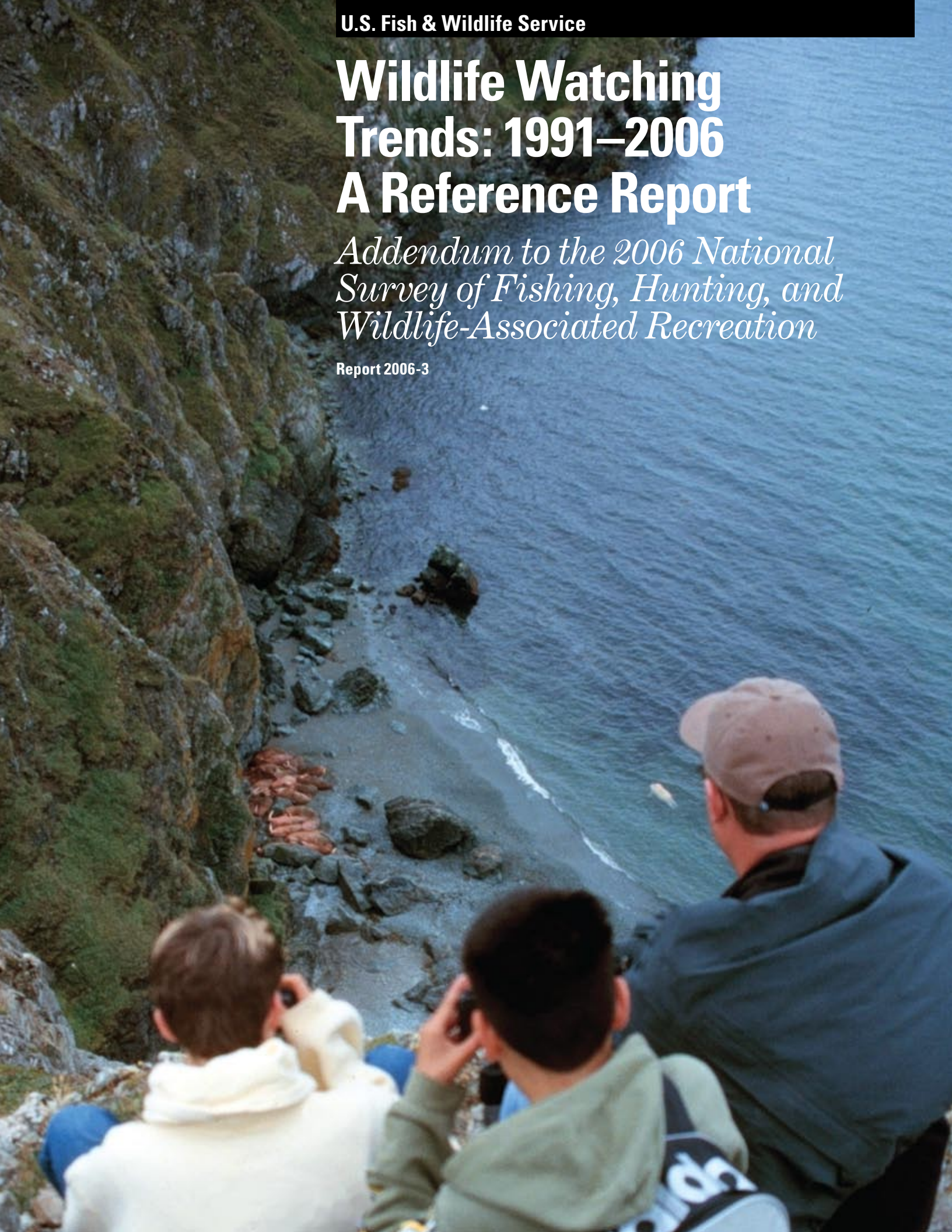


Wildlife Watching Trends: 1991–2006 A Reference Report

*Addendum to the 2006 National
Survey of Fishing, Hunting, and
Wildlife-Associated Recreation*

Report 2006-3



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June 2009

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This report is intended to complement the National and State reports from the 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. The conclusions are the author's and do not represent official positions of the U.S. Fish and Wildlife Service.

The author thanks Sylvia Cabrera for her input into this report.

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Introduction

In 2006 a third of U.S. residents engaged in one of the nation's most popular outdoor recreation activities—*wildlife watching*. Over 70 million people closely observed, photographed, and fed numerous species of wildlife in their backyards and in areas such as wetlands, woodlands, rivers and lakes. Furthermore, they spent a lot of money on this activity. In 2006 each wildlife watcher spent an average of \$642 for equipment and trip-related items, totaling \$45.7 billion nationally.

Given the popularity of this activity and the public's interest in the welfare of wildlife, all levels of resource managers are concerned about trends in wildlife watching. The purpose of this report is to provide trend estimates that will inform those managers and all organizations and individuals interested in wildlife-related recreation.

The analysis is based on the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation¹. This Survey is conducted every five years to measure the extent of participation in and expenditures for wildlife-related recreation. This analysis uses data from the 1991, 1996, 2001, and 2006 Surveys to examine trends in wildlife watching. Wildlife watching is (1) closely observing or attempting to identify, (2) photographing, (3) feeding, (4) visiting public areas, and (5) maintaining plantings or natural areas for the benefit of wildlife. These activities must be the primary purpose of the trip or around-the-home activity.

¹ For estimates and background information for the Survey, see *2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*. U.S. Department of the Interior, Fish and Wildlife Service, and U.S. Department of Commerce, U.S. Census Bureau. October 2007. It can be downloaded from wsfrprograms.fws.gov.



Steve Hillebrand/USFWS

This report presents overall changes in participation nationally, regionally, and by state. It identifies trends by the types of animal watching undertaken, including bird watching, mammal watching, and other animal watching. It presents trends in wildlife-watching days and expenditures. It examines changes in wildlife-watchers' socioeconomic characteristics: age, gender, income, urban/rural, race, and ethnicity. Finally, it explores the trend in avid and casual wildlife watching.

Like the Survey, this report divides wildlife watchers into two groups: those who go on trips to engage in their activities and those who do so around their home. Around-the-home (defined as within a mile of home) wildlife watching includes maintaining plantings or natural areas for the benefit of wildlife as well as observing, photographing, and feeding wildlife. Nearly all wildlife watchers are around-the-home participants. A third of them are trip-taking participants, or “away-from-home” participants.

National Participation Trends

The national trend in wildlife watching since 1991 has not undergone a steady linear progression, instead there was a decline and then an increase. The 17% drop in wildlife-watching participation from 1991 to 1996 was nearly balanced by the 13% increase from 1996 to 2006. Wildlife watching around the home was primarily responsible for the overall trend, with an 18% drop from 1991 to 1996 and a 12% increase from 1996 to 2006. Wildlife watching away from home experienced a 21% drop from 1991 to 1996, but did not increase from 1996 to 2006. From 1996 to 2006 wildlife-watching expenditures increased even more than participation, going up 21% for expenditures compared to 13% for participation.

Table 1. Wildlife Watching Participation and Expenditures: 2001–2006

(Numbers in thousands. Population 16 years old and older. Expenditures in 2006 dollars)

	2001	2006	Percent Change
Wildlife Watchers, Total	66,105	71,132	8
Around the Home, Total	62,928	67,756	8
Observe	42,111	44,467	6
Photograph	13,937	18,763	35
Feed	53,988	55,512	(V)
Visit Public Parks	10,981	13,271	21
Maintain Plantings/ Natural Areas	13,072	14,508	11
Away from Home, Total	21,823	22,977	(V)
Observe	20,080	21,546	(V)
Photograph	9,427	11,708	24
Feed	7,077	7,084	(V)
Expenditures, Total	\$43,792,516	\$45,654,960	(V)
Trip-Related	\$9,305,180	\$12,875,152	38
Equipment	\$26,835,136	\$23,174,053	-14
Other	\$7,652,201	\$9,605,755	(V)

(V) No change at the 95% level of significance. This means that for 95% of all possible samples, the estimate for one survey year is not different from the estimate for the other survey year.

Table 2. Wildlife Watching Participation and Expenditures: 1991–1996

(Numbers in thousands. Population 16 years old and older. Expenditures in 2006 dollars)

	1991	1996	Percent Change
Wildlife Watchers, Total	76,111	62,868	-17
Around the Home, Total	73,904	60,751	-18
Observe	54,653	44,063	-21
Photograph	16,990	16,021	(V)
Feed	65,423	54,122	-17
Visit Public Parks	15,525	11,011	-29
Maintain Plantings/ Natural Areas	13,601	13,401	(V)
Away from Home, Total	29,999	23,652	-21
Observe	28,812	22,878	-21
Photograph	14,225	12,038	-15
Feed	13,306	9,976	-25
Expenditures, Total	N.A.⁽¹⁾	\$37,651,365	N.A.
Trip-Related	N.A.	\$12,165,513	N.A.
Equipment	N.A.	\$21,451,842	N.A.
Other	N.A.	\$4,034,010	N.A.

(V) No change at the 95% level of significance. This means that for 95% of all possible samples, the estimate for one survey year is not different from the estimate for the other survey year.

(1) The expenditure categories for 1991 do not match the categories for later surveys, so the estimates are not comparable. Adjustments were made to the estimates of later surveys to make them comparable to 1991 in the 1991–2006 analysis section.

It is enlightening to look at the number of participants relative to the number of all Americans, i.e., a participation rate. The proportion of all Americans 16 years old and older who participated in wildlife watching decreased substantially from 1991 to 1996, then leveled off from 1996 to 2006². The 1996–2006 stability in wildlife watching was due to around-the-home wildlife watching; away-from-home wildlife watching decreased significantly from 1991 to 1996 and from 1996 to 2001, but leveled off from 2001 to 2006. Around-the-home wildlife watching is commonly less strenuous and less expensive than away-from-home wildlife watching. The trend in away-from-home wildlife watching is more like the trend in hunting, another trip-oriented recreation activity, where we have not seen an increase in participation since 1991.

² 1991 is heretofore the high water mark for wildlife watching. The Survey began including wildlife watching questions in 1980, and there was an increase of approximately 30% in primary (i.e., wildlife watching being the principal motivation of the activity, instead of a secondary activity while doing something else) wildlife watching from 1980 to 1985 and 30% again from 1985 to 1990. Despite the 17% drop from 1991 to 1996, the number of wildlife watchers in the 1990s and the first half of the 2000s is more than the number in the 1980s.

