Rhode Island	842	355	42	86	10	312	37
South Carolina	3,315	1,283	39	595	18	943	28
South Dakota	601	327	54	136	23	266	44
Tennessee	4,699	2,287	49	775	16	1,966	42
Texas	17,076	5,481	32	2,668	16	4,111	24
Utah	1,808	764	42	351	19	574	32
Vermont	506	311	62	91	18	279	55
Virginia	5,893	2,500	42	857	15	2,126	36
Washington	4,980	2,315	46	764	15	2,007	40
West Virginia	1,458	735	50	364	25	585	40
Wisconsin	4,350	2,217	51	1,185	27	1,710	39
Wyoming	405	229	57	113	28	194	48

Note: Detail does not add to total because of multiple responses. U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 51. Participation in Wildlife-Associated Recreation in Each State by Both Residents and Nonresidents of the State: 2006

(Population 16 years old and older. Numbers in thousands)

State where activity took place	Total participants		Sportspersons		Wildlife-watching participants	
	Number	Percent	Number	Percent	Number	Percent
United States, total	87,465	100	33,916	39	71,132	81
Alabama	1,719	100	962	56	1,161	68
Alaska	691	100	315	46	496	72
Arizona	1,546	100	493	32	1,277	83
Arkansas	1,419	100	790	56	1,011	71
California	7,385	100	1,814	25	6,270	85
Colorado	2,234	100	813	36	1,819	81
Connecticut	1,332	100	309	23	1,170	88
Delaware	395	100	189	48	285	72
Florida	5,886	100	2,815	48	4,240	72
Georgia	2,773	100	1,308	47	1,987	72
Hawaii	366	100	162	44	262	72
Idaho	1,005	100	440	44	754	75
Illinois	3,126	100	1,004	32	2,566	82
Indiana	2,610	100	886	34	2,042	78
Iowa	1,455	100	552	38	1,205	83
Kansas	1,107	100	544	49	816	74
Kentucky	1,906	100	820	43	1,475	77
Louisiana	1,221	100	769	63	738	60
Maine	1,007	100	411	41	801	80
Maryland	1,867	100	707	38	1,491	80
Massachusetts	2,205	100	532	24	1,919	87
Michigan	4,217	100	1,685	40	3,227	77
Minnesota	2,970	100	1,571	53	2,093	70
Mississippi	1,138	100	656	58	731	64
Missouri	2,876	100	1,300	45	2,248	78
Montana	950	100	378	40	755	79
Nebraska	650	100	259	40	490	75
Nevada	788	100	177	22	686	87
New Hampshire	839	100	258	31	710	85
New Jersey	2,100	100	696	33	1,713	82
New Mexico	947	100	316	33	787	83
New York	4,595	100	1,428	31	3,852	84
North Carolina	3,412	100	1,361	40	2,641	77
North Dakota	279	100	190	68	148	53
Ohio	4,247	100	1,488	35	3,489	82
Oklahoma	1,472	100	684	46	1,110	75
Oregon	1,837	100	661	36	1,484	81
Pennsylvania	4,663	100	1,520	33	3,947	85
Rhode Island	527	100	163	31	436	83
South Carolina	1,653	100	893	54	1,115	67
South Dakota	572	100	251	44	432	75
Tennessee	2,824	100	969	34	2,362	84
Texas	6,029	100	2,940	49	4,225	70
Utah	1,132	100	437	39	877	77
Vermont	545	100	150	27	468	86
Virginia	2,866	100	1,045	36	2,312	81
Washington	2,739	100	818	30	2,331	85
West Virginia	994	100	488	49	743	75
Wisconsin	2,913	100	1,582	54	2,039	70
Wyoming	762	100	264	35	643	84

Note: Detail does not add to total because of multiple responses. U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 52. Expenditures for Wildlife-Related Recreation by State Where Spending Took Place: 2006

(Population 16 years old and older. Expenditures in thousands of dollars)

State where spending took place	Total, wildlife-associated expenditures				Fishing and hunting expenditures			
	Total	Trip-related	Equipment	Other	Total	Trip-related	Equipment	Other
United States, total	122,274,524	37,432,326	64,137,178	20,705,020	76,619,564	24,557,174	40,963,125	11,099,265
Alabama	2,188,366	808,343	1,149,125	230,899	1,738,363	656,678	890,573	191,111
Alaska	1,255,021	922,526	270,541	61,954	673,969	410,924	233,737	29,308
Arizona	2,275,589	714,360	1,367,277	193,951	1,437,282	338,103	1,077,982	21,197
Arkansas	2,093,535	569,231	1,089,988	434,316	1,486,462	454,352	775,713	256,397
California	7,975,145	3,431,669	4,055,460	488,016	3,795,562	1,434,117	2,123,820	237,625
Colorado	2,972,516	1,126,076	1,722,970	123,470	1,584,779	588,649	905,502	90,628
Connecticut	873,137	189,759	596,284	87,095	363,187	136,733	201,185	25,269
Delaware	309,034	85,358	203,737	19,940	178,202	72,230	93,523	12,449
Florida	8,115,284	3,017,044	4,189,608	908,633	5,033,788	2,129,102	2,459,456	445,231
Georgia	3,542,304	754,626	2,139,230	648,448	1,926,988	607,904	893,170	425,913
Hawaii	373,778	268,563	98,427	6,787	163,363	83,464	77,922	1,977
Idaho	921,985	467,679	385,120	69,186	656,601	274,211	322,363	60,027
Illinois	2,393,450	616,175	1,461,258	316,017	1,259,594	410,199	680,337	169,058
Indiana	2,200,587	451,791	1,501,804	246,992	1,266,667	308,177	830,209	128,282
Iowa	1,033,723	305,785	595,413	132,525	715,716	251,373	396,223	68,120
Kansas	838,316	301,936	478,352	58,028	682,131	249,158	388,057	44,916
Kentucky	1,870,689	437,134	1,226,197	207,358	1,328,630	321,021	852,162	155,446
Louisiana	2,023,585	604,540	989,792	429,252	1,711,155	542,718	801,384	367,053
Maine	1,499,097	355,461	951,465	192,172	633,454	176,998	358,414	98,041
Maryland	1,582,291	425,438	1,049,273	107,580	946,077	354,981	523,264	67,832
Massachusetts	1,614,739	482,766	930,257	201,716	859,776	333,987	436,249	89,539
Michigan	5,134,320	1,185,544	2,783,944	1,164,833	3,511,799	846,356	2,003,686	661,757
Minnesota	4,298,979	1,297,727	2,182,729	818,522	3,600,090	1,026,234	1,811,891	761,964
Mississippi	1,071,563	323,568	491,271	256,724	895,717	254,981	404,718	236,018
Missouri	3,376,385	912,363	1,685,842	778,180	2,507,310	692,431	1,275,031	539,848
Montana	1,129,300	585,233	471,741	72,326	752,849	282,608	417,110	53,131
Nebraska	639,982	129,760	412,621	97,601	498,071	107,019	304,273	86,780
Nevada	916,183	259,899	529,124	127,159	553,954	100,964	419,308	33,682
New Hampshire	559,942	222,382	224,050	113,510	286,023	106,246	148,584	31,193
New Jersey	1,663,140	690,158	804,007	168,975	1,125,691	543,858	538,907	42,926
New Mexico	822,115	429,743	282,632	109,741	524,941	221,465	200,679	102,797
New York	3,526,906	1,481,998	1,553,726	491,181	1,959,277	786,275	918,420	254,582
North Carolina	2,711,328	1,029,862	1,449,506	231,959	1,794,425	782,956	860,848	150,621
North Dakota	269,150	116,473	137,318	15,359	246,238	111,521	120,339	14,377
Ohio	3,157,972	914,655	1,859,639	383,678	1,970,269	707,402	1,121,338	141,529
Oklahoma	1,424,671	571,611	768,708	84,352	1,096,011	436,744	591,140	68,127
Oregon	1,995,580	637,590	1,213,970	144,020	1,219,166	375,165	771,151	72,850
Pennsylvania	5,402,046	897,758	3,912,745	591,543	3,959,365	572,767	2,983,892	402,705
Rhode Island	381,086	180,041	126,323	74,722	166,840	82,634	77,439	6,767
South Carolina	2,455,112	843,694	1,324,978	286,441	1,904,335	647,890	1,043,543	212,902
South Dakota	549,769	305,618	166,547	77,604	366,466	175,688	119,571	71,207
Tennessee	2,329,427	727,111	1,314,601	287,716	1,337,066	399,871	881,063	56,132
Texas	9,924,444	2,862,119	5,452,013	1,610,312	6,985,426	2,437,922	3,671,841	875,662
Utah	1,288,534	577,456	658,473	52,605	724,091	255,433	431,781	36,877
Vermont	383,376	119,682	206,143	57,551	260,504	61,463	175,682	23,358
Virginia	2,353,483	768,146	1,412,796	172,540	1,393,293	520,125	785,935	87,233
Washington	3,055,034	870,765	1,599,076	585,192	1,552,723	429,113	1,004,370	119,240
West Virginia	1,743,089	369,037	435,423	938,629	1,501,488	232,902	358,355	910,231
Wisconsin	3,918,727	1,282,746	1,433,705	1,202,276	3,174,037	1,022,580	1,148,520	1,002,937
Wyoming	1,078,978	473,584	231,797	373,598	684,109	173,595	167,057	343,457

See footnotes at end of table.

Table 52. Expenditures for Wildlife-Related Recreation by State Where Spending Took Place: 2006—Continued

(Population 16 years old and older. Expenditures in thousands of dollars)

State where spending took place	Wildlife-watching expenditures			
	Total	Trip-related	Equipment	Other
United States, total	45,654,960	12,875,152	23,174,053	9,605,755
Alabama	450,004	151,665	258,551	39,788
Alaska	581,051	511,602	36,803	32,646
Arizona	838,307	376,256	289,296	172,754
Arkansas	607,073	114,879	314,275	177,919
California	4,179,583	1,997,551	1,931,640	250,391
Colorado	1,387,737	537,427	817,468	32,842
Connecticut	509,950	53,025	395,098	61,826
Delaware	130,832	13,128	110,214	7,490
Florida	3,081,496	887,942	1,730,152	463,402
Georgia	1,615,316	146,722	1,246,059	222,534
Hawaii	210,414	185,100	20,505	4,810
Idaho	265,383	193,468	62,756	9,159
Illinois	1,133,856	205,976	780,921	146,959
Indiana	933,920	143,615	671,595	118,710
Iowa	318,006	54,411	199,190	64,405
Kansas	156,185	52,778	90,294	13,113
Kentucky	542,059	116,113	374,034	51,912
Louisiana	312,430	61,822	188,409	62,199
Maine	865,643	178,462	593,051	94,130
Maryland	636,214	70,457	526,010	39,748
Massachusetts	754,963	148,779	494,008	112,177
Michigan	1,622,521	339,188	780,258	503,076
Minnesota	698,889	271,493	370,838	56,558
Mississippi	175,846	68,587	86,553	20,706
Missouri	869,075	219,932	410,810	238,332
Montana	376,451	302,625	54,631	19,195
Nebraska	141,910	22,741	108,348	10,821
Nevada	362,229	158,935	109,816	93,478
New Hampshire	273,920	116,136	75,466	82,318
New Jersey	537,449	146,300	265,100	126,049
New Mexico	297,174	208,278	81,952	6,944
New York	1,567,629	695,724	635,306	236,599
North Carolina	916,903	246,906	588,658	81,338
North Dakota	22,913	4,952	16,979	981
Ohio	1,187,703	207,253	738,301	242,149
Oklahoma	328,660	134,868	177,568	16,225
Oregon	776,414	262,425	442,818	71,170
Pennsylvania	1,442,681	324,990	928,853	188,838
Rhode Island	214,247	97,407	48,884	67,955
South Carolina	550,777	195,804	281,434	73,539
South Dakota	183,304	129,930	46,977	6,397
Tennessee	992,362	327,240	433,538	231,585
Texas	2,939,018	424,197	1,780,171	734,650
Utah	564,443	322,023	226,692	15,728
Vermont	122,872	58,219	30,461	34,192
Virginia	960,190	248,021	626,861	85,307
Washington	1,502,311	441,652	594,706	465,953
West Virginia	241,601	136,136	77,068	28,397
Wisconsin	744,689	260,166	285,185	199,339
Wyoming	394,869	299,988	64,740	30,140

Note: U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 53. Expenditures for Wildlife-Related Recreation in the United States by State Residents Both Inside and Outside Their Resident State: 2006

(Population 16 years old and older. Expenditures in thousands of dollars)

Participant's state of residence	Total, wildlife-associated expenditures				Fishing and hunting expenditures			
	Total	Trip-related	Equipment	Other	Total	Trip-related	Equipment	Other
United States, total. . . .	122,274,524	37,432,326	64,137,178	20,705,020	76,619,564	24,557,174	40,963,125	11,099,265
Alabama	2,255,226	772,709	1,235,088	247,428	1,761,377	574,577	978,331	208,468
Alaska	540,041	189,194	283,616	67,231	378,136	123,618	234,027	20,492
Arizona	1,540,698	641,998	688,826	209,873	751,401	340,002	386,602	24,797
Arkansas	1,859,935	489,260	1,017,376	353,300	1,409,243	419,162	708,673	281,409
California	8,579,974	3,936,108	4,043,232	600,633	4,205,307	1,709,474	2,159,640	336,193
Colorado	3,060,175	732,853	2,237,327	89,996	1,906,666	428,910	1,419,958	57,798
Connecticut	1,322,903	470,021	709,848	143,034	593,185	229,313	289,015	74,856
Delaware	349,988	80,392	245,131	24,466	232,026	67,901	147,619	16,506
Florida	8,112,073	2,269,467	5,088,990	753,616	4,873,738	1,813,946	2,793,699	266,093
Georgia	3,299,332	938,235	1,810,276	550,821	1,770,640	648,315	785,999	336,326
Hawaii	204,819	88,963	105,457	10,399	150,183	58,958	86,009	5,216
Idaho	712,613	291,841	394,010	26,763	574,757	204,490	347,687	22,580
Illinois	3,215,834	1,243,245	1,545,352	427,237	1,849,948	811,769	758,090	280,089
Indiana	2,503,372	632,387	1,511,393	359,593	1,386,090	397,631	854,455	134,005
Iowa	1,163,782	412,287	611,904	139,591	766,110	307,745	382,914	75,451
Kansas	968,297	342,207	526,232	99,857	732,552	250,370	397,050	85,132
Kentucky	2,214,149	568,398	1,398,295	247,456	1,511,349	404,563	896,015	210,771
Louisiana	2,023,533	681,610	982,745	359,178	1,602,652	563,293	742,381	296,979
Maine	1,294,577	210,134	939,026	145,417	509,721	104,794	330,541	74,387
Maryland	1,776,327	461,259	1,078,999	236,068	1,049,552	357,994	500,367	191,191
Massachusetts	2,104,733	750,211	1,071,689	282,833	1,219,207	500,231	559,117	159,859
Michigan	5,217,263	1,257,235	2,717,390	1,242,638	3,426,954	734,358	1,937,535	755,061
Minnesota	4,449,646	1,461,945	2,415,208	572,493	3,562,321	1,003,011	2,043,213	516,097
Mississippi	1,066,440	305,415	518,683	242,343	862,477	227,648	414,384	220,445
Missouri	3,295,807	1,046,714	1,638,191	610,903	2,319,214	681,454	1,263,739	374,021
Montana	706,261	197,835	456,323	52,103	575,137	140,374	401,804	32,959
Nebraska	650,718	185,410	357,208	108,100	481,102	129,617	254,246	97,239
Nevada	1,211,480	269,099	701,029	241,352	747,551	161,046	437,208	149,296
New Hampshire	423,652	137,114	195,939	90,600	240,420	75,850	140,439	24,131
New Jersey	2,228,739	804,376	848,027	576,336	1,579,731	609,125	598,493	372,113
New Mexico	620,544	250,443	313,245	56,856	442,930	168,583	224,982	49,366
New York	3,573,499	1,716,521	1,416,605	440,373	1,980,373	829,483	924,444	226,446
North Carolina	2,978,628	968,663	1,853,454	156,511	1,968,476	643,695	1,237,884	86,897
North Dakota	242,194	90,275	129,784	22,136	214,095	81,985	111,012	21,099
Ohio	3,283,714	1,232,008	1,682,263	369,442	2,048,073	866,372	1,055,519	126,182
Oklahoma	1,555,383	733,541	737,371	84,470	1,066,297	441,877	556,996	67,424
Oregon	1,780,370	548,422	1,067,345	164,603	1,092,075	371,058	644,947	76,070
Pennsylvania	5,834,627	1,329,195	3,905,972	599,461	4,126,388	741,389	2,978,949	406,051
Rhode Island	317,522	104,760	135,065	77,697	145,186	60,360	77,258	7,567
South Carolina	1,979,808	678,069	1,030,559	271,180	1,577,952	510,605	865,819	201,527
South Dakota	372,940	118,874	185,715	68,352	274,717	72,105	140,709	61,903
Tennessee	2,131,393	721,629	1,027,766	381,998	1,315,528	479,122	690,289	146,116
Texas	10,148,819	3,328,265	5,285,011	1,535,543	6,687,542	2,405,596	3,480,541	801,406
Utah	1,029,777	400,054	527,986	101,737	837,788	283,653	457,760	96,375
Vermont	243,048	81,443	112,006	49,598	151,374	55,755	73,812	21,808
Virginia	2,924,299	726,811	1,194,427	1,003,061	2,178,463	571,819	685,043	921,601
Washington	3,207,376	792,578	1,794,271	620,527	1,772,537	477,898	1,162,017	132,622
West Virginia	904,338	339,516	415,640	149,183	717,308	256,041	341,988	119,280
Wisconsin	3,342,135	1,034,065	1,289,386	1,018,684	2,697,864	845,439	1,011,982	840,443
Wyoming	705,660	142,014	253,757	309,889	567,607	87,542	185,844	294,221

See footnotes at end of table.

Table 53. Expenditures for Wildlife-Related Recreation in the United States by State Residents Both Inside and Outside Their Resident State: 2006—Continued

(Population 16 years old and older. Expenditures in thousands of dollars)

Participant's state of residence	Wildlife-watching expenditures			
	Total	Trip-related	Equipment	Other
United States, total. . . .	45,654,960	12,875,152	23,174,053	9,605,755
Alabama	493,849	198,132	256,757	*38,960
Alaska	161,904	65,576	49,589	46,739
Arizona	789,297	301,997	302,224	185,076
Arkansas	450,692	70,098	308,703	*71,891
California	4,374,667	2,226,634	1,883,592	264,441
Colorado	1,153,510	303,943	817,369	32,198
Connecticut	729,718	240,708	420,832	68,177
Delaware	117,962	12,490	97,511	7,960
Florida	3,238,334	455,521	2,295,291	487,522
Georgia	1,528,691	289,920	1,024,277	214,495
Hawaii	54,636	30,005	19,448	5,183
Idaho	137,856	87,351	46,323	*4,183
Illinois	1,365,886	431,477	787,262	147,148
Indiana	1,117,282	234,756	656,938	225,588
Iowa	397,672	104,542	228,990	64,140
Kansas	235,745	91,838	129,182	14,725
Kentucky	702,800	163,835	502,280	36,685
Louisiana	420,881	118,317	240,365	62,199
Maine	784,855	105,340	608,486	71,030
Maryland	726,774	103,265	578,632	44,877
Massachusetts	885,526	249,979	512,572	122,975
Michigan	1,790,310	522,877	779,856	487,577
Minnesota	887,325	458,934	371,995	56,396
Mississippi	203,964	77,767	104,299	*21,898
Missouri	976,593	365,259	374,452	236,882
Montana	131,125	57,461	54,520	19,144
Nebraska	169,616	55,793	102,961	10,861
Nevada	463,929	108,053	263,821	92,056
New Hampshire	183,232	61,263	55,500	66,469
New Jersey	649,008	195,252	249,533	204,222
New Mexico	177,613	81,860	88,263	7,490
New York	1,593,127	887,039	492,160	213,928
North Carolina	1,010,152	324,968	615,570	69,614
North Dakota	28,099	8,290	18,772	*1,037
Ohio	1,235,640	365,635	626,744	243,261
Oklahoma	489,086	291,664	180,375	17,047
Oregon	688,295	177,364	422,399	88,532
Pennsylvania	1,708,239	587,806	927,023	193,410
Rhode Island	172,336	44,400	57,806	70,130
South Carolina	401,857	167,464	164,740	69,653
South Dakota	98,224	46,769	45,006	6,449
Tennessee	815,865	242,507	337,477	235,882
Texas	3,461,277	922,669	1,804,471	734,137
Utah	191,989	116,401	70,227	5,361
Vermont	91,674	25,689	38,195	27,790
Virginia	745,837	154,992	509,385	81,460
Washington	1,434,839	314,680	632,254	487,905
West Virginia	187,030	83,475	73,652	*29,903
Wisconsin	644,271	188,626	277,404	178,241
Wyoming	138,052	54,472	67,913	15,668

* Estimate based on a sample size of 10–29.

Note: U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 54. Anglers and Hunters by Sportsperson's State of Residence: 2006

(Population 16 years old and older. Numbers in thousands)

Sportsperson's state of residence	Population	Fished or hunted		Fished only		Hunted only		Fished and hunted	
		Number	Percent of population	Number	Percent of population	Number	Percent of population	Number	Percent of population
United States, total. . . .	229,245	33,916	15	21,406	9	3,964	2	8,546	4
Alabama	3,550	707	20	395	11	79	2	233	7
Alaska	499	149	30	94	19	*11	*2	44	9
Arizona	4,585	418	9	290	6	48	1	81	2
Arkansas	2,156	551	26	244	11	88	4	220	10
California	27,299	1,783	7	1,465	5	*94	*(Z)	223	1
Colorado	3,605	593	16	460	13	*39	*1	94	3
Connecticut	2,735	297	11	257	9	...	...	34	1
Delaware	669	85	13	64	10	*9	*1	12	2
Florida	14,233	2,004	14	1,678	12	*54	*(Z)	271	2
Georgia	6,910	1,161	17	805	12	*101	*1	255	4
Hawaii	1,014	100	10	81	8	...	...	*14	*1
Idaho	1,102	259	24	136	12	*36	*3	88	8
Illinois	9,767	1,109	11	837	9	*74	*1	198	2
Indiana	4,799	822	17	569	12	83	2	171	4
Iowa	2,339	518	22	308	13	70	3	141	6
Kansas	2,110	425	20	233	11	56	3	136	6
Kentucky	3,260	670	21	410	13	*49	*1	212	7
Louisiana	3,433	678	20	403	12	*81	*2	195	6
Maine	1,074	266	25	120	11	40	4	106	10
Maryland	4,333	521	12	370	9	46	1	105	2
Massachusetts	5,032	472	9	406	8	*20	*(Z)	46	1
Michigan	7,804	1,371	18	650	8	272	3	449	6
Minnesota	4,021	1,280	32	745	19	*138	*3	398	10
Mississippi	2,214	537	24	293	13	*58	*3	186	8
Missouri	4,521	1,096	24	536	12	165	4	394	9
Montana	753	232	31	86	11	53	7	92	12
Nebraska	1,359	234	17	129	10	42	3	63	5
Nevada	1,895	182	10	122	6	26	1	34	2
New Hampshire	1,044	141	14	89	9	*17	*2	35	3
New Jersey	6,734	562	8	478	7	*32	*(Z)	53	1
New Mexico	1,500	224	15	152	10	34	2	38	3
New York	14,990	1,236	8	734	5	207	1	295	2
North Carolina	6,719	1,038	15	734	11	*74	*1	230	3
North Dakota	507	145	29	59	12	40	8	47	9
Ohio	8,889	1,488	17	1,011	11	195	2	282	3
Oklahoma	2,743	602	22	370	13	*55	*2	177	6
Oregon	2,889	550	19	331	11	67	2	152	5
Pennsylvania	9,793	1,415	14	482	5	425	4	508	5
Rhode Island	842	86	10	73	9	...	...	*10	*1
South Carolina	3,315	595	18	429	13	*48	*1	119	4
South Dakota	601	136	23	46	8	41	7	50	8
Tennessee	4,699	775	16	491	10	*67	*1	217	5
Texas	17,076	2,668	16	1,672	10	324	2	672	4
Utah	1,808	351	19	197	11	38	2	116	6
Vermont	506	91	18	34	7	20	4	37	7
Virginia	5,893	857	15	497	8	127	2	233	4
Washington	4,980	764	15	577	12	74	1	113	2
West Virginia	1,458	364	25	165	11	58	4	141	10
Wisconsin	4,350	1,185	27	534	12	160	4	492	11
Wyoming	405	113	28	61	15	*15	*4	37	9

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably. (Z) Less than 0.5 percent.

Note: U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 55. Anglers and Hunters by State Where Fishing or Hunting Took Place: 2006

(Population 16 years old and older. Numbers in thousands)

State where fishing or hunting took place	Anglers						Hunters					
	Total anglers, residents and nonresidents		State residents		Nonresidents		Total hunters, residents and nonresidents		State residents		Nonresidents	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
United States, total.	29,952	100	27,641	92	6,494	22	12,510	100	11,971	96	1,826	15
Alabama	806	100	600	74	206	26	391	100	310	79	81	21
Alaska	293	100	137	47	156	53	71	100	53	75	...	...
Arizona	422	100	330	78	92	22	159	100	126	79	*33	*21
Arkansas	655	100	430	66	225	34	354	100	301	85	*53	*15
California	1,730	100	1,578	91	152	9	281	100	274	97	...	...
Colorado	660	100	490	74	171	26	259	100	126	49	134	51
Connecticut	302	100	251	83	51	17	38	100	36	96	...	...
Delaware	159	100	66	41	*94	*59	42	100	19	46	...	...
Florida	2,767	100	1,881	68	885	32	236	100	214	91	*22	*9
Georgia	1,107	100	971	88	136	12	481	100	344	72	136	28
Hawaii	157	100	92	58	*65	*42	18	100	18	98	...	...
Idaho	350	100	206	59	144	41	187	100	122	65	65	35
Illinois	873	100	795	91	78	9	316	100	258	82	*58	*18
Indiana	768	100	663	86	106	14	272	100	237	87	*35	*13
Iowa	438	100	397	91	*40	*9	251	100	208	83	*44	*17
Kansas	404	100	319	79	85	21	271	100	183	68	88	32
Kentucky	721	100	580	80	141	20	291	100	241	83	*50	*17
Louisiana	702	100	590	84	112	16	270	100	241	89	...	...
Maine	351	100	220	63	131	37	175	100	146	83	*29	*17
Maryland	645	100	403	62	242	38	161	100	133	83	*28	*17
Massachusetts	497	100	398	80	99	20	73	100	57	79	*16	*21
Michigan	1,394	100	1,077	77	318	23	753	100	721	96	*32	*4
Minnesota	1,427	100	1,108	78	319	22	535	100	509	95	*26	*5
Mississippi	546	100	465	85	80	15	304	100	238	78	*66	*22
Missouri	1,076	100	871	81	206	19	608	100	540	89	69	11
Montana	291	100	172	59	119	41	197	100	145	74	*52	*26
Nebraska	198	100	169	85	*29	*15	118	100	102	86	...	...
Nevada	142	100	114	81	*27	*19	63	100	54	85	...	...
New Hampshire	230	100	108	47	122	53	61	100	51	85	*9	*15
New Jersey	654	100	458	70	197	30	89	100	72	81	...	...
New Mexico	248	100	164	66	*84	*34	99	100	66	67	*32	*33
New York	1,153	100	932	81	221	19	566	100	491	87	75	13
North Carolina	1,263	100	868	69	395	31	304	100	277	91	*27	*9
North Dakota	106	100	88	84	...	...	128	100	86	67	*42	*33
Ohio	1,256	100	1,145	91	112	9	500	100	467	93	...	...
Oklahoma	611	100	525	86	86	14	251	100	224	89	*27	*11
Oregon	576	100	455	79	122	21	237	100	218	92	...	...
Pennsylvania	994	100	830	83	164	17	1,044	100	933	89	111	11
Rhode Island	158	100	76	48	82	52	14	100	12	84	...	...
South Carolina	810	100	527	65	283	35	208	100	159	77	*49	*23
South Dakota	135	100	89	66	45	34	171	100	89	52	81	48
Tennessee	871	100	658	75	214	25	329	100	265	81	*64	*19
Texas	2,527	100	2,308	91	218	9	1,101	100	979	89	123	11
Utah	375	100	288	77	87	23	166	100	144	86	*23	*14
Vermont	114	100	64	56	50	44	73	100	56	76	*17	*24
Virginia	858	100	640	75	218	25	413	100	353	86	*60	*14
Washington	736	100	641	87	95	13	182	100	179	98	...	...
West Virginia	376	100	291	77	86	23	269	100	194	72	*75	*28
Wisconsin	1,394	100	1,014	73	381	27	697	100	649	93	*48	*7
Wyoming	203	100	96	47	107	53	102	100	50	49	52	51

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

Note: For the U.S. row, detail does not add to total because of multiple responses. U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 56. Hunters by Type of Hunting and State Where Hunting Took Place: 2006

(Population 16 years old and older. Numbers in thousands)

State where hunting took place	Total, all hunting		Big game		Small game		Migratory bird		Other animals	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
United States, total.	12,510	100	10,682	85	4,797	38	2,293	18	1,128	9
Alabama	391	100	352	90	126	32	73	19	...	...
Alaska	71	100	63	88	*4	*6	*11	*15	*9	*12
Arizona	159	100	96	61	68	43	*36	*23	...	...
Arkansas	354	100	282	80	114	32	113	32	...	...
California	281	100	153	54	153	54	150	53	...	...
Colorado	259	100	208	80	*58	*22	*44	*17	...	...
Connecticut	38	100	*21	*57	*15	*39	...	...	...	...
Delaware	42	100	37	87	*6	*15	12	29	...	...
Florida	236	100	191	81	*96	*41	*42	*18	...	...
Georgia	481	100	410	85	184	38	117	24	...	...
Hawaii	18	100	*15	*81	...	...	...	...	...	...
Idaho	187	100	160	86	55	30	*42	*22	...	...
Illinois	316	100	216	69	146	46	90	29	...	...
Indiana	272	100	233	85	109	40	*30	*11	*19	*7
Iowa	251	100	175	70	144	57	*22	*9	*36	*14
Kansas	271	100	142	52	185	68	55	20	*17	*6
Kentucky	291	100	242	83	104	36	*34	*12	*28	*10
Louisiana	270	100	204	76	126	47	100	37	*32	*12
Maine	175	100	165	95	59	34	*16	*9	...	...
Maryland	161	100	129	80	*42	*26	46	28	...	...
Massachusetts	73	100	58	80	*30	*41	*14	*19	...	...
Michigan	753	100	715	95	228	30	*60	*8	...	...
Minnesota	535	100	416	78	190	35	*55	*10	...	...
Mississippi	304	100	285	94	103	34	*57	*19	...	...
Missouri	608	100	502	83	237	39	87	14	*39	*6
Montana	197	100	182	92	44	22	*16	*8	...	...
Nebraska	118	100	67	57	63	54	44	37	*26	*22
Nevada	63	100	35	56	26	41	...	...	*16	*25
New Hampshire	61	100	53	88	*15	*25	*10	*16	*8	*13
New Jersey	89	100	73	82	*38	*42	...	...	...	...
New Mexico	99	100	81	81	*23	*23	*8	*9	...	...
New York	566	100	537	95	164	29	...	...	*49	*9
North Carolina	304	100	234	77	107	35	*40	*13	...	...
North Dakota	128	100	77	60	77	60	24	18	*15	*11
Ohio	500	100	432	86	213	43	...	...	*74	*15
Oklahoma	251	100	193	77	79	32	*65	*26	*42	*17
Oregon	237	100	191	80	*58	*24	*29	*12	...	...
Pennsylvania	1,044	100	1,000	96	354	34	*71	*7	*148	*14
Rhode Island	14	100	*11	*82	*5	*37	...	...	...	...
South Carolina	208	100	180	86	*56	*27	*42	*20	...	...
South Dakota	171	100	67	39	133	78	29	17	*11	*7
Tennessee	329	100	281	85	130	39	*80	*24	*42	*13
Texas	1,101	100	890	81	359	33	435	40	*118	*11
Utah	166	100	125	75	71	42	*26	*16	*15	*9
Vermont	73	100	65	90	23	31	*10	*13	*7	*9
Virginia	413	100	362	88	142	34	*64	*16	*78	*19
Washington	182	100	164	90	*42	*23	*20	*11	...	...
West Virginia	269	100	256	95	128	48	...	...	...	...
Wisconsin	697	100	639	92	222	32	*75	*11	...	...
Wyoming	102	100	88	86	*25	*24	...	...	...	...