Table 3. Wildlife Watching Participation and Expenditures: 1996–2001

(Numbers in thousands. Population 16 years old and older. Expenditures in 2006 dollars)

	1996	2001	Percent Change
Wildlife Watchers, Total	62,868	66,105	5
Around the Home, Total	60,751	62,928	4
Observe	44,063	42,111	-4
Photograph	16,021	13,937	-13
Feed	54,122	53,988	(V)
Visit Public Parks	11,011	10,981	(V)
Maintain Plantings/ Natural Areas	13,401	13,072	(V)
Away from Home, Total	23,652	21,823	-8
Observe	22,878	20,080	-12
Photograph	12,038	9,427	-22
Feed	9,976	7,077	-29
Expenditures, Total	\$37,651,365	\$43,792,516	25
Trip-Related	\$12,165,513	\$9,305,180	-23
Equipment	\$21,451,842	\$26,835,136	25
Other	\$4,034,010	\$7,652,201	25

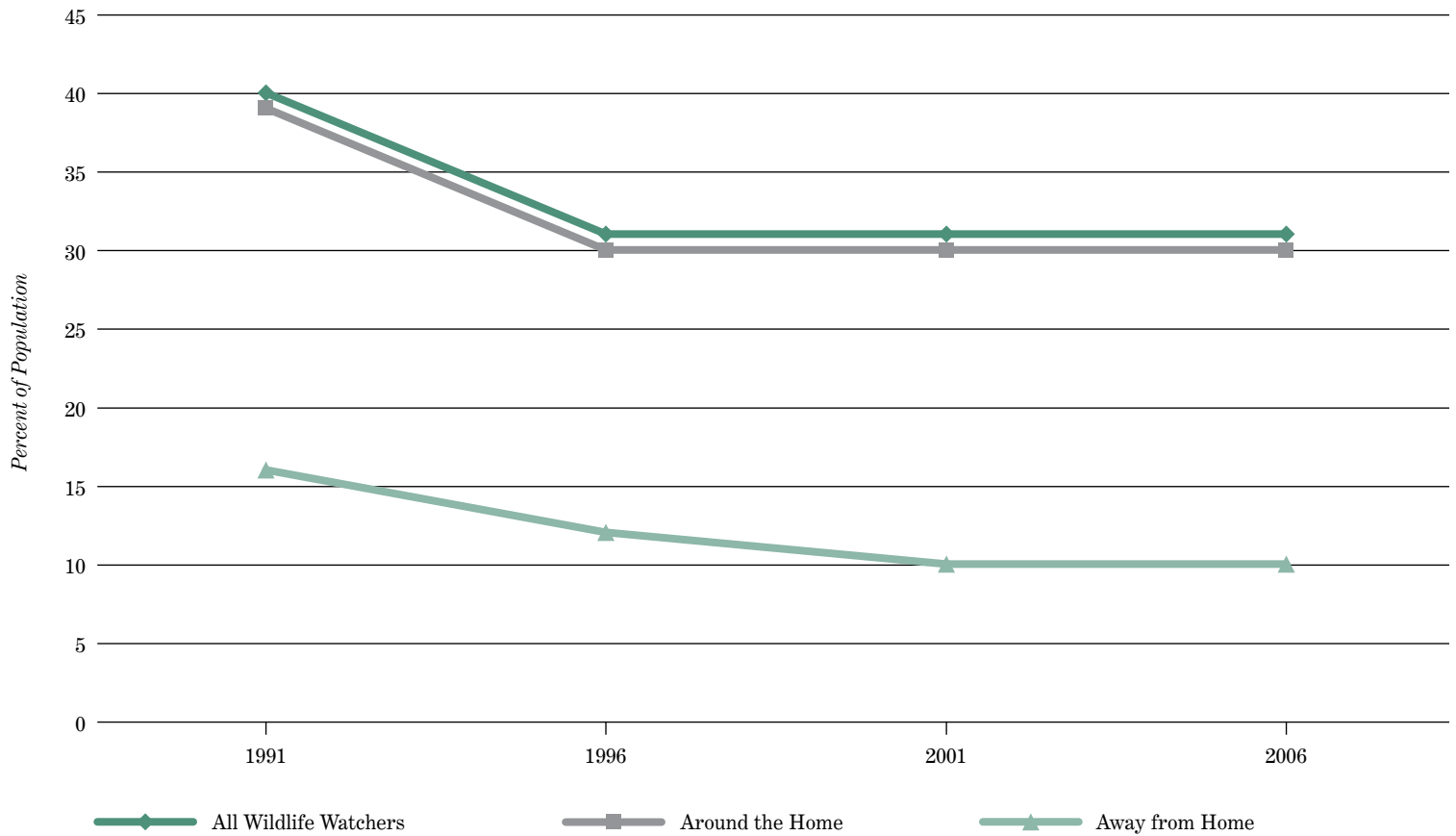
(V) No change at the 95% level of significance. This means that for 95% of all possible samples, the estimate for one survey year is not different from the estimate for the other survey year.

Table 4. Wildlife-Watching Participation Rates: 1991–2006

(U.S. Population 16 years old and older)

Percent of Population	1991	1996	2001	2006
Wildlife Watchers, Total	40%	31%	31%	31%
Around the Home, Total	39%	30%	30%	30%
Observe	29%	22%	20%	19%
Photograph	9%	8%	7%	8%
Feed	34%	27%	25%	24%
Visit Public Parks	8%	5%	5%	6%
Maintain Plantings/Natural Areas	7%	7%	6%	6%
Away from Home, Total	16%	12%	10%	10%
Observe	15%	11%	9%	9%
Photograph	7%	6%	4%	5%
Feed	7%	5%	3%	3%

Figure 1. Trend in Wildlife Watching Participation as a Percent of the U.S. Population



The around-the-home activity that had the biggest percentage drop from 1991–2006 in the number of participants was closely observing wildlife. The away-from-home activity with the biggest percentage drop was feeding wildlife. But the 2001–2006 trends were nearly all up, with the activity that had the biggest percentage increase being photographing both around the home and away from home. The technological advances of photographic equipment likely has a part in this trend.

In contrast to participation, total expenditures increased 30% from 1991 to 2006, largely due to the equipment purchase component³. While participation numbers overall declined, equipment purchases increased 41% from 1991–2006. Wildlife watching became more equipment-intensive over the study period.

³ See Appendix Tables 17–19.

Table 5. Animal Watching: 1991–2006

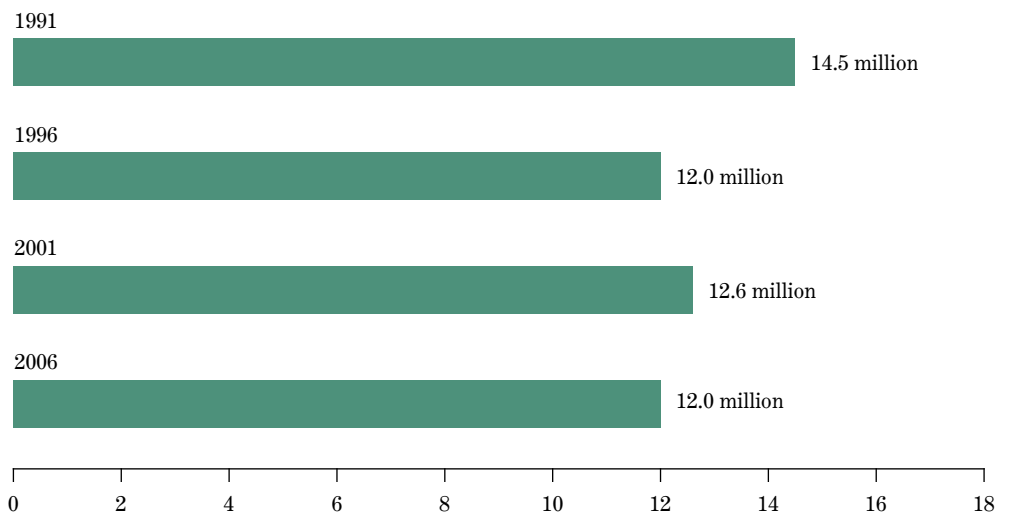
(Numbers in thousands. Population 16 years old and older)

	1991	Percent	1996	Percent	2001	Percent	2006	Percent
Total, U.S.	60,589	100	49,312	100	48,206	100	50,796	100
Birders	56,307	93	45,991	93	45,951	95	47,693	94
Mammal Watchers	45,164	75	43,168	88	40,161	83	41,936	83
Large Mammal Watchers	N.A.	N.A.	24,900	50	24,969	52	27,869	55
Small Mammal Observers	N.A.	N.A.	40,839	83	37,302	77	38,283	75
Other Animal Watchers ⁽¹⁾	32,285	53	30,502	62	23,819	49	27,055	53

*(1) "Other Animals" include fish, marine mammals, amphibians, insects, reptiles, and spiders.**Note: The 1991 Survey did not have mammals categorized as large and small.*

The change in participation also varied in terms of the types of animals watched. Over 90% of all wildlife observers were interested in birds. Mammal observers also were a high proportion of wildlife observers, 83% in 2006, which was an increase compared to 1991. Other animal observers were 53% of all observers in 2006 and 1991. The popularity of different types of animals varied from 1991 to 2006, but the number of participants for each type of wildlife observation decreased.

The Surveys were designed to cover the activity of participants 16 years old and older. Children under 16 years of age were not asked detailed questions. However, estimates of the participation of 6–15 year olds can be calculated using responses by an adult household respondent. In 1991 there were 14.5 million children who wildlife watched. In 1996 12.0 million children wildlife watched, a drop of 17%. Then in 2001 12.6 million children wildlife watched; in 2006 12.0 million wildlife watched. The number of wildlife-watching children dropped from 1991 to 1996, similar to the trend in adult wildlife watchers, but did not increase from 2001 to 2006, as adult wildlife watching did.

Figure 2. Trend of 6–15 Year-Old Wildlife Watchers

USFWS

Regional Participation Trends

There is much regional variety in wildlife watching that is masked by a focus on the national picture. Therefore the following presents changes in the participation rates of nine regions' populations. Analyzing participation rates is a good way of studying the popularity of an activity since it measures the percent of the population that took part.

The region with the highest rate of wildlife watching in 2006 was the West North Central, where more than 4 out of 10 people participated. The region with the lowest rate was the Pacific, with 1 out of 4 people participating.

The regions that paralleled the nation's 1991–2006 trend for total wildlife watching were Middle Atlantic, East North Central, and West South Central. The participation rate for these regions dropped from 1991 to 1996 then leveled off through 2006. The trend for New England, West North Central, and East South Central participation dropped from 1991 to 1996 then increased by 2006, although not back to the 1991 level. Finally, the South Atlantic, Mountain, and Pacific regions saw sharp declines in their wildlife participation from 1991 to 1996 and lesser levels of decline from 1996 to 2006.

An increase in around-the-home participation was responsible for the participation increase from 1996–2006 in the New England, West North Central, and East South Central regions. Around-the-home activity is the most popular type of wildlife watching, and its trend swamps the effect of away-from-home wildlife watching. For example, in the East North Central region there was an increase in away-from-home activity from 2001 to 2006, but since around-the-home activity did not increase overall wildlife watching stayed level in that region.

Figure 3. Map of U.S. Regions

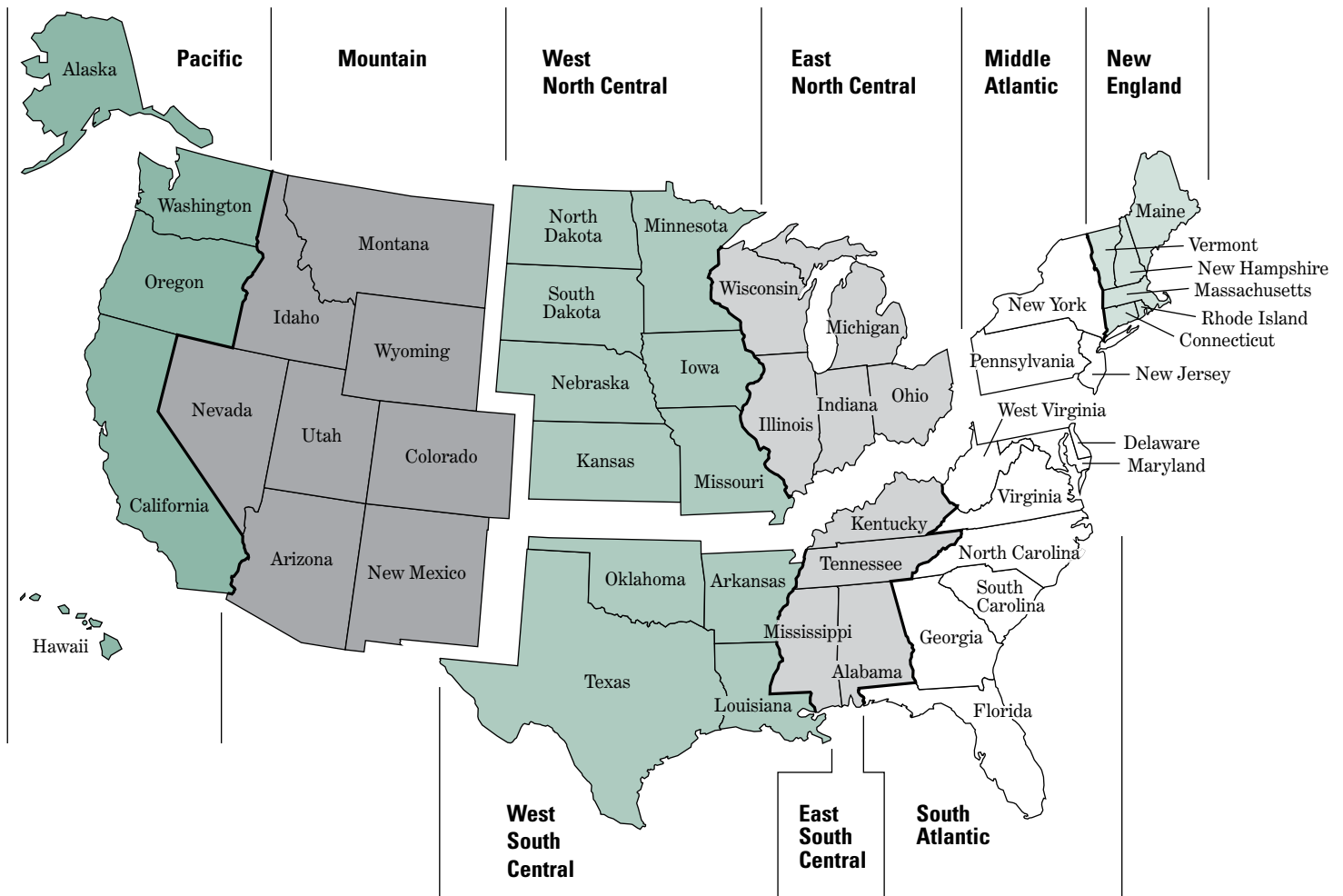


Table 6. Wildlife-Watching Participants by Region: 1991, 1996, 2001, 2006

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

Area	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

State Participation Trends

We now look at the 50 states and their diverse histories of wildlife watching. Ranking states by the popularity of wildlife watching by their state residents in 2006 has northern, less-populated states at the high end of the spectrum. Thirty-four states had participation rates above the national average of 31%.

The most-populated states have participation rates below the national average. This is at least partly due to the high degree of urbanization in those states. High population density has a negative effect on participation in wildlife-related recreation.

The following sections, unless otherwise noted, set forth comparisons of state resident participation estimates. Comparing actual participation numbers is a good way of measuring the impact of an activity on wildlife and the economy.

Table 7. State Ranking of Wildlife Watchers in 2006, by Percent of State Population
(Numbers in thousands. Population 16 years old and older)

	<i>Participants</i>	<i>Percent of Population</i>		<i>Participants</i>	<i>Percent of Population</i>		
1	Maine	600	56	27	Rhode Island	312	37
2	Montana	412	55	28	Virginia	2,126	36
3	Vermont	279	55	29	Massachusetts	1,725	34
4	Iowa	1,111	48	30	North Carolina	2,267	34
5	Minnesota	1,946	48	31	New Mexico	490	33
6	Wyoming	194	48	32	Delaware	212	32
7	Missouri	2,059	46	33	Nebraska	438	32
8	New Hampshire	471	45	34	Utah	574	32
9	Oregon	1,266	44		National Average	71,132	31
10	South Dakota	266	44	35	Maryland	1,334	31
11	Alaska	207	42	36	Alabama	1,006	28
12	Tennessee	1,966	42	37	Mississippi	618	28
13	Kentucky	1,341	41	38	South Carolina	943	28
14	Arkansas	859	40	39	Georgia	1,819	26
15	Colorado	1,459	40	40	North Dakota	134	26
16	Connecticut	1,102	40	41	Florida	3,520	25
17	Washington	2,007	40	42	Illinois	2,355	24
18	West Virginia	585	40	43	New York	3,548	24
19	Idaho	432	39	44	Texas	4,111	24
20	Oklahoma	1,082	39	45	New Jersey	1,537	23
21	Wisconsin	1,710	39	46	Arizona	988	22
22	Indiana	1,825	38	47	Nevada	420	22
23	Michigan	2,947	38	48	California	5,799	21
24	Ohio	3,379	38	49	Louisiana	712	21
25	Kansas	787	37	50	Hawaii	160	16
26	Pennsylvania	3,638	37				

2001–2006 Trends

The national increase in all wildlife watching from 2001–2006 was led by the state residents of Georgia, Texas, Rhode Island, and Missouri. The states that had statistically significant drops at the 90% level⁴ were Wisconsin, Alaska, Nebraska, and Washington. All other states maintained or increased their participation.

⁴ All state-level measures of statistical significance in this report are at the 90% level of significance. This means that for 90% of all possible samples, the estimate for one survey year cannot be shown to be different from the estimate for the other survey year.



Poppy Benson/USFWS

Table 8. Wildlife Watching by State of Residence: 2001–2006

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

	<i>2001 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	66,105	31	71,132	31
Alabama	965	28	1,006	28
Alaska	241	53	207	42
Arizona	1,107	30	988	22
Arkansas	778	39	859	40
California	5,491	21	5,799	21
Colorado	1,213	38	1,459	40
Connecticut	883	35	1,102	40
Delaware	170	28	212	32
Florida	2,856	23	3,520	25
Georgia	1,326	22	1,819	26
Hawaii	126	14	160	16
Idaho	388	40	432	39
Illinois	2,492	27	2,355	24
Indiana	1,786	39	1,825	38
Iowa	983	45	1,111	48
Kansas	735	36	787	37
Kentucky	1,264	40	1,341	41
Louisiana	840	25	712	21
Maine	520	52	600	56
Maryland	1,311	32	1,334	31
Massachusetts	1,493	31	1,725	34
Michigan	2,424	32	2,947	38
Minnesota	1,993	54	1,946	48
Mississippi	579	27	618	28
Missouri	1,612	38	2,059	46
Montana	362	52	412	55
Nebraska	498	39	438	32
Nevada	334	23	420	22
New Hampshire	450	47	471	45
New Jersey	1,694	27	1,537	23
New Mexico	471	35	490	33
New York	3,524	25	3,548	24
North Carolina	1,884	32	2,267	34
North Dakota	135	28	134	26
Ohio	2,768	32	3,379	38
Oklahoma	1,042	40	1,082	39
Oregon	1,286	49	1,266	44
Pennsylvania	3,522	38	3,638	37
Rhode Island	242	32	312	37
South Carolina	1,079	35	943	28
South Dakota	251	45	266	44
Tennessee	1,706	40	1,966	42
Texas	3,088	20	4,111	24
Utah	572	37	574	32
Vermont	287	60	279	55
Virginia	2,168	40	2,126	36
Washington	2,234	49	2,007	40
West Virginia	517	36	585	40
Wisconsin	2,159	53	1,710	39
Wyoming	172	46	194	48

From 2001 to 2006 there was an increase in around-the-home wildlife watching. The states with the biggest increases were Georgia, Texas, Missouri, and Rhode Island. Only two states had significant decreases: Nebraska and Wisconsin.

Table 9. Around-The-Home Wildlife Watching by State: 2001–2006

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

	<i>2001 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	62,928	30	67,756	30
Alabama	925	27	989	28
Alaska	221	49	202	41
Arizona	1,063	29	950	21
Arkansas	762	38	811	38
California	4,853	19	5,259	19
Colorado	1,127	35	1,393	39
Connecticut	859	34	1,063	39
Delaware	168	28	206	31
Florida	2,635	22	3,274	23
Georgia	1,305	21	1,798	26
Hawaii	120	13	145	14
Idaho	333	34	395	36
Illinois	2,379	26	2,258	23
Indiana	1,727	38	1,786	37
Iowa	939	43	1,059	45
Kansas	718	36	723	34
Kentucky	1,234	40	1,235	38
Louisiana	802	24	671	20
Maine	501	50	576	54
Maryland	1,261	31	1,322	31
Massachusetts	1,443	30	1,647	33
Michigan	2,361	31	2,826	36
Minnesota	1,932	52	1,908	47
Mississippi	576	27	606	27
Missouri	1,514	36	1,966	43
Montana	341	49	389	52
Nebraska	469	37	407	30
Nevada	300	21	371	20
New Hampshire	445	47	451	43
New Jersey	1,640	26	1,483	22
New Mexico	449	34	437	29
New York	3,442	24	3,465	23
North Carolina	1,815	31	2,237	33
North Dakota	125	26	128	25
Ohio	2,653	31	3,272	37
Oklahoma	997	39	976	36
Oregon	1,204	46	1,129	39
Pennsylvania	3,371	36	3,502	36
Rhode Island	237	31	298	35
South Carolina	1,045	34	924	28
South Dakota	241	43	257	43
Tennessee	1,655	38	1,853	39
Texas	2,930	19	3,861	23
Utah	515	33	491	27
Vermont	280	58	274	54
Virginia	2,105	38	2,082	35
Washington	2,105	47	1,927	39
West Virginia	492	34	559	38
Wisconsin	2,076	51	1,703	39
Wyoming	154	41	180	44

Despite the steadiness of away-from-home participation nationally from 2001 to 2006, there were three states with significant drops in away-from-home participation: Wisconsin, Alaska, and Washington. Conversely, six states had significant increases: Tennessee, Rhode Island, Kentucky, Arkansas, South Dakota, and Ohio.

Table 10. Away-From-Home Wildlife Watching by State of Residence: 2001–2006
(Numbers in thousands. Population 16 years old and older. State residents taking a trip away from home anywhere in the U.S.)

	<i>2001 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	21,823	10	22,977	10
Alabama	280	8	348	10
Alaska	118	26	68	14
Arizona	329	9	381	8
Arkansas	190	10	304	14
California	2,191	8	2,565	9
Colorado	531	17	531	15
Connecticut	248	10	290	11
Delaware	43	7	49	7
Florida	1,279	11	988	7
Georgia	302	5	371	5
Hawaii	50	5	55	5
Idaho	214	22	183	17
Illinois	683	7	756	8
Indiana	484	11	611	13
Iowa	354	16	344	15
Kansas	286	14	234	11
Kentucky	329	11	540	17
Louisiana	250	8	234	7
Maine	174	17	213	20
Maryland	413	10	305	7
Massachusetts	427	9	531	11
Michigan	747	10	827	11
Minnesota	562	15	579	14
Mississippi	103	5	145	7
Missouri	581	14	709	16
Montana	195	28	184	24
Nebraska	150	12	151	11
Nevada	128	9	168	9
New Hampshire	139	15	127	12
New Jersey	564	9	513	8
New Mexico	205	15	220	15
New York	1,112	8	1,178	8
North Carolina	367	6	402	6
North Dakota	48	10	30	6
Ohio	887	10	1,174	13
Oklahoma	340	13	414	15
Oregon	561	21	481	17
Pennsylvania	1,173	13	1,038	11
Rhode Island	58	8	96	11
South Carolina	282	9	332	10
South Dakota	77	14	116	19
Tennessee	375	9	725	15
Texas	1,043	7	1,176	7
Utah	323	21	255	14
Vermont	109	23	82	16
Virginia	581	11	603	10
Washington	874	19	686	14
West Virginia	166	11	129	9
Wisconsin	769	19	424	10
Wyoming	95	25	82	20

Table 10 gives estimates of participation by state residents travelling anywhere in the United States (although most activity by wildlife watchers is in their state of residence). Table 11 provides in-state participation estimates by state residents and nonresidents. State of residence tables are particularly interesting because of the participation rate estimates. In-state activity tables are useful because they are totals of all participation.