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

Note: Detail does not add to total because of multiple responses. U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 57. Days of Hunting by State Where Hunting Took Place and Hunter's State of Residence: 2006

(Population 16 years old and older. Numbers in thousands)

State	Days of hunting in state						Days of hunting by state residents					
	Total days, residents and nonresidents		Days by state residents		Days by nonresidents		Total days, in state of residence and other states		Days in state of residence		Days in other states	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
United States, total.	219,925	100	203,319	92	18,023	8	219,925	100	203,319	92	18,023	8
Alabama	8,649	100	7,609	88	1,039	12	8,036	100	7,609	95	*427	*5
Alaska	854	100	758	89	...	...	859	100	758	88	*101	*12
Arizona	1,509	100	1,388	92	*121	*8	1,538	100	1,388	90	*151	*10
Arkansas	7,882	100	7,219	92	*662	*8	7,636	100	7,219	95	*417	*5
California	3,376	100	3,339	99	...	...	4,226	100	3,339	79	*887	*21
Colorado	2,376	100	1,224	52	1,152	48	1,421	100	1,224	86	*197	*14
Connecticut	509	100	500	98	...	...	693	100	500	72	*193	*28
Delaware	654	100	462	71	...	...	513	100	462	90	*50	*10
Florida	3,769	100	3,699	98	*70	*2	5,955	100	3,699	62	2,256	38
Georgia	8,228	100	6,783	82	1,445	18	7,248	100	6,783	94	*466	*6
Hawaii	420	100	*418	*99	...	...	421	100	*418	*99	...	...
Idaho	2,117	100	1,125	53	993	47	1,187	100	1,125	95	...	...
Illinois	4,688	100	4,238	90	*451	*10	4,658	100	4,238	91	*420	*9
Indiana	4,808	100	4,184	87	*624	*13	4,652	100	4,184	90	*468	*10
Iowa	3,849	100	3,627	94	*222	*6	3,745	100	3,627	97	*118	*3
Kansas	3,017	100	2,574	85	442	15	2,721	100	2,574	95	*147	*5
Kentucky	5,429	100	4,886	90	*543	*10	5,119	100	4,886	95	*233	*5
Louisiana	5,979	100	5,847	98	...	...	7,278	100	5,847	80	*1,431	*20
Maine	2,283	100	2,004	88	*279	*12	2,043	100	2,004	98	...	...
Maryland	2,262	100	1,813	80	*449	*20	2,228	100	1,813	81	415	19
Massachusetts	1,149	100	1,083	94	*66	*6	1,821	100	1,083	59	*739	*41
Michigan	11,905	100	11,735	99	*170	*1	11,756	100	11,735	100	...	...
Minnesota	6,492	100	6,346	98	*145	*2	6,966	100	6,346	91	*619	*9
Mississippi	6,835	100	6,050	89	*786	*11	6,259	100	6,050	97	*209	*3
Missouri	9,714	100	9,171	94	544	6	9,720	100	9,171	94	*550	*6
Montana	2,142	100	1,783	83	*359	*17	1,828	100	1,783	98	...	...
Nebraska	1,611	100	1,559	97	...	...	1,652	100	1,559	94	*93	*6
Nevada	615	100	578	94	...	...	692	100	578	84	*114	*16
New Hampshire	1,057	100	969	92	*88	*8	1,100	100	969	88	*131	*12
New Jersey	1,457	100	1,343	92	...	...	1,645	100	1,343	82	*302	*18
New Mexico	852	100	685	80	*167	*20	743	100	685	92	*58	*8
New York	10,289	100	9,462	92	826	8	9,747	100	9,462	97	*284	*3
North Carolina	4,880	100	4,653	95	*228	*5	5,484	100	4,653	85	831	15
North Dakota	1,344	100	1,081	80	*263	*20	1,125	100	1,081	96	*44	*4
Ohio	10,633	100	10,419	98	...	...	10,758	100	10,419	97	*338	*3
Oklahoma	5,534	100	5,339	96	*194	*4	5,569	100	5,339	96	*230	*4
Oregon	2,729	100	2,658	97	...	...	2,768	100	2,658	96	...	...
Pennsylvania	16,863	100	16,157	96	706	4	17,404	100	16,157	93	*1,247	*7
Rhode Island	155	100	140	90	...	...	184	100	140	76	*43	*24
South Carolina	4,318	100	3,893	90	*424	*10	4,031	100	3,893	97	*138	*3
South Dakota	1,719	100	1,190	69	530	31	1,208	100	1,190	98	...	...
Tennessee	5,729	100	5,343	93	*386	*7	6,340	100	5,343	84	*997	*16
Texas	14,050	100	13,400	95	650	5	13,896	100	13,400	96	...	...
Utah	1,715	100	1,624	95	*91	*5	1,921	100	1,624	85	*297	*15
Vermont	1,111	100	922	83	*190	*17	1,073	100	922	86	*152	*14
Virginia	6,771	100	6,280	93	*491	*7	6,752	100	6,280	93	*473	*7
Washington	2,126	100	2,124	100	...	...	2,409	100	2,124	88	*285	*12
West Virginia	3,939	100	3,376	86	*563	*14	3,691	100	3,376	91	...	...
Wisconsin	10,059	100	9,679	96	*380	*4	10,016	100	9,679	97	*337	*3
Wyoming	904	100	580	64	325	36	605	100	580	96	...	...

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

Note: U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 58. Days of Hunting by Type of Hunting and State Where Hunting Took Place: 2006

(Population 16 years old and older. Numbers in thousands)

State where hunting took place	Total, all hunting		Big game		Small game		Migratory bird		Other animals	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
United States, total.	219,925	100	164,061	75	52,395	24	19,770	9	15,205	7
Alabama	8,649	100	7,685	89	1,311	15	401	5	...	...
Alaska	854	100	639	75	*109	*13	*64	*7	*182	*21
Arizona	1,509	100	849	56	535	35	*187	*12	...	...
Arkansas	7,882	100	5,554	70	1,958	25	1,656	21	...	...
California	3,376	100	1,837	54	1,438	43	1,140	34	...	...
Colorado	2,376	100	1,718	72	*400	*17	*302	*13	...	...
Connecticut	509	100	*280	*55	*212	*42	...	...	...	...
Delaware	654	100	520	80	*79	*12	*103	*16	...	...
Florida	3,769	100	2,875	76	*1,054	*28	*217	*6	...	...
Georgia	8,228	100	6,959	85	1,549	19	664	8	...	...
Hawaii	420	100	*386	*92	...	...	...	...	...	...
Idaho	2,117	100	1,422	67	398	19	*229	*11	...	...
Illinois	4,688	100	2,728	58	1,600	34	1,111	24	...	...
Indiana	4,808	100	3,469	72	1,163	24	*444	*9	*391	*8
Iowa	3,849	100	2,333	61	1,427	37	*182	*5	*529	*14
Kansas	3,017	100	1,239	41	1,528	51	481	16	*199	*7
Kentucky	5,429	100	3,832	71	1,385	26	*285	*5	*530	*10
Louisiana	5,979	100	4,013	67	1,447	24	1,419	24	*487	*8
Maine	2,283	100	1,854	81	436	19	*117	*5	...	...
Maryland	2,262	100	1,811	80	*264	*12	381	17	...	...
Massachusetts	1,149	100	936	82	*189	*16	*102	*9	...	...
Michigan	11,905	100	10,357	87	2,109	18	*357	*3	...	...
Minnesota	6,492	100	4,406	68	1,925	30	*527	*8	...	...
Mississippi	6,835	100	5,849	86	1,115	16	*381	*6	...	...
Missouri	9,714	100	6,973	72	2,078	21	892	9	*844	*9
Montana	2,142	100	1,906	89	316	15	*69	*3	...	...
Nebraska	1,611	100	572	36	653	41	396	25	*298	*19
Nevada	615	100	313	51	224	37	...	...	*88	*14
New Hampshire	1,057	100	805	76	*157	*15	*151	*14	*98	*9
New Jersey	1,457	100	1,259	86	*315	*22	...	...	...	...
New Mexico	852	100	580	68	*228	*27	*49	*6	...	...
New York	10,289	100	8,564	83	3,519	34	...	...	*373	*4
North Carolina	4,880	100	3,275	67	1,462	30	*130	*3	...	...
North Dakota	1,344	100	561	42	644	48	*187	*14	*85	*6
Ohio	10,633	100	6,796	64	2,908	27	...	...	*1,586	*15
Oklahoma	5,534	100	3,982	72	595	11	*451	*8	*1,039	*19
Oregon	2,729	100	2,201	81	*382	*14	*294	*11	...	...
Pennsylvania	16,863	100	13,609	81	3,379	20	*434	*3	*1,469	*9
Rhode Island	155	100	*95	*61	*55	*35	...	...	...	...
South Carolina	4,318	100	3,870	90	*883	*20	*425	*10	...	...
South Dakota	1,719	100	543	32	1,028	60	200	12	*184	*11
Tennessee	5,729	100	3,882	68	1,426	25	*550	*10	*323	*6
Texas	14,050	100	10,650	76	2,925	21	2,461	18	*1,340	*10
Utah	1,715	100	1,059	62	651	38	*189	*11	*106	*6
Vermont	1,111	100	827	74	315	28	*94	*8	*70	*6
Virginia	6,771	100	5,072	75	1,008	15	*270	*4	*1,557	*23
Washington	2,126	100	1,835	86	*332	*16	*166	*8	...	...
West Virginia	3,939	100	3,190	81	1,241	32	...	...	...	...
Wisconsin	10,059	100	7,950	79	2,059	20	*756	*8	...	...
Wyoming	904	100	726	80	*198	*22	...	...	...	...

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

Note: Detail does not add to total because of multiple responses. U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 59. Expenditures for Hunting by State Where Spending Took Place: 2006

(Population 16 years old and older. Expenditures in thousands of dollars)

State where spending took place	Total expenditures	Trip-related expenditures				Expenditures for equipment				Expenditures for other items ¹
		Total trip-related	Food and lodging	Transportation	Other trip costs	Total equipment	Hunting equipment	Auxiliary equipment	Special equipment	
United States, total. . . .	22,893,156	6,678,614	2,791,245	2,696,924	1,190,445	10,731,501	5,366,357	1,330,216	4,034,928	5,483,041
Alabama	678,024	239,398	82,577	84,777	72,045	315,894	151,297	40,510	*124,087	122,731
Alaska	125,112	48,905	9,745	29,166	9,994	67,897	24,831	19,083	...	8,310
Arizona	538,033	92,363	33,599	39,386	19,377	434,935	61,155	17,977	...	10,735
Arkansas	788,575	182,192	81,047	73,257	27,889	375,236	191,180	55,862	*128,194	231,147
California	813,239	230,873	88,210	104,256	38,407	428,493	152,902	38,964	...	153,873
Colorado	444,061	288,325	97,329	76,786	114,210	91,574	71,900	19,674	...	64,162
Connecticut	68,530	5,991	*1,782	3,558	*651	50,160	20,660	*4,162	...	12,379
Delaware	51,436	23,693	11,865	7,387	4,442	24,802	16,019	6,487	...	2,941
Florida	377,394	155,116	43,013	59,561	52,543	173,749	125,342	28,308	...	48,528
Georgia	677,762	237,162	96,620	84,652	55,890	209,233	121,722	30,372	...	231,367
Hawaii	21,098	10,736	5,410	4,469	*858	9,780	8,837	*943	...	583
Idaho	259,718	100,218	37,974	40,986	21,259	121,708	54,161	*11,431	...	37,792
Illinois	381,937	130,466	47,128	47,761	35,578	129,180	77,291	39,188	...	122,290
Indiana	223,023	65,553	26,628	31,871	7,054	103,456	85,542	17,914	...	54,015
Iowa	288,324	110,756	43,895	49,582	*17,279	131,184	99,548	23,535	...	46,384
Kansas	248,674	121,162	52,847	58,116	10,199	95,175	78,056	15,970	...	32,337
Kentucky	423,439	83,591	38,019	41,503	4,069	208,270	143,802	29,785	...	131,578
Louisiana	525,505	205,355	83,297	73,628	48,429	206,072	114,697	23,285	...	114,078
Maine	241,301	58,997	29,704	25,774	3,519	110,898	33,779	15,174	...	71,406
Maryland	217,283	62,343	22,873	23,895	15,575	120,572	66,578	37,674	...	34,367
Massachusetts	70,824	36,675	10,616	19,263	6,796	24,374	19,870	*4,504	...	9,775
Michigan	915,884	262,326	134,017	105,588	22,720	371,574	210,202	61,477	...	281,985
Minnesota	494,149	166,577	78,295	73,749	14,533	219,505	179,406	36,001	...	108,066
Mississippi	519,808	149,362	67,646	53,649	28,068	152,654	90,355	18,348	...	217,792
Missouri	1,146,240	234,468	90,216	108,385	35,866	499,132	283,748	57,023	...	412,641
Montana	310,540	132,808	48,044	50,289	34,475	144,951	62,657	16,417	*65,878	32,782
Nebraska	231,032	46,027	17,685	25,416	2,926	137,627	75,814	23,727	...	47,378
Nevada	129,080	39,574	18,022	16,193	5,360	76,412	17,082	12,631	...	13,094
New Hampshire	74,467	17,665	8,860	8,460	*344	48,294	37,199	2,776	...	8,509
New Jersey	146,001	72,680	34,083	19,133	*19,463	62,897	55,390	*6,862	...	10,424
New Mexico	164,308	93,052	28,346	25,440	39,266	61,766	29,057	11,090	...	9,490
New York	715,707	201,631	98,197	74,828	28,606	338,592	230,525	42,510	...	175,485
North Carolina	430,562	89,979	46,603	40,173	*3,203	314,578	202,839	17,825	...	26,006
North Dakota	129,114	72,445	28,270	31,908	*12,266	45,473	24,228	8,561	...	11,196
Ohio	841,556	148,609	73,341	66,995	*8,273	599,743	210,082	41,726	...	93,204
Oklahoma	476,657	135,335	52,990	69,314	13,031	307,048	111,501	22,468	*173,078	34,274
Oregon	373,613	116,690	51,610	58,089	6,991	226,632	105,293	16,531	*104,808	30,290
Pennsylvania	1,609,045	274,158	125,470	123,397	25,290	1,037,875	390,810	96,587	...	297,013
Rhode Island	10,186	3,734	1,455	1,731	*547	5,839	5,113	*726	...	613
South Carolina	278,640	121,953	50,471	38,137	33,345	112,304	94,138	7,767	...	44,382
South Dakota	185,258	117,063	53,224	41,388	22,451	31,517	24,683	5,679	...	36,678
Tennessee	488,420	109,447	52,240	45,299	11,908	350,346	109,606	21,663	...	28,627
Texas	2,222,298	873,928	337,965	335,890	200,073	785,297	445,492	125,975	...	563,073
Utah	273,782	71,575	25,915	37,255	8,405	180,329	92,425	30,042	*57,862	21,879
Vermont	189,707	20,928	10,993	8,954	*981	151,053	17,658	2,587	...	17,726
Virginia	480,802	124,862	60,585	56,592	7,686	297,143	167,914	25,158	...	58,797
Washington	313,134	74,233	33,083	36,528	4,622	188,739	66,625	44,120	...	50,163
West Virginia	284,511	79,376	40,194	38,070	*1,113	160,014	99,231	15,621	...	45,121
Wisconsin	1,312,128	275,268	147,349	104,350	23,569	316,756	170,466	53,572	...	720,103
Wyoming	137,265	62,991	31,901	22,090	9,000	45,632	22,802	9,655	...	28,642

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

¹ Includes expenditures for magazine subscriptions, membership dues and contributions, land leasing and ownership, and licenses, stamps, tags, and permits.

Note: U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 60. Freshwater (Except Great Lakes) Anglers and Days of Fishing by State Where Fishing Took Place: 2006

(Population 16 years old and older. Numbers in thousands)

State where fishing took place	Anglers						Days of fishing					
	Total anglers, residents and nonresidents		State residents		Nonresidents		Total days, residents and nonresidents		Days by state residents		Days by nonresidents	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
United States, total. . . .	25,035	100	23,266	93	4,604	18	419,942	100	382,512	91	37,869	9
Alabama	714	100	567	79	147	21	12,987	100	12,202	94	785	6
Alaska	191	100	99	52	92	48	1,826	100	1,305	71	521	29
Arizona	422	100	330	78	92	22	4,156	100	3,505	84	651	16
Arkansas	655	100	430	66	225	34	10,812	100	9,273	86	1,539	14
California	1,224	100	1,150	94	74	6	12,307	100	11,526	94	781	6
Colorado	660	100	490	74	171	26	6,374	100	5,529	87	845	13
Connecticut	204	100	178	87	*26	*13	4,354	100	4,179	96	*175	*4
Delaware	58	100	34	59	...	...	1,133	100	780	69	...	...
Florida	1,417	100	1,155	82	262	18	24,512	100	23,031	94	1,482	6
Georgia	1,025	100	908	89	118	11	15,646	100	14,742	94	905	6
Hawaii	22	100	*15	*69	...	...	67	100	*60	*90	...	...
Idaho	350	100	206	59	144	41	4,301	100	3,307	77	994	23
Illinois	777	100	710	91	67	9	15,631	100	14,968	96	663	4
Indiana	677	100	582	86	*96	*14	8,289	100	7,594	92	*695	*8
Iowa	438	100	397	91	*40	*9	6,215	100	6,063	98	*152	*2
Kansas	404	100	319	79	85	21	5,314	100	4,883	92	431	8
Kentucky	721	100	580	80	141	20	9,231	100	8,324	90	906	10
Louisiana	549	100	472	86	*77	*14	8,743	100	8,312	95	*431	*5
Maine	303	100	209	69	94	31	4,272	100	3,472	81	800	19
Maryland	364	100	244	67	119	33	4,799	100	3,090	64	1,708	36
Massachusetts	292	100	263	90	29	10	5,345	100	5,186	97	159	3
Michigan	1,192	100	941	79	250	21	19,677	100	17,993	91	1,684	9
Minnesota	1,381	100	1,091	79	289	21	24,041	100	22,093	92	1,949	8
Mississippi	508	100	439	86	*69	*14	7,095	100	6,609	93	*486	*7
Missouri	1,076	100	871	81	206	19	16,569	100	15,263	92	1,306	8
Montana	291	100	172	59	119	41	2,927	100	2,357	81	569	19
Nebraska	198	100	169	85	*29	*15	3,096	100	2,913	94	*183	*6
Nevada	142	100	114	81	*27	*19	1,526	100	1,436	94	*90	*6
New Hampshire	198	100	94	47	104	53	2,733	100	1,849	68	884	32
New Jersey	243	100	210	86	*33	*14	3,646	100	3,500	96	*146	*4
New Mexico	248	100	164	66	*84	*34	2,596	100	2,129	82	*467	*18
New York	741	100	633	85	108	15	10,994	100	9,806	89	1,188	11
North Carolina	884	100	740	84	144	16	13,923	100	13,207	95	716	5
North Dakota	106	100	88	84	...	...	953	100	905	95	...	...
Ohio	982	100	929	95	*53	*5	12,827	100	12,064	94	*763	*6
Oklahoma	611	100	525	86	86	14	10,580	100	9,843	93	737	7
Oregon	491	100	401	82	90	18	7,053	100	6,175	88	878	12
Pennsylvania	914	100	770	84	143	16	14,456	100	13,754	95	703	5
Rhode Island	50	100	38	76	...	...	541	100	467	86	...	...
South Carolina	612	100	483	79	130	21	10,658	100	9,817	92	842	8
South Dakota	135	100	89	66	45	34	1,697	100	1,406	83	291	17
Tennessee	871	100	658	75	214	25	15,103	100	13,221	88	1,882	12
Texas	1,860	100	1,711	92	150	8	27,074	100	25,628	95	1,446	5
Utah	375	100	288	77	87	23	3,822	100	3,387	89	434	11
Vermont	114	100	64	56	50	44	1,665	100	1,400	84	265	16
Virginia	622	100	454	73	168	27	6,417	100	5,680	89	737	11
Washington	538	100	481	90	*56	*10	7,524	100	7,076	94	*448	*6
West Virginia	376	100	291	77	86	23	6,885	100	6,442	94	443	6
Wisconsin	1,253	100	918	73	336	27	16,216	100	13,424	83	2,792	17
Wyoming	203	100	96	47	107	53	1,691	100	1,245	74	446	26

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

Note: For the U.S. row, detail does not add to total because of multiple responses. U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 61. Great Lakes Anglers and Days of Great Lakes Fishing by State Where Fishing Took Place: 2006

(Population 16 years old and older. Numbers in thousands)

State where fishing took place	Anglers						Days of fishing					
	Total anglers, residents and nonresidents		State residents		Nonresidents		Total days, residents and nonresidents		Days by state residents		Days by nonresidents	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
United States, total	1,420	100	1,182	83	306	22	18,016	100	15,545	86	2,366	13
Illinois	*56	*100	*47	*84	...	...	*728	*100	*709	*97	...	...
Indiana	*46	*100	*42	*90	...	...	*759	*100	*654	*86	...	...
Michigan	461	100	367	80	94	20	6,981	100	6,280	90	701	10
Minnesota	*48	*100	...	...	...	...	*272	*100	...	...	...	...
New York	247	100	178	72	69	28	2,060	100	1,431	69	628	31
Ohio	328	100	275	84	*53	*16	2,807	100	2,432	87	*375	*13
Pennsylvania	*85	*100	*75	*88	...	...	*598	*100	*522	*87	...	...
Wisconsin	235	100	176	75	*60	*25	3,705	100	3,348	90	*357	*10

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

Note: For the U.S. row, detail does not add to total because of multiple responses.