Table 11. Away-From-Home Wildlife Watching by State Where Activity Took Place: 2001–2006

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

	2001 <i>Participants</i>	2006 <i>Participants</i>	<i>Percent Change</i>
U.S. Total	21,823	22,977	5
Alabama	276	471	71
Alaska	292	354	21
Arizona	638	644	1
Arkansas	211	435	106
California	2,270	2,894	27
Colorado	838	873	4
Connecticut	279	266	-5
Delaware	96	109	14
Florida	1,503	1,560	4
Georgia	411	438	7
Hawaii	141	154	9
Idaho	451	506	12
Illinois	638	837	31
Indiana	474	755	59
Iowa	310	404	30
Kansas	297	248	-16
Kentucky	385	572	49
Louisiana	314	225	-28
Maine	419	399	-5
Maryland	533	419	-21
Massachusetts	542	655	21
Michigan	884	1,034	17
Minnesota	634	641	1
Mississippi	131	246	88
Missouri	738	842	14
Montana	511	512	0
Nebraska	186	176	-5
Nevada	309	416	35
New Hampshire	425	347	-18
New Jersey	688	615	-11
New Mexico	387	507	31
New York	1,330	1,293	-3
North Carolina	588	686	17
North Dakota	93	39	-58
Ohio	898	1,055	17
Oklahoma	403	372	-8
Oregon	910	675	-26
Pennsylvania	1,279	1,168	-9
Rhode Island	98	203	107
South Carolina	331	447	35
South Dakota	181	270	49
Tennessee	683	1,007	47
Texas	1,002	956	-5
Utah	530	518	-2
Vermont	307	265	-14
Virginia	772	728	-6
Washington	1,065	959	-10
West Virginia	219	282	29
Wisconsin	1,000	685	-32
Wyoming	416	521	25

2001–2006 saw a small increase nationally in observing wildlife around the home. The states with the biggest percentage increases were Florida, Rhode Island, Ohio, and Arkansas. On the flip side, the states with the largest decreases were North Dakota, Wisconsin, and New Jersey.

Table 12. Around-The-Home Observers by State: 2001–2006

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

	<i>2001 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	42,111	20	44,467	19
Alabama	634	19	676	19
Alaska	145	32	146	29
Arizona	791	21	705	15
Arkansas	473	24	620	29
California	3,072	12	3,479	13
Colorado	745	23	799	22
Connecticut	614	24	788	29
Delaware	108	18	123	18
Florida	1,663	14	2,364	17
Georgia	908	15	1,138	16
Hawaii	71	8	88	9
Idaho	240	25	280	25
Illinois	1,551	17	1,460	15
Indiana	1,295	28	1,092	23
Iowa	699	32	804	34
Kansas	477	24	451	21
Kentucky	703	23	794	24
Louisiana	505	15	491	14
Maine	351	35	405	38
Maryland	865	21	813	19
Massachusetts	1,007	21	1,167	23
Michigan	1,566	21	1,664	21
Minnesota	1,226	33	1,384	34
Mississippi	387	18	402	18
Missouri	1,003	24	1,300	29
Montana	282	40	285	38
Nebraska	306	24	302	22
Nevada	194	13	254	13
New Hampshire	329	34	334	32
New Jersey	1,085	17	843	13
New Mexico	326	24	306	20
New York	2,401	17	2,183	15
North Carolina	980	17	1,229	18
North Dakota	84	17	56	11
Ohio	1,626	19	2,185	25
Oklahoma	627	24	632	23
Oregon	824	31	770	27
Pennsylvania	2,325	25	2,349	24
Rhode Island	143	19	194	23
South Carolina	585	19	618	19
South Dakota	176	31	174	29
Tennessee	1,059	25	1,353	29
Texas	2,050	13	2,252	13
Utah	372	24	335	19
Vermont	207	43	193	38
Virginia	1,512	28	1,273	22
Washington	1,476	33	1,432	29
West Virginia	344	24	267	18
Wisconsin	1,521	37	1,059	24
Wyoming	114	30	129	32

The number of around-the-home wildlife photographers jumped from 2001 to 2006. The states with the biggest percentage increases were Texas, Rhode Island, Michigan, and Alabama. There was not a significant drop in any state, a remarkable across-the-board advance in popularity.

Table 13. Around-The-Home Photographers by State: 2001–2006

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

	<i>2001 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	13,937	7	18,763	8
Alabama	144	4	258	7
Alaska	109	24	86	17
Arizona	232	6	261	6
Arkansas	154	8	231	11
California	1,052	4	1,593	6
Colorado	326	10	387	11
Connecticut	228	9	271	10
Delaware	37	6	60	9
Florida	716	6	1,230	9
Georgia	244	4	386	6
Hawaii	25	3	41	4
Idaho	98	10	114	10
Illinois	476	5	688	7
Indiana	382	8	424	9
Iowa	254	12	240	10
Kansas	161	8	162	8
Kentucky	201	6	335	10
Louisiana	125	4	125	4
Maine	129	13	204	19
Maryland	299	7	372	9
Massachusetts	303	6	464	9
Michigan	520	7	990	13
Minnesota	512	14	470	12
Mississippi	61	3	112	5
Missouri	319	8	541	12
Montana	93	13	111	15
Nebraska	90	7	95	7
Nevada	69	5	78	4
New Hampshire	129	14	166	16
New Jersey	378	6	468	7
New Mexico	141	11	127	8
New York	834	6	946	6
North Carolina	336	6	521	8
North Dakota	25	5	30	6
Ohio	480	6	833	9
Oklahoma	170	7	274	10
Oregon	281	11	247	9
Pennsylvania	780	8	713	7
Rhode Island	37	5	88	10
South Carolina	145	5	174	5
South Dakota	41	7	60	10
Tennessee	336	8	370	8
Texas	565	4	1,411	8
Utah	131	8	185	10
Vermont	95	20	82	16
Virginia	470	9	493	8
Washington	578	13	588	12
West Virginia	95	7	165	11
Wisconsin	485	12	445	10
Wyoming	47	12	47	12

The states with the biggest percentage increases in feeding wildlife were Texas, Delaware, Georgia, and Missouri. The only states with significant decreases were Arizona, Nebraska, and Wisconsin.

Table 14. Around-The-Home Feeders by State: 2001–2006

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

	<i>2001 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	53,988	25	55,512	24
Alabama	835	24	924	26
Alaska	129	28	120	24
Arizona	860	23	659	14
Arkansas	710	36	722	33
California	3,763	14	3,447	13
Colorado	904	28	936	26
Connecticut	756	30	857	31
Delaware	141	24	181	27
Florida	2,092	17	2,474	17
Georgia	1,204	20	1,494	22
Hawaii	91	10	88	9
Idaho	233	24	299	27
Illinois	2,171	23	1,945	20
Indiana	1,615	35	1,578	33
Iowa	878	40	922	39
Kansas	627	31	569	27
Kentucky	1,126	36	1,029	32
Louisiana	714	22	598	17
Maine	426	42	502	47
Maryland	1,077	26	1,134	26
Massachusetts	1,263	26	1,259	25
Michigan	2,078	27	2,384	31
Minnesota	1,663	45	1,639	41
Mississippi	531	25	525	24
Missouri	1,372	33	1,684	37
Montana	246	35	248	33
Nebraska	403	32	325	24
Nevada	229	16	283	15
New Hampshire	398	42	354	34
New Jersey	1,322	21	1,255	19
New Mexico	387	29	342	23
New York	2,847	20	2,723	18
North Carolina	1,706	29	2,051	31
North Dakota	105	22	114	22
Ohio	2,364	27	2,670	30
Oklahoma	956	37	909	33
Oregon	997	38	995	34
Pennsylvania	2,812	30	2,938	30
Rhode Island	210	27	237	28
South Carolina	972	32	878	26
South Dakota	191	34	208	35
Tennessee	1,570	36	1,589	34
Texas	2,528	16	3,332	20
Utah	368	24	365	20
Vermont	243	51	215	42
Virginia	1,804	33	1,813	31
Washington	1,583	35	1,513	30
West Virginia	464	32	528	36
Wisconsin	1,822	45	1,534	35
Wyoming	116	31	120	30

Birders

During 2001–2006 when birding participation nationally did not change, only one state had a significant drop, Wisconsin. Six states had statistically significant increases: Nevada, Arkansas, Florida, Kentucky, Tennessee, and Ohio.

Table 15. Birders by State of Residence: 2001–2006
(Numbers in thousands. Population 16 years old and older)

	<i>2001 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	45,951	22	47,693	21
Alabama	653	19	692	19
Alaska	164	36	148	30
Arizona	840	23	778	17
Arkansas	499	25	603	28
California	3,698	14	4,050	15
Colorado	817	25	910	25
Connecticut	663	26	797	29
Delaware	111	19	130	19
Florida	1,954	16	2,464	17
Georgia	903	15	1,077	16
Hawaii	79	9	107	11
Idaho	295	30	314	28
Illinois	1,712	19	1,630	17
Indiana	1,343	29	1,165	24
Iowa	772	35	798	34
Kansas	513	25	470	22
Kentucky	740	24	902	28
Louisiana	526	16	520	15
Maine	364	36	423	39
Maryland	915	22	853	20
Massachusetts	1,112	23	1,209	24
Michigan	1,740	23	1,768	23
Minnesota	1,344	36	1,346	33
Mississippi	392	19	421	19
Missouri	1,129	27	1,407	31
Montana	309	44	304	40
Nebraska	327	26	329	24
Nevada	231	16	311	16
New Hampshire	334	35	337	32
New Jersey	1,181	19	965	14
New Mexico	372	28	352	23
New York	2,525	18	2,282	15
North Carolina	1,054	18	1,289	19
North Dakota	82	17	70	14
Ohio	1,797	21	2,330	26
Oklahoma	689	27	739	27
Oregon	933	35	821	28
Pennsylvania	2,470	27	2,480	25
Rhode Island	147	19	216	26
South Carolina	632	21	649	20
South Dakota	190	34	198	33
Tennessee	1,097	25	1,469	31
Texas	2,227	14	2,450	14
Utah	421	27	388	21
Vermont	209	44	191	38
Virginia	1,569	29	1,402	24
Washington	1,629	36	1,546	31
West Virginia	355	25	268	18
Wisconsin	1,677	41	1,144	26
Wyoming	131	35	125	31

Table 16. Birders by State Where Activity Took Place: 2001–2006

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

	<i>2001</i> <i>Participants</i>	<i>2006</i> <i>Participants</i>	<i>Percent Change</i>
U.S. Total	45,951	47,693	4
Alabama	703	828	18
Alaska	321	429	34
Arizona	1,168	1,038	-11
Arkansas	548	764	39
California	3,987	4,493	13
Colorado	1,077	1,229	14
Connecticut	732	857	17
Delaware	172	189	10
Florida	2,363	3,101	31
Georgia	1,063	1,210	14
Hawaii	164	205	25
Idaho	478	557	17
Illinois	1,815	1,784	-2
Indiana	1,423	1,345	-5
Iowa	813	842	4
Kansas	569	493	-13
Kentucky	803	1,041	30
Louisiana	608	552	-9
Maine	595	622	5
Maryland	1,068	980	-8
Massachusetts	1,263	1,377	9
Michigan	1,961	1,997	2
Minnesota	1,471	1,448	-2
Mississippi	437	535	22
Missouri	1,299	1,576	21
Montana	558	571	2
Nebraska	386	364	-6
Nevada	343	518	51
New Hampshire	569	548	-4
New Jersey	1,335	1,132	-15
New Mexico	531	641	21
New York	2,802	2,517	-10
North Carolina	1,296	1,586	22
North Dakota	134	83	-38
Ohio	1,899	2,405	27
Oklahoma	760	765	1
Oregon	1,187	1,046	-12
Pennsylvania	2,721	2,669	-2
Rhode Island	193	297	54
South Carolina	742	809	9
South Dakota	271	283	4
Tennessee	1,420	1,838	29
Texas	2,268	2,476	9
Utah	616	639	4
Vermont	383	364	-5
Virginia	1,818	1,572	-14
Washington	1,877	1,853	-1
West Virginia	428	398	-7
Wisconsin	1,944	1,454	-25
Wyoming	388	448	15

Mammal Observers

The 2001–2006 comparison in mammal observing shows a significant increase nationally, although not to the high water mark of 1991. The states with the biggest percentage increases were Rhode Island, Arkansas, Florida, and Georgia. Two states had significant drops in in-state mammal observing: Wisconsin and Washington.