Table 62. Saltwater Anglers and Days of Saltwater Fishing by State Where Fishing Took Place: 2006

(Population 16 years old and older. Numbers in thousands)

State where fishing took place	Anglers						Days of fishing					
	Total anglers, residents and nonresidents		State residents		Nonresidents		Total days, residents and nonresidents		Days by state residents		Days by nonresidents	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
United States, total	7,717	100	6,089	79	2,185	28	85,663	100	73,365	86	12,451	15
Alabama	153	100	89	59	*63	*41	758	100	530	70	*229	*30
Alaska	180	100	76	42	104	58	974	100	641	66	333	34
California	761	100	666	88	95	12	7,606	100	7,275	96	330	4
Connecticut	157	100	121	77	*36	*23	1,691	100	1,398	83	*293	*17
Delaware	117	100	45	39	*72	*61	703	100	444	63	*260	*37
Florida	2,002	100	1,286	64	716	36	23,077	100	19,553	85	3,524	15
Georgia	146	100	125	85	...	...	1,707	100	1,383	81	...	...
Hawaii	154	100	89	58	*65	*42	1,411	100	1,244	88	*167	*12
Louisiana	289	100	248	86	*42	*14	2,975	100	2,541	85	*433	*15
Maine	100	100	52	52	48	48	703	100	504	72	198	28
Maryland	372	100	227	61	145	39	3,114	100	2,357	76	756	24
Massachusetts	298	100	223	75	75	25	3,054	100	2,616	86	438	14
Mississippi	*66	*100	*57	*87	...	...	*590	*100	*573	*97	...	...
New Hampshire	47	100	27	58	*20	*42	206	100	120	58	*86	*42
New Jersey	496	100	340	69	155	31	5,568	100	4,728	85	840	15
New York	291	100	238	82	52	18	3,950	100	3,646	92	304	8
North Carolina	519	100	253	49	266	51	3,434	100	1,922	56	1,511	44
Oregon	150	100	128	85	*23	*15	846	100	813	96	*33	*4
Rhode Island	122	100	55	45	67	55	1,236	100	864	70	371	30
South Carolina	325	100	142	44	183	56	2,174	100	1,425	66	749	34
Texas	1,147	100	1,070	93	77	7	15,143	100	14,380	95	762	5
Virginia	352	100	289	82	63	18	3,313	100	3,023	91	290	9
Washington	286	100	244	85	*42	*15	1,550	100	1,383	89	*167	*11

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

Note: For the U.S. row, detail does not add to total because of multiple responses. U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 63. Days of Fishing by State Where Fishing Took Place and Angler's State of Residence: 2006

(Population 16 years old and older. Numbers in thousands)

State	Days of fishing in state						Days of fishing by state residents					
	Total days, residents and nonresidents		Days by state residents		Days by nonresidents		Total days, in state of residence and other states		Days in state of residence		Days in other states	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
United States, total.....	516,781	100	470,594	91	52,380	10	516,781	100	470,594	91	52,380	10
Alabama	13,708	100	12,686	93	1,022	7	13,286	100	12,686	95	600	5
Alaska	2,687	100	1,925	72	762	28	1,965	100	1,925	98	40	2
Arizona	4,156	100	3,505	84	651	16	4,450	100	3,505	79	944	21
Arkansas	10,812	100	9,273	86	1,539	14	10,101	100	9,273	92	828	8
California	19,394	100	18,310	94	1,084	6	19,731	100	18,310	93	1,420	7
Colorado	6,374	100	5,529	87	845	13	6,813	100	5,529	81	1,284	19
Connecticut	5,860	100	5,403	92	457	8	6,400	100	5,403	84	997	16
Delaware	1,821	100	1,185	65	*637	*35	1,557	100	1,185	76	373	24
Florida	46,311	100	41,507	90	4,804	10	43,632	100	41,507	95	2,125	5
Georgia	17,375	100	16,305	94	1,070	6	18,567	100	16,305	88	2,262	12
Hawaii	1,471	100	1,300	88	*171	*12	1,345	100	1,300	97	45	3
Idaho	4,301	100	3,307	77	994	23	4,214	100	3,307	78	908	22
Illinois	16,881	100	16,159	96	723	4	21,713	100	16,159	74	5,554	26
Indiana	9,805	100	9,052	92	753	8	10,754	100	9,052	84	1,702	16
Iowa	6,215	100	6,063	98	*152	*2	7,188	100	6,063	84	1,125	16
Kansas	5,314	100	4,883	92	431	8	5,724	100	4,883	85	841	15
Kentucky	9,231	100	8,324	90	906	10	10,210	100	8,324	82	1,886	18
Louisiana	11,204	100	10,564	94	640	6	11,205	100	10,564	94	641	6
Maine	4,794	100	3,804	79	990	21	3,856	100	3,804	99	52	1
Maryland	8,223	100	5,753	70	2,470	30	6,729	100	5,753	85	976	15
Massachusetts	7,847	100	7,259	93	588	7	9,892	100	7,259	73	2,633	27
Michigan	24,822	100	22,532	91	2,290	9	23,389	100	22,532	96	856	4
Minnesota	24,382	100	22,305	91	2,077	9	23,474	100	22,305	95	1,169	5
Mississippi	7,648	100	7,134	93	514	7	7,601	100	7,134	94	467	6
Missouri	16,569	100	15,263	92	1,306	8	16,416	100	15,263	93	1,152	7
Montana	2,927	100	2,357	81	569	19	2,464	100	2,357	96	106	4
Nebraska	3,096	100	2,913	94	*183	*6	3,235	100	2,913	90	322	10
Nevada	1,526	100	1,436	94	*90	*6	1,999	100	1,436	72	563	28
New Hampshire	2,947	100	1,971	67	976	33	2,518	100	1,971	78	547	22
New Jersey	8,820	100	7,836	89	984	11	9,457	100	7,836	83	1,621	17
New Mexico.....	2,596	100	2,129	82	*467	*18	2,475	100	2,129	86	346	14
New York	17,060	100	14,960	88	2,100	12	16,282	100	14,960	92	1,322	8
North Carolina	17,221	100	15,015	87	2,205	13	16,198	100	15,015	93	1,182	7
North Dakota	953	100	905	95	...	...	1,152	100	905	79	247	21
Ohio	16,318	100	15,141	93	1,178	7	17,628	100	15,141	86	2,487	14
Oklahoma	10,580	100	9,843	93	737	7	10,376	100	9,843	95	533	5
Oregon	8,384	100	7,408	88	975	12	8,126	100	7,408	91	718	9
Pennsylvania	17,967	100	17,128	95	839	5	20,957	100	17,128	82	3,829	18
Rhode Island	1,745	100	1,294	74	451	26	1,508	100	1,294	86	214	14
South Carolina	12,325	100	10,910	89	1,415	11	11,311	100	10,910	96	401	4
South Dakota	1,697	100	1,406	83	291	17	1,476	100	1,406	95	69	5
Tennessee	15,103	100	13,221	88	1,882	12	14,134	100	13,221	94	912	6
Texas	41,141	100	38,942	95	2,199	5	40,249	100	38,942	97	1,306	3
Utah	3,822	100	3,387	89	434	11	3,852	100	3,387	88	465	12
Vermont	1,665	100	1,400	84	265	16	1,527	100	1,400	92	127	8
Virginia.....	9,629	100	8,596	89	1,033	11	10,054	100	8,596	85	1,458	15
Washington	8,882	100	8,249	93	633	7	9,166	100	8,249	90	917	10
West Virginia	6,885	100	6,442	94	443	6	6,995	100	6,442	92	552	8
Wisconsin	20,823	100	17,034	82	3,789	18	17,834	100	17,034	96	800	4
Wyoming	1,691	100	1,245	74	446	26	1,363	100	1,245	91	118	9

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

Note: U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 64. Expenditures for Fishing by State Where Spending Took Place: 2006

(Population 16 years old and older. Expenditures in thousands of dollars)

State where spending took place	Total expenditures	Trip-related expenditures				Expenditures for equipment				Expenditures for other items ¹
		Total trip-related	Food and lodging	Transportation	Other trip costs	Total equipment	Fishing equipment	Auxiliary equipment	Special equipment	
United States, total. . . .	42,156,092	17,878,560	6,302,524	4,961,830	6,614,205	18,757,370	5,332,401	778,740	12,646,229	5,520,162
Alabama	701,669	417,279	126,363	101,414	189,502	221,832	139,540	*11,462	*70,830	62,558
Alaska	517,420	362,019	132,056	99,945	130,018	135,237	39,504	7,063	*88,671	20,163
Arizona	803,990	245,741	80,144	67,026	98,570	547,205	33,529	6,164	*507,512	11,044
Arkansas	425,102	272,160	106,389	84,709	81,062	127,228	66,454	*8,058	*52,717	25,714
California	2,420,943	1,203,244	410,279	291,465	501,500	1,140,587	326,982	90,940	*722,665	77,112
Colorado	545,406	300,324	125,067	111,885	63,373	224,118	52,838	10,974	*160,306	20,964
Connecticut	243,985	130,742	37,910	30,819	62,013	102,988	49,268	12,677	*41,044	10,254
Delaware	96,734	48,536	17,785	12,477	18,274	39,246	14,181	6,568	*18,497	8,952
Florida	4,311,377	1,973,985	680,147	419,711	874,127	1,944,798	523,433	37,035	1,384,330	392,594
Georgia	1,023,343	370,743	152,886	100,416	117,441	459,927	134,972	24,435	*300,519	192,673
Hawaii	110,519	72,728	24,600	18,480	29,648	36,849	27,297	6,850	...	942
Idaho	286,459	173,993	75,877	58,256	39,860	90,425	38,885	*5,943	...	22,041
Illinois	776,544	279,732	94,413	92,326	92,994	455,317	136,349	25,255	*293,714	41,494
Indiana	628,085	242,624	67,201	67,546	107,877	316,108	110,784	17,648	*187,676	69,353
Iowa	323,859	140,617	46,271	40,607	53,740	163,104	59,311	13,215	*90,578	20,139
Kansas	243,767	127,996	40,561	54,627	32,808	108,983	44,817	6,371	*57,794	6,789
Kentucky	858,413	237,430	96,607	67,266	73,557	596,587	125,828	*9,659	...	24,396
Louisiana	1,007,231	337,363	96,927	87,043	153,393	424,564	122,194	*7,633	*294,738	245,304
Maine	260,500	118,002	51,735	39,653	26,613	115,792	27,679	3,653	*84,460	26,706
Maryland	568,473	292,638	88,459	59,475	144,703	253,571	97,600	6,691	*149,280	22,265
Massachusetts	770,765	297,312	85,723	56,248	155,341	397,049	98,524	14,957	283,568	76,404
Michigan	1,674,874	584,030	210,052	180,363	193,615	720,637	190,066	*13,532	*517,039	370,207
Minnesota	2,729,311	859,657	350,889	299,240	209,528	1,220,074	218,400	26,485	975,188	649,580
Mississippi	244,707	105,618	38,357	33,464	33,798	120,138	50,651	*4,797	...	18,951
Missouri	1,095,947	457,963	187,138	135,593	135,232	517,239	134,910	18,514	*363,815	120,745
Montana	231,412	149,800	58,092	61,516	30,192	59,938	23,765	*3,186	*32,987	21,673
Nebraska	181,905	60,992	24,365	22,042	14,584	83,777	32,130	4,978	*46,669	37,137
Nevada	145,739	61,390	26,342	23,476	11,572	65,190	26,863	2,708	...	19,160
New Hampshire	173,448	88,581	35,674	28,613	24,293	62,892	21,588	6,559	*34,744	21,975
New Jersey	752,933	471,178	88,650	74,589	307,939	253,729	128,299	14,311	*111,118	28,027
New Mexico	300,920	128,413	51,059	48,588	28,766	80,729	29,216	7,293	*44,220	91,777
New York	939,196	584,644	197,876	143,792	242,976	269,704	180,746	18,774	*70,185	84,849
North Carolina	1,131,470	692,977	281,279	169,492	242,206	311,489	166,816	28,474	*116,198	127,004
North Dakota	94,304	39,076	14,367	18,762	5,948	52,346	15,745	*1,007	...	2,881
Ohio	1,063,027	558,793	198,886	125,429	234,478	461,692	147,939	21,790	*291,963	42,542
Oklahoma	502,175	301,408	108,505	106,687	86,216	169,020	87,604	5,849	*75,566	31,747
Oregon	502,971	258,474	102,998	98,698	56,779	199,319	101,008	19,364	*78,947	45,178
Pennsylvania	1,292,629	298,610	113,989	107,453	77,168	896,076	153,021	37,226	*705,829	97,943
Rhode Island	153,771	78,900	20,276	9,561	49,063	68,950	18,458	7,346	*43,146	5,921
South Carolina	1,407,205	525,937	194,829	115,546	215,562	725,624	176,118	*28,664	*520,842	155,644
South Dakota	134,706	58,624	25,821	21,408	11,395	38,564	20,215	*1,698	...	37,517
Tennessee	603,154	290,424	101,063	90,676	98,685	280,692	90,631	11,076	*178,985	32,039
Texas	4,015,529	1,563,994	448,390	480,681	634,924	2,120,367	496,454	47,487	...	331,168
Utah	373,452	183,859	65,081	63,356	55,421	174,560	54,025	15,828	*104,708	15,033
Vermont	64,966	40,535	17,916	9,858	12,762	18,907	8,023	*1,591	...	5,524
Virginia	735,757	395,264	122,771	72,448	200,045	318,616	95,681	14,978	*207,957	21,878
Washington	906,135	354,880	117,878	120,130	116,873	485,945	139,299	35,378	311,267	65,310
West Virginia	1,175,533	153,525	63,284	57,739	32,503	154,149	38,504	21,775	...	867,859
Wisconsin	1,659,865	747,312	351,744	225,688	169,879	623,420	152,350	8,795	462,275	289,133
Wyoming	521,487	110,604	44,488	50,939	15,178	97,185	17,480	*3,037	*76,668	313,697

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

¹ Includes expenditures for magazine subscriptions, membership dues and contributions, land leasing and ownership, and licenses, stamps, tags, and permits.

Note: U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 65. Participation in Wildlife-Watching Activities by State Residents Both Inside and Outside Their Resident State: 2006

(Population 16 years old and older. Numbers in thousands)

Participant's state of residence	Population	Total participants		Away from home		Around the home	
		Number	Percent of population	Number	Percent of population	Number	Percent of population
United States, total.	229,245	71,132	31	22,977	10	67,756	30
Alabama	3,550	1,006	28	348	10	989	28
Alaska	499	207	42	68	14	202	41
Arizona	4,585	988	22	381	8	950	21
Arkansas	2,156	859	40	304	14	811	38
California	27,299	5,799	21	2,565	9	5,259	19
Colorado	3,605	1,459	40	531	15	1,393	39
Connecticut	2,735	1,102	40	290	11	1,063	39
Delaware	669	212	32	49	7	206	31
Florida	14,233	3,520	25	988	7	3,274	23
Georgia	6,910	1,819	26	371	5	1,798	26
Hawaii	1,014	160	16	*55	*5	145	14
Idaho	1,102	432	39	173	17	395	36
Illinois	9,767	2,355	24	756	8	2,258	23
Indiana	4,799	1,825	38	611	13	1,786	37
Iowa	2,339	1,111	48	344	15	1,059	45
Kansas	2,110	787	37	234	11	723	34
Kentucky	3,260	1,341	41	540	17	1,235	38
Louisiana	3,433	712	21	*234	*7	671	20
Maine	1,074	600	56	213	20	576	54
Maryland	4,333	1,334	31	305	7	1,322	31
Massachusetts	5,032	1,725	34	531	11	1,647	33
Michigan	7,804	2,947	38	827	11	2,826	36
Minnesota	4,021	1,946	48	579	14	1,908	47
Mississippi	2,214	618	28	*145	*7	606	27
Missouri	4,521	2,059	46	709	16	1,966	43
Montana	753	412	55	184	24	389	52
Nebraska	1,359	438	32	151	11	407	30
Nevada	1,895	420	22	168	9	371	20
New Hampshire	1,044	471	45	127	12	451	43
New Jersey	6,734	1,537	23	513	8	1,483	22
New Mexico	1,500	490	33	220	15	437	29
New York	14,990	3,548	24	1,178	8	3,465	23
North Carolina	6,719	2,267	34	402	6	2,237	33
North Dakota	507	134	26	*30	*6	128	25
Ohio	8,889	3,379	38	1,174	13	3,272	37
Oklahoma	2,743	1,082	39	414	15	976	36
Oregon	2,889	1,266	44	481	17	1,129	39
Pennsylvania	9,793	3,638	37	1,038	11	3,502	36
Rhode Island	842	312	37	96	11	298	35
South Carolina	3,315	943	28	332	10	924	28
South Dakota	601	266	44	116	19	257	43
Tennessee	4,699	1,966	42	725	15	1,853	39
Texas	17,076	4,111	24	1,176	7	3,861	23
Utah	1,808	574	32	255	14	491	27
Vermont	506	279	55	82	16	274	54
Virginia	5,893	2,126	36	603	10	2,082	35
Washington	4,980	2,007	40	686	14	1,927	39
West Virginia	1,458	585	40	*129	*9	559	38
Wisconsin	4,350	1,710	39	424	10	1,703	39
Wyoming	405	194	48	82	20	180	44

* Estimate based on a sample size of 10–29.

Note: Detail does not add to total because of multiple responses. U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 66. Participation in Wildlife-Watching Activities by State Where Activity Took Place: 2006

(Population 16 years old and older. Numbers in thousands)

State where activity took place	Total participants		Away from home		Around the home	
	Number	Percent	Number	Percent	Number	Percent
United States, total.	71,132	100	22,977	32	67,756	95
Alabama	1,161	100	471	41	989	85
Alaska	496	100	354	72	202	41
Arizona	1,277	100	644	50	950	74
Arkansas	1,011	100	435	43	811	80
California	6,270	100	2,894	46	5,259	84
Colorado	1,819	100	873	48	1,393	77
Connecticut	1,170	100	266	23	1,063	91
Delaware	285	100	109	38	206	72
Florida	4,240	100	1,560	37	3,274	77
Georgia	1,987	100	438	22	1,798	90
Hawaii	262	100	154	59	145	55
Idaho	754	100	506	67	395	52
Illinois	2,566	100	837	33	2,258	88
Indiana	2,042	100	755	37	1,786	87
Iowa	1,205	100	404	34	1,059	88
Kansas	816	100	248	30	723	89
Kentucky	1,475	100	572	39	1,235	84
Louisiana	738	100	*225	*30	671	91
Maine	801	100	399	50	576	72
Maryland	1,491	100	419	28	1,322	89
Massachusetts	1,919	100	655	34	1,647	86
Michigan	3,227	100	1,034	32	2,826	88
Minnesota	2,093	100	641	31	1,908	91
Mississippi	731	100	246	34	606	83
Missouri	2,248	100	842	37	1,966	87
Montana	755	100	512	68	389	52
Nebraska	490	100	176	36	407	83
Nevada	686	100	416	61	371	54
New Hampshire	710	100	347	49	451	63
New Jersey	1,713	100	615	36	1,483	87
New Mexico	787	100	507	64	437	55
New York	3,852	100	1,293	34	3,465	90
North Carolina	2,641	100	686	26	2,237	85
North Dakota	148	100	*39	*26	128	86
Ohio	3,489	100	1,055	30	3,272	94
Oklahoma	1,110	100	372	33	976	88
Oregon	1,484	100	675	45	1,129	76
Pennsylvania	3,947	100	1,168	30	3,502	89
Rhode Island	436	100	203	47	298	68
South Carolina	1,115	100	447	40	924	83
South Dakota	432	100	270	63	257	60
Tennessee	2,362	100	1,007	43	1,853	78
Texas	4,225	100	956	23	3,861	91
Utah	877	100	518	59	491	56
Vermont	468	100	265	57	274	59
Virginia	2,312	100	728	31	2,082	90
Washington	2,331	100	959	41	1,927	83
West Virginia	743	100	282	38	559	75
Wisconsin	2,039	100	685	34	1,703	84
Wyoming	643	100	521	81	180	28

* Estimate based on a sample size of 10–29.

Note: Detail does not add to total because of multiple responses. U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 67. Participation in Away-From-Home Wildlife Watching by State Where Activity Took Place: 2006

(Population 16 years old and older. Numbers in thousands)

State where activity took place	Total participants		State residents		Nonresidents	
	Number	Percent	Number	Percent	Number	Percent
United States, total	22,977	100	19,095	83	7,530	33
Alabama	471	100	315	67	*156	*33
Alaska	354	100	66	19	288	81
Arizona	644	100	352	55	292	45
Arkansas	435	100	274	63	*161	*37
California	2,894	100	2,328	80	566	20
Colorado	873	100	488	56	385	44
Connecticut	266	100	187	70	*79	*30
Delaware	109	100	35	32	*74	*68
Florida	1,560	100	813	52	746	48
Georgia	438	100	*256	*58	*183	*42
Hawaii	154	100	*47	*31	*107	*69
Idaho	506	100	179	35	326	65
Illinois	837	100	546	65	*291	*35
Indiana	755	100	537	71	*218	*29
Iowa	404	100	292	72	*112	*28
Kansas	248	100	202	81	...	...
Kentucky	572	100	398	70	*173	*30
Louisiana	*225	*100	*193	*86	...	...
Maine	399	100	186	47	213	53
Maryland	419	100	253	60	*166	*40
Massachusetts	655	100	444	68	212	32
Michigan	1,034	100	753	73	*281	*27
Minnesota	641	100	495	77	*146	*23
Mississippi	246	100	*126	*51	*120	*49
Missouri	842	100	611	73	*231	*27
Montana	512	100	169	33	343	67
Nebraska	176	100	115	65	*61	*35
Nevada	416	100	133	32	283	68
New Hampshire	347	100	98	28	249	72
New Jersey	615	100	418	68	*198	*32
New Mexico	507	100	199	39	*308	*61
New York	1,293	100	936	72	357	28
North Carolina	686	100	300	44	386	56
North Dakota	*39	*100	*23	*60	...	...
Ohio	1,055	100	923	87	*132	*13
Oklahoma	372	100	313	84	...	...
Oregon	675	100	382	57	293	43
Pennsylvania	1,168	100	858	73	310	27
Rhode Island	203	100	75	37	*128	*63
South Carolina	447	100	267	60	*180	*40
South Dakota	270	100	105	39	*165	*61
Tennessee	1,007	100	611	61	397	39
Texas	956	100	*778	*81	*178	*19
Utah	518	100	194	37	324	63
Vermont	265	100	77	29	188	71
Virginia	728	100	542	74	*186	*26
Washington	959	100	628	66	*331	*34
West Virginia	282	100	*120	*43	*162	*57
Wisconsin	685	100	356	52	329	48
Wyoming	521	100	71	14	451	86

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

Note: Detail does not add to total because of multiple responses. U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 68. Days of Wildlife Watching Away From Home by State Where Activity Took Place and Participant's State of Residence: 2006

(Population 16 years old and older. Numbers in thousands)

State	Days of activity in state						Days of activity by state residents					
	Total days, residents and nonresidents		Days by residents		Days by nonresidents		Total days, in state of residence and other states		Days in state of residence		Days in other states	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
United States, total. . . .	352,070	100	269,936	77	82,134	23	352,070	100	269,936	77	82,134	23
Alabama	7,292	100	6,634	91	*659	*9	7,488	100	6,634	89	*854	*11
Alaska	4,126	100	1,434	35	2,692	65	1,629	100	1,434	88	...	...
Arizona	5,281	100	3,634	69	1,647	31	4,784	100	3,634	76	*1,149	*24
Arkansas	4,148	100	3,739	90	*409	*10	4,434	100	3,739	84	...	...
California	45,010	100	41,436	92	3,573	8	47,752	100	41,436	87	6,315	13
Colorado	9,404	100	7,010	75	2,394	25	8,105	100	7,010	86	*1,095	*14
Connecticut	4,184	100	3,660	87	*524	*13	5,400	100	3,660	68	1,740	32
Delaware	855	100	718	84	*136	*16	847	100	718	85	*129	*15
Florida	16,551	100	10,449	63	6,102	37	14,451	100	10,449	72	*4,001	*28
Georgia	4,097	100	*3,266	*80	*830	*20	5,221	100	*3,266	*63	*1,954	*37
Hawaii	1,109	100	*386	*35	*723	*65	*488	*100	*386	*79	...	...
Idaho	5,165	100	2,423	47	2,741	53	2,975	100	2,423	81	...	...
Illinois	5,686	100	4,512	79	*1,174	*21	7,720	100	4,512	58	3,208	42
Indiana	24,013	100	7,397	31	*16,616	*69	8,644	100	7,397	86	*1,248	*14
Iowa	4,013	100	3,655	91	*358	*9	4,436	100	3,655	82	*782	*18
Kansas	3,244	100	3,029	93	...	...	3,626	100	3,029	84	*597	*16
Kentucky	4,155	100	3,265	79	*890	*21	4,155	100	3,265	79	*890	*21
Louisiana	*3,199	*100	*3,076	*96	...	...	*3,905	*100	*3,076	*79	...	...
Maine	4,778	100	3,621	76	1,157	24	3,979	100	3,621	91	*358	*9
Maryland	4,782	100	4,124	86	*658	*14	4,919	100	4,124	84	*795	*16
Massachusetts	8,461	100	7,866	93	595	7	9,863	100	7,866	80	1,998	20
Michigan	10,043	100	8,600	86	*1,443	*14	11,582	100	8,600	74	*2,982	*26
Minnesota	8,040	100	7,416	92	*625	*8	9,705	100	7,416	76	*2,290	*24
Mississippi	1,302	100	*962	*74	*339	*26	*1,408	*100	*962	*68	...	...
Missouri	14,757	100	13,445	91	*1,312	*9	14,924	100	13,445	90	*1,479	*10
Montana	3,081	100	1,578	51	1,503	49	1,809	100	1,578	87	*231	*13
Nebraska	906	100	808	89	*98	*11	1,323	100	808	61	*514	*39
Nevada	2,298	100	1,366	59	932	41	1,935	100	1,366	71	*569	*29
New Hampshire	3,165	100	1,922	61	1,243	39	2,393	100	1,922	80	471	20
New Jersey	7,965	100	7,307	92	*658	*8	8,694	100	7,307	84	1,388	16
New Mexico	5,429	100	3,670	68	*1,759	*32	3,890	100	3,670	94	*219	*6
New York	13,521	100	11,361	84	2,160	16	14,515	100	11,361	78	*3,154	*22
North Carolina	4,868	100	2,552	52	2,316	48	3,641	100	2,552	70	*1,089	*30
North Dakota	*264	*100	*168	*64	...	...	*284	*100	*168	*59	...	...
Ohio	7,816	100	6,746	86	*1,070	*14	9,522	100	6,746	71	*2,776	*29
Oklahoma	7,098	100	6,824	96	...	...	8,003	100	6,824	85	*1,179	*15
Oregon	8,162	100	6,344	78	1,817	22	7,741	100	6,344	82	*1,397	*18
Pennsylvania	11,972	100	10,562	88	1,410	12	13,157	100	10,562	80	*2,594	*20
Rhode Island	2,948	100	900	31	*2,048	*69	1,246	100	900	72	346	28
South Carolina	4,759	100	1,788	38	*2,972	*62	2,233	100	1,788	80	*446	*20
South Dakota	1,382	100	690	50	*693	*50	771	100	690	89	...	...
Tennessee	15,486	100	13,447	87	2,039	13	15,031	100	13,447	89	*1,584	*11
Texas	13,120	100	*12,150	*93	*970	*7	*31,986	*100	*12,150	*38	...	...
Utah	3,927	100	2,409	61	1,518	39	3,216	100	2,409	75	*807	*25
Vermont	2,459	100	1,491	61	968	39	2,053	100	1,491	73	*562	*27
Virginia	5,745	100	4,495	78	*1,250	*22	7,269	100	4,495	62	*2,774	*38
Washington	9,104	100	7,995	88	*1,109	*12	9,475	100	7,995	84	1,480	16
West Virginia	4,005	100	*2,748	*69	*1,257	*31	*3,346	*100	*2,748	*82	...	...
Wisconsin	5,547	100	3,760	68	1,786	32	4,568	100	3,760	82	...	...
Wyoming	3,009	100	813	27	2,196	73	963	100	813	84	*149	*16

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

Note: Detail does not add to total because of nonresponse. U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 69. Expenditures for Wildlife-Watching Activities by State Where Spending Took Place: 2006

(Population 16 years old and older. Expenditures in thousands of dollars)