Table 17. Mammal Observers by State Where Activity Took Place: 2001–2006

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

	<i>2001 Participants</i>	<i>2006 Participants</i>	<i>Percent Change</i>
U.S. Total	40,193	41,936	4
Alabama	567	680	20
Alaska	300	368	23
Arizona	845	842	-0
Arkansas	443	655	48
California	3,080	3,646	18
Colorado	1,130	1,184	5
Connecticut	605	738	22
Delaware	131	155	18
Florida	1,702	2,328	37
Georgia	859	1,174	37
Hawaii	83	64	-23
Idaho	428	506	18
Illinois	1,611	1,348	-16
Indiana	1,222	1,157	-5
Iowa	685	794	16
Kansas	532	436	-18
Kentucky	731	950	30
Louisiana	519	479	-8
Maine	457	508	11
Maryland	943	872	-8
Massachusetts	984	1,177	20
Michigan	1,675	1,882	12
Minnesota	1,199	1,260	5
Mississippi	360	454	26
Missouri	1,226	1,411	15
Montana	567	625	10
Nebraska	325	333	2
Nevada	256	393	54
New Hampshire	540	466	-14
New Jersey	1,123	900	-20
New Mexico	421	490	16
New York	2,460	2,111	-14
North Carolina	1,057	1,288	22
North Dakota	116	59	-49
Ohio	1,696	2,184	29
Oklahoma	699	700	0
Oregon	1,067	976	-9
Pennsylvania	2,375	2,484	5
Rhode Island	139	251	81
South Carolina	508	612	20
South Dakota	256	298	16
Tennessee	1,301	1,610	24
Texas	1,809	2,180	21
Utah	551	512	-7
Vermont	339	320	-6
Virginia	1,650	1,277	-23
Washington	1,645	1,447	-12
West Virginia	407	395	-3
Wisconsin	1,773	1,305	-26
Wyoming	419	488	16

As for large mammal watching, the national 2001–2006 trend was a significant increase. No state had a statistically significant drop in large mammal watching. The states with the biggest increases were Rhode Island, Ohio, Arkansas, and Texas.

Table 18. Large Mammal Observers by State of Residence: 2001–2006

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

	<i>2001 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	24,853	12	27,869	12
Alabama	315	9	427	12
Alaska	128	28	127	25
Arizona	297	8	334	7
Arkansas	249	12	402	19
California	1,524	6	1,848	7
Colorado	570	18	623	17
Connecticut	423	17	540	20
Delaware	53	9	64	10
Florida	744	6	820	6
Georgia	455	7	663	10
Hawaii	14	2	21	2
Idaho	184	19	224	20
Illinois	861	9	827	8
Indiana	790	17	758	16
Iowa	417	19	499	21
Kansas	301	15	203	10
Kentucky	449	14	593	18
Louisiana	195	6	206	6
Maine	223	22	302	28
Maryland	549	13	553	13
Massachusetts	549	11	575	11
Michigan	890	12	1,134	15
Minnesota	869	24	866	22
Mississippi	194	9	259	12
Missouri	693	16	898	20
Montana	265	38	272	36
Nebraska	135	11	170	13
Nevada	88	6	112	6
New Hampshire	197	21	225	22
New Jersey	616	10	514	8
New Mexico	137	10	150	10
New York	1,561	11	1,409	9
North Carolina	434	7	760	11
North Dakota	56	12	46	9
Ohio	946	11	1,701	19
Oklahoma	355	14	484	18
Oregon	567	22	546	19
Pennsylvania	1,677	18	1,657	17
Rhode Island	49	6	103	12
South Carolina	276	9	298	9
South Dakota	121	22	125	21
Tennessee	637	15	873	19
Texas	999	6	1,522	9
Utah	360	23	252	14
Vermont	183	38	138	27
Virginia	759	14	731	12
Washington	1,006	22	776	16
West Virginia	305	21	275	19
Wisconsin	1,051	26	817	19
Wyoming	123	33	120	30

Table 19. Large Mammal Observers by State Where Activity Took Place: 2001–2006

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

	<i>2001</i> <i>Participants</i>	<i>2006</i> <i>Participants</i>	<i>Percent Change</i>
U.S. Total	24,853	27,869	12
Alabama	318	481	51
Alaska	287	337	17
Arizona	483	471	-2
Arkansas	248	436	76
California	1,538	2,044	33
Colorado	797	868	9
Connecticut	454	526	16
Delaware	59	80	36
Florida	684	884	29
Georgia	496	734	48
Hawaii	25	15	-40
Idaho	331	405	22
Illinois	814	790	-3
Indiana	797	782	-2
Iowa	434	531	22
Kansas	337	213	-37
Kentucky	505	668	32
Louisiana	196	207	6
Maine	310	374	21
Maryland	571	597	5
Massachusetts	552	570	3
Michigan	1,012	1,216	20
Minnesota	922	889	-4
Mississippi	201	337	68
Missouri	800	937	17
Montana	527	581	10
Nebraska	147	172	17
Nevada	191	193	1
New Hampshire	371	321	-13
New Jersey	623	557	-11
New Mexico	236	333	41
New York	1,684	1,465	-13
North Carolina	531	873	64
North Dakota	86	51	-41
Ohio	944	1,678	78
Oklahoma	373	467	25
Oregon	677	692	2
Pennsylvania	1,810	1,813	0
Rhode Island	48	130	171
South Carolina	271	373	38
South Dakota	197	235	19
Tennessee	870	1,140	31
Texas	850	1,473	73
Utah	484	434	-10
Vermont	293	236	-19
Virginia	955	814	-15
Washington	1,012	870	-14
West Virginia	336	385	15
Wisconsin	1,236	1,022	-17
Wyoming	377	462	23

The trend for small mammal watching nationally saw no significant change in the number of participants from 2001 to 2006. Only six states had significant changes in participation. Nevada, Florida, Georgia, and California had increases; Virginia and Wisconsin had decreases.

Table 20. Small Mammal Observers by State of Residence: 2001–2006

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

	<i>2001 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	37,215	18	38,283	17
Alabama	511	15	501	14
Alaska	114	25	122	24
Arizona	551	15	588	13
Arkansas	405	20	537	25
California	2,737	11	3,030	11
Colorado	751	23	819	23
Connecticut	532	21	697	25
Delaware	98	16	98	15
Florida	1,459	12	1,913	13
Georgia	725	12	960	14
Hawaii	36	4	27	3
Idaho	192	20	248	23
Illinois	1,434	16	1,195	12
Indiana	1,127	25	917	19
Iowa	626	28	670	29
Kansas	442	22	399	19
Kentucky	607	19	776	24
Louisiana	461	14	432	13
Maine	289	29	359	33
Maryland	784	19	684	16
Massachusetts	856	18	1,068	21
Michigan	1,445	19	1,544	20
Minnesota	992	27	1,109	28
Mississippi	336	16	275	12
Missouri	1,003	24	1,215	27
Montana	227	32	250	33
Nebraska	279	22	273	20
Nevada	148	10	179	9
New Hampshire	295	31	303	29
New Jersey	980	16	772	11
New Mexico	250	19	238	16
New York	2,012	14	1,807	12
North Carolina	885	15	1,019	15
North Dakota	67	14	45	9
Ohio	1,590	18	1,908	21
Oklahoma	617	24	642	23
Oregon	764	29	656	23
Pennsylvania	2,041	22	2,007	20
Rhode Island	120	16	172	20
South Carolina	457	15	472	14
South Dakota	144	26	171	28
Tennessee	929	22	1,151	24
Texas	1,767	11	1,984	12
Utah	324	21	227	13
Vermont	196	41	182	36
Virginia	1,349	25	1,011	17
Washington	1,337	30	1,153	23
West Virginia	309	21	254	17
Wisconsin	1,421	35	1,054	24
Wyoming	121	32	116	29

Table 21. Small Mammal Observers by State Where Activity Took Place: 2001–2006

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

	<i>2001</i> <i>Participants</i>	<i>2006</i> <i>Participants</i>	<i>Percent Change</i>
U.S. Total	37,215	38,283	3
Alabama	523	579	11
Alaska	218	261	20
Arizona	803	791	-1
Arkansas	424	585	38
California	2,846	3,381	19
Colorado	957	1,074	12
Connecticut	567	701	24
Delaware	126	142	13
Florida	1,633	2,195	34
Georgia	802	1,058	32
Hawaii	77	58	-25
Idaho	314	403	28
Illinois	1,466	1,228	-16
Indiana	1,172	1,007	-14
Iowa	632	693	10
Kansas	492	404	-18
Kentucky	669	867	30
Louisiana	505	450	-11
Maine	431	472	10
Maryland	877	806	-8
Massachusetts	923	1,125	22
Michigan	1,601	1,705	6
Minnesota	1,055	1,141	8
Mississippi	340	365	7
Missouri	1,140	1,298	14
Montana	442	420	-5
Nebraska	305	301	-1
Nevada	203	360	77
New Hampshire	416	424	2
New Jersey	1,059	857	-19
New Mexico	395	473	20
New York	2,183	1,941	-11
North Carolina	970	1,172	21
North Dakota	102	50	-51
Ohio	1,645	1,919	17
Oklahoma	662	660	-0
Oregon	952	847	-11
Pennsylvania	2,223	2,184	-2
Rhode Island	134	231	72
South Carolina	463	581	25
South Dakota	222	269	21
Tennessee	1,169	1,427	22
Texas	1,680	1,977	18
Utah	448	427	-5
Vermont	298	306	3
Virginia	1,517	1,125	-26
Washington	1,475	1,259	-15
West Virginia	363	343	-6
Wisconsin	1,621	1,201	-26
Wyoming	349	362	4

Observers of Other Animals

“Other animals” include fish, marine mammals, reptiles, and insects. There was a 14% increase in other animal observing nationally from 2001 to 2006, compared to a 16% decrease from 1991 to 2006. The states with the biggest percentage increase in participation were Rhode Island, Georgia, Alabama, Florida, and Kentucky. Only one state had a significant decline in participation: Oregon.

Table 22. “Other Animal” Observers by State of Residence: 2001–2006

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

	<i>2001 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	23,761	11	27,055	12
Alabama	329	10	461	13
Alaska	113	25	73	15
Arizona	469	13	481	10
Arkansas	204	10	264	12
California	2,071	8	2,890	11
Colorado	528	16	527	15
Connecticut	326	13	451	16
Delaware	61	10	53	8
Florida	1,278	11	2,013	14
Georgia	412	7	772	11
Hawaii	59	6	76	7
Idaho	144	15	191	17
Illinois	785	8	867	9
Indiana	558	12	713	15
Iowa	358	16	430	18
Kansas	294	15	261	12
Kentucky	342	11	517	16
Louisiana	283	9	318	9
Maine	175	17	263	24
Maryland	583	14	485	11
Massachusetts	573	12	707	14
Michigan	867	11	888	11
Minnesota	596	16	503	13
Mississippi	156	7	214	10
Missouri	603	14	725	16
Montana	179	26	144	19
Nebraska	148	12	156	11
Nevada	134	9	146	8
New Hampshire	187	20	203	19
New Jersey	644	10	577	9
New Mexico	204	15	230	15
New York	1,206	8	1,167	8
North Carolina	456	8	556	8
North Dakota	28	6	25	5
Ohio	987	11	1,197	13
Oklahoma	379	15	424	15
Oregon	611	23	405	14
Pennsylvania	1,242	13	1,267	13
Rhode Island	68	9	148	18
South Carolina	321	10	369	11
South Dakota	79	14	77	13
Tennessee	458	11	731	16
Texas	962	6	1,398	8
Utah	260	17	165	9
Vermont	146	30	141	28
Virginia	808	15	680	12
Washington	1,089	24	826	17
West Virginia	167	12	176	12
Wisconsin	715	18	562	13
Wyoming	91	24	82	20

Table 23. "Other Animal" Observers by State Where Activity Took Place: 2001–2006

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

	<i>2001</i> <i>Participants</i>	<i>2006</i> <i>Participants</i>	<i>Percent Change</i>
U.S. Total	23,761	27,055	14
Alabama	320	530	66
Alaska	262	308	18
Arizona	563	598	6
Arkansas	223	319	43
California	2,347	3,242	38
Colorado	633	644	2
Connecticut	353	456	29
Delaware	105	95	-10
Florida	1,661	2,517	52
Georgia	490	861	76
Hawaii	141	183	30
Idaho	238	290	22
Illinois	762	875	15
Indiana	564	753	34
Iowa	362	447	23
Kansas	328	272	-17
Kentucky	375	571	52
Louisiana	315	343	9
Maine	304	354	16
Maryland	682	532	-22
Massachusetts	644	790	23
Michigan	944	1,009	7
Minnesota	649	549	-15
Mississippi	171	272	59
Missouri	681	778	14
Montana	294	213	-28
Nebraska	164	145	-12
Nevada	161	249	55
New Hampshire	301	280	-7
New Jersey	716	681	-5
New Mexico	313	359	15
New York	1,291	1,302	1
North Carolina	564	688	22
North Dakota	70	31	-56
Ohio	1,013	1,208	19
Oklahoma	410	429	5
Oregon	796	561	-30
Pennsylvania	1,326	1,358	2
Rhode Island	98	207	111
South Carolina	372	486	31
South Dakota	118	114	-3
Tennessee	650	916	41
Texas	1,002	1,455	45
Utah	350	275	-21
Vermont	227	234	3
Virginia	933	732	-22
Washington	1,179	1,052	-11
West Virginia	194	238	23
Wisconsin	861	686	-20
Wyoming	243	183	-25

Note: "Other animals" include fish, marine mammals, reptiles, and insects.

Days of Wildlife Watching

An important way of looking at away-from-home wildlife watching is by total days of participation. Summing the numbers of participants, while important, is not necessarily the best measure of wildlife watching. It treats each participant as equal, despite the fact that they vary greatly in levels of recreational activity. However, each day of wildlife watching is more or less equal. So the analysis turns to a measure of effort, i.e., the days of wildlife watching by trip-takers (the Survey does not ask questions for total days of around-the-home wildlife watching). There was no significant difference between the number of days of away-from-home wildlife watching nationally in 2001 and 2006. At the state level, four states had significant differences in their number of days. Two states had increases: Tennessee and California. Two states had decreases: Wisconsin and Ohio.

Table 24. Away-From-Home Wildlife Watching Days by State Where Activity Took Place: 2001–2006

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

	<i>2001 Days</i>	<i>Average Days</i>	<i>2006 Days</i>	<i>Average Days</i>	<i>Percent Change</i>
U.S. Total	372,006	17	352,070	15	-5
Alabama	3,643	13	7,292	15	100
Alaska	3,892	13	4,126	12	6
Arizona	4,584	7	5,281	8	15
Arkansas	1,562	7	4,148	10	166
California	23,807	10	45,010	16	89
Colorado	9,510	11	9,404	11	-1
Connecticut	7,241	26	4,184	16	-42
Delaware	722	8	855	8	18
Florida	21,388	14	16,551	11	-23
Georgia	4,868	12	4,097	9	-16
Hawaii	1,718	12	1,109	7	-35
Idaho	3,610	8	5,165	10	43
Illinois	7,656	12	5,686	7	-26
Indiana	11,999	25	7,761	10	-35
Iowa	6,393	21	4,013	10	-37
Kansas	2,416	8	3,244	13	34
Kentucky	5,689	15	4,155	7	-27
Louisiana	2,432	8	3,199	14	32
Maine	4,981	12	4,778	12	-4
Maryland	6,809	13	4,782	11	-30
Massachusetts	10,198	19	8,461	13	-17
Michigan	13,999	16	10,043	10	-28
Minnesota	13,234	21	8,040	13	-39
Mississippi	3,288	25	1,302	5	-60
Missouri	12,448	17	14,757	18	19
Montana	4,612	9	3,081	6	-33
Nebraska	2,240	12	906	5	-60
Nevada	1,567	5	2,298	6	47
New Hampshire	3,178	7	3,165	9	-0
New Jersey	9,873	14	7,965	13	-19
New Mexico	6,381	16	5,429	11	-15
New York	21,583	16	13,521	10	-37
North Carolina	5,947	10	4,868	7	-18
North Dakota	523	6	264	7	-50
Ohio	19,814	22	7,816	7	-61
Oklahoma	4,058	10	7,098	19	75
Oregon	8,517	9	8,162	12	-4
Pennsylvania	18,990	15	11,972	10	-37
Rhode Island	1,414	14	2,948	15	108
South Carolina	4,616	14	4,759	11	3
South Dakota	1,923	11	1,382	5	-28
Tennessee	6,144	9	15,486	15	152
Texas	7,711	8	13,120	14	70
Utah	4,414	8	3,927	8	-11
Vermont	3,717	12	2,459	9	-34
Virginia	8,906	12	5,745	8	-35
Washington	11,256	11	9,104	9	-19
West Virginia	2,619	12	4,005	14	53
Wisconsin	16,499	16	5,547	8	-66
Wyoming	3,924	9	3,009	6	-23

2001–2006 Expenditure Trend

There was no statistically significant difference between the 2001 and 2006 national expenditure estimates⁵. The states with expenditure increases that more than doubled from 2001 to 2006 were Georgia, Maine, Arkansas, Michigan, and Texas. Three states had significant decreases: New Jersey, New Mexico, and Wisconsin.

⁵ All expenditure estimates are adjusted to be in 2006 dollars.

Table 25. Wildlife-Watching Expenditures by State of Purchase: 2001–2006

(Numbers in thousands. Population 16 years old and older. 2006 dollars.)

	<i>2001 Expenditures</i>	<i>2006 Expenditures</i>	<i>Percent Change</i>
U.S. Total	43,792,516	45,654,960	4
Alabama	714,096	450,004	-37
Alaska	568,706	581,051	2
Arizona	935,619	838,307	-10
Arkansas	278,149	606,701	118
California	2,942,196	4,179,082	42
Colorado	711,818	1,387,621	95
Connecticut	257,599	509,432	98
Delaware	48,265	130,832	171
Florida	1,796,048	3,081,496	72
Georgia	610,779	1,615,316	164
Hawaii	150,046	210,414	40
Idaho	259,316	265,383	2
Illinois	679,715	1,133,863	67
Indiana	822,923	933,920	13
Iowa	214,766	318,006	48
Kansas	146,676	156,185	6
Kentucky	685,767	542,060	-21
Louisiana	191,999	312,430	63
Maine	394,381	865,644	119
Maryland	983,463	633,699	-36
Massachusetts	535,040	754,965	41
Michigan	789,743	1,622,521	105
Minnesota	605,405	698,889	15
Mississippi	345,964	175,846	-49
Missouri	511,582	869,075	70
Montana	399,382	376,451	-6
Nebraska	147,912	141,910	-4
Nevada	285,165	362,229	27
New Hampshire	390,952	273,769	-30
New Jersey	1,417,982	537,388	-62
New Mexico	636,451	297,174	-53
New York	1,604,201	1,567,643	-2
North Carolina	942,645	916,907	-3
North Dakota	30,894	22,913	-26
Ohio	710,278	1,187,703	67
Oklahoma	220,303	328,660	49
Oregon	877,124	776,414	-11
Pennsylvania	1,096,451	1,442,582	32
Rhode Island	193,384	214,247	11
South Carolina	292,264	550,777	88
South Dakota	104,832	183,304	75
Tennessee	511,339	992,365	94
Texas	1,462,555	2,939,018	101
Utah	633,513	564,443	-11
Vermont	232,235	122,841	-47
Virginia	899,058	960,190	7
Washington	1,116,892	1,502,311	35
West Virginia	186,403	241,601	30
Wisconsin	1,495,246	744,689	-50
Wyoming	302,021	394,869	31

There was an increase of 38% in trip-related expenditures nationally from 2001 to 2006. The states in which there were statistically significant increases were Arkansas, New York, Illinois, and California. There were no states in which there were significant decreases.

Table 26. Trip-Related Wildlife Watching Expenditures by State of Purchase: 2001–2006
(Numbers in thousands. Population 16 years old and older. 2006 dollars.)

	2001 <i>Expenditures</i>	2006 <i>Expenditures</i>	<i>Percent Change</i>
U.S. Total	9,305,180	12,875,152	38
Alabama	90,665	151,665	67
Alaska	440,306	511,602	16
Arizona	347,332	376,256	8
Arkansas	22,850	114,879	403
California	1,004,118	1,997,551	99
Colorado	475,077	537,427	13
Connecticut	43,331	53,025	22
Delaware	16,287	13,128	-19
Florida	769,938	887,942	15
Georgia	140,521	146,722	4
Hawaii	78,725	185,100	135
Idaho	110,360	193,468	75
Illinois	97,605	205,976	111
Indiana	135,119	143,615	6
Iowa	25,156	54,411	116
Kansas	36,680	52,778	44
Kentucky	56,745	116,113	105
Louisiana	63,183	61,822	-2
Maine	168,184	178,462	6
Maryland	147,849	70,457	-52
Massachusetts	185,174	148,779	-20
Michigan	321,455	339,188	6
Minnesota	131,830	271,493	106
Mississippi	41,164	68,587	67
Missouri	178,964	219,932	23
Montana	236,545	302,625	28
Nebraska	20,991	22,741	8
Nevada	79,987	158,935	99
New Hampshire	202,128	116,136	-43
New Jersey	161,928	146,300	-10
New Mexico	172,157	208,278	21
New York	282,918	695,724	146
North Carolina	180,716	246,906	37
North Dakota	10,672	4,952	-54
Ohio	147,958	207,253	40
Oklahoma	78,901	134,868	71
Oregon	347,689	262,425	-25
Pennsylvania	195,690	324,990	66
Rhode Island	75,968	97,407	28
South Carolina	101,511	195,804	93
South Dakota	61,054	129,930	113
Tennessee	235,671	327,240	39
Texas	260,809	424,197	63
Utah	200,482	322,023	61
Vermont	72,097	58,219	-19
Virginia	196,480	248,021	26
Washington	322,041	441,652	37
West Virginia	89,900	136,136	51
Wisconsin	285,866	260,166	-9
Wyoming	154,614	299,988	94

Equipment expenditures did not change significantly from 2001 to 2006. States that had the biggest percentage increases were Colorado, Georgia, Maine, and Michigan. States that had the biggest decreases were New Mexico, New Jersey, Mississippi, and Wisconsin.

Table 27. Wildlife Watching Equipment Expenditures by State of Purchase: 2001–2006
(Numbers in thousands. Population 16 years old and older. 2006 dollars.)

	<i>2001</i> <i>Expenditures</i>	<i>2006</i> <i>Expenditures</i>	<i>Percent Change</i>
U.S. Total	34,487,336	32,779,808	-5
Alabama	623,431	298,339	-52
Alaska	128,400	69,449	-46
Arizona	588,287	462,051	-21
Arkansas	255,299	491,822	93
California	1,938,078	2,181,531	13
Colorado	236,741	850,194	259
Connecticut	214,268	456,407	113
Delaware	31,978	117,704	268
Florida	1,026,110	2,193,554	114
Georgia	470,258	1,468,594	212
Hawaii	71,321	25,314	-65
Idaho	148,956	71,915	-52
Illinois	582,110	927,887	59
Indiana	687,805	790,305	15
Iowa	189,610	263,595	39
Kansas	109,997	103,407	-6
Kentucky	629,022	425,947	-32
Louisiana	128,816	250,608	95
Maine	226,197	687,182	204
Maryland	835,614	563,242	-33
Massachusetts	349,866	606,186	73
Michigan	468,288	1,283,333	174
Minnesota	473,575	427,396	-10
Mississippi	304,800	107,259	-65
Missouri	332,618	649,143	95
Montana	162,837	73,826	-55
Nebraska	126,921	119,169	-6
Nevada	205,178	203,294	-1
New Hampshire	188,824	157,633	-17
New Jersey	1,256,054	391,088	-69
New Mexico	464,294	88,896	-81
New York	1,321,283	871,919	-34
North Carolina	761,929	670,001	-12
North Dakota	20,222	17,961	-11
Ohio	562,320	980,450	74
Oklahoma	141,402	193,792	37
Oregon	529,435	513,989	-3
Pennsylvania	900,761	1,117,592	24
Rhode Island	117,416	116,840	-0
South Carolina	190,753	354,973	86
South Dakota	43,778	53,374	22
Tennessee	275,668	665,125	141
Texas	1,201,746	2,514,821	109
Utah	433,031	242,420	-44
Vermont	160,138	64,622	-60
Virginia	702,578	712,169	1
Washington	794,851	1,060,659	33
West Virginia	96,503	105,465	9
Wisconsin	1,209,380	484,523	-60
Wyoming	147,407	94,881	-36

Note: In addition to equipment, these estimates include expenditures for magazines, books, membership dues, contributions, land lease and ownership, and plantings.