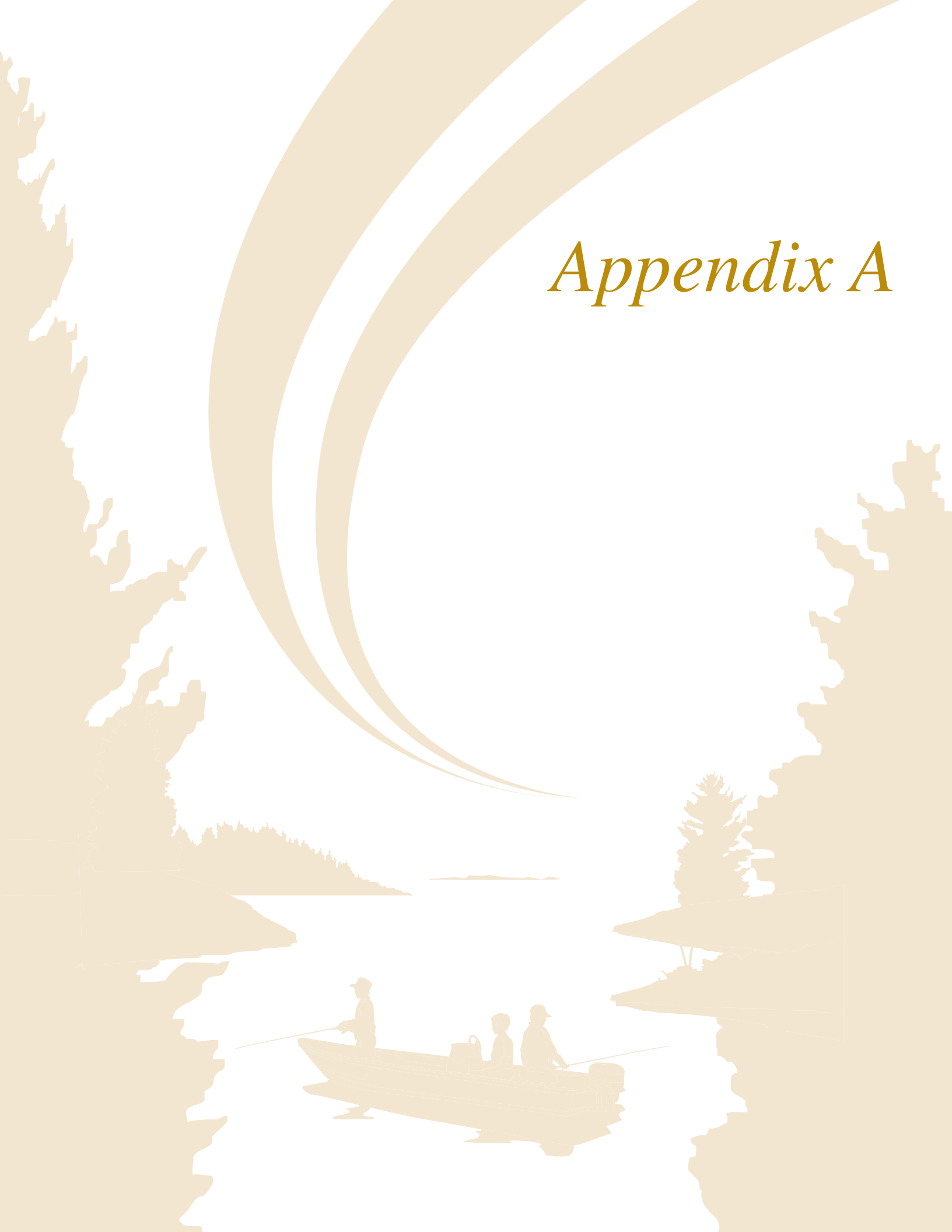
State where spending took place	Total expenditures	Trip-related expenditures				Expenditures for equipment				Expenditures for other items ¹
		Total trip-related	Food and lodging	Transportation	Other trip costs	Total equipment	Wildlife-watching equipment	Auxiliary equipment	Special equipment	
United States, total	45,654,960	12,875,152	7,516,281	4,456,013	902,858	23,174,053	9,869,727	1,033,060	12,271,266	9,605,755
Alabama	450,004	151,665	77,815	47,239	*26,611	258,551	137,632	*18,943	...	*39,788
Alaska	581,051	511,602	308,919	148,615	54,068	36,803	34,318	*2,486	...	32,646
Arizona	838,307	376,256	226,856	138,829	10,572	289,296	132,546	*28,670	...	172,754
Arkansas	607,073	114,879	60,666	46,451	*7,762	314,275	128,546	...	...	*177,919
California	4,179,583	1,997,551	1,181,309	657,316	158,927	1,931,640	1,131,764	200,080	*599,797	250,391
Colorado	1,387,737	537,427	345,652	165,370	26,405	817,468	131,635	*32,468	...	32,842
Connecticut	509,950	53,025	14,833	34,896	*3,296	395,098	151,303	13,581	...	61,826
Delaware	130,832	13,128	6,054	5,978	*1,097	110,214	31,593	*3,053	...	7,490
Florida	3,081,496	887,942	565,177	264,052	58,713	1,730,152	353,046	24,159	*1,352,947	463,402
Georgia	1,615,316	146,722	89,209	43,820	*13,694	1,246,059	417,129	*44,523	...	222,534
Hawaii	210,414	185,100	108,276	60,429	16,395	20,505	17,450	*3,055	...	4,810
Idaho	265,383	193,468	81,615	96,383	15,471	62,756	59,828	...	...	*9,159
Illinois	1,133,856	205,976	98,942	88,364	*18,670	780,921	340,407	*57,082	...	146,959
Indiana	933,920	143,615	80,678	43,914	19,022	671,595	242,537	*8,853	...	118,710
Iowa	318,006	54,411	26,749	26,241	...	199,190	132,212	...	...	64,405
Kansas	156,185	52,778	20,316	30,411	*2,051	90,294	55,191	*4,815	...	13,113
Kentucky	542,059	116,113	67,494	46,949	...	374,034	137,558	...	...	51,912
Louisiana	312,430	61,822	*41,818	*18,772	*1,232	188,409	102,097	...	...	62,199
Maine	865,643	178,462	116,876	50,392	11,194	593,051	76,001	*61,474	*455,576	94,130
Maryland	636,214	70,457	35,864	25,799	8,794	526,010	174,055	*8,815	*343,140	39,748
Massachusetts	754,963	148,779	73,481	65,496	9,802	494,008	215,958	31,122	...	112,177
Michigan	1,622,521	339,188	189,949	133,660	*15,579	780,258	331,432	*26,322	...	503,076
Minnesota	698,889	271,493	192,267	68,787	*10,439	370,838	332,942	*20,354	...	56,558
Mississippi	175,846	68,587	*31,567	*30,634	*6,386	86,553	84,814	...	...	*20,706
Missouri	869,075	219,932	86,027	121,019	*12,886	410,810	316,242	*21,580	...	238,332
Montana	376,451	302,625	177,498	95,146	29,982	54,631	43,694	...	...	19,195
Nebraska	141,910	22,741	10,721	11,431	*589	108,348	42,675	*960	...	10,821
Nevada	362,229	158,935	75,569	45,901	37,466	109,816	61,649	*6,426	...	93,478
New Hampshire	273,920	116,136	63,345	50,754	2,037	75,466	70,947	*3,509	...	82,318
New Jersey	537,449	146,300	81,168	58,984	*6,148	265,100	225,519	*35,044	...	126,049
New Mexico	297,174	208,278	124,779	71,056	12,443	81,952	47,495	*3,541	...	6,944
New York	1,567,629	695,724	351,017	306,721	37,986	635,306	602,353	*17,256	...	236,599
North Carolina	916,903	246,906	131,930	99,341	15,635	588,658	294,390	*15,900	...	81,338
North Dakota	22,913	4,952	*1,306	*3,551	...	16,979	10,008	...	...	*981
Ohio	1,187,703	207,253	118,964	84,018	...	738,301	372,495	*40,105	...	242,149
Oklahoma	328,660	134,868	75,517	54,824	*4,527	177,568	158,048	*3,052	...	16,225
Oregon	776,414	262,425	155,350	96,970	10,105	442,818	142,603	*29,407	...	71,170
Pennsylvania	1,442,681	324,990	176,807	131,536	16,646	928,853	432,149	*29,397	...	188,838
Rhode Island	214,247	97,407	84,630	9,984	*2,793	48,884	33,237	*10,103	...	67,955
South Carolina	550,777	195,804	115,067	57,668	*23,069	281,434	150,641	*36,976	...	73,539
South Dakota	183,304	129,930	97,896	29,244	*2,789	46,977	34,758	*4,204	...	6,397
Tennessee	992,362	327,240	215,427	102,989	8,823	433,538	271,007	46,057	...	231,585
Texas	2,939,018	424,197	206,692	148,729	68,776	1,780,171	664,076	*24,928	...	734,650
Utah	564,443	322,023	228,164	83,011	10,848	226,692	55,756	*8,414	...	15,728
Vermont	122,872	58,219	37,206	19,244	*1,770	30,461	27,646	*2,815	...	34,192
Virginia	960,190	248,021	195,270	41,807	10,944	626,861	245,364	*4,016	...	85,307
Washington	1,502,311	441,652	227,721	157,045	56,886	594,706	262,335	29,797	*302,574	465,953
West Virginia	241,601	136,136	*76,701	*57,678	...	77,068	69,352	...	...	*28,397
Wisconsin	744,689	260,166	171,773	79,881	*8,512	285,185	199,868	*27,604	...	199,339
Wyoming	394,869	299,988	186,338	97,847	15,803	64,740	20,031	...	...	30,140

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

¹ Includes expenditures for magazine subscriptions, membership dues and contributions, land leasing and owning, and plantings around the home that benefit wildlife.

Note: U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Appendix A



Appendix A.

Definitions

Annual household income—Total 2006 income of household members before taxes and other deductions.

Around-the-home wildlife

watching—Activity within 1 mile of home with one of six primary purposes: (1) taking special interest in or trying to identify birds or other wildlife; (2) photographing wildlife; (3) feeding birds or other wildlife; (4) maintaining natural areas of at least 1/4 acre for the benefit of wildlife; (5) maintaining plantings (such as shrubs and agricultural crops) for the benefit of wildlife; and (6) visiting public land to observe, photograph, or feed wildlife.

Auxiliary equipment—Equipment owned primarily for wildlife-associated recreation. For the sportspersons section, these include sleeping bags, packs, duffel bags, tents, binoculars and field glasses, special fishing and hunting clothing, foul weather gear, boots and waders, maintenance and repair of equipment, and processing and taxidermy costs. For the wildlife-watching section, these include tents, tarps, frame packs, backpacking and other camping equipment, and blinds.

Away-from-home wildlife watching

Trips or outings at least 1 mile from home for the primary purpose of observing, photographing, or feeding wildlife. Trips to zoos, circuses, aquariums, and museums are not included.

Big game—Bear, deer, elk, moose, wild turkey, and similar large animals that are hunted.

Census Divisions

East North Central

Illinois
Indiana
Michigan
Ohio
Wisconsin

East South Central

Alabama
Kentucky
Mississippi
Tennessee

Middle Atlantic

New Jersey
New York
Pennsylvania

Mountain

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

New England

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

Pacific

Alaska
California
Hawaii
Oregon
Washington

South Atlantic

Delaware
District of Columbia
Florida
Georgia
Maryland
North Carolina
South Carolina
Virginia
West Virginia

West North Central

Kansas
Iowa
Minnesota

Missouri
Nebraska
North Dakota
South Dakota

West South Central

Arkansas
Louisiana
Oklahoma
Texas

Day—Any part of a day spent participating in a given activity. For example, if someone hunted two hours one day and three hours another day, it would be reported as two days of hunting. If someone hunted two hours in the morning and three hours in the afternoon of the same day, it would be considered one day of hunting.

Education—The highest completed grade of school or year of college.

Expenditures—Money spent in 2006 for wildlife-related recreation trips in the United States, wildlife-related recreational equipment purchased in the United States, and other items. The “other items” were books and magazines, membership dues and contributions, land leasing or owning, hunting and fishing licenses, and plantings, all for the purpose of wildlife-related recreation. Expenditures included both money spent by participants for themselves and the value of gifts they received.

Fishing—The sport of catching or attempting to catch fish with a hook and line, bow and arrow, or spear; it also includes catching or gathering shellfish (clams, crabs, etc.); and the noncommercial seining or netting of fish, unless the fish are for use as bait. For example, seining for smelt is fishing, but seining for bait minnows is not included as fishing.

Fishing equipment—Items owned primarily for fishing:

Rods, reels, poles, and rodmaking components
Lines and leaders
Artificial lures, flies, baits, and dressing for flies or lines
Hooks, sinkers, swivels, and other items attached to a line, except lures and baits
Tackle boxes
Creels, stringers, fish bags, landing nets, and gaff hooks
Minnow traps, seines, and bait containers
Depth finders, fish finders, and other electronic fishing devices
Ice fishing equipment
Other fishing equipment

Freshwater—Reservoirs, lakes, ponds, and the nontidal portions of rivers and streams.

Great Lakes fishing—Fishing in Lakes Superior, Michigan, Huron, St. Clair, Erie, and Ontario, their connecting waters such as the St. Mary's River system, Detroit River, St. Clair River, and the Niagara River, and the St. Lawrence River south of the bridge at Cornwall, New York. Great Lakes fishing includes fishing in tributaries of the Great Lakes for smelt, steelhead, and salmon.

Home—The starting point of a wildlife-related recreational trip. It may be a permanent residence or a temporary or seasonal residence such as a cabin.

Hunting—The sport of shooting or attempting to shoot wildlife with firearms or archery equipment.

Hunting equipment—Items owned primarily for hunting:

Rifles, shotguns, muzzleloaders, and handguns
Archery equipment
Telescopic sights
Decoys and game calls
Ammunition
Hand loading equipment

Hunting dogs and associated costs
Other hunting equipment

Land leasing and owning—Leasing or owning land either singly or in cooperation with others for the primary purpose of fishing, hunting, or wildlife watching on it.

Maintain natural areas—To set aside 1/4 acre or more of natural environment, such as wood lots or open fields, for the primary purpose of benefiting wildlife. This is categorized as a wildlife-watching activity, not fishing or hunting.

Maintain plantings—To introduce or encourage the growth of food and cover plants for the primary purpose of benefiting wildlife. Examples of plantings are butterfly bushes and various sumacs. This is categorized as a wildlife-watching activity, not fishing or hunting.

Metropolitan statistical area (MSA)—Except in the New England States, an MSA is a county or group of contiguous counties containing at least one city of 50,000 or more inhabitants or twin cities (i.e., cities with contiguous boundaries and constituting, for general social and economic purposes, a single community) with a combined population of at least 50,000. Also included in an MSA are contiguous counties that are socially and economically integrated with the central city. In the New England States, an MSA consists of towns and cities instead of counties. Each MSA must include at least one central city. See U.S. Census Bureau publication *State and Metropolitan Area Data Book; 2006* for more detailed information on MSAs. It can be found at <<http://www.census.gov/prod/2006pubs/smadb/smadb-06.pdf>>.

Migratory birds—Birds that regularly migrate from one region or climate to another such as ducks, geese, and doves and other birds that may be hunted.

Multiple responses—The term used to reflect the fact that individuals or their characteristics fall into more than one reporting category. An example of a big game hunter who hunted for deer and elk demonstrates the effect of multiple responses. In this case, adding the number of deer hunters (one) and elk hunters (one) would overstate the number of big game hunters (one)

because deer and elk hunters are not mutually exclusive categories. In contrast, total participants is the sum of male and female participants, because “male” and “female” are mutually exclusive categories.

Nonresidents—Individuals who do not live in the State being reported. For example, a person living in Texas who watches whales in California is a nonresidential wildlife-watcher in California.

Nonresponse—A term used to reflect the fact that some Survey respondents provide incomplete sets of information. For example, a Survey respondent may have been unable to identify the primary type of hunting for which a gun was bought. Total hunting expenditure estimates will include the gun purchase, but it will not appear as spending for big game or any other type of hunting. Nonresponses result in reported totals that are greater than the sum of their parts.

Observe—To take special interest in or try to identify birds, fish, or other wildlife.

Other animals—Coyotes, crows, foxes, groundhogs, prairie dogs, raccoons, and similar animals that can be legally hunted and are not classified as big game, small game, or migratory birds. They may be classified as unprotected or predatory animals by the State in which they are hunted. Feral pigs are classified as “other animals” in all States except Hawaii, where they are considered big game.

Participants—Individuals who engage in fishing, hunting, or a wildlife-watching activity. Unless otherwise stated, a person has to have hunted, fished, or wildlife watched in 2006 to be considered a participant.

Plantings—See “Maintain plantings.”

Primary purpose—The principal motivation for an activity, trip, or expenditure.

Private land—Land that is owned by a private individual, group of individuals, or nongovernmental organization.

Public land—Land that is owned by local governments (such as county parks and municipal watersheds), State

governments (such as State parks and wildlife management areas), or federal governments (such as National Forests and Wildlife Refuges).

Public parks or areas—See “Public land.”

Residents—Individuals who lived in the State being reported. For example, a person who lives in California and watches whales in California is a residential wildlife watcher in California.

Rural—All territory, population, and housing units located outside of urbanized areas and urban clusters, as determined by the Census Bureau.

Saltwater—Oceans, tidal bays and sounds, and the tidal portions of rivers and streams.

Screening interviews—The first Survey contact with a sample household. Screening interviews are conducted with a household representative to identify respondents who are eligible for in-depth interviews. Screening interviews gather data such as age and sex about individuals in the households. Further information on screening interviews is available on page vii in the “Survey Background and Method” section of this report.

Small game—Grouse, pheasants, quail, rabbits, squirrels, and similar small animals for which States have small game seasons and bag limits.

Special equipment—Big-ticket equipment items that are owned primarily for wildlife-related recreation:

Bass boats

Other types of motorboats

Canoes and other types of non-motorboats

Boat motors, boat trailer/hitches, and other boat accessories

Pickups, campers, vans, travel or tent trailers, motor homes, house trailers, recreational vehicles (RVs)

Cabins

Off-the-road vehicles such as trail bikes, all terrain vehicles (ATVs), dune buggies, four-wheelers, 4x4 vehicles, and snowmobiles

Other special equipment

Spenders—People who spent money on fishing, hunting, or wildlife-watching activities or equipment.

Sportspersons—Individuals who engage in fishing, hunting, or both.

Trip—An outing involving fishing, hunting, or wildlife watching. A trip may begin from an individual’s principal residence or from another place, such as a vacation home or the home of a relative. A trip may last an hour, a day, or many days.

Type of fishing—There are three types of fishing: (1) freshwater except Great Lakes, (2) Great Lakes, and (3) saltwater.

Type of hunting—There are four types of hunting: (1) big game, (2) small game, (3) migratory bird, and (4) other animal.

Unspecified expenditure—An item that was purchased for use in both fishing and hunting, rather than primarily one or the other. Auxiliary equipment, special equipment, magazines and books, and membership dues and contributions are the items for which a purchase could be categorized as “unspecified.”

Urban—All territory, population, and housing units located within boundaries that encompass densely settled territory, consisting of core census block groups or blocks that have a population density of at least 1,000 people per square mile and surrounding census blocks that have an overall density of at least 500 people per square mile. Under certain conditions, less densely settled territory may be included, as determined by the Census Bureau.

Wildlife—Animals, such as birds, fish, insects, mammals, amphibians, and reptiles that are living in natural or wild environments. Wildlife does not include animals living in aquariums, zoos, and other artificial surroundings or domestic animals such as farm animals or pets.

Wildlife-associated recreation—Recreational fishing, hunting, and wildlife watching.

Wildlife watching—There are six types of wildlife watching: (1) closely observing, (2) photographing, (3) feeding, (4) visiting public parks or areas, (5) maintaining plantings, and (6) maintaining natural areas. These activities must be the primary purpose of the trip or the around-the-home undertaking.

Wildlife observed, photographed, or fed—Examples of species that wildlife watchers observe, photograph, and/or feed are (1) Wild birds—songbirds such as cardinals, robins, warblers, jays, buntings, and sparrows; birds of prey such as hawks, owls, eagles, and falcons; waterfowl such as ducks, geese, and swans; other water birds such as shorebirds, herons, pelicans, and cranes; and other birds such as pheasants, turkeys, road runners, and woodpeckers; (2) Land mammals—large land mammals such as bears, bison, deer, moose, and elk; and small land mammals such as squirrels, foxes, prairie dogs, and rabbits; (3) Fish such as salmon, sharks, and groupers; (4) Marine mammals such as whales, dolphins, and manatees; and (5) Other wildlife such as butterflies, turtles, spiders, and snakes.

Wildlife-watching equipment—Items owned primarily for observing, photographing, or feeding wildlife:

Binoculars and spotting scopes

Cameras, video cameras, special lenses, and other photographic equipment

Film and developing

Commercially prepared and packaged wild bird food

Other bulk food used to feed wild birds

Food for other wildlife

Nest boxes, bird houses, feeders, and baths

Day packs, carrying cases, and special clothing

Other items such as field guides and maps



Appendix B

Appendix B.

2005 Participation of 6-to-15-Year-Olds and Historical Participation of Sportspersons: Data From Screening Interviews

The 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation was carried out in two phases. The first (or screening) phase began in April 2006. The main purpose of this phase was to collect information about all persons 16 years old and older in order to develop a sample of potential sportspersons and wildlife-watchers for the second (or detailed) phase. Also, information was collected on the number of persons 6 to 15 years old who participated in wildlife-related recreation activities in 2005.

It is important to emphasize that the information reported from the 2006 screen relates to activity only up to and including 2005. Also, these data are reported in most cases by one household respondent speaking for all household members rather than the actual participant. In addition, these data are based on long-term recall (at least a 12-month recall), which has been found in Survey research (Investigation of Possible Recall/Reference Period Bias in National Surveys of Fishing, Hunting, and Wildlife-Associated Recreation, December

1989, Westat, Inc.) to add bias to the resulting estimates. In many cases, longer recall periods result in overestimating participation and expenditures for wildlife-related recreation.

Tables B-1 through B-4 report data on first-time participation and the most recent year of hunting and fishing for participants 6 years of age and older. Tables B-5 through B-11 report data specifically on 6-to-15-year-old participants in 2005. Table B-12 gives trend data for 6-15 year olds. Detailed expenditures and recreational activity data were not gathered for the 6-to-15-year-old participants.

Because of differences in methodologies of the screening and the detailed phases of the 2006 Survey, resulting estimates are not comparable. Only participants 16 years old and older were eligible for the detailed phase. The detailed phase was a series of three interviews conducted at four-month intervals. The screening interviews were one year or more recall. The shorter recall period of the detailed phase had better data accuracy.

Table B-1. Anglers and Hunters Participating for the First Time in 2005 by Age Group

(Population 6 years old and older. Numbers in thousands)

Age group	Total anglers in 2005	Fishing for first time		Total hunters in 2005	Hunting for first time	
		Number	Percent of anglers in age group		Number	Percent of hunters in age group
Total, all ages	55,739	3,983	7	15,725	1,327	8
6 to 8 years	3,403	937	28	212	101	48
9 to 11 years	3,747	574	15	369	153	42
12 to 15 years	4,960	464	9	1,192	423	35
16 to 17 years	1,910	128	7	677	97	14
18 to 24 years	4,773	288	6	1,475	165	11
25 to 34 years	7,468	418	6	2,388	143	6
35 to 44 years	10,523	518	5	3,104	113	4
45 to 54 years	9,091	350	4	3,171	103	3
55 to 64 years	6,005	150	3	1,927	*21	*1
65 years or older	3,859	155	4	...	...	...

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

Note: Data reported on this table are from screening interviews in which one adult household member responded for all household members. The screening interview required the respondent to recall 12 months worth of activity.

Table B-2. Anglers and Hunters Participating in 2004 but Not in 2005 by Age Group

(Population 6 years old and older. Numbers in thousands)

Age group	Anglers		Hunters	
	Number	Percent	Number	Percent
Total, all ages	11,506	100	3,183	100
6 to 8 years	475	4	*61	*2
9 to 11 years	615	5	88	3
12 to 15 years	929	8	171	5
16 to 17 years	506	4	121	4
18 to 24 years	1,002	9	327	10
25 to 34 years	1,846	16	522	16
35 to 44 years	2,166	19	697	22
45 to 54 years	1,973	17	525	16
55 to 64 years	1,131	10	402	13
65 years or older	864	8	269	8

* Estimate based on a sample size of 10–29.

Note: Data reported on this table are from screening interviews in which one adult household member responded for all household members. The screening interview required the respondent to recall 12 months worth of activity. Includes persons who fished or hunted only in other countries.

Table B-3. Most Recent Year of Hunting by Age Group

(Population 6 years old and older. Numbers in thousands)

Age group	Total, all persons who hunted in 2005 or earlier year		Most recent year of hunting					
			2005		2004		2003	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total, all ages	46,247	100	15,741	34	3,191	7	1,750	4
6 to 11 years.	829	100	581	70	149	18	*28	*3
12 to 15 years	1,588	100	1,192	75	172	11	68	4
16 to 17 years	967	100	677	70	121	13	73	8
18 to 24 years	3,037	100	1,477	49	331	11	224	7
25 to 34 years	5,868	100	2,390	41	522	9	300	5
35 to 44 years	8,465	100	3,111	37	700	8	409	5
45 to 54 years	9,326	100	3,174	34	525	6	281	3
55 to 64 years	7,761	100	1,927	25	402	5	219	3
65 years or older	8405	100	1,213	14	269	3	149	2
	Most recent year of hunting							
	2002		2001		2000		Before 2000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
	Total, all ages	1,249	3	1,037	2	1,271	3	21,693	47
6 to 11 years. . . . .	...	...	...	...	...	...	*39	*5
12 to 15 years	*43	*3	*15	*1	...	...	67	4
16 to 17 years . . . . .	...	...	*16	*2	*18	*2	47	5
18 to 24 years	159	5	116	4	132	4	546	18
25 to 34 years	186	3	202	3	191	3	2,022	34
35 to 44 years	291	3	193	2	256	3	3,437	41
45 to 54 years	254	3	189	2	264	3	4,605	49
55 to 64 years	174	2	128	2	214	3	4,681	60
65 years or older	127	2	176	2	179	2	6,249	74

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

Note: Data reported on this table are from screening interviews in which one adult household member responded for all household members. The screening interview required the respondent to recall 12 months worth of activity.

Table B-4. Most Recent Year of Fishing by Age Group

(Population 6 years old and older. Numbers in thousands)

Age group	Total, all persons who fished in 2005 or earlier year		Most recent year of fishing					
			2005		2004		2003	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total, all ages	119,399	100	55,766	47	11,546	10	5,760	5
6 to 11 years	9,333	100	7,150	77	1,090	12	397	4
12 to 15 years	7,543	100	4,960	66	935	12	443	6
16 to 17 years	3,635	100	1,910	53	506	14	248	7
18 to 24 years	9,753	100	4,781	49	1,013	10	646	7
25 to 34 years	15,840	100	7,470	47	1,851	12	884	6
35 to 44 years	20,805	100	10,527	51	2,172	10	1,089	5
45 to 54 years	21,081	100	9,095	43	1,979	9	1,003	5
55 to 64 years	15,645	100	6,008	38	1,134	7	593	4
65 years or older	15,763	100	3,865	25	866	5	456	3
Most recent year of fishing								
	2002		2001		2000		Before 2000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total, all ages	3,965	3	3,250	3	3,169	3	35,190	29
6 to 11 years	223	2	126	1	85	1	199	2
12 to 15 years	330	4	167	2	113	1	560	7
16 to 17 years	197	5	107	3	97	3	547	15
18 to 24 years	389	4	343	4	373	4	2,051	21
25 to 34 years	619	4	435	3	447	3	3,990	25
35 to 44 years	630	3	588	3	677	3	5,000	24
45 to 54 years	722	3	603	3	661	3	6,935	33
55 to 64 years	492	3	508	3	343	2	6,514	42
65 years or older	363	2	374	2	372	2	9,394	60

Note: Data reported on this table are from screening interviews in which one adult household member responded for all household members. The screening interview required the respondent to recall 12 months worth of activity.

Table B-5. Anglers and Hunters 6 to 15 Years Old: 2005

(Population 6 to 15 years old. Numbers in thousands)

Sportspersons	Total, 6 to 15 years old		12 to 15 years old		9 to 11 years old		6 to 8 years old	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total sportspersons, fished or hunted .	12,318	100	5,121	100	3,786	100	3,411	100
Total anglers	12,110	98	4,960	97	3,747	99	3,403	100
Fished only	10,545	86	3,929	77	3,417	90	3,199	94
Fished and hunted.....	1,565	13	1,031	20	330	9	203	6
Total hunters	1,773	14	1,192	23	369	10	212	6
Hunted only.....	208	2	161	3	*38	*1	...	...
Hunted and fished.....	1,565	13	1,031	20	330	9	203	6

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably.

Note: Detail does not add to total because of multiple responses. Data reported on this table are from screening interviews in which one adult household member responded for all household members 6 to 15 years old. The screening interview required the respondent to recall 12 months worth of activity. Includes persons who fished or hunted only in other countries.

Table B-6. Wildlife-Watching Participants 6 to 15 Years Old by Wildlife-Watching Activity: 2005

(Population 6 to 15 years old. Numbers in thousands)

Activity	Total, 6 to 15 years old			12 to 15 years old			9 to 11 years old			6 to 8 years old		
	Number	Percent of participants	Percent of population	Number	Percent of participants	Percent of population	Number	Percent of participants	Percent of population	Number	Percent of participants	Percent of population
Total participants	13,587	100	34	5,115	100	30	4,334	100	37	4,137	100	35
Away from home	5,850	43	14	2,154	42	13	1,981	46	17	1,716	41	14
Around the home	12,055	89	30	4,526	88	27	3,849	89	33	3,680	89	31
Observe wildlife	9,967	73	25	3,684	72	22	3,212	74	27	3,072	74	26
Photograph wildlife	2,009	15	5	934	18	6	670	15	6	405	10	3
Feed wild birds or other wildlife	6,324	47	16	2,248	44	13	2,139	49	18	1,937	47	16
Maintain plantings or natural areas	1,913	14	5	843	16	5	626	14	5	444	11	4

Note: Detail does not add to total because of multiple responses. Columns showing percent of participants are based on the first row of each column. Columns showing percent of population in age group are based on the U.S. population in each age category, including those who did not participate in wildlife-watching activities. Data reported on this table are from screening interviews in which one adult household member responded for household members 6 to 15 years old. The screening interview required the respondent to recall 12 months worth of activity. Includes persons who participated only in other countries.

Table B-7. **Selected Characteristics of Anglers and Hunters 6 to 15 Years Old: 2005**

(Population 6 to 15 years old. Numbers in thousands)

Characteristic	U.S. population		Sportspersons, fished or hunted			Fished only		
	Number	Percent	Number	Percent who participated	Percent	Number	Percent who participated	Percent
Total persons	40,500	100	12,318	30	100	10,545	26	100
Population Density of Residence								
Urban	31,077	77	8,108	26	66	7,382	24	70
Rural	9,422	23	4,210	45	34	3,163	34	30
Population Size of Residence								
Metropolitan statistical area (MSA)	33,809	83	9,618	28	78	8,537	25	81
1,000,000 or more	21,164	52	5,590	26	45	5,039	24	48
250,000 to 999,999	8,790	22	2,678	30	22	2,383	27	23
Less than 250,000	3,854	10	1,350	35	11	1,114	29	11
Outside MSA	6,691	17	2,701	40	22	2,008	30	19
Census Geographic Division								
New England	1,807	4	552	31	4	530	29	5
Middle Atlantic	5,246	13	1,384	26	11	1,266	24	12
East North Central	6,343	16	2,285	36	19	2,002	32	19
West North Central	2,571	6	1,289	50	10	1,074	42	10
South Atlantic	7,435	18	2,222	30	18	1,930	26	18
East South Central	2,309	6	886	38	7	627	27	6
West South Central	4,896	12	1,502	31	12	1,117	23	11
Mountain	2,922	7	872	30	7	760	26	7
Pacific	6,971	17	1,326	19	11	1,240	18	12
Age								
6 to 8 years	11,896	29	3,411	29	28	3,199	27	30
9 to 11 years	11,827	29	3,786	32	31	3,417	29	32
12 to 15 years	16,777	41	5,121	31	42	3,929	23	37
Sex								
Male, total	20,929	52	7,662	37	62	6,225	30	59
6 to 8 years	6,068	15	2,017	33	16	1,835	30	17
9 to 11 years	6,104	15	2,324	38	19	2,013	33	19
12 to 15 years	8,756	22	3,321	38	27	2,377	27	23
Female, total	19,571	48	4,656	24	38	4,320	22	41
6 to 8 years	5,828	14	1,394	24	11	1,364	23	13
9 to 11 years	5,722	14	1,462	26	12	1,404	25	13
12 to 15 years	8,021	20	1,799	22	15	1,551	19	15
Ethnicity								
Hispanic	7,598	19	1,032	14	8	941	12	9
Non-Hispanic	32,901	81	11,286	34	92	9,604	29	91
Race								
White	31,400	78	10,976	35	89	9,315	30	88
Black	6,051	15	709	12	6	664	11	6
Asian	1,948	5	227	12	2	220	11	2
All others	1,100	3	406	37	3	347	32	3
Annual Household Income								
Under \$10,000	1,647	4	324	20	3	290	18	3
\$10,000 to \$19,999	2,894	7	439	15	4	405	14	4
\$20,000 to \$24,999	2,105	5	509	24	4	449	21	4
\$25,000 to \$29,999	2,099	5	524	25	4	441	21	4
\$30,000 to \$34,999	2,127	5	561	26	5	492	23	5
\$35,000 to \$39,999	2,006	5	565	28	5	477	24	5
\$40,000 to \$49,999	3,416	8	1,200	35	10	1,026	30	10
\$50,000 to \$74,999	6,824	17	2,542	37	21	2,077	30	20
\$75,000 to \$99,999	4,470	11	1,869	42	15	1,611	36	15
\$100,000 or more	6,225	15	2,616	42	21	2,295	37	22
Not reported	6,687	17	1,170	17	9	983	15	9

See footnotes at end of table.