1991–2006 Trends

Four states saw significant increases in state resident wildlife watching from 1991–2006: Colorado, Montana, Nevada, and Tennessee. These state's trends ran counter to the national downward trend. The four states with the biggest decreases were Hawaii, Illinois, Louisiana, and North Dakota.



Ron Lautenstein/USFWS

Table 28. Wildlife Watching by State of Residence: 1991–2006

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

	<i>1991 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	76,111	40	71,132	31
Alabama	1,229	40	1,006	28
Alaska	229	62	207	42
Arizona	1,083	40	988	22
Arkansas	812	45	859	40
California	6,480	29	5,799	21
Colorado	1,161	46	1,459	40
Connecticut	1,075	43	1,102	40
Delaware	211	40	212	32
Florida	3,866	37	3,520	25
Georgia	1,756	36	1,819	26
Hawaii	230	27	160	16
Idaho	385	52	432	39
Illinois	3,451	39	2,355	24
Indiana	2,033	48	1,825	38
Iowa	1,060	49	1,111	48
Kansas	876	47	787	37
Kentucky	1,191	42	1,341	41
Louisiana	1,060	34	712	21
Maine	548	58	600	56
Maryland	1,456	40	1,334	31
Massachusetts	1,882	41	1,725	34
Michigan	3,273	47	2,947	38
Minnesota	1,953	59	1,946	48
Mississippi	742	39	618	28
Missouri	2,006	51	2,059	46
Montana	312	52	412	55
Nebraska	602	50	438	32
Nevada	337	37	420	22
New Hampshire	449	52	471	45
New Jersey	2,152	36	1,537	23
New Mexico	466	41	490	33
New York	4,301	31	3,548	24
North Carolina	2,152	42	2,267	34
North Dakota	200	42	134	26
Ohio	3,696	44	3,379	38
Oklahoma	1,146	48	1,082	39
Oregon	1,123	51	1,266	44
Pennsylvania	4,103	44	3,638	37
Rhode Island	368	47	312	37
South Carolina	863	33	943	28
South Dakota	228	43	266	44
Tennessee	1,701	45	1,966	42
Texas	4,016	32	4,111	24
Utah	504	44	574	32
Vermont	276	62	279	55
Virginia	2,070	44	2,126	36
Washington	2,076	56	2,007	40
West Virginia	584	41	585	40
Wisconsin	2,058	56	1,710	39
Wyoming	190	55	194	48

Around-the-home wildlife watching is the primary outlet for wildlife watching, in terms of the overall number of participants. Nationally, the large drop from 1991–1996 was followed by a substantial increase from 1996–2006, although not back to the 1991 level. The states with the largest drops from 1991–2006 were Louisiana, Illinois, Hawaii, and North Dakota. Only three states saw statistically significant increases: Montana, Colorado, and South Dakota.

Figure 4. State Resident Wildlife Watching Participation Trends: 1991–2006

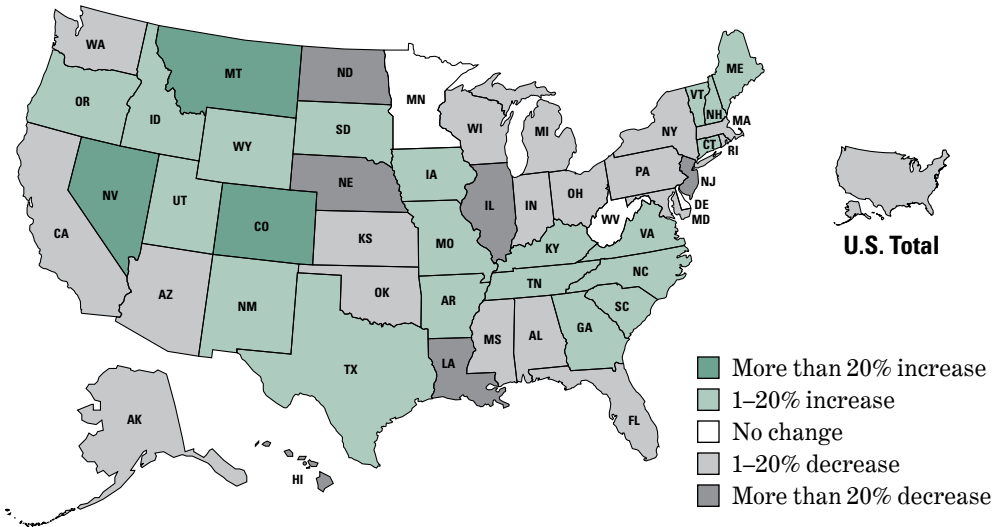


Figure 5. State Resident Around-The-Home Participation Trends: 1991–2006

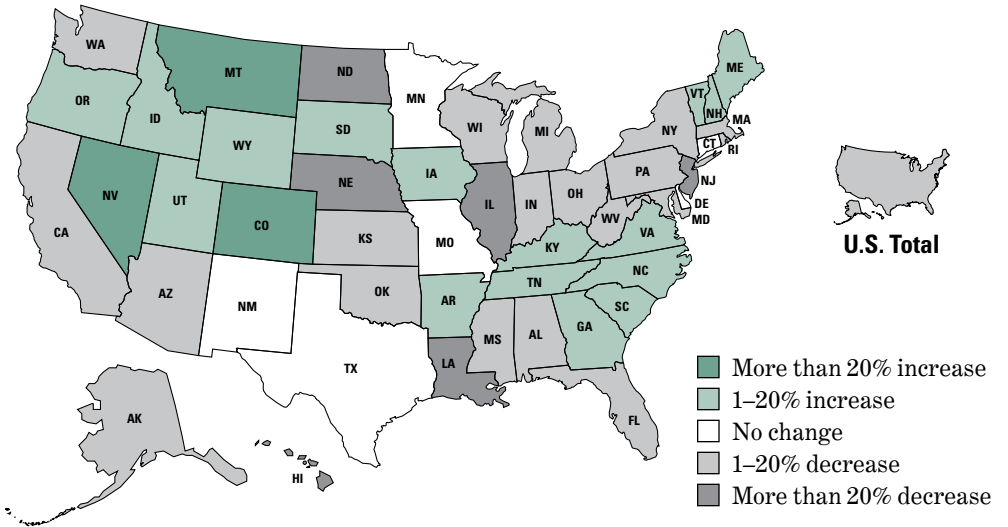


Figure 6. State Resident Away-From-Home Participation Trends: 1991–2006

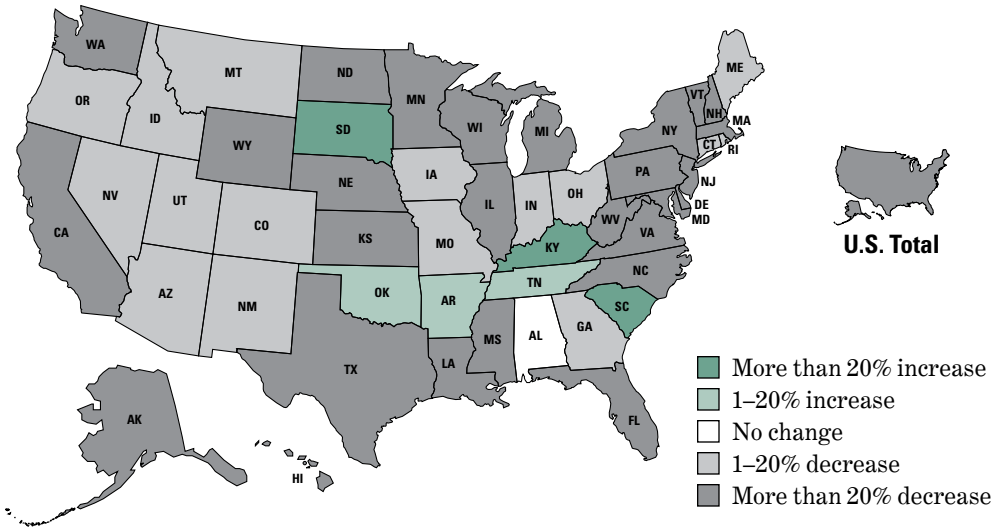


Table 29. Around-The-Home Wildlife Watching by State of Residence: 1991–2006

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

	<i>1991 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	73,904	39	67,756	30
Alabama	1,214	39	989	28
Alaska	216	59	202	41
Arizona	1,041	38	950	21
Arkansas	791	44	811	38
California	6,117	27	5,259	19
Colorado	1,092	43	1,393	39
Connecticut	1,061	42	1,063	39
Delaware	205	39	206	31
Florida	3,802	37	3,274	23
Georgia	1,730	36	1,798	26
Hawaii	217	26	145	14
Idaho	360	48	395	36
Illinois	3,411	38	2,258	23
Indiana	1,996	47	1,786	37
Iowa	1,030	48	1,059	45
Kansas	844	45	723	34
Kentucky	1,175	42	1,235	38
Louisiana	1,049	33	671	20
Maine	542	57	576	54
Maryland	1,421	39	1,322	31
Massachusetts	1,866	40	1,647	33
Michigan	3,167	45	2,826	36
Minnesota	1,912	58	1,908	47
Mississippi	727	38	606	27
Missouri	1,958	50	1,966	43
Montana	280	47	389	52
Nebraska	573	47	407	30
Nevada	307	34	371	20
New Hampshire	441	51	451	43
New Jersey	2,099	35	1,483	22
New Mexico	436	39	437	29
New York	4,172	30	3,465	23
North Carolina	2,112	41	2,237	33
North Dakota	191	40	128	25
Ohio	3,621	44	3,272	37
Oklahoma	1,128	47	976	36
Oregon	1,059	48	1,129	39
Pennsylvania	4,011	43	3,502	36
Rhode Island	363	47	298	35
South Carolina	855	32	924	28
South Dakota	214	41	257	43
Tennessee	1,649	43	1,853	39
Texas	3,848	31	3,861	23
Utah	463	41	491	27
Vermont	271	61	274	54
Virginia	2,031	43	2,082	35
Washington	2,033	55	1,927	39
West Virginia	569	40	559	38
Wisconsin	1,979	53	1,703	39
Wyoming	165	48	180	44

Table 30 shows changes in away-from-home wildlife watching by state residents both inside and outside their state. Away-from-home participation is a possible indication of a higher level of commitment to wildlife watching. To get in a car and drive to a wildlife-watching site requires more effort and expense than enjoying wildlife around the home. Just a third of all wildlife watchers go on trips for their avocation. The trend was downward throughout the 1990's and level in the first half of the decade of the 2000's. The 21% drop from 1991–1996 was followed by an 8% drop from 1996–2001, then no significant difference from 2001 to 2006. The two states that had increases in state resident away-from-home wildlife watchers from 1991 to 2006 were South Carolina and Kentucky. The states with the biggest declines were Alaska, Wisconsin, and North Dakota, where participation fell by more than half.

Table 30. Away-From-Home Wildlife Watching by State of Residence: 1991–2006
(Numbers in thousands. Population 16 years old and older. State residents taking a trip away from home anywhere in the U.S.)