Table B-7. **Selected Characteristics of Anglers and Hunters 6 to 15 Years Old: 2005—Continued**

(Population 6 to 15 years old. Numbers in thousands)

Characteristic	Hunted only			Fished and hunted		
	Number	Percent who participated	Percent	Number	Percent who participated	Percent
Total persons	208	1	100	1,565	4	100
Population Density of Residence						
Urban	99	(Z)	47	627	2	40
Rural	110	1	53	937	10	60
Population Size of Residence						
Metropolitan statistical area (MSA) . . .	141	(Z)	68	939	3	60
1,000,000 or more	62	(Z)	30	489	2	31
250,000 to 999,999	*49	*1	*24	245	3	16
Less than 250,000	*31	*1	*15	205	5	13
Outside MSA	67	1	32	626	9	40
Census Geographic Division						
New England . . . . .	...	...	...	*20	*1	*1
Middle Atlantic . . . . .	...	...	...	*95	*2	*6
East North Central . . . . .	...	...	...	264	4	17
West North Central	*30	*1	*14	185	7	12
South Atlantic	*37	*(Z)	*18	255	3	16
East South Central	*31	*1	*15	228	10	15
West South Central	*30	*1	*15	355	7	23
Mountain	25	1	12	86	3	6
Pacific . . . . .	...	...	...	75	1	5
Age						
6 to 8 years . . . . .	...	...	...	203	2	13
9 to 11 years	*38	*(Z)	*18	330	3	21
12 to 15 years	161	1	77	1,031	6	66
Sex						
Male, total	158	1	76	1,278	6	82
6 to 8 years . . . . .	...	...	...	175	3	11
9 to 11 years	*27	*(Z)	*13	284	5	18
12 to 15 years	125	1	60	819	9	52
Female, total	50	(Z)	24	286	1	18
6 to 8 years . . . . .	...	...	...	*28	*(Z)	*2
9 to 11 years . . . . .	...	...	...	*46	*1	*3
12 to 15 years	*36	*(Z)	*17	212	3	14
Ethnicity						
Hispanic . . . . .	...	...	...	*86	*1	*6
Non-Hispanic	203	1	97	1,478	4	94
Race						
White	194	1	93	1,466	5	94
Black . . . . .	...	...	...	*36	*1	*2
Asian . . . . .	...	...	...	...	...	...
All others . . . . .	...	...	...	55	5	3
Annual Household Income						
Under \$10,000 . . . . .	...	...	...	*29	*2	*2
\$10,000 to \$19,999 . . . . .	...	...	...	*26	*1	*2
\$20,000 to \$24,999 . . . . .	...	...	...	*50	*2	*3
\$25,000 to \$29,999 . . . . .	...	...	...	*74	*4	*5
\$30,000 to \$34,999 . . . . .	...	...	...	64	3	4
\$35,000 to \$39,999 . . . . .	...	...	...	75	4	5
\$40,000 to \$49,999 . . . . .	...	...	...	161	5	10
\$50,000 to \$74,999	57	1	28	407	6	26
\$75,000 to \$99,999	*27	*1	*13	231	5	15
\$100,000 or more	*39	*1	*19	282	5	18
Not reported	*21	*(Z)	*10	165	2	11

* Estimate based on a sample size of 10–29. ... Sample size too small to report data reliably. (Z) Less than 0.5 percent.

Note: Percent who participated columns show the percent of each row's population who participated in the activity named by the column (the percent of those living in urban areas who fished only, etc.). Percent columns show the percent of each column's participants who are described by the row heading (the percent of those who fished only who lived in urban areas, etc.). Data reported on this table are from screening interviews in which one adult household member responded for all household members. The screening interview required the respondent to recall 12 months worth of activity.

Table B-8. **Selected Characteristics of Wildlife-Watching Participants 6 to 15 Years Old: 2005**

(Population 6 to 15 years old. Numbers in thousands)

Characteristic	U.S. population		Participants								
			Total			Away from home			Around the home		
	Number	Percent	Number	Percent who participated	Percent	Number	Percent who participated	Percent	Number	Percent who participated	Percent
Total persons	40,500	100	13,587	34	100	5,850	14	100	12,055	30	100
Population Density of Residence											
Urban	31,077	77	9,503	31	70	4,103	13	70	8,331	27	69
Rural	9,422	23	4,084	43	30	1,747	19	30	3,724	40	31
Population Size of Residence											
Metropolitan statistical area (MSA)	33,809	83	10,937	32	80	4,726	14	81	9,694	29	80
1,000,000 or more	21,164	52	6,289	30	46	2,713	13	46	5,569	26	46
250,000 to 999,999	8,790	22	3,097	35	23	1,365	16	23	2,727	31	23
Less than 250,000	3,854	10	1,550	40	11	647	17	11	1,398	36	12
Outside MSA	6,691	17	2,650	40	20	1,125	17	19	2,361	35	20
Census Geographic Division											
New England	1,807	4	744	41	5	295	16	5	658	36	5
Middle Atlantic	5,246	13	1,698	32	12	712	14	12	1,564	30	13
East North Central	6,343	16	2,265	36	17	987	16	17	2,074	33	17
West North Central	2,571	6	1,201	47	9	498	19	9	1,028	40	9
South Atlantic	7,435	18	2,343	32	17	875	12	15	2,165	29	18
East South Central	2,309	6	792	34	6	317	14	5	731	32	6
West South Central	4,896	12	1,603	33	12	738	15	13	1,400	29	12
Mountain	2,922	7	1,072	37	8	554	19	9	906	31	8
Pacific	6,971	17	1,868	27	14	873	13	15	1,528	22	13
Age											
6 to 8 years	11,896	29	4,137	35	30	1,716	14	29	3,680	31	31
9 to 11 years	11,827	29	4,334	37	32	1,981	17	34	3,849	33	32
12 to 15 years	16,777	41	5,115	30	38	2,154	13	37	4,526	27	38
Sex											
Male, total	20,929	52	7,281	35	54	3,138	15	54	6,468	31	54
6 to 8 years	6,068	15	2,156	36	16	916	15	16	1,908	31	16
9 to 11 years	6,104	15	2,256	37	17	1,051	17	18	2,027	33	17
12 to 15 years	8,756	22	2,869	33	21	1,171	13	20	2,533	29	21
Female, total	19,571	48	6,306	32	46	2,712	14	46	5,587	29	46
6 to 8 years	5,828	14	1,981	34	15	800	14	14	1,772	30	15
9 to 11 years	5,722	14	2,078	36	15	930	16	16	1,822	32	15
12 to 15 years	8,021	20	2,247	28	17	983	12	17	1,993	25	17
Ethnicity											
Hispanic	7,598	19	1,626	21	12	784	10	13	1,378	18	11
Non-Hispanic	32,901	81	11,960	36	88	5,067	15	87	10,677	32	89
Race											
White	31,400	78	11,687	37	86	5,025	16	86	10,468	33	87
Black	6,051	15	1,000	17	7	314	5	5	890	15	7
Asian	1,948	5	438	22	3	275	14	5	294	15	2
All others	1,100	3	461	42	3	236	21	4	404	37	3
Annual Household Income											
Under \$10,000	1,647	4	335	20	2	145	9	2	284	17	2
\$10,000 to \$19,999	2,894	7	716	25	5	271	9	5	648	22	5
\$20,000 to \$24,999	2,105	5	533	25	4	188	9	3	462	22	4
\$25,000 to \$29,999	2,099	5	547	26	4	300	14	5	464	22	4
\$30,000 to \$34,999	2,127	5	743	35	5	279	13	5	642	30	5
\$35,000 to \$39,999	2,006	5	641	32	5	283	14	5	596	30	5
\$40,000 to \$49,999	3,416	8	1,312	38	10	493	14	8	1,167	34	10
\$50,000 to \$74,999	6,824	17	2,601	38	19	1,171	17	20	2,351	34	20
\$75,000 to \$99,999	4,470	11	2,027	45	15	1,022	23	17	1,776	40	15
\$100,000 or more	6,225	15	2,858	46	21	1,280	21	22	2,537	41	21
Not reported	6,687	17	1,273	19	9	417	6	7	1,129	17	9

Note: Detail does not add to total because of multiple responses. Percent who participated columns show the percent of each row's population who participated in the activity named by the column (the percent of those living in urban areas who were around-the-home participants, etc.). Percent columns show the percent of each column's participants who are described by the row heading (the percent of those who were around-the-home participants who lived in urban areas, etc.). Data reported on this table are from screening interviews in which one adult household member responded for all household members 6 to 15 years old. The screening interview required the respondent to recall 12 months worth of activity. Includes persons who participated in wildlife-watching activities only in other countries.

Table B-9. Participants in Wildlife-Related Recreation 6 to 15 Years Old by State Residents Both Inside and Outside Their Resident State: 2005

(Population 6 to 15 years old. Numbers in thousands)

Participant's state of residence	Population	Total participants		Sportspersons		Wildlife-watching participants	
		Number	Percent of population	Number	Percent of population	Number	Percent of population
United States, total.	40,500	18,421	45	12,318	30	13,587	34
Alabama	600	281	47	230	38	177	29
Alaska	104	75	72	58	55	52	50
Arizona	879	321	36	172	20	236	27
Arkansas	371	217	58	164	44	121	33
California	5,389	1,656	31	810	15	1,255	23
Colorado	646	364	56	242	37	302	47
Connecticut	472	225	48	138	29	175	37
Delaware	107	53	49	35	32	40	37
Florida	2,263	884	39	547	24	645	29
Georgia	1,281	567	44	394	31	406	32
Hawaii	168	56	33	33	20	38	22
Idaho	206	124	60	87	42	86	42
Illinois	1,785	725	41	493	28	500	28
Indiana	897	489	55	366	41	313	35
Iowa	368	240	65	184	50	177	48
Kansas	368	237	64	177	48	178	48
Kentucky	541	348	64	272	50	245	45
Louisiana	620	233	37	167	27	160	26
Maine	155	103	66	73	47	78	51
Maryland	772	329	43	210	27	253	33
Massachusetts	798	380	48	194	24	316	40
Michigan	1,414	747	53	541	38	613	43
Minnesota	672	495	74	391	58	346	52
Mississippi	404	164	41	147	36	96	24
Missouri	756	469	62	353	47	343	45
Montana	112	71	63	46	41	49	44
Nebraska	233	135	58	106	45	73	31
Nevada	354	122	34	69	20	103	29
New Hampshire	172	106	62	78	45	80	47
New Jersey	1,203	438	36	279	23	326	27
New Mexico	270	131	48	83	31	103	38
New York	2,476	905	37	513	21	697	28
North Carolina	1,181	562	48	384	33	370	31
North Dakota	74	45	61	37	50	28	38
Ohio	1,531	861	56	596	39	597	39
Oklahoma	466	269	58	172	37	201	43
Oregon	477	254	53	157	33	188	39
Pennsylvania	1,567	854	54	592	38	674	43
Rhode Island	136	67	50	36	26	52	39
South Carolina	564	290	51	218	39	179	32
South Dakota	101	65	65	41	41	56	56
Tennessee	764	364	48	236	31	275	36
Texas	3,438	1,412	41	1,000	29	1,121	33
Utah	393	203	51	141	36	157	40
Vermont	74	53	71	33	45	41	56
Virginia	1,000	479	48	325	33	367	37
Washington	833	416	50	268	32	335	40
West Virginia	211	120	57	109	52	83	39
Wisconsin	716	375	52	290	40	242	34
Wyoming	62	46	74	30	49	36	58

Note: Detail does not add to total because of multiple responses. U.S. totals include responses from participants residing in the District of Columbia, as described in the statistical accuracy appendix. Data reported on this table are from screening interviews in which one adult household member responded for household members 6 to 15 years old. The screening interview required the respondent to recall 12 months worth of activity. Includes persons who participated only in other countries.

Table B-10. Anglers and Hunters 6 to 15 Years Old by State Residents Participating Both Inside and Outside Their Resident State: 2005

(Population 6 to 15 years old. Numbers in thousands)

Sportsperson's state of residence	Population	Fished or hunted		Fished only		Hunted only		Fished and hunted	
		Number	Percent of population	Number	Percent of population	Number	Percent of population	Number	Percent of population
United States, total.	40,500	12,318	30	10,545	26	208	1	1,565	4
Alabama	600	230	38	157	26	...	...	*64	*11
Alaska	104	58	55	52	50	...	...	*6	*5
Arizona	879	172	20	156	18	...	...	...	...
Arkansas	371	164	44	120	32	...	...	*37	*10
California	5,389	810	15	778	14	...	...	...	...
Colorado	646	242	37	223	34	...	...	*13	*2
Connecticut	472	138	29	136	29	...	...	...	...
Delaware	107	35	32	32	30	...	...	...	...
Florida	2,263	547	24	499	22	...	...	*38	*2
Georgia	1,281	394	31	324	25	...	...	*56	*4
Hawaii	168	33	20	30	18	...	...	...	...
Idaho	206	87	42	68	33	...	...	*13	*6
Illinois	1,785	493	28	438	25	...	...	*55	*3
Indiana	897	366	41	303	34	...	...	*57	*6
Iowa	368	184	50	157	43	...	...	*23	*6
Kansas	368	177	48	152	41	...	...	*18	*5
Kentucky	541	272	50	219	41	...	...	*42	*8
Louisiana	620	167	27	120	19	...	...	*43	*7
Maine	155	73	47	68	44	...	...	...	...
Maryland	772	210	27	187	24	...	...	*19	*2
Massachusetts	798	194	24	190	24	...	...	...	...
Michigan	1,414	541	38	486	34	...	...	*52	*4
Minnesota	672	391	58	334	50	...	...	*54	*8
Mississippi	404	147	36	78	19	...	...	61	15
Missouri	756	353	47	289	38	...	...	*57	*8
Montana	112	46	41	33	30	...	...	*9	*8
Nebraska	233	106	45	86	37	...	...	*18	*8
Nevada	354	69	20	62	18	...	...	...	...
New Hampshire	172	78	45	74	43	...	...	...	...
New Jersey	1,203	279	23	271	23	...	...	...	...
New Mexico	270	83	31	78	29	...	...	...	...
New York	2,476	513	21	471	19	...	...	...	...
North Carolina	1,181	384	33	337	29	...	...	*42	*4
North Dakota	74	37	50	26	36	...	...	*7	*9
Ohio	1,531	596	39	541	35	...	...	*49	*3
Oklahoma	466	172	37	125	27	...	...	41	9
Oregon	477	157	33	141	29	...	...	...	...
Pennsylvania	1,567	592	38	525	33	...	...	*53	*3
Rhode Island	136	36	26	35	26	...	...	...	...
South Carolina	564	218	39	188	33	...	...	*29	*5
South Dakota	101	41	41	30	30	...	...	*8	*8
Tennessee	764	236	31	173	23	...	...	*62	*8
Texas	3,438	1,000	29	752	22	...	...	234	7
Utah	393	141	36	114	29	...	...	*23	*6
Vermont	74	33	45	27	37	...	...	...	...
Virginia	1,000	325	33	289	29	...	...	*34	*3
Washington	833	268	32	239	29	...	...	*22	*3
West Virginia	211	109	52	73	35	...	...	*34	*16
Wisconsin	716	290	40	233	33	...	...	*51	*7
Wyoming	62	30	49	25	40	...	...	*5	*7

* Estimate based on a sample size of 10-29. ... Sample size too small to report data reliably.

Note: U.S. totals include responses from participants residing in the District of Columbia, as described in the statistical accuracy appendix. Data reported on this table are from screening interviews in which one adult household member responded for household members 6 to 15 years old. The screening interviews required the respondent to recall 12 months worth of activity. Includes persons who participated only in other countries.

Table B-11. Participants in Wildlife-Watching Activities 6 to 15 Years Old by State Residents Participating Both Inside and Outside Their Resident State: 2005

(Population 6 to 15 years old. Numbers in thousands)

Participant's state of residence	Population	Participants					
		Total		Away from home		Around the home	
		Number	Percent of population	Number	Percent of population	Number	Percent of population
United States, total.	40,500	13,587	34	5,850	14	12,055	30
Alabama	600	177	29	*49	*8	165	27
Alaska	104	52	50	27	26	47	45
Arizona	879	236	27	113	13	205	23
Arkansas	371	121	33	*41	*11	102	27
California	5,389	1,255	23	597	11	1,011	19
Colorado	646	302	47	158	25	265	41
Connecticut	472	175	37	71	15	155	33
Delaware	107	40	37	17	16	35	33
Florida	2,263	645	29	232	10	611	27
Georgia	1,281	406	32	153	12	376	29
Hawaii	168	38	22	17	10	30	18
Idaho	206	86	42	37	18	63	31
Illinois	1,785	500	28	216	12	467	26
Indiana	897	313	35	144	16	285	32
Iowa	368	177	48	77	21	160	43
Kansas	368	178	48	68	19	147	40
Kentucky	541	245	45	89	16	224	41
Louisiana	620	160	26	*74	*12	143	23
Maine	155	78	51	35	23	73	47
Maryland	772	253	33	118	15	231	30
Massachusetts	798	316	40	121	15	278	35
Michigan	1,414	613	43	313	22	551	39
Minnesota	672	346	52	161	24	296	44
Mississippi	404	96	24	*34	*8	88	22
Missouri	756	343	45	130	17	295	39
Montana	112	49	44	36	32	39	34
Nebraska	233	73	31	33	14	57	25
Nevada	354	103	29	50	14	84	24
New Hampshire	172	80	47	40	23	67	39
New Jersey	1,203	326	27	139	12	288	24
New Mexico	270	103	38	53	20	82	30
New York	2,476	697	28	264	11	646	26
North Carolina	1,181	370	31	121	10	333	28
North Dakota	74	28	38	*7	*10	25	34
Ohio	1,531	597	39	254	17	533	35
Oklahoma	466	201	43	65	14	178	38
Oregon	477	188	39	74	15	155	33
Pennsylvania	1,567	674	43	310	20	630	40
Rhode Island	136	52	39	19	14	46	34
South Carolina	564	179	32	90	16	165	29
South Dakota	101	56	56	22	22	47	46
Tennessee	764	275	36	146	19	255	33
Texas	3,438	1,121	33	558	16	977	28
Utah	393	157	40	84	21	137	35
Vermont	74	41	56	*10	*14	40	54
Virginia	1,000	367	37	111	11	338	34
Washington	833	335	40	158	19	284	34
West Virginia	211	83	39	*33	*16	77	36
Wisconsin	716	242	34	*61	*9	239	33
Wyoming	62	36	58	22	36	31	50

* Estimate based on a sample size of 10–29.

Note: Detail does not add to total because of multiple responses. U.S. totals include responses from participants residing in the District of Columbia, as described in the statistical accuracy appendix. Data reported on this table are from screening interviews in which one adult household member responded for all household members 6 to 15 years old. The screening interview required the respondent to recall 12 months worth of activity. Includes persons who participated only in other countries.

Table B-12. **Participation by 6-to-15-Year-Olds in 1980, 1985, 1990, 1995, 2000, and 2005**

(Numbers in thousands)

Participant	1980			1985			1990		
	Number of participants	Percent change from previous survey	Percent of 6-to-15-year-old population	Number of participants	Percent change from previous survey	Percent of 6-to-15-year-old population	Number of participants	Percent change from previous survey	Percent of 6-to-15-year-old population
Total sportspersons	12,141	(NA)	34	12,558	3	36	14,011	12	39
Anglers	11,787	(NA)	33	12,243	4	35	13,790	13	39
Hunters	1,962	(NA)	6	1,799	-8	5	1,730	-4	5
Total wildlife watchers.	(NA)	(NA)	(NA)	17,789	(NA)	51	17,136	-4	48
Around the home	(NA)	(NA)	(NA)	16,151	(NA)	46	15,406	-5	43
Away from home	(NA)	(NA)	(NA)	6,615	(NA)	19	7,311	11	21
	1995			2000			2005		
	Number of participants	Percent change from previous survey	Percent of 6-to-15-year-old population	Number of participants	Percent change from previous survey	Percent of 6-to-15-year-old population	Number of participants	Percent change from previous survey	Percent of 6-to-15-year-old population
Total sportspersons	15,019	7	39	13,369	-11	33	12,318	-8	30
Anglers	14,808	7	38	13,145	-11	32	12,110	-8	30
Hunters	1,720	-1	4	1,741	1	4	1,773	2	4
Total wildlife watchers.	17,449	2	45	15,066	-14	37	13,587	-10	34
Around the home	15,425	(Z)	40	13,542	-12	33	12,055	-11	30
Away from home	8,314	14	21	6,091	-27	15	5,850	-4	14

(NA) Not available. (Z) Less than 0.5 percent.



Appendix C

Appendix C.

Significant Methodological Changes From Previous Surveys and Regional Trends

The 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (FHWAR) was designed to continue the data collection of the 1955 to 2001 Surveys. While complete comparability between any two surveys cannot be achieved, this appendix compares major findings of all the surveys and presents trends for the major categories of wildlife-related recreation where feasible. Differences among the Surveys are discussed in the following two sections.

The principal characteristics of the 1955 to 2006 Surveys are summarized in Table C-1. The table shows the scope and design of all 11 surveys.

This appendix provides trend information in two sections (1991 to 2006 and 1955 to 1985). A significant change was made in 1991 in the recall period used in the detailed phase of the FHWAR Surveys. The recall period in 1991 was shortened from 12 months (used in previous surveys) to 4 months in order to improve the accuracy of the data collected. As a result of that change, the surveys conducted since 1991 cannot be compared with those conducted earlier.

The 1955 to 1985 Surveys required respondents to recall their recreation activities for the survey year at the beginning of the following year. The 1991 to 2006 Surveys went back to the respondents three times during the survey year to get their activity information. The change in the recall period was due to a study¹ of the effect of the respondent recall length on survey estimates. The study found significant differences in FHWAR survey results using annual recall periods

versus shorter recall periods. Longer recall periods lead to higher estimates. Even when everything else was held constant, such as questionnaire content and sample design, increasing the respondent's recall period resulted in significantly higher estimates for the same phenomenon.

The recall study also found that the extent of recall bias varied for different types of fishing and hunting participation and expenditures. For example, annual recall respondents gave an estimate of average annual days of saltwater fishing that was 46 percent higher than the trimester recall estimate, while the annual recall estimate of average annual saltwater fishing trips was 30 percent higher than the trimester recall estimate. This means there is no single correction factor for all survey estimates when calculating trends from surveys using different recall periods.

Reliable trends analysis needs to use data compiled from surveys in which the important elements, such as the sample design and recall period, are not significantly different.

1991 to 2006 Significant Methodological Differences

The most significant design differences in the four surveys are as follows:

1. The 1991 Survey data were collected by interviewers filling out paper questionnaires. The data entries were keyed in a separate operation after the interview. The 1996, 2001, and 2006 survey data were collected by the use of computer-assisted interviews. The questionnaires were programmed into computers, and the interviewer keyed in the responses at the time of the interview.

2. The 1991 Survey screening phase was conducted in January and February 1991, when the sample households were contacted and a household respondent was interviewed on behalf of the entire household. The screening interviews for the 1996, 2001, and 2006 Surveys were conducted April through June of their survey years in conjunction with the first wave of the detailed interviews. The screening interviews for all four Surveys consisted primarily of demographic questions and wildlife-related recreation questions concerning activity in the previous year (1990, 1995, etc.) and intentions for recreating in the survey year.

In the 1991 Survey, an attempt was made to contact every sample person in all three detailed interview waves. In 1996, 2001, and 2006, respondents who were interviewed in the first detailed interview wave were not contacted again until the third wave. Also, all interviews in the second wave were conducted by telephone. In-person interviews were only conducted in the first and third waves.

Section I. Important Instrument Changes in the 1996 Survey

1. The 1991 Survey collected information on all wildlife-related recreation purchases made by participants without reference to where the purchase was made. The 1996 Survey asked in which state the purchase was made.
2. In 1991, respondents were asked what kind of fishing they did, i.e., Great Lakes, other freshwater, or saltwater, and then were asked in what states they fished. In 1996, respondents were asked in which

¹ Investigation of Possible Recall/Reference Period Bias in National Surveys of Fishing, Hunting, and Wildlife-Associated Recreation, December 1989, Westat, Inc.

Table C-1. Major Characteristics of Surveys: 1955 to 2006

Characteristic	1955	1960	1965	1970	1975	1980	1985	1991	1996	2001	2006
Survey design:											
Screening interview mode and population of interest	Combined with detailed phase	Personal interview, 12 years old and older	Personal interview, 9 years old and older	Mail questionnaire, 9 years old and older	Telephone interview, 6 years old and older	Telephone/ personal interview, 6 years old and older	Telephone/ personal interview, 6 years old and older	Telephone/ personal interview, 6 years old and older	Telephone/ personal interview, 6 years old and older	Telephone/ personal interview, 6 years old and older	Telephone/ personal interview, 6 years old and older
Detailed interview mode and population of interest	Personal interview, 12 years old and older	Personal interview, 12 years old and older. Substantial participants ¹	Personal interview, 12 years old and older. Substantial participants ¹	Personal interview, 12 years old and older. Substantial participants ²	Mail questionnaire, 9 years old and older	Personal interview, 16 years old and older	Personal interview, 16 years old and older	Telephone/ personal interview, 16 years old and older.	Telephone/ personal interview, 16 years old and older	Telephone/ personal interview, 16 years old and older	Telephone/ personal interview, 16 years old and older
Respondent's recall period. . .	1 year	1 year	1 year	1 year	1 year	1 year	1 year	4 months	4–8 months	4–8 months	4–8 months
Sample sizes:											
Screening phase (households)	20,000	18,000	16,000	24,000	106,294	116,025	102,694	102,804	44,000	52,508	66,688
Detailed phase (individuals):											
Fishing and hunting	9,328	10,300	6,400	8,700	20,211	30,291	28,011	23,179	13,222	25,070	21,938
Wildlife watching ³	(X)	(X)	(X)	(X)	(X)	5,997	26,671	22,723	9,802	15,303	11,279
Response rates:											
Screening phase	(NA)	(NA)	(NA)	(NA)	95 percent	95 percent	93 percent	95 percent	71 percent	75 percent	90 percent
Detailed phase:											
Fishing and hunting	(NA)	93 percent	(NA)	(NA)	37 percent	90 percent	92 percent	95 percent	80 percent	88 percent	77 percent
Wildlife watching ³	(X)	(X)	(X)	(X)	(X)	95 percent	94 percent	95 percent	82 percent	90 percent	78 percent
Level of reporting.	National	National	National	National	State and National	State and National	State and National	State and National	State and National	State and National	State and National
Data collection agent	Private contractor	U.S. Census Bureau	U.S. Census Bureau	U.S. Census Bureau	Private contractor	U.S. Census Bureau	U.S. Census Bureau	U.S. Census Bureau	U.S. Census Bureau	U.S. Census Bureau	U.S. Census Bureau

(NA) Not available. (X) Not applicable; wildlife-watching (nonconsumptive) interviews were not conducted prior to 1980.

¹ Spent \$5.00 or more or participated 3 days or more during the year.

² Spent \$7.50 or more or participated 3 days or more during the year.

³ Termed "nonconsumptive" in 1980, 1985, and 1991 Surveys.

states they fished and then were asked what kind of fishing they did. This method had the advantage of not asking about, for example, salt-water fishing when they only fished in a noncoastal state.

3. In 1991, respondents were asked how many days they “actually” hunted or fished for a particular type of game or fish and then how many days they “chiefly” hunted or fished for the same type of game or fish rather than another type of game or fish. To get total days of hunting or fishing for a particular type of game or fish, the “actually” day response was used, while to get the sum of all days of hunting or fishing, the “chiefly” days were summed. In 1996, respondents were asked their total days of hunting or fishing in the country and in each state, then how many days they hunted or fished for a particular type of game or fish.
4. Trip-related and equipment expenditure categories were not the same for all Surveys. “Guide fee” and “Pack trip or package fee” were two separate trip-related expenditure items in 1991, while they were combined into one category in the 1996 Survey. “Boating costs” was added to the 1996 hunting and wildlife-watching trip-related expenditure sections. “Heating and cooking fuel” was added to all of the trip-related expenditure sections. “Spearfishing equipment” was moved from a separate category to the “other” list. “Rods” and “Reels” were two separate categories in 1991 but were combined in 1996. “Lines, hooks, sinkers, etc.” was one category in 1991 but split into “Lines” and “Hooks, sinkers, etc.” in 1996. “Food used to feed other wildlife” was added to the wildlife-watching equipment section; “Boats” and “Cabins” were added to the wildlife-watching special equipment section; and “Land leasing and ownership” was added to the wildlife-watching expenditures section.
5. Questions asking sportspersons if they participated as much as they wanted were added in 1996. If the

sportspersons said no, they were asked why not.

6. The 1991 Survey included questions about participation in organized fishing competitions; anglers using bows and arrows, nets or seines, or spearfishing; hunters using pistols or handguns and target shooting in preparation for hunting. These questions were not asked in 1996.
7. The 1996 Survey included questions about catch and release fishing and persons with disabilities participating in wildlife-related recreation. These questions were not part of the 1991 Survey.
8. The 1991 Survey included questions about average distance traveled to recreation sites. These questions were not included in the 1996 Survey.
9. The 1996 Survey included questions about the last trip the respondent took. Included were questions about the type of trip, where the activity took place, and the distance and direction to the site visited. These questions were not asked in 1991.
10. The 1991 Survey collected data on hunting, fishing, and wildlife watching by U.S. residents in Canada. The 1996 Survey collected data on fishing and wildlife-watching by U.S. residents in Canada.

Section II. Important Instrument Changes in the 2001 Survey

1. The 1991 and 1996 single-race category “Asian or Pacific Islander” was changed to two categories “Asian” and “Native Hawaiian or Other Pacific Islander.” In 1991 and 1996, the respondent was required to pick only one category, while in 2001 the respondent could pick any combination of categories. The next question stipulated that the respondent could only be identified with one category and then asked what that category was.
2. The 1991 and 1996 land leasing and ownership sections asked the

respondent to combine the two types of land use into one and give total acreage and expenditures. In 2001, the two types of land use were explored separately.

3. The 1991 and 1996 wildlife-watching sections included questions on birdwatching for residential users only. The 2001 Survey added a question on birdwatching for nonresidential users. Also, questions on the use of birding life lists and how many species the respondent can identify were added.
4. “Recreational vehicles” was added to the sportspersons and wildlife-watchers special equipment section. “House trailer” was added to the sportspersons special equipment section.
5. Total personal income was asked in the detailed phase of the 1996 Survey. This was changed to total household income in the 2001 Survey.
6. A question was added to the trip-related expenditures section to ascertain how much of the total was spent in the respondent’s state of residence when the respondent participated in hunting, fishing, or wildlife watching out of state.
7. Boating questions were added to the fishing section. The respondent was asked about the extent of boat usage for the three types of fishing.
8. The 1996 Survey included questions about the months residential wildlife watchers fed birds. These questions were not repeated in the 2001 Survey.
9. The contingent valuation sections of the three types of wildlife-related recreation were altered, using an open-ended question format instead of the dichotomous choice format used in 1996.

Section III. Important Instrument Changes in the 2006 Survey

1. A series of boating questions was added. The new questions dealt with anglers using motorboats and/or non-motorboats, length of boat

Table C-2. Anglers and Hunters by Census Division: 1991, 1996, 2001, and 2006

(U.S. population 16 years old and older. Numbers in thousands)

Area and sportsperson	1991		1996		2001		2006	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
UNITED STATES								
Total population	189,964	100	201,472	100	212,298	100	229,245	100
Sportspersons	39,979	21	39,694	20	37,805	18	33,916	15
Anglers	35,578	19	35,246	17	34,067	16	29,952	13
Hunters	14,063	7	13,975	7	13,034	6	12,510	5
New England								
Total population	10,180	100	10,306	100	10,575	100	11,233	100
Sportspersons	1,658	16	1,673	16	1,504	14	1,353	12
Anglers	1,545	15	1,520	15	1,402	13	1,246	11
Hunters	444	4	465	5	386	4	374	3
Middle Atlantic								
Total population	29,216	100	29,371	100	29,806	100	31,518	100
Sportspersons	4,508	15	4,192	14	3,810	13	3,214	10
Anglers	3,871	13	3,627	12	3,250	11	2,550	8
Hunters	1,746	6	1,453	5	1,633	5	1,520	5
East North Central								
Total population	32,188	100	33,121	100	34,082	100	35,609	100
Sportspersons	7,202	22	6,912	21	6,400	19	5,975	17
Anglers	6,264	19	6,006	18	5,655	17	5,190	15
Hunters	2,789	9	2,712	8	2,421	7	2,376	7
West North Central								
Total population	13,504	100	13,875	100	14,430	100	15,458	100
Sportspersons	4,143	31	3,977	29	4,239	29	3,836	25
Anglers	3,647	27	3,416	25	3,836	27	3,284	21
Hunters	1,709	13	1,917	14	1,710	12	1,779	12
South Atlantic								
Total population	33,682	100	36,776	100	39,286	100	43,965	100
Sportspersons	6,996	21	7,282	20	6,957	18	6,633	15
Anglers	6,441	19	6,636	18	6,451	16	6,116	14
Hunters	2,083	6	2,050	6	1,875	5	1,884	4
East South Central								
Total population	11,667	100	12,459	100	12,976	100	13,722	100
Sportspersons	2,984	26	2,907	23	2,865	22	2,689	20
Anglers	2,635	23	2,514	20	2,543	20	2,436	18
Hunters	1,279	11	1,301	10	1,164	9	1,101	8
West South Central								
Total population	19,926	100	21,811	100	23,337	100	25,407	100
Sportspersons	5,125	26	5,093	23	4,924	21	4,499	18
Anglers	4,592	23	4,616	21	4,375	19	3,952	16
Hunters	1,843	9	1,812	8	1,988	9	1,810	7
Mountain								
Total population	10,092	100	11,966	100	13,308	100	15,651	100
Sportspersons	2,488	25	2,761	23	2,757	21	2,372	15
Anglers	2,079	21	2,411	20	2,443	18	2,084	13
Hunters	1,069	11	1,061	9	1,020	8	868	6
Pacific								
Total population	29,508	100	31,787	100	34,498	100	36,681	100
Sportspersons	4,875	17	4,897	15	4,349	13	3,345	9
Anglers	4,505	15	4,501	14	4,111	12	3,094	8
Hunters	1,101	4	1,203	4	837	2	798	2

Table C-3. Wildlife-Watching Participants by Census Division: 1991, 1996, 2001, and 2006

(Numbers in thousands. Population 16 years old and older)

Area and wildlife watcher	1991		1996		2001		2006	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
UNITED STATES								
Total population	189,964	100	201,472	100	212,298	100	229,245	100
Total wildlife watchers	76,111	40	62,868	31	66,105	31	71,132	31
Away from home	29,999	16	23,652	12	21,823	10	22,977	10
Around the home	73,904	39	60,751	30	62,928	30	67,756	30
New England								
Total population	10,180	100	10,306	100	10,575	100	11,233	100
Total wildlife watchers	4,598	45	3,710	36	3,875	37	4,489	40
Away from home	1,856	18	1,443	14	1,155	11	1,340	12
Around the home	4,544	45	3,586	35	3,765	36	4,310	38
Middle Atlantic								
Total population	29,216	100	29,371	100	29,806	100	31,518	100
Total wildlife watchers	10,556	36	8,185	28	8,740	29	8,723	28
Away from home	4,166	14	2,960	10	2,849	10	2,729	9
Around the home	10,282	35	8,023	27	8,452	28	8,451	27
East North Central								
Total population	32,188	100	33,121	100	34,082	100	35,609	100
Total wildlife watchers	14,511	45	11,731	35	11,631	34	12,215	34
Away from home	5,572	17	4,501	14	3,571	10	3,792	11
Around the home	14,175	44	11,297	34	11,196	33	11,845	33
West North Central								
Total population	13,504	100	13,875	100	14,430	100	15,458	100
Total wildlife watchers	6,924	51	5,089	37	6,206	43	6,741	44
Away from home	2,654	20	1,927	14	2,059	14	2,163	14
Around the home	6,722	50	4,900	35	5,938	41	6,447	42
South Atlantic								
Total population	33,682	100	36,776	100	39,286	100	43,965	100
Total wildlife watchers	13,047	39	11,252	31	11,395	29	12,862	29
Away from home	4,450	13	3,992	11	3,469	9	3,208	7
Around the home	12,813	38	10,964	30	10,911	28	12,432	28
East South Central								
Total population	11,667	100	12,459	100	12,976	100	13,722	100
Total wildlife watchers	4,864	42	3,904	31	4,514	35	4,931	36
Away from home	1,592	14	1,118	9	1,086	8	1,758	13
Around the home	4,765	41	3,795	30	4,390	34	4,683	34
West South Central								
Total population	19,926	100	21,811	100	23,337	100	25,407	100
Total wildlife watchers	7,035	35	5,933	27	5,747	25	6,764	27
Away from home	2,459	12	2,096	10	1,822	8	2,127	8
Around the home	6,817	34	5,773	26	5,490	24	6,319	25
Mountain								
Total population	10,092	100	11,966	100	13,308	100	15,651	100
Total wildlife watchers	4,437	44	4,099	34	4,619	35	4,968	32
Away from home	2,215	22	1,967	16	2,019	15	2,004	13
Around the home	4,145	41	3,855	32	4,282	32	4,605	29
Pacific								
Total population	29,508	100	31,787	100	34,498	100	36,681	100
Total wildlife watchers	10,139	34	8,966	28	9,377	27	9,439	26
Away from home	5,035	17	3,648	11	3,793	11	3,856	11
Around the home	9,641	33	8,558	27	8,504	25	8,664	24

- used most often, distance to boat launch used most often, needed improvements to facilities at the launch, whether or not the respondent completed a boating safety course, who the boater fished with most often, and the source and type of information the boater used for his or her fishing.
2. Questions regarding catch and release fishing were added. Whether or not the respondent caught and released fish and, if so, the percent of fish released.
 3. The proportion of hunting done with a rifle or shotgun, as contrasted with muzzleloader or archery equipment, was asked.
 4. In the contingent valuation section, where the value of wildlife-related recreation was determined, two quality-variable questions were added: the average length of certain fish caught and whether a deer, elk, or moose was killed. Plus, the economic evaluation bid questions were rephrased, from “What is the most your [species] hunting in [State name] could have cost you per trip last year before you would NOT have gone [species] hunting at all in 2001, not even one trip, because it would have been too expensive?” for the hunters, for example, to “What is the cost that would have prevented you from taking even one such trip in 2006? In other words, if the trip cost was below this amount, you would have gone [species] hunting in [State name], but if the trip cost was above this amount, you would not have gone.”
 5. Questions concerning hunting, fishing, or wildlife watching in other countries was taken out of the Survey.
 6. Questions about the reasons for not going hunting or fishing, or not going as much as expected, were deleted.
 7. Disability of participants questions were taken out.

8. Determination of the types of sites for wildlife watching was discontinued.
9. The birding questions regarding the use of birding life lists and the ability to identify birds based on their sight or sounds were deleted.
10. Public transportation costs were divided into two sections, “public transportation by airplane” and “other public transportation, including trains, buses, and car rentals, etc.”

1955 to 1985 Significant Methodological Differences

1955 to 1970 Surveys

The 1955 to 1970 Surveys included only substantial participants. Substantial participants were defined as people who participated at least three days and/or spent at least \$5 (the 1955 to 1965 Surveys) or \$7.50 (the 1970 Survey) during the survey year. Under most circumstances, the Surveys may be compared for totals, but the effects of differences should be considered when comparing the details of the Surveys.

The 1960, 1965, and 1970 Surveys differed from the 1955 National Survey in classification of expenditures as outlined below:

1. Alaska and Hawaii were not included in the 1955 Survey.
2. Expenditure categories were more detailed in 1970 than in earlier Surveys.
3. The 1960 to 1970 classification of some expenditures differs from the 1955 Survey in the following respects:
 - a. “Boats and boat motors” shown under “auxiliary equipment” were included in “equipment, other” in 1955.
 - b. “Entrance and other privilege fees” shown separately were included in “trip expenditures, other” in 1955.

- c. “Snacks and refreshments” not included with “food” expenditures in the 1960 to 1970 reports were under “trip expenditures, other” in 1955.
- d. Expenditures on equipment, magazines, club dues, licenses, and similar items were classified by the one sport activity for which expenditures were chiefly made. In 1955, these expenditures were evenly divided among all the activities in which the sportsperson took part.
- e. Compared with 1955, the 1960 to 1970 Surveys reported fewer expenditures within the “other” category because selected items were transferred to more appropriate categories.
- f. Expenditures on alcoholic beverages were reported separately in the 1970 Survey.
- g. In 1970, definition of a “substantial participant” was changed from one who spent at least \$5 during the year or spent three days fishing or hunting to one who spent \$7.50 for the year or spent three days fishing or hunting.

4. The number of waterfowl hunters in the 1970 Survey is not comparable with those reported in the 1960 and 1965 Surveys. In 1960 and 1965, respondent sportspersons were not included in the waterfowl hunter total if they reported that they went waterfowl hunting but did not take the trip chiefly to hunt waterfowl. In 1970, all respondents who reported that they had hunted waterfowl during 1970, regardless of trip purpose, were included in the total. The number of hunters who did not take trips chiefly to hunt waterfowl in 1970 was 1,054,000.

1975 Survey

In contrast to previous surveys that covered substantial participants 12 years old and older, the 1975 Survey based all the estimates on responses

from individuals 9 years of age and older and did not select respondents based upon substantial participation as defined above. As a result, individuals who participated fewer than three days or spent less than \$7.50 on hunting or fishing were included in the estimates of participants, days of activity, and expenditures.

Categories of hunting and fishing expenditures differed from the previous four Surveys in that only major categories were reported. For example, hunting equipment expenditures were not further delineated by subcategory. Similarly, no detail was provided within the category of fishing equipment expenditures. Expenses for “other” items, such as daily entrance fees, magazines, club dues, and dogs, were categorized as “other” in the 1975 report.

In addition to the above differences, the 1975 Survey gathered data on species sought for the favorite hunting and fishing activity. This data replaced the “chiefly” category where hunting or fishing was the primary purpose of the trip or day of activity. Data omitted in the 1975 Survey that were included in previous Surveys include the respondents population density of residence, occupation, and level of education.

1980 to 1985 Surveys

The 1980 and 1985 Surveys were similar. Each measured participants, rather than substantial participants. Questions were incorporated into the 1980 and 1985 Survey questionnaires to facilitate the construction of categories of data for comparisons with earlier Surveys. The use of “chiefly” to delimit primary purpose appeared in the 1970 and prior Surveys, and its use was continued in the 1980 and 1985 Surveys. The expenditure categories in 1980 and 1985 are similar to the 1970 categories with the addition of fish finders, motor homes, and camper trucks as separate categories. The definition of fishing included the use of nets or seines and spearfishing.

As in the 1970 and 1975 Surveys, the 1980 and 1985 Surveys used a two-phase process to gather information from households and individuals. In the first phase, household respondents were asked to identify each participant 6 years of age and older who resided in their household. In comparison, the 1975 and 1970 Surveys screened households for participants who were 9 years of age and older. In the second phase, the detailed interview phase, interviews were conducted in person for the 1985, 1980, and 1970 Surveys and were conducted by mail

for the 1975 Survey. Participants were included in the detailed phase of the Survey if they were at least 12 years old in 1970, 9 years old in 1975, and 16 years old in 1980 and 1985. As a result, the population of hunters and anglers was more narrowly defined in 1980 and 1985 to include individuals 16 years old and older. However, estimates of sportspersons 6 years old and older, 9 years old and older, and 12 years old and older are available for comparison with past surveys.

Regional Trends

Section I. Most Recent Trends

This trends section covers the period from 1991 to 2006. The 1991, 1996, 2001, and 2006 Surveys used similar methodologies, therefore all published information for the three Surveys is directly comparable.

Section II. Historical Trends

This trends section covers the period from 1955 to 1985. The methodology of these Surveys differed (see above), but acceptable correction factors were estimated.

Table C-4. Comparison of Major Findings of the National Surveys: 1955 to 1985

(U.S. population 12 years old and older. Numbers in thousands)

Sportspersons	1955	1960	1965	1970	1975	1980	1985
Total sportspersons	24,917	30,435	32,881	36,277	45,773	46,966	49,827
Anglers	20,813	25,323	28,348	33,158	41,299	41,873	45,345
Freshwater	18,420	21,677	23,962	29,363	36,599	35,782	39,122
Saltwater	4,557	6,292	8,305	9,460	13,738	11,972	12,893
Hunters	11,784	14,637	13,583	14,336	17,094	16,758	16,340
Small game	9,822	12,105	10,576	11,671	14,182	12,496	11,130
Big game	4,414	6,277	6,566	7,774	11,037	11,047	12,576
Waterfowl	1,986	1,955	1,650	2,894	4,284	3,177	3,201
Expenditures¹	11,401,464	13,948,974	14,991,502	19,618,548	33,398,677	34,517,421	42,058,860
Anglers	7,655,522	9,743,971	9,952,411	13,699,311	23,498,506	23,387,469	28,585,686
Freshwater	5,700,187	7,476,454	7,231,851	10,315,966	17,333,212	16,663,239	18,942,060
Saltwater	1,955,336	2,267,512	2,720,574	3,383,345	6,165,294	5,581,976	7,191,387
Hunters	3,745,942	4,204,997	3,814,303	5,919,236	9,900,171	10,812,058	10,256,668
Small game	1,975,707	2,629,360	2,093,137	2,612,390	4,525,942	3,335,852	2,342,860
Big game	1,295,357	1,251,800	1,424,711	2,631,532	4,238,341	5,638,395	5,345,606
Waterfowl	474,878	323,840	296,452	675,315	1,135,889	766,033	783,315
Days	566,870	658,308	708,578	909,876	1,459,551	1,300,983	1,415,379
Fishing	397,447	465,769	522,759	706,187	1,058,075	952,420	1,064,986
Freshwater	338,826	385,167	426,922	592,494	890,576	788,392	895,027
Saltwater	58,621	80,602	95,837	113,694	167,499	164,040	171,055
Hunting	169,423	192,539	185,819	203,689	401,476	348,543	350,393
Small game	118,630	138,192	128,448	124,041	269,653	225,793	214,544
Big game	30,834	39,190	43,845	54,536	100,600	117,406	135,447
Waterfowl	19,959	15,158	13,526	25,113	31,223	26,179	25,933

¹ In 1985 dollars.

Note: Methodological differences described in the text make the estimates in this table not comparable with the estimates in Tables C-2 and C-3.

Table C-5. Anglers and Hunters by Census Division: 1955 to 1985

(U.S. population 12 years old and older. Numbers in thousands)

Year	Population		Sportspersons, fished or hunted		Anglers		Hunters	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
UNITED STATES								
1955	118,366	100	24,917	21.1	20,813	17.6	11,784	10.0
1960	131,226	100	30,435	23.2	25,323	19.3	14,637	11.2
1965	141,928	100	32,881	23.2	28,348	20.0	13,585	9.6
1970	155,230	100	36,277	23.4	33,158	21.4	14,336	9.2
1975	171,860	100	45,773	26.6	41,299	24.0	17,094	9.9
1980	184,691	100	46,966	25.4	41,873	22.7	16,758	9.1
1985	195,659	100	49,827	25.5	45,345	23.2	16,340	8.4
New England								
1955	7,919	100	1,224	15.4	1,002	12.7	589	7.4
1960	8,349	100	1,368	16.4	1,205	14.4	517	6.2
1965	9,256	100	1,650	17.8	1,488	16.0	583	6.3
1970	8,652	100	1,579	18.3	1,430	16.5	582	6.7
1975	9,910	100	2,004	20.2	1,861	18.8	566	5.7
1980	10,205	100	1,974	19.3	1,788	17.5	572	5.6
1985	10,554	100	2,058	19.5	1,914	18.1	552	5.2
Middle Atlantic								
1955	24,869	100	3,539	14.2	2,811	11.3	1,608	6.5
1960	26,493	100	3,432	13.0	2,569	9.7	1,723	6.5
1965	27,346	100	3,602	13.2	2,760	10.1	1,631	6.0
1970	28,244	100	4,539	16.1	4,504	14.4	1,731	6.1
1975	30,449	100	5,919	19.4	5,097	16.7	2,096	6.9
1980	30,256	100	5,181	17.1	4,332	14.3	2,001	6.6
1985	31,099	100	5,565	17.9	4,820	15.5	1,972	6.3
East North Central								
1955	25,733	100	5,489	21.3	4,583	17.8	2,538	9.9
1960	26,833	100	6,316	32.5	5,317	19.8	2,985	11.1
1965	28,124	100	6,214	22.1	5,336	19.0	2,563	9.1
1970	31,550	100	7,284	23.1	6,699	21.2	2,812	8.9
1975	32,796	100	9,049	27.6	8,181	24.9	3,392	10.3
1980	33,526	100	8,725	26.0	7,891	23.5	2,955	8.8
1985	33,747	100	8,973	26.6	8,270	24.5	2,814	8.3
West North Central								
1955	9,201	100	2,913	31.7	2,346	25.5	1,534	16.7
1960	10,149	100	3,383	33.3	2,855	28.1	1,709	16.8
1965	11,681	100	3,678	31.5	3,226	27.6	1,620	13.9
1970	12,904	100	4,000	31.0	3,579	27.7	1,783	13.8
1975	13,564	100	4,524	33.3	4,089	30.1	1,863	13.7
1980	13,826	100	4,770	34.5	4,220	30.5	1,965	14.2
1985	14,137	100	5,140	36.4	4,681	33.1	1,971	13.9
South Atlantic								
1955	14,336	100	3,223	22.5	2,805	19.6	1,449	10.1
1960	17,798	100	4,423	24.9	3,695	20.8	2,045	11.5
1965	20,593	100	5,626	27.3	5,054	24.5	1,900	9.2
1970	23,539	100	5,461	23.2	5,129	21.8	1,904	8.1
1975	27,127	100	7,110	26.2	6,479	23.9	2,494	9.2
1980	30,512	100	7,769	25.5	7,086	23.2	2,444	8.0
1985	33,636	100	8,721	25.9	8,056	24.0	2,467	7.3
East South Central								
1955	7,959	100	1,963	24.7	1,665	20.9	989	12.4
1960	9,277	100	2,778	29.9	2,207	23.8	1,510	16.3
1965	9,652	100	2,587	26.8	2,201	22.8	1,294	13.4
1970	9,862	100	2,660	27.0	2,464	25.0	1,162	11.8
1975	10,798	100	3,007	27.8	2,689	24.9	1,355	12.5
1980	11,771	100	3,614	30.7	3,173	27.0	1,567	13.3
1985	12,364	100	3,671	29.7	3,308	26.8	1,441	11.7

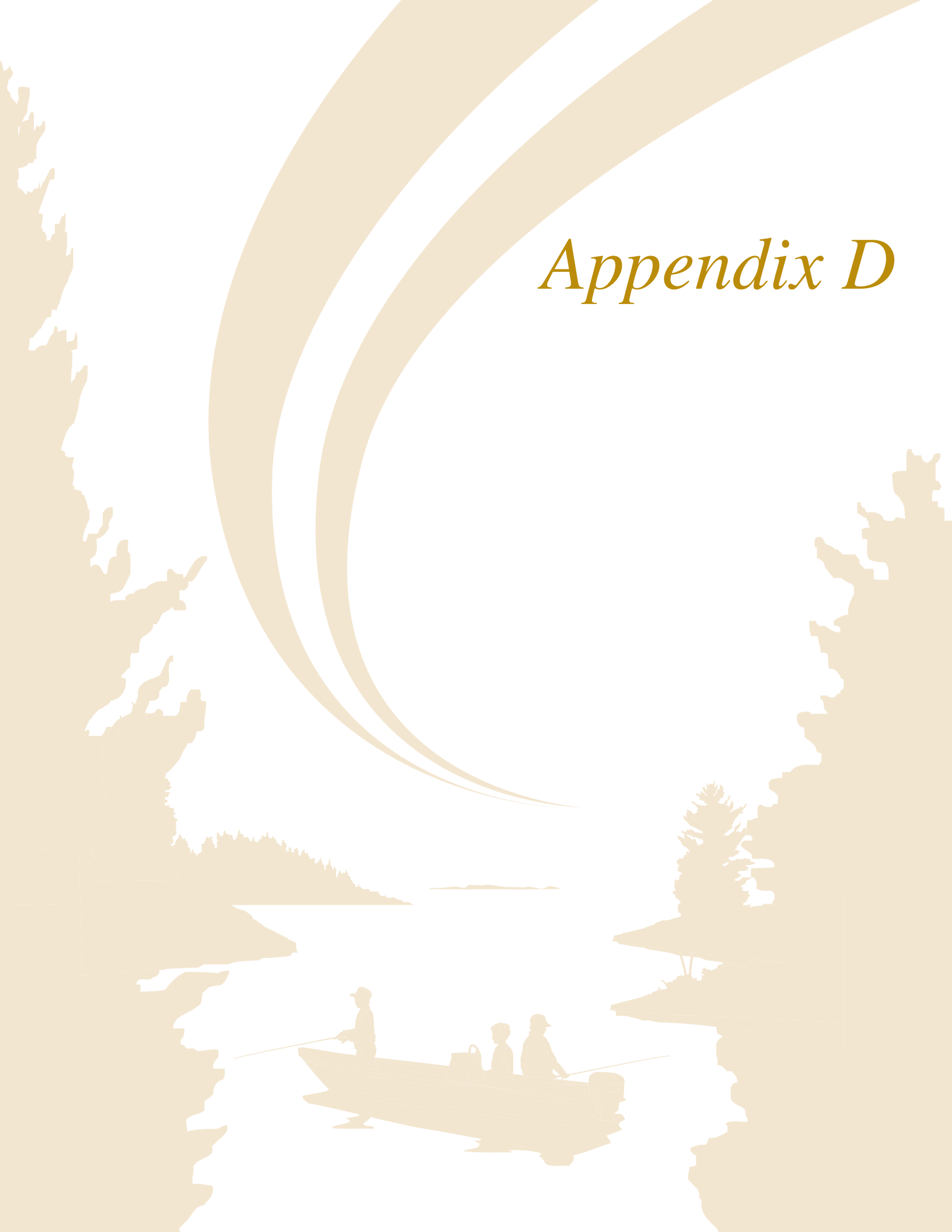
Table C-5. Anglers and Hunters by Census Division: 1955 to 1985—Continued

(U.S. population 12 years old and older. Numbers in thousands)

Year	Population		Sportspersons, fished or hunted		Anglers		Hunters	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
West South Central								
1955	10,250	100	2,560	25.0	2,237	21.8	1,165	11.4
1960	11,837	100	3,666	31.0	3,133	26.5	1,750	14.8
1965	12,724	100	3,713	29.2	3,278	25.8	1,571	12.3
1970	14,624	100	4,380	30.0	4,006	27.4	1,918	13.1
1975	16,628	100	5,781	34.8	5,267	31.7	2,563	15.4
1980	19,136	100	5,862	30.6	5,136	26.8	2,456	12.8
1985	21,184	100	6,418	30.3	5,704	26.9	2,572	12.1
Mountain								
1955	4,529	100	1,369	30.2	1,112	24.6	796	17.6
1960	5,222	100	1,646	31.5	1,372	26.3	1,120	21.4
1965	5,029	100	1,565	31.1	1,261	25.1	988	19.6
1970	5,656	100	2,044	36.1	1,769	31.3	980	17.3
1975	7,576	100	2,570	33.9	2,252	29.7	1,159	15.3
1980	9,160	100	2,903	31.7	2,500	27.3	1,268	13.8
1985	10,215	100	3,128	30.6	2,765	27.1	1,241	12.1
Pacific								
1955	13,570	100	2,637	19.4	2,252	16.6	1,116	8.2
1960	15,268	100	3,422	22.4	2,971	19.5	1,279	8.4
1965	17,523	100	4,246	24.2	3,744	21.4	1,433	8.2
1970	20,199	100	4,332	21.4	4,030	20.0	1,466	7.3
1975	23,012	100	5,811	25.2	5,386	23.4	1,607	7.0
1980	26,299	100	6,168	23.5	5,747	21.9	1,531	5.0
1985	38,725	100	6,154	21.4	5,829	20.3	1,310	4.6

Note: Methodological differences described in the text make the estimates in this table not comparable with the estimates in Tables C-2 and C-3.

Appendix D



Appendix D.

Sample Design and Statistical Accuracy

This appendix is presented in two parts. The first part is the U.S. Census Bureau Source and Accuracy Statement. This statement describes the sampling design for the 2006 Survey and highlights the steps taken to produce estimates from the completed questionnaires. The statement explains the use of standard errors and confidence intervals. It also provides comprehensive information about errors characteristic of surveys and formulas and parameters to calculate an approximate standard error or confidence interval for each number published in this report. The second part, Tables D-1 to D-5, reports approximate standard errors and 95-percent confidence intervals for selected measures of participation and expenditures for wildlife-related recreation.

Source and Accuracy Statement for the 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation

SOURCE OF DATA

The estimates in this report are based on data collected in the *2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation* (FHWAR) conducted by the Census Bureau and sponsored by the U.S. Fish and Wildlife Service.

The eligible universe for the FHWAR is the civilian noninstitutionalized and nonbarrack military population living in the United States. The institutionalized population, which is excluded from the population universe, is composed primarily of the population in correctional institutions and nursing homes (91 percent of the 4.1 million institutionalized people in Census 2000).

The 2006 Survey was designed to provide state-level estimates of the number of participants in recreational hunting and fishing and in wildlife-watching activities (e.g., wildlife observation). Information was

collected on the number of participants, where and how often they participated, the type of wildlife encountered, and the amounts of money spent on wildlife-related recreation.

The survey was conducted in two stages: an initial screening of households to identify likely sportspersons and wildlife-watching participants and a series of follow-up interviews of selected persons to collect detailed data about their wildlife-related recreation during 2006.

SAMPLE DESIGN

The 2006 FHWAR sample was selected from the Census Bureau's master address file (MAF) and unused sample of the Current Population Survey (CPS). The CPS sample was used to improve coverage in rural areas of some states.

The FHWAR is a multistage probability sample, with coverage in all 50 states and the District of Columbia. In the first stage of the sampling process, primary sampling units (PSUs) are selected for sample. The PSUs are defined to correspond to the Office of Management and Budget definitions of Core Based Statistical Area definitions and to improve efficiency in field operations. The United States is divided into 2,025 PSUs. These PSUs are grouped into 824 strata. Within each stratum, a single PSU is chosen for the sample, with its probability of selection proportional to its population as of the most recent decennial census. This PSU represents the entire stratum from which it was selected. In the case of strata consisting of only one PSU, the PSU is chosen with certainty.

Within the selected PSUs, the FHWAR sample was selected from the MAF where sufficient coverage of addresses existed. In some rural areas, the sample was selected from unused cases from the CPS to improve coverage.

FHWAR Screening Sample

The total screening sample consisted of **85,000** households. Interviewing for the screen was conducted during April, May, and June 2006. Of all housing units in sample, about **74,000** were determined to be eligible for interview. Interviewers obtained interviews at **66,688** of these units for a national response rate of **90** percent. Local field representatives conducted interviews by telephone when possible, otherwise through a personal visit. The field representatives asked screening questions for all household members 6 years old and older. Noninterviews occur when the occupants are not found at home after repeated calls or are unavailable for some other reason.

Data for the FHWAR sportspersons sample and wildlife-watchers sample were collected in three waves. The first wave started in April 2006, the second in September 2006, and the third in January 2007. In the sportspersons sample, all persons who hunted or fished in 2006 by the time of the screening interview were interviewed in the first wave. The remaining sportspersons sample were interviewed in the second wave. A subsampling operation was conducted before the third wave of sampling to reduce cost of the Survey, and everyone remaining in sample was interviewed in the third wave.

The reference period was the preceding 4 months for waves 1 and 2. In wave 3, the reference period was either 4, 8, or 12 months depending on when the sample person was first interviewed.

Detailed Samples

Two independent detailed samples were chosen from the FHWAR screening sample. One consisted of sportspersons (people who hunt or fish) and the other of wildlife watchers (people who observe, photograph, or feed wildlife).

A. Sportspersons

The Census Bureau selected the detailed samples based on information reported during the screening phase. Based on information collected from the household respondent, every person 16 years old and older in the FHWAR screening sample was assigned to a sportspersons stratum. The criteria for the strata included time devoted to hunting or fishing in previous years, participation in hunting or fishing in 2006 by the time of the screening interview, and intentions to participate in hunting and fishing activities during the remainder of 2006. The four sportspersons categories were:

1. *Active*—a person who had already participated in hunting or fishing in 2006 at the time of the screener interview.
2. *Likely*—a person who had not participated in 2006 at the time of the screener, but had participated in 2005 OR was likely to participate in 2006.
3. *Inactive*—a person who had not participated in 2005 or 2006 AND was somewhat unlikely to participate in 2006.
4. *Nonparticipant*—a person who had not participated in 2005 or 2006 AND was very unlikely to participate in 2006.

Persons were selected for the detailed phase based on these groupings.

Active sportspersons were given the detailed interview twice—at the time of the screening interview (in April, May, or June 2006) and again in January or February 2007. Likely sportspersons and a subsample of the inactive sportspersons were also interviewed twice—first in September or October 2006, then in January or February 2007. If Census Bureau field representatives were not able to obtain the first interview, they attempted to interview the person in the final interviewing period with the reference period being the entire year. Persons in the nonparticipant group were not eligible for a detailed interview.

About **28,600** persons were designated for interviews. The detailed sportspersons sample sizes varied by state to get reliable state-level estimates. During each interview period, about 23 percent of the designated persons were not found at home or were unavailable for some other reason. Overall, about **22,000** detailed sportspersons interviews were completed at a response rate of **77** percent.

B. Wildlife Watchers

The wildlife-watching detailed sample was also selected based on information reported during the screening phase. Based on information collected from the household respondent, every person 16 years old and older was assigned to a stratum. The criteria for the strata included time devoted to wildlife-watching activities in previous years, participation in wildlife-watching activities in 2006 by the time of the screening interview, and intentions to participate in wildlife watching activities during the remainder of 2006. The five wildlife watching categories were:

1. *Active*—a person who had already participated in 2006 at the time of the screening interview.
2. *Avid*—a person who had not yet participated in 2006, but in 2005 had taken trips to participate in wildlife-watching activities for 21 or more days or had spent \$300 or more.
3. *Average*—a person who had not yet participated in 2006, but in 2005 had taken trips to wildlife watch for less than 21 days and had spent less than \$300 OR had not participated in wildlife watching activities but was very likely to in the remainder of 2006.
4. *Infrequent*—a person who had not participated in 2005 or 2006, but was somewhat likely or somewhat unlikely to participate in the remainder of 2006.
5. *Nonparticipant*—a person who had not participated in 2005 or 2006 AND was very unlikely to participate during the remainder of 2006.

Persons were selected for the detailed sample based on these groupings, but persons in the nonparticipant group were not eligible for a detailed interview. A subsample of each of the other groups was selected to receive a detailed interview with the chance of selection diminishing as the likelihood of participation diminished.

Wildlife-watching participants were given the detailed interview twice. Some received their first detailed interview at the same time as the screening interview (in April, May, or June 2006). The rest received their first detailed interview in September or October 2006. All wildlife-watching participants received their second interview in January or February 2007. If Census Bureau field representatives were not able to obtain the first interview, they attempted to interview the person in the final interviewing period with the reference period being the entire year.

About **14,400** persons were designated for interviews. The detailed wildlife-watching sample sizes varied by state to get reliable state-level estimates. During each interview period, about 20 percent of the designated persons were not found at home or were unavailable for some other reason. Overall, about **11,300** detailed wildlife-watcher interviews were completed at a response rate of **78** percent.

ESTIMATION PROCEDURE

Several stages of adjustments were used to derive the final 2006 FHWAR person weights. A brief description of the major components of the weights is given below.

All statistics for the population 6 to 15 years of age were derived from the screening interview. Statistics for the population 16 years old and older come from both the screening and detailed interviews. Estimates that come from the screening sample are presented in Appendix B.

A. Screening Sample

Every interviewed person in the screening sample received a screening weight that was the product of the following factors:

1. *Base Weight.* The base weight is the inverse of the household's probability of selection.
2. *Household Noninterview Adjustment.* The noninterview adjustment inflates the weight assigned to interviewed households to account for households eligible for interview but for which no interview was obtained.
3. *First-Stage Adjustment.* The 824 areas designated for our samples were selected from 2,025 such areas of the United States. Some sample areas represent only themselves and are referred to as self-representing. The remaining areas represent other areas similar in selected characteristics and are thus designated non-self-representing. The first-stage factor reduces the component of variation arising from sampling the non-self-representing areas.
4. *Second-Stage Adjustment.* This adjustment brings the estimates of the total population into agreement with census-based estimates of the civilian noninstitutionalized and nonbar-rack military populations for each state.

B. Sportspersons Sample

Every interviewed person in the sportspersons detailed sample received a weight that was the product of the following factors:

1. *Screening Weight.* This is the person's final weight from the screening sample.
2. *Sportspersons Stratum Adjustment.* This factor inflates the weights of persons selected for the detailed sample to account for the subsampling done within each sportsperson stratum.
3. *Sportspersons Noninterview Adjustment.* This factor adjusts the weights of the interviewed sportspersons to account for sportspersons selected for the detailed sample for whom no interview was obtained. A person was considered a noninterview if he or she was not

interviewed in the third wave of interviewing.

4. *Sportspersons Ratio Adjustment Factor.* This is a ratio adjustment of the detailed sample to the screening sample within the sportspersons sampling stratum. This adjustment brings the population estimates of persons aged 16 years old and older from the detailed sample into agreement with the same estimates from the screening sample, which was a much larger sample.

C. Wildlife-Watchers Sample

Every interviewed person in the wildlife-watchers detailed sample received a weight that was the product of the following factors:

1. *Screening Weight.* This is the person's final weight from the screening sample.
2. *Wildlife-Watchers Stratum Adjustment.* This factor inflates the weights of persons selected for the detailed sample to account for the subsampling done within each wildlife-watcher stratum.
3. *Wildlife-Watchers Noninterview Adjustment.* This factor adjusts the weights of the interviewed wildlife-watching participants to account for wildlife watchers selected for the detailed sample for which no interview was obtained. A person was considered a noninterview if he or she was not interviewed in the third wave of interviewing.
4. *Wildlife-Watchers Ratio Adjustment Factor.* This is a ratio adjustment of the detailed sample to the screening sample within wildlife-watchers sampling strata. This adjustment brings the population estimates of persons aged 16 years old and older from the detailed sample into agreement with the same estimates from the screening sample, which was a much larger sample.

ACCURACY OF THE ESTIMATES

A sample survey estimate has two types of error: sampling and nonsampling. The accuracy of an estimate depends

on both types of error. The nature of the sampling error is known given the survey design; the full extent of the nonsampling error is unknown.

NONSAMPLING ERROR

For a given estimator, the difference between the estimate that would result if the sample were to include the entire population and the true population value being estimated is known as nonsampling error. There are several sources of nonsampling error that may occur during the development or execution of the survey. It can occur because of circumstances created by the interviewer, the respondent, the survey instrument, or the way the data are collected and processed. For example, errors could occur because:

- The interviewer records the wrong answer, the respondent provides incorrect information, the respondent estimates the requested information, or an unclear survey question is misunderstood by the respondent (measurement error).
- Some individuals or businesses that should have been included in the survey frame were missed (coverage error).
- Responses are not collected from all those in the sample or the respondent is unwilling to provide information (nonresponse error).
- Values are estimated imprecisely for missing data (imputation error).
- Forms may be lost, data may be incorrectly keyed, coded, or recoded, etc. (processing error).

The Census Bureau employs quality control procedures throughout the production process, including the overall design of surveys, the wording of questions, the review of the work of interviewers and coders, and the statistical review of reports to minimize these errors.

Two types of nonsampling error that can be examined to a limited extent are nonresponse and undercoverage.

Nonresponse. The effect of nonresponse cannot be measured directly, but one indication of its potential effect is the nonresponse rate. For the FHWAR screener interview, the household-level nonresponse rate was 10 percent. The person-level nonresponse rate for the

detailed sportsperson interview was an 23 percent and for the wildlife watchers it was 22 percent. Since the screener nonresponse rate is a household-level rate and the detailed interview nonresponse rate is a person-level rate, we cannot combine these rates to derive an overall nonresponse rate. Since it is unlikely the nonresponding households to the FHWAR have the same number of persons as the households successfully interviewed, combining these rates would result in an overestimate of the “true” person-level overall nonresponse rate for the detailed interviews.

Coverage. Overall screener undercoverage is estimated to be about 13 percent. Ratio estimation to independent population controls, as described previously, partially corrects for the bias due to survey undercoverage. However, biases exist in the estimates to the extent that missed persons in missed households or missed persons in interviewed households have different characteristics from those of interviewed persons in the same age group.

Comparability of Data. Data obtained from the 2006 FHWAR and other sources are not entirely comparable. This results from differences in interviewer training and experience and in differing survey processes. This is an example of nonsampling variability not reflected in the standard errors. Therefore, caution should be used when comparing results from different sources. (See Appendix C.)

A Nonsampling Error Warning. Since the full extent of the nonsampling error is unknown, one should be particularly careful when interpreting results based on small differences between estimates. The Census Bureau recommends that data users incorporate information about nonsampling errors into their analyses, as nonsampling error could impact the conclusions drawn from the results. Caution should also be used when interpreting results based on a relatively small number of cases. Summary measures (such as medians and percentage distributions) probably do not reveal useful information when computed on a subpopulation smaller than 50,000 for screener data, 65,000 for the detailed sportsperson data, and 230,000 for the wildlife-watchers data.

SAMPLING ERROR

Since the FHWAR estimates come from a sample, they may differ from figures from an enumeration of the entire

population using the same questionnaires, instructions, and enumerators. For a given estimator, the difference between an estimate based on a sample and the estimate that would result if the sample were to include the entire population is known as sampling error. Standard errors, as calculated by methods described in “Standard Errors and Their Use,” are primarily measures of the magnitude of sampling error. However, they may include some nonsampling error.

Standard Errors and Their Use. The sample estimate and its standard error enable one to construct a confidence interval. A confidence interval is a range that has a known probability of including the average result of all possible samples. For example, if all possible samples were surveyed under essentially the same general conditions and using the same sample design, and if an estimate and its standard error were calculated from each sample, then approximately 95 percent of the intervals from 1.96 standard errors below the estimate to 1.96 standard errors above the estimate would include the average result of all possible samples.

A particular confidence interval may or may not contain the average estimate derived from all possible samples. However, one can say with specified confidence that the interval includes the average estimate calculated from all possible samples.

Standard errors may also be used to perform hypothesis testing, a procedure for distinguishing between population parameters using sample estimates. The most common type of hypothesis is that the population parameters are different. An example would be comparing the proportion of anglers to the proportion of hunters.

Tests may be performed at various levels of significance. A significance level is the probability of concluding that the characteristics are different when, in fact, they are the same. For example, to conclude that two characteristics are different at the 0.05 level of significance, the absolute value of the estimated difference between characteristics must be greater than or equal to 1.96 times the standard error of the difference.

This report uses 95-percent confidence intervals and 0.05 levels of significance to determine statistical validity. Consult standard statistical textbooks for alternative criteria.

Estimating Standard Errors. The Census Bureau uses replication methods to estimate the standard errors of FHWAR estimates. These methods primarily measure the magnitude of sampling error. However, they do measure some effects of nonsampling error as well. They do not measure systematic biases in the data associated with nonsampling error. Bias is the average over all possible samples of the differences between the sample estimates and the true value.

Generalized Variance Parameters. While it is possible to compute and present an estimate of the standard error based on the survey data for each estimate in a report, there are a number of reasons why this is not done. A presentation of the individual standard errors would be of limited use, since one could not possibly predict all of the combinations of results that may be of interest to data users. Additionally, data users have access to FHWAR microdata files, and it is impossible to compute in advance the standard error for every estimate one might obtain from those data sets. Moreover, variance estimates are based on sample data and have variances of their own. Therefore, some methods of stabilizing these estimates of variance, for example, by generalizing or averaging over time, may be used to improve their reliability.

Experience has shown that certain groups of estimates have similar relationships between their variances and expected values. Modeling or generalizing may provide more stable variance estimates by taking advantage of these similarities. The generalized variance function is a simple model that expresses the variance as a function of the expected value of the survey estimate. The parameters of the generalized variance function are estimated using direct replicate variances. These generalized variance parameters provide a relatively easy method to obtain approximate standard errors for numerous characteristics. Tables D-6 to D-11 provide the generalized variance parameters for FHWAR data. Methods for using the parameters to calculate standard errors of various estimates are given in the next sections.

Standard Errors of Estimated Numbers. The approximate standard error, S_x , of an estimated number shown in this report can be obtained using the following formulas. Formula (1) is used to calculate the standard errors of levels of sportspersons, anglers, and wildlife watchers.

$$s_x = \sqrt{ax^2 + bx} \quad (1)$$

Here, x is the size of the estimate and a and b are the parameters in the tables associated with the particular characteristic.

Formula (2) is used for standard errors of aggregates, i.e., trips, days, and expenditures.

$$s_x = \sqrt{ax^2 + bx + \frac{cx^2}{y}} \quad (2)$$

Here, x is again the size of the estimate; y is the base of the estimate; and a , b , and c are the parameters in the tables associated with the particular characteristic.

Illustration of the Computation of the Standard Error of an Estimated Number

Table 1 in this report shows that 33,916,000 persons 16 years old and older either fished or hunted in the United States in 2006. Using formula (1) with the parameters $a = -0.000027$ and $b = 6,125$ from table D-7, the approximate standard error of the estimated number of 33,916,000 sportspersons 16 years old and older is

$$s_x = \sqrt{-0.000027 \times 33,916,000^2 + 6,125 \times 33,916,000} = 420,330$$

The 95-percent confidence interval for the estimate number of sportspersons 16 years old and older is from 33,092,000 to 34,740,000, i.e., $33,916,000 \pm 1.96 \times 420,330$. Therefore, a conclusion that the average estimate derived from all possible samples lies within a range computed in this way would be correct for roughly 95 percent of all possible samples.

Table 1 shows that 12,510,000 hunters 16 years old and older engaged in 219,925,000 days of participation in 2006. Using formula (2) with the parameters $a = -0.000235$, $b = -85,241$, and $c = 22,698$ from table D-9, the approximate standard error on 219,925,000 estimated days on an estimated base of 12,510,000 hunters is

$$s_x = \sqrt{-0.000235 \times 219,925,000^2 - 85,241 \times 219,925,000 + \frac{22,698 \times 219,925,000^2}{12,510,000}} = 7,592,000$$

The 95-percent confidence interval on the estimate of 219,925,000 days is from 205,044,000 to 234,806,000, i.e., $219,925,000 \pm 1.96 \times 7,592,000$. Again, a conclusion that the average estimate derived from all possible samples lies within a range computed in this way would be correct for roughly 95 percent of all possible samples.

Standard Errors of Estimated Percentages. The reliability of an estimated percentage, computed using sample data for both numerator and denominator, depends on the size of the percentage and its base. Estimated percentages are relatively more reliable than the corresponding estimates of the numerators of the percentages, particularly if the percentages are 50 percent or more. When the numerator and the denominator of the percentage are in different categories, use the parameter in the tables indicated by the numerator.

The approximate standard error, $s_{x,p}$, can be obtained by use of the formula

$$s_{x,p} = \sqrt{\frac{bp(100 - p)}{x}} \quad (3)$$

Here, x is the total number of sportspersons, hunters, etc., which is the base of the percentage; p is the percentage ($0 \leq p \leq 100$); and b is the parameter in the tables associated with the characteristic in the numerator of the percentage.

Illustration of the Computation of the Standard Error of an Estimated Percentage

Table 1 shows that of the 12,510,000 hunters 16 years old and older, 18.3 percent hunted migratory birds. From table D-7, the appropriate b parameter is 5,756. Using formula (3), the approximate standard error on the estimate of 18.3 percent is

$$s_{x,p} = \sqrt{\frac{5,756 \times 18.3 \times (100 - 18.3)}{12,510,000}} = 0.83$$

Consequently, the 95-percent confidence interval for the estimate percentage of migratory bird hunters 16 years old and older is from 16.7 percent to 19.9 percent, i.e., $18.3 \pm 1.96 \times 0.83$.

Standard Error of a Difference. The standard error of the difference between two sample estimates is approximately equal to

$$s_{x-y} = \sqrt{s_x^2 + s_y^2} \quad (4)$$

where S_x and S_y are the standard errors of the estimates x and y . The estimates can be numbers, percentages, ratios, etc. This will represent the actual standard error quite accurately for the difference between estimates of the same characteristic in two different areas, or for the difference between separate and uncorrelated characteristics in the same area. However, if there is a high positive (negative) correlation between the two characteristics, the formula will overestimate (underestimate) the true standard error.

Illustration of the Computation of the Standard Error of a Difference

In Table 8, of the 11,655,000 females in the age range of 18–24, 726,000 or 6.2 percent are sportspersons. Similarly, of the 11,638,000 males in the same age range, 1,929,000 or 16.6 percent are sportspersons. The apparent difference between the percent of female and male participants is 10.4 percent. Using formula (3) and the appropriate b parameter from Table D-7, the approximate standard errors of 6.2 percent and 16.6 percent are 0.55 and 0.85, respectively. Using formula (4), the approximate standard error of the estimated difference of 10.4 percent is

$$s_{x-y} = \sqrt{0.55^2 + 0.85^2} = 1.02$$

The 95-percent confidence interval on the difference between 18-to-24-year-old female and male sportspersons is from 8.4 to 12.4, i.e., $10.4 \pm 1.96 \times 1.02$. Since the interval does not contain zero, we can conclude with 95 percent confidence that the percentage of 18-to-24-year-old female sportspersons is less than the percentage of 18-to-24-year-old male sportspersons.

Standard Errors of Estimated Averages. Certain mean values for sportspersons, anglers, etc., shown in the report were calculated as the ratio of two numbers. For example, average days per angler is calculated as:

$$\frac{x}{y} = \frac{\text{total days}}{\text{total anglers}}$$

Standard errors for these averages may be approximated by the use of formula (5) below.

$$s_{x/y} = \frac{x}{y} \sqrt{\left[\frac{s_x}{x}\right]^2 + \left[\frac{s_y}{y}\right]^2 - 2r \frac{s_x s_y}{xy}} \quad (5)$$

In formula (5), r represents the correlation coefficient between the numerator and the denominator of the estimate. In the above formula, use 0.7 as an estimate of r .

Illustration of the Computation of the Standard Error of an Estimated Average

Table 2 shows that the average days per angler 16 years old and older for all fishing was 17.3 days. Using formulas (1) and (2) above, we compute the standard error on total days, 516,781,000, and total anglers, 29,952,000, to be 15,828,079 and 399,342, respectively. The approximate standard error on the estimated average of 17.3 days is

$$s_{x/y} = \frac{516,781,000}{29,952,000} \sqrt{\left[\frac{15,828,079}{516,781,000}\right]^2 + \left[\frac{399,342}{29,952,000}\right]^2 - 2 \times 0.7 \frac{15,828,079 \times 399,342}{516,781,000 \times 29,952,000}} = 0.40$$

Therefore, the 95-percent confidence interval on the estimated average of 17.3 days is from 16.5 to 18.0, i.e., $17.3 \pm 1.96 \times 0.40$.

Table D-1. **Approximate Standard Errors and 95-Percent Confidence Intervals for Selected Fishing Estimates: 2006**

Anglers, days, and expenditures	Estimate	Standard error	Lower 95 percent	Upper 95 percent
ANGLERS (thousands)				
Total	29,952	399	29,169	30,735
Freshwater	25,431	372	24,702	26,160
Freshwater, except Great Lakes	25,035	370	24,311	25,759
Great Lakes	1,420	93	1,238	1,602
Saltwater	7,717	214	7,298	8,136
DAYS OF FISHING (thousands)				
Total	516,781	15,828	485,758	547,804
Freshwater	433,337	14,153	405,597	461,077
Freshwater, except Great Lakes	419,942	13,797	392,900	446,984
Great Lakes	18,016	2,222	13,661	22,371
Saltwater	85,663	4,641	76,566	94,760
Average Days Per Angler				
Total	17.3	0.4	16.5	18.0
Freshwater	17.0	0.4	16.2	17.9
Freshwater, except Great Lakes	16.8	0.4	16.0	17.6
Great Lakes	12.7	1.1	10.4	14.9
Saltwater	11.1	0.4	10.2	12.0
FISHING EXPENDITURES (thousands of dollars)				
Total	42,156,092	1,262,473	39,681,645	44,630,539
Freshwater	26,348,217	858,427	24,665,699	28,030,735
Freshwater, except Great Lakes	24,581,671	808,752	22,996,516	26,166,826
Great Lakes	1,507,656	193,877	1,127,657	1,887,655
Saltwater	8,879,948	514,207	7,872,103	9,887,793
Average Expenditures Per Angler (dollars)				
Total	1,407	32	1,345	1,470
Freshwater	1,036	26	986	1,086
Freshwater, except Great Lakes	982	24	934	1,030
Great Lakes	1,062	101	864	1,260
Saltwater	1,151	50	1,053	1,248

Table D-2. **Approximate Standard Errors and 95-Percent Confidence Intervals for Selected Hunting Estimates: 2006**

Hunters, days, and expenditures	Estimate	Standard error	Lower 95 percent	Upper 95 percent
HUNTERS (thousands)				
Total	12,510	261	11,999	13,021
Big game	10,682	242	10,207	11,157
Small game	4,797	164	4,475	5,119
Migratory bird	2,293	114	2,069	2,517
Other animals	1,128	80	970	1,286
DAYS OF HUNTING (thousands)				
Total	219,925	7,592	205,045	234,805
Big game	164,061	6,073	152,158	175,964
Small game	52,395	2,807	46,894	57,896
Migratory bird	19,770	1,446	16,935	22,605
Other animals	15,205	1,817	11,644	18,766
Average Days Per Hunter				
Total	17.6	0.4	16.7	18.4
Big game	15.4	0.4	14.6	16.2
Small game	10.9	0.4	10.1	11.7
Migratory bird	8.6	0.5	7.7	9.5
Other animals	13.5	1.2	11.2	15.8
HUNTING EXPENDITURES (thousands of dollars)				
Total	22,893,156	1,097,899	20,741,273	25,045,039
Big game	11,754,122	601,296	10,575,582	12,932,662
Small game	2,365,778	166,802	2,038,845	2,692,711
Migratory bird	1,349,148	128,833	1,096,636	1,601,660
Other animals	207,856	29,591	149,857	265,855
Average Expenditures Per Hunter (dollars)				
Total	1,830	67	1,699	1,961
Big game	1,100	43	1,017	1,184
Small game	493	26	442	544
Migratory bird	588	41	507	669
Other animals	184	19	146	222

Table D-3. Approximate Standard Errors and 95-Percent Confidence Intervals for Selected Fishing and Hunting Expenditure Estimates: 2006

(Thousands of dollars)

Expenditures	Estimate	Standard error	Lower 95 percent	Upper 95 percent
FISHING AND HUNTING EXPENDITURES				
Total	76,619,564	2,166,071	72,374,066	80,865,062
Trip-related	24,557,174	714,964	23,155,846	25,958,502
Food and lodging	9,093,769	279,376	8,546,191	9,641,347
Transportation	7,658,755	233,992	7,200,130	8,117,380
Other trip costs	7,804,650	252,636	7,309,484	8,299,816
Equipment				
Fishing	5,365,933	188,904	4,995,681	5,736,185
Hunting	5,716,758	273,637	5,180,429	6,253,087
Auxiliary	2,969,992	143,901	2,687,945	3,252,039
Special	26,910,442	2,260,113	22,480,620	31,340,264
Other				
Books, magazine subscriptions	304,181	16,416	272,006	336,356
Membership dues and contributions	593,242	41,212	512,467	674,017
Land leasing and ownership	8,986,342	902,640	7,217,168	10,755,516
Licenses, stamps, tags, and permits	1,215,500	38,513	1,140,014	1,290,986
Fishing Expenditures				
Total	42,156,092	1,262,473	39,681,645	44,630,539
Trip-related	17,878,560	552,205	16,796,238	18,960,882
Food and lodging	6,302,524	206,999	5,896,805	6,708,243
Transportation	4,961,830	163,180	4,641,996	5,281,664
Other trip costs	6,614,205	218,667	6,185,617	7,042,793
Equipment				
Fishing	5,332,401	188,871	4,962,214	5,702,588
Auxiliary	778,740	58,892	663,312	894,168
Special	12,646,229	1,404,577	9,893,258	15,399,200
Other				
Books, magazine subscriptions	115,019	9,174	97,038	133,000
Membership dues and contributions	157,728	19,181	120,133	195,323
Land leasing and ownership	4,598,988	783,665	3,063,004	6,134,972
Licenses, stamps, tags, and permits	648,427	21,711	605,874	690,980
Hunting Expenditures				
Total	22,893,156	1,097,899	20,741,273	25,045,039
Trip-related	6,678,614	329,123	6,033,533	7,323,695
Food and lodging	2,791,245	140,998	2,514,888	3,067,602
Transportation	2,696,924	133,733	2,434,807	2,959,041
Other trip costs	1,190,445	88,756	1,016,483	1,364,407
Equipment				
Hunting	5,366,357	277,519	4,822,419	5,910,295
Auxiliary	1,330,216	90,892	1,152,068	1,508,364
Special	4,034,928	749,373	2,566,157	5,503,699
Other				
Books, magazine subscriptions	83,524	6,323	71,132	95,916
Membership dues and contributions	269,660	26,130	218,444	320,876
Land leasing and ownership	4,387,354	468,754	3,468,597	5,306,111
Licenses, stamps, tags, and permits	742,503	34,036	675,793	809,213

Table D-4. **Approximate Standard Errors and 95-Percent Confidence Intervals for Selected Wildlife-Watching Estimates: 2006**

Participants and expenditures	Estimate	Standard error	Lower 95 percent	Upper 95 percent
WILDLIFE-WATCHING PARTICIPANTS (thousands)				
Total	71,132	808	69,548	72,716
Away from home	22,977	525	21,949	24,005
Observe wildlife	21,546	510	20,547	22,545
Photograph wildlife	11,708	385	10,954	12,462
Feed wildlife	7,084	302	6,491	7,677
Around the home	67,756	797	66,193	69,319
Observe wildlife	44,467	691	43,113	45,821
Photograph wildlife	18,763	479	17,824	19,702
Feed wildlife	55,512	749	54,045	56,979
Visit public parks	13,271	408	12,471	14,071
Maintain natural areas or plantings	14,508	425	13,674	15,342
DAYS OF PARTICIPATION IN AWAY-FROM-HOME ACTIVITIES (thousands)				
Total	352,070	23,204	306,589	397,551
Observe wildlife	291,027	20,962	249,942	332,112
Photograph wildlife	103,872	12,238	79,886	127,858
Feed wildlife	77,329	10,439	56,868	97,790
Average Days of Participation in Away-From-Home Activities				
Total	15.3	0.8	13.7	16.9
Observe wildlife	13.5	0.8	12.0	15.0
Photograph wildlife	8.9	0.9	7.2	10.6
Feed wildlife	10.9	1.2	8.6	13.3
EXPENDITURES (thousands of dollars)				
Total	45,654,960	1,682,661	42,356,945	48,952,975
Trip-related	12,875,152	766,956	11,371,918	14,378,386
Food and lodging	7,516,281	482,580	6,570,424	8,462,138
Transportation	4,456,013	267,023	3,932,647	4,979,379
Other trip costs	902,858	79,026	747,967	1,057,749
Equipment and other expenses	32,779,808	1,083,752	30,655,654	34,903,962
Wildlife-watching equipment	9,869,727	374,202	9,136,291	10,603,163
Auxiliary equipment	1,033,060	117,461	802,836	1,263,284
Special equipment	12,271,266	2,301,238	7,760,839	16,781,693
Magazines, books	359,681	22,995	314,611	404,751
Land leasing and ownership	6,551,517	1,819,034	2,986,211	10,116,823
Membership dues and contributions	1,052,496	91,539	873,080	1,231,912
Plantings	1,642,061	162,142	1,324,262	1,959,860

Table D-5. Approximate Standard Errors and 95-Percent Confidence Intervals for Participants in Wildlife-Related Recreation by Participant's State of Residence: 2006

(Numbers in thousands)

Participant's state of residence	Total participants	Standard error	Lower 95 percent	Upper 95 percent
United States, total.....	87,465	864	85,772	89,158
Alabama.....	1,417	83	1,253	1,581
Alaska.....	288	21	248	328
Arizona.....	1,233	68	1,099	1,367
Arkansas.....	1,082	71	943	1,221
California.....	6,804	292	6,232	7,376
Colorado.....	1,735	98	1,543	1,927
Connecticut.....	1,223	55	1,115	1,331
Delaware.....	256	15	227	285
Florida.....	4,626	216	4,202	5,050
Georgia.....	2,415	151	2,118	2,712
Hawaii.....	227	18	191	263
Idaho.....	564	45	475	653
Illinois.....	2,886	154	2,584	3,188
Indiana.....	2,279	112	2,059	2,499
Iowa.....	1,306	75	1,159	1,453
Kansas.....	979	52	876	1,082
Kentucky.....	1,667	96	1,479	1,855
Louisiana.....	1,106	78	953	1,259
Maine.....	717	40	639	795
Maryland.....	1,549	81	1,391	1,707
Massachusetts.....	1,931	80	1,775	2,087
Michigan.....	3,651	213	3,233	4,069
Minnesota.....	2,480	143	2,200	2,760
Mississippi.....	896	69	760	1,032
Missouri.....	2,496	125	2,251	2,741
Montana.....	510	29	452	568
Nebraska.....	552	29	494	610
Nevada.....	530	41	450	610
New Hampshire.....	527	25	479	575
New Jersey.....	1,826	88	1,653	1,999
New Mexico.....	601	35	533	669
New York.....	4,103	239	3,634	4,572
North Carolina.....	2,816	127	2,566	3,066
North Dakota.....	232	18	198	266
Ohio.....	4,022	192	3,647	4,397
Oklahoma.....	1,372	87	1,201	1,543
Oregon.....	1,531	93	1,349	1,713
Pennsylvania.....	4,165	210	3,754	4,576
Rhode Island.....	355	16	324	386
South Carolina.....	1,283	76	1,134	1,432
South Dakota.....	327	23	282	372
Tennessee.....	2,287	118	2,055	2,519
Texas.....	5,481	374	4,748	6,214
Utah.....	764	53	660	868
Vermont.....	311	16	280	342
Virginia.....	2,500	135	2,235	2,765
Washington.....	2,315	86	2,147	2,483
West Virginia.....	735	56	625	845
Wisconsin.....	2,217	131	1,961	2,473
Wyoming.....	229	18	194	264

Table D-6. Parameters a and b for Calculating Approximate Standard Errors of Sportspersons, Anglers, Hunters, and Wildlife-Watching Participants

(These parameters are to be used only to calculate estimates of standard errors for characteristics developed from the screening sample)

State	6 years and older		6-to-15-year-olds only	
	a	b	a	b
United States, total.	-0.000015	4,173	-0.000365	14,798
Alabama	-0.000523	2,173	-0.014402	8,642
Alaska	-0.001157	697	-0.024644	2,566
Arizona	-0.000399	2,178	-0.008468	7,441
Arkansas	-0.001116	2,820	-0.026111	9,698
California	-0.000126	4,134	-0.003139	16,914
Colorado	-0.000573	2,435	-0.019382	12,522
Connecticut	-0.000313	1,005	-0.008787	4,151
Delaware	-0.000510	396	-0.014882	1,597
Florida	-0.000266	4,389	-0.006122	13,852
Georgia	-0.000568	4,653	-0.012587	16,121
Hawaii	-0.000437	517	-0.009528	1,602
Idaho	-0.001346	1,759	-0.042091	8,654
Illinois	-0.000296	3,416	-0.007029	12,542
Indiana	-0.000488	2,782	-0.012165	10,911
Iowa	-0.000762	2,062	-0.020347	7,491
Kansas	-0.000537	1,329	-0.016690	6,138
Kentucky	-0.000772	2,935	-0.018308	9,902
Louisiana	-0.000775	3,143	-0.017795	11,036
Maine	-0.000924	1,135	-0.030300	4,683
Maryland	-0.000357	1,821	-0.008162	6,298
Massachusetts	-0.000261	1,521	-0.007130	5,692
Michigan	-0.000685	6,318	-0.018937	26,784
Minnesota	-0.001009	4,733	-0.029835	20,037
Mississippi	-0.000757	1,982	-0.016992	6,865
Missouri	-0.000670	3,534	-0.018329	13,847
Montana	-0.001418	1,227	-0.033110	3,719
Nebraska	-0.000567	902	-0.014086	3,277
Nevada	-0.000515	1,159	-0.011577	4,097
New Hampshire	-0.000535	650	-0.015945	2,744
New Jersey	-0.000209	1,655	-0.005070	6,099
New Mexico	-0.000620	1,097	-0.016872	4,557
New York	-0.000320	5,582	-0.009275	22,967
North Carolina	-0.000416	3,286	-0.011916	14,068
North Dakota	-0.001096	637	-0.036240	2,677
Ohio	-0.000484	5,045	-0.011219	17,172
Oklahoma	-0.000744	2,389	-0.020948	9,767
Oregon	-0.000752	2,533	-0.024824	11,839
Pennsylvania	-0.000544	6,176	-0.014615	22,903
Rhode Island	-0.000315	308	-0.008710	1,182
South Carolina	-0.000560	2,174	-0.016004	9,034
South Dakota	-0.001061	745	-0.025331	2,568
Tennessee	-0.000565	3,084	-0.015267	11,667
Texas	-0.000466	9,557	-0.011141	38,300
Utah	-0.000700	1,541	-0.018090	7,116
Vermont	-0.001053	611	-0.032724	2,420
Virginia	-0.000450	3,102	-0.014313	14,311
Washington	-0.000349	2,031	-0.010251	8,539
West Virginia	-0.001092	1,823	-0.042234	8,929
Wisconsin	-0.000820	4,156	-0.021060	15,086
Wyoming	-0.001268	592	-0.028116	1,742

Table D-7. Parameters a and b for Calculating Approximate Standard Errors for Levels for the Detailed Sportspersons Sample

State	Sportspersons and anglers 16 years and older		Hunters 16 years and older	
	a	b	a	b
United States, total.....	-0.000027	6,125	-0.000025	5,756
Alabama	-0.000936	3,324	-0.000921	3,268
Alaska	-0.002197	1,096	-0.002013	1,004
Arizona	-0.000641	2,941	-0.000403	1,849
Arkansas	-0.001833	3,951	-0.001705	3,674
California	-0.000239	6,523	-0.000213	5,801
Colorado	-0.000960	3,459	-0.000735	2,650
Connecticut.....	-0.000545	1,490	-0.000514	1,407
Delaware.....	-0.000758	507	-0.000720	482
Florida	-0.000415	5,911	-0.000347	4,943
Georgia	-0.000965	6,668	-0.000752	5,199
Hawaii	-0.000763	774	-0.000751	761
Idaho	-0.002486	2,738	-0.001888	2,080
Illinois.....	-0.000430	4,201	-0.000388	3,789
Indiana	-0.000821	3,939	-0.000777	3,729
Iowa	-0.001383	3,234	-0.001535	3,589
Kansas	-0.001097	2,315	-0.001433	3,024
Kentucky	-0.001222	3,983	-0.001048	3,415
Louisiana	-0.001300	4,464	-0.001271	4,365
Maine	-0.001560	1,675	-0.001469	1,578
Maryland	-0.000552	2,392	-0.000456	1,975
Massachusetts.....	-0.000412	2,072	-0.000383	1,929
Michigan.....	-0.001085	8,470	-0.001214	9,474
Minnesota.....	-0.001694	6,812	-0.001504	6,049
Mississippi	-0.001355	3,000	-0.001169	2,588
Missouri	-0.001031	4,662	-0.001067	4,825
Montana	-0.002523	1,899	-0.002383	1,793
Nebraska.....	-0.001066	1,449	-0.001236	1,680
Nevada	-0.000898	1,703	-0.000823	1,561
New Hampshire.....	-0.000801	836	-0.000774	808
New Jersey.....	-0.000327	2,200	-0.000251	1,690
New Mexico.....	-0.001323	1,984	-0.001264	1,895
New York	-0.000456	6,842	-0.000378	5,671
North Carolina.....	-0.000713	4,794	-0.000588	3,951
North Dakota	-0.001558	791	-0.001754	890
Ohio	-0.000851	7,569	-0.000697	6,194
Oklahoma	-0.001278	3,504	-0.001303	3,574
Oregon	-0.001291	3,730	-0.001024	2,957
Pennsylvania.....	-0.000867	8,490	-0.001030	10,089
Rhode Island	-0.000487	410	-0.000425	358
South Carolina.....	-0.000983	3,259	-0.000981	3,251
South Dakota	-0.001728	1,038	-0.001532	920
Tennessee	-0.001019	4,790	-0.000929	4,367
Texas.....	-0.000859	14,660	-0.000725	12,388
Utah	-0.001453	2,627	-0.001268	2,292
Vermont	-0.001514	766	-0.001403	710
Virginia.....	-0.000885	5,215	-0.001105	6,510
Washington.....	-0.000626	3,116	-0.000676	3,368
West Virginia	-0.001844	2,688	-0.001712	2,496
Wisconsin.....	-0.001281	5,572	-0.001144	4,978
Wyoming	-0.003226	1,306	-0.002251	911

Table D-8. **Parameters a, b, and c for Calculating Approximate Standard Errors for Expenditures for the Detailed Sportspersons Sample**

State	Sportspersons and anglers 16 years and older			Hunters 16 years and older		
	a	b	c	a	b	c
United States, total.....	0.000118	-150,479	22,234	0.000918	-401,912	17,005
Alabama	0.019700	-12,417	5,855	0.016799	-96,800	6,317
Alaska	0.030420	-2,004	1,057	0.031018	-14,867	1,091
Arizona	0.036222	-2,002	2,994	0.069395	-74,101	2,742
Arkansas	0.024408	-27,794	6,433	0.010107	-101,205	7,942
California	0.018462	-35,800	10,686	0.027550	-58,262	9,255
Colorado	0.008867	676	5,062	0.034102	-27,935	4,373
Connecticut	0.036498	-11,421	2,841	0.096937	-60,991	2,564
Delaware	0.031385	-1,643	734	0.018489	-3,855	719
Florida	0.014951	-23,048	9,553	0.021932	-407,268	10,425
Georgia	0.022339	-47,820	8,031	0.051440	-143,590	7,061
Hawaii	0.065152	-5,771	830	0.123487	-5,097	588
Idaho	0.034640	9,981	3,224	0.023728	-69,369	3,841
Illinois	0.017187	6,704	5,219	0.024778	74,958	3,321
Indiana	0.027022	-16,160	4,558	0.042674	-61,618	4,557
Iowa	0.033205	22,341	2,171	0.045665	-41,343	1,583
Kansas	0.034206	-23,245	3,454	0.042600	-116,049	4,343
Kentucky	0.051496	-17,125	5,942	0.025277	-89,098	6,822
Louisiana	0.023308	-66,118	7,237	0.027891	135,631	6,412
Maine	0.022050	-7,457	2,175	0.021630	-12,360	2,038
Maryland	0.015599	-14,663	3,208	0.018873	-30,982	2,820
Massachusetts	0.049013	-25,362	3,792	0.138120	-47,649	2,049
Michigan	0.035078	-148,672	13,535	0.039658	-147,585	12,587
Minnesota	0.028185	-92,976	11,279	0.027553	-263,285	12,919
Mississippi	0.026713	-53,218	5,433	0.014058	-97,282	6,390
Missouri	0.011821	-40,950	10,804	-0.005607	-190,726	17,070
Montana	0.024760	-9,845	2,520	0.020119	-99,543	3,580
Nebraska	0.018618	1,031	1,640	0.022265	-22,187	1,472
Nevada	0.048609	-9,688	1,387	0.102222	-32,513	1,074
New Hampshire	0.025253	-6,176	1,434	0.037780	-26,900	1,448
New Jersey	0.019672	-39,093	4,262	0.029909	-90,209	3,910
New Mexico	0.084483	2,232	1,181	0.096226	20,132	683
New York	0.039569	-84,193	13,133	0.069695	-128,553	12,761
North Carolina	0.029775	-35,783	6,154	0.035333	-15,128	5,717
North Dakota	0.033611	-586	751	0.032562	6,176	804
Ohio	0.031480	-41,813	11,082	0.040646	-140,259	8,710
Oklahoma	0.023920	-27,206	4,719	0.020041	-31,920	5,066
Oregon	0.029208	-11,360	5,033	0.019440	-76,401	4,937
Pennsylvania	0.011981	-92,207	15,295	0.014951	-17,951	14,434
Rhode Island	0.033545	-2,922	634	0.053976	-12,463	565
South Carolina	0.082716	-96,641	6,922	0.191600	-23,834	2,573
South Dakota	0.030933	682	1,071	0.018421	-25,518	1,356
Tennessee	0.027200	67,423	6,450	0.029272	-98,688	7,535
Texas	0.032817	-69,604	20,795	0.027826	-146,956	22,831
Utah	0.033896	-13,369	2,671	0.024396	-195,230	4,439
Vermont	0.022379	-4,177	1,337	0.026395	-21,534	1,476
Virginia	0.035897	-28,532	5,705	0.032298	-68,680	6,293
Washington	0.026464	-45,106	5,612	0.081551	81,860	1,611
West Virginia	0.086611	-39,384	2,945	0.103915	-184,675	4,610
Wisconsin	0.017762	-81,329	10,849	0.029543	-54,069	8,015
Wyoming	0.075474	-5,404	1,197	0.090886	12,235	847

Table D-9. Parameters a, b, and c for Calculating Approximate Standard Errors for Days or Trips for the Detailed Sportspersons Sample

State	Sportspersons and anglers 16 years and older			Hunters 16 years and older		
	a	b	c	a	b	c
United States, total.....	0.000211	-23,610	23,157	-0.000235	-85,241	22,698
Alabama.....	0.027360	-4,011	4,995	0.035544	-6,621	5,383
Alaska.....	0.016117	-432	1,681	0.027498	8	1,622
Arizona.....	0.065842	-511	1,775	0.053516	-8,367	2,773
Arkansas.....	0.013952	-12,325	8,675	0.024038	-5,931	6,861
California.....	0.010707	-16,022	13,917	0.028439	-23,877	12,350
Colorado.....	0.019267	4,638	3,198	0.017940	128	3,608
Connecticut.....	0.034363	-781	1,504	0.024306	-1,047	1,829
Delaware.....	0.061308	-234	527	0.058226	-184	529
Florida.....	0.010264	-17,862	11,170	0.022310	21,695	5,794
Georgia.....	0.040208	-10,805	6,234	0.044845	16,702	1,853
Hawaii.....	0.034563	-1,603	1,552	0.212584	-1,169	945
Idaho.....	0.069064	-15,482	4,996	0.024568	-5,756	3,301
Illinois.....	0.005932	-8,487	9,365	0.001562	-38,372	13,100
Indiana.....	0.006553	-5,775	6,973	0.018011	-6,028	6,053
Iowa.....	0.026962	-7,704	4,252	0.037766	-10,398	4,032
Kansas.....	0.015744	-2,510	4,078	0.046706	-21,946	6,195
Kentucky.....	0.015099	-6,026	7,313	-0.014871	-7,130	8,307
Louisiana.....	0.004012	-4,767	6,568	0.022152	-3,240	5,213
Maine.....	0.030520	-7,661	3,270	0.003096	-10,278	3,842
Maryland.....	0.017639	-6,240	3,697	0.011515	-6,512	3,608
Massachusetts.....	0.027491	-3,619	4,355	0.044116	-8,700	5,301
Michigan.....	0.011920	-23,905	20,643	0.025076	23,642	7,030
Minnesota.....	0.035500	-7,447	10,504	0.027723	-23,061	14,333
Mississippi.....	0.015625	-10,362	5,357	-0.000218	-2,695	4,394
Missouri.....	0.019454	-11,342	12,042	0.010034	-70,146	19,451
Montana.....	0.018290	-1,849	2,202	0.013948	-3,887	2,640
Nebraska.....	0.009103	-2,063	3,655	-0.005553	-28,329	7,091
Nevada.....	0.043203	-1,733	1,536	0.123560	535	425
New Hampshire.....	0.019444	-2,643	1,627	0.013722	400	1,313
New Jersey.....	0.026108	1,903	1,969	0.013215	-1,967	2,735
New Mexico.....	0.112638	-431	817	0.096905	807	610
New York.....	0.029022	-22,367	14,881	0.008095	-27,096	17,017
North Carolina.....	0.021276	-6,354	5,499	0.012831	-28,563	9,265
North Dakota.....	0.019007	-3,002	1,621	0.008541	-5,760	2,617
Ohio.....	0.022273	-21,768	15,604	0.044683	-9,949	10,955
Oklahoma.....	0.006405	-10,237	8,296	0.013165	-12,426	8,445
Oregon.....	0.073495	-1,650	3,786	0.042692	-10,309	6,182
Pennsylvania.....	0.027085	-24,417	16,685	-0.014656	-134,270	41,466
Rhode Island.....	0.011732	-506	680	0.021282	-344	525
South Carolina.....	0.014487	-6,537	6,823	0.086503	1,677	2,737
South Dakota.....	0.012863	-1,152	1,751	0.019075	-2,901	1,859
Tennessee.....	0.005611	-9,561	11,404	-0.011681	-60,797	16,711
Texas.....	0.014288	-13,795	18,462	-0.003611	-31,876	25,228
Utah.....	0.041500	-1,853	2,544	0.071790	3,964	792
Vermont.....	0.016042	-1,485	1,360	-0.006963	-2,952	1,792
Virginia.....	0.008112	-5,920	7,627	0.011922	165	6,590
Washington.....	0.017168	-6,558	4,800	0.045009	3,663	1,723
West Virginia.....	0.006512	-2,872	4,433	0.001964	-2,897	4,911
Wisconsin.....	0.009197	-14,330	10,587	-0.002285	-35,565	15,098
Wyoming.....	0.025766	-1,835	1,823	0.034258	-3,738	1,705

Table D-10. **Parameters a and b for Calculating Approximate Standard Errors of Levels of Wildlife-Watching Participants for the Detailed Wildlife-Watching Sample**

State	Away-from-home participants		Wildlife-watching participants ¹	
	a	b	a	b
United States, total.	-0.000064	14,628	-0.000058	13,319
Alabama	-0.002522	8,955	-0.002252	7,994
Alaska	-0.005091	2,539	-0.005744	2,864
Arizona	-0.001212	5,555	-0.001128	5,170
Arkansas	-0.003685	7,943	-0.003787	8,163
California	-0.000633	17,272	-0.000632	17,247
Colorado	-0.002818	10,157	-0.002773	9,995
Connecticut	-0.001942	5,313	-0.001578	4,317
Delaware	-0.002431	1,625	-0.002061	1,378
Florida	-0.001067	15,191	-0.001082	15,396
Georgia	-0.002273	15,705	-0.002082	14,383
Hawaii	-0.002169	2,200	-0.002077	2,106
Idaho	-0.005872	6,469	-0.006027	6,640
Illinois	-0.001350	13,189	-0.001237	12,083
Indiana	-0.002090	10,031	-0.002026	9,722
Iowa	-0.003442	8,051	-0.003725	8,712
Kansas	-0.002087	4,403	-0.002245	4,737
Kentucky	-0.003921	12,780	-0.003130	10,201
Louisiana	-0.002878	9,878	-0.002325	7,980
Maine	-0.005383	5,779	-0.005003	5,372
Maryland	-0.001401	6,072	-0.001512	6,552
Massachusetts	-0.001153	5,803	-0.001045	5,260
Michigan	-0.003188	24,879	-0.002805	21,892
Minnesota	-0.004869	19,579	-0.004257	17,116
Mississippi	-0.004033	8,929	-0.004149	9,184
Missouri	-0.003241	14,653	-0.002731	12,349
Montana	-0.006536	4,919	-0.005006	3,768
Nebraska	-0.001913	2,600	-0.001770	2,406
Nevada	-0.003763	7,131	-0.002387	4,524
New Hampshire	-0.002265	2,364	-0.002070	2,160
New Jersey	-0.000942	6,346	-0.000899	6,057
New Mexico	-0.002139	3,207	-0.002023	3,034
New York	-0.001498	22,454	-0.001320	19,791
North Carolina	-0.001307	8,785	-0.001368	9,194
North Dakota	-0.004745	2,408	-0.004900	2,486
Ohio	-0.001834	16,302	-0.001729	15,365
Oklahoma	-0.004720	12,946	-0.003724	10,214
Oregon	-0.004482	12,948	-0.003771	10,895
Pennsylvania	-0.001862	18,235	-0.001779	17,426
Rhode Island	-0.001588	1,338	-0.001451	1,222
South Carolina	-0.002527	8,378	-0.002147	7,118
South Dakota	-0.005879	3,532	-0.005273	3,168
Tennessee	-0.002040	9,583	-0.002340	10,996
Texas	-0.002981	50,906	-0.002276	38,865
Utah	-0.002948	5,329	-0.003322	6,007
Vermont	-0.003834	1,940	-0.003687	1,866
Virginia	-0.002142	12,625	-0.002049	12,078
Washington	-0.001012	5,037	-0.001076	5,361
West Virginia	-0.005125	7,470	-0.005457	7,954
Wisconsin	-0.002461	10,707	-0.003232	14,058
Wyoming	-0.006998	2,833	-0.006562	2,657

¹ Use these parameters for total wildlife-watching participants and around-the-home participants.

Table D-11. Parameters a, b, and c for Calculating Approximate Standard Errors for Expenditures and Days or Trips for Detailed Wildlife-Watching Sample

State	Expenditures			Days or trips		
	a	b	c	a	b	c
United States, total.....	0.000184	-1,140,662	67,137	0.000574	1,457,630	-8,497
Alabama.....	0.045588	-11,994	16,603	0.188740	-119,343	614
Alaska.....	0.120206	-27,366	3,041	-0.124071	-135,739	22,893
Arizona.....	0.030207	-53,304	10,729	-0.012992	48,146	15,350
Arkansas.....	0.099812	14,720	8,751	-0.017705	122,002	28,315
California.....	0.033850	-512,106	41,075	-0.045068	409,984	182,262
Colorado.....	0.027999	-274,128	22,499	-0.048837	-38,813	65,367
Connecticut.....	0.021634	-65,691	10,399	-0.024457	-95,765	25,345
Delaware.....	0.065106	-1,447	1,138	-0.008505	9,777	5,498
Florida.....	0.023886	346,119	21,198	0.008852	367,813	29,038
Georgia.....	0.074762	-1,010,585	34,617	-0.043108	-269,579	83,544
Hawaii.....	0.083826	-21,578	2,574	-0.072050	-22,450	10,110
Idaho.....	0.062974	-42,113	7,740	-0.034736	-28,632	22,517
Illinois.....	0.036256	-247,805	22,614	-0.015710	-127,759	55,397
Indiana.....	0.036663	-31,127	16,250	-0.011371	-60,979	38,357
Iowa.....	0.079272	54,459	5,841	-0.010582	-64,612	23,312
Kansas.....	0.065343	2,002	6,423	-0.009647	290,376	9,046
Kentucky.....	0.054215	7,733	10,118	-0.027046	-203,563	66,052
Louisiana.....	0.122208	-20,968	9,262	-0.027645	11,297	25,905
Maine.....	0.023874	-51,089	9,384	-0.124695	-361,658	61,734
Maryland.....	0.014472	-4,594	10,674	0.003905	125,364	13,230
Massachusetts.....	0.028723	-178,823	9,836	-0.028071	-151,233	43,446
Michigan.....	0.034044	-350,268	38,895	-0.189982	-1,478,372	355,858
Minnesota.....	0.074185	-156,337	26,053	-0.037135	-287,075	81,476
Mississippi.....	0.069734	-5,671	8,343	0.007734	-4,828	12,669
Missouri.....	0.050350	-370,879	19,939	-0.072363	-297,324	107,372
Montana.....	0.096467	-101,441	7,127	0.021739	75,970	2,590
Nebraska.....	0.057553	-29,126	3,150	-0.037603	-53,492	15,634
Nevada.....	0.114708	-32,736	5,704	0.007035	8,360	8,647
New Hampshire.....	0.014724	-17,918	4,039	-0.004938	74,043	4,376
New Jersey.....	0.022949	-169,333	13,969	-0.040442	238,149	40,992
New Mexico.....	0.036652	16,768	4,306	-0.023441	72,449	11,803
New York.....	0.042036	-450,788	32,575	-0.019285	-366,511	102,534
North Carolina.....	0.061423	-16,794	13,694	-0.012815	19,657	37,216
North Dakota.....	0.155007	-2,199	1,794	0.150664	6,024	376
Ohio.....	0.035458	-205,570	28,049	-0.018753	-103,758	63,267
Oklahoma.....	0.036357	-21,977	15,171	-0.000564	1,344,926	16,961
Oregon.....	0.062814	-65,011	9,965	-0.004734	831,881	37,513
Pennsylvania.....	0.054585	-176,791	24,331	-0.024636	-296,844	94,825
Rhode Island.....	0.037242	-31	2,537	-0.019391	234	7,490
South Carolina.....	0.017341	-52,304	14,141	-0.021836	-45,588	28,960
South Dakota.....	0.058011	-16,346	3,878	-0.063876	-12,873	14,245
Tennessee.....	0.058962	-19,581	19,197	-0.067979	539,487	98,190
Texas.....	0.107126	268,978	41,639	-0.115263	-2,660,430	425,213
Utah.....	0.056246	-5,750	4,842	-0.002938	-77,345	25,347
Vermont.....	0.005556	-22,018	4,065	-0.014449	33,588	6,073
Virginia.....	0.043764	-51,970	12,817	-0.046070	-227,508	91,189
Washington.....	0.030615	-16,210	11,199	-0.000250	36,174	12,719
West Virginia.....	0.118586	-4,653	8,819	-0.073404	38,459	30,640
Wisconsin.....	0.009997	-400,732	26,411	-0.015178	-125,383	46,927
Wyoming.....	0.083907	-31,350	3,012	-0.062286	-29,913	12,976

U.S. Department of the Interior
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