	<i>1991 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	29,999	16	22,977	10
Alabama	347	11	348	10
Alaska	143	39	68	14
Arizona	435	16	381	8
Arkansas	279	15	304	14
California	3,408	15	2,565	9
Colorado	571	23	531	15
Connecticut	361	14	290	11
Delaware	84	16	49	7
Florida	1,678	16	988	7
Georgia	400	8	371	5
Hawaii	84	10	55	5
Idaho	224	30	183	17
Illinois	1,182	13	756	8
Indiana	664	16	611	13
Iowa	398	18	344	15
Kansas	323	17	234	11
Kentucky	382	14	540	17
Louisiana	306	10	234	7
Maine	217	23	213	20
Maryland	531	15	305	7
Massachusetts	868	19	531	11
Michigan	1,395	20	827	11
Minnesota	782	24	579	14
Mississippi	231	12	145	7
Missouri	740	19	709	16
Montana	185	31	184	24
Nebraska	237	20	151	11
Nevada	175	19	168	9
New Hampshire	186	22	127	12
New Jersey	765	13	513	8
New Mexico	231	21	220	15
New York	1,611	12	1,178	8
North Carolina	540	11	402	6
North Dakota	78	16	30	6
Ohio	1,373	17	1,174	13
Oklahoma	394	16	414	15
Oregon	524	24	481	17
Pennsylvania	1,790	19	1,038	11
Rhode Island	116	15	96	11
South Carolina	179	7	332	10
South Dakota	96	18	116	19
Tennessee	632	17	725	15
Texas	1,481	12	1,176	7
Utah	284	25	255	14
Vermont	109	24	82	16
Virginia	786	17	603	10
Washington	875	24	686	14
West Virginia	214	15	129	9
Wisconsin	958	26	424	10
Wyoming	112	32	82	20

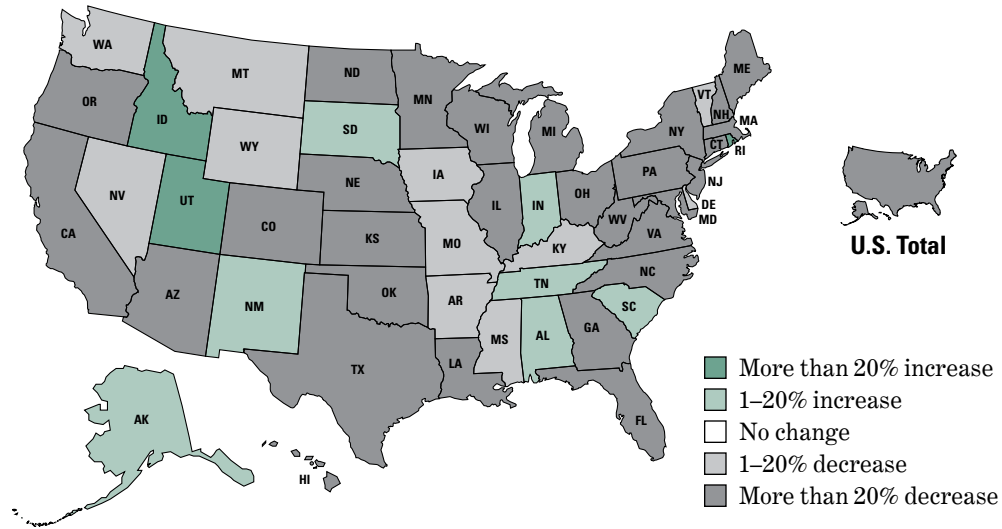
Away-from-home wildlife watching includes people coming from other states. Nonresidents were not included in Table 30's estimates. Including nonresidents gives a somewhat different picture. No state had a statistically significant increase in away-from-home wildlife watching from 1991 to 2006. Roughly half of the states had significant drops in away-from-home activity in their state.

Table 31. Away-From-Home Wildlife Watching by State Where Activity Took Place: 1991–2006

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

	1991 <i>Participants</i>	2006 <i>Participants</i>	<i>Percent Change</i>
U.S. Total	29,999	22,977	-23
Alabama	450	471	5
Alaska	340	354	4
Arizona	820	644	-21
Arkansas	467	435	-7
California	3,845	2,894	-25
Colorado	1,164	873	-25
Connecticut	410	266	-35
Delaware	124	109	-12
Florida	2,387	1,560	-35
Georgia	551	438	-21
Hawaii	321	154	-52
Idaho	382	506	32
Illinois	1,126	837	-26
Indiana	748	755	1
Iowa	426	404	-5
Kansas	347	248	-29
Kentucky	580	572	-1
Louisiana	368	225	-39
Maine	605	399	-34
Maryland	663	419	-37
Massachusetts	1,002	655	-35
Michigan	1,546	1,034	-33
Minnesota	921	641	-30
Mississippi	295	246	-17
Missouri	956	842	-12
Montana	558	512	-8
Nebraska	276	176	-36
Nevada	451	416	-8
New Hampshire	475	347	-27
New Jersey	839	615	-27
New Mexico	422	507	20
New York	1,717	1,293	-25
North Carolina	892	686	-23
North Dakota	104	39	-63
Ohio	1,358	1,055	-22
Oklahoma	478	372	-22
Oregon	882	675	-23
Pennsylvania	2,070	1,168	-44
Rhode Island	153	203	33
South Carolina	380	447	18
South Dakota	236	270	14
Tennessee	957	1,007	5
Texas	1,613	956	-41
Utah	415	518	25
Vermont	303	265	-13
Virginia	1,082	728	-33
Washington	1,058	959	-9
West Virginia	461	282	-39
Wisconsin	1,311	685	-48
Wyoming	552	521	-6

Figure 7. In-State Away-From-Home Participation Trends: 1991–2006



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The focus now moves back to state resident wildlife watching. As previously stated, closely observing, feeding, and photographing wildlife constitutes wildlife watching. First we will examine observing. Participation in around-the-home wildlife observation decreased 21% from 1991–1996 and leveled out from 1996–2006. North Dakota, New Jersey, and Illinois had the biggest drops from 1991 to 2006. Two states had significant increases in this activity: Montana and Tennessee. Around-the-home wildlife observation is the second-most popular wildlife-related activity in the U.S., after around-the-home wildlife feeding. The large drop in observer numbers had a significant downward effect on overall wildlife-related recreation from 1991 to 2006.

Table 32. Around-The-Home Observers by State of Residence: 1991–2006

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

	<i>1991 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	54,653	29	44,467	19
Alabama	934	30	676	19
Alaska	176	48	146	29
Arizona	733	27	705	15
Arkansas	586	32	620	29
California	4,531	20	3,479	13
Colorado	789	31	799	22
Connecticut	754	30	788	29
Delaware	146	28	123	18
Florida	2,999	29	2,364	17
Georgia	1,235	26	1,138	16
Hawaii	127	15	88	9
Idaho	268	36	280	25
Illinois	2,514	28	1,460	15
Indiana	1,488	35	1,092	23
Iowa	780	36	804	34
Kansas	586	31	451	21
Kentucky	800	28	794	24
Louisiana	777	25	491	14
Maine	448	47	405	38
Maryland	1,051	29	813	19
Massachusetts	1,398	30	1,167	23
Michigan	2,442	35	1,664	21
Minnesota	1,538	46	1,384	34
Mississippi	523	27	402	18
Missouri	1,398	35	1,300	29
Montana	212	35	285	38
Nebraska	410	34	302	22
Nevada	208	23	254	13
New Hampshire	360	42	334	32
New Jersey	1,542	26	843	13
New Mexico	318	28	306	20
New York	3,215	23	2,183	15
North Carolina	1,510	30	1,229	18
North Dakota	146	31	56	11
Ohio	2,610	31	2,185	25
Oklahoma	795	33	632	23
Oregon	810	36	770	27
Pennsylvania	2,925	31	2,349	24
Rhode Island	260	33	194	23
South Carolina	551	21	618	19
South Dakota	156	30	174	29
Tennessee	1,118	29	1,353	29
Texas	2,833	23	2,252	13
Utah	348	31	335	19
Vermont	219	49	193	38
Virginia	1,366	29	1,273	22
Washington	1,585	43	1,432	29
West Virginia	415	29	267	18
Wisconsin	1,526	41	1,059	24
Wyoming	121	35	129	32

Participation in around-the-home wildlife photography declined from 1991–2001 but rebounded with a vengeance in 2006. This category is one of the more demanding around-the-home recreational activities, in terms of effort and equipment, and amounts to only about a fourth of all around-the-home participants. Interestingly, it is one of only two wildlife-watching categories that didn't see a significant drop in participation from 1991–1996. It was the only category that increased in participation from 1991 to 2006. Its 35% increase from 2001 to 2006 was by far the biggest increase of any wildlife-related recreation category. The variety of portable photography equipment available now may at least partly explain the increase. The states with the biggest percentage increases from 1991–2006 were Texas, Utah, Kentucky, and North Carolina. Only three states had significant drops: Louisiana, Alaska, and Pennsylvania.

Table 33. Around-The-Home Photographers by State of Residence: 1991–2006

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

	<i>1991 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	16,990	9	18,763	8
Alabama	221	7	258	7
Alaska	135	37	86	17
Arizona	199	7	261	6
Arkansas	176	10	231	11
California	1,475	7	1,593	6
Colorado	315	13	387	11
Connecticut	283	11	271	10
Delaware	43	8	60	9
Florida	1,148	11	1,230	9
Georgia	301	6	386	6
Hawaii	29	3	41	4
Idaho	98	13	114	10
Illinois	685	8	688	7
Indiana	410	10	424	9
Iowa	214	10	240	10
Kansas	171	9	162	8
Kentucky	175	6	335	10
Louisiana	210	7	125	4
Maine	158	17	204	19
Maryland	354	10	372	9
Massachusetts	434	9	464	9
Michigan	921	13	990	13
Minnesota	431	13	470	12
Mississippi	134	7	112	5
Missouri	401	10	541	12
Montana	80	13	111	15
Nebraska	114	9	95	7
Nevada	76	8	78	4
New Hampshire	148	17	166	16
New Jersey	482	8	468	7
New Mexico	106	9	127	8
New York	1,109	8	946	6
North Carolina	342	7	521	8
North Dakota	44	9	30	6
Ohio	838	10	833	9
Oklahoma	202	8	274	10
Oregon	216	10	247	9
Pennsylvania	1,052	11	713	7
Rhode Island	65	8	88	10
South Carolina	142	5	174	5
South Dakota	54	10	60	10
Tennessee	299	8	370	8
Texas	516	4	1,411	8
Utah	82	7	185	10
Vermont	78	17	82	16
Virginia	510	11	493	8
Washington	577	16	588	12
West Virginia	159	11	165	11
Wisconsin	531	14	445	10
Wyoming	43	12	47	12

Around-the-home wildlife feeding dropped from 1991–1996 and stayed level from 1996–2006. This is the largest single category of wildlife watching in terms of the number of participants. It is unique in that feeding can be done without personally witnessing the wildlife. It can be thought of as a wildlife maintenance activity, yet it is the most popular single category of wildlife-related recreation.

The long-term trend from 1991 to 2006 reveals no statistically significant increase in feeding wildlife for any state. The states with the biggest decreases were Hawaii, Illinois, Louisiana, and Nebraska.

Table 34. Around-The-Home Feeders by State of Residence: 1991–2006

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

	<i>1991 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	65,423	34	55,512	24
Alabama	1,111	36	924	26
Alaska	146	40	120	24
Arizona	902	33	659	14
Arkansas	728	40	722	33
California	4,899	22	3,447	13
Colorado	897	36	936	26
Connecticut	972	39	857	31
Delaware	192	36	181	27
Florida	3,268	32	2,474	17
Georgia	1,594	33	1,494	22
Hawaii	182	22	88	9
Idaho	273	37	299	27
Illinois	3,076	35	1,945	20
Indiana	1,844	43	1,578	33
Iowa	921	43	922	39
Kansas	761	40	569	27
Kentucky	1,085	38	1,029	32
Louisiana	954	30	598	17
Maine	487	51	502	47
Maryland	1,248	34	1,134	26
Massachusetts	1,654	36	1,259	25
Michigan	2,922	42	2,384	31
Minnesota	1,643	50	1,639	41
Mississippi	657	34	525	24
Missouri	1,753	44	1,684	37
Montana	211	35	248	33
Nebraska	502	41	325	24
Nevada	250	27	283	15
New Hampshire	401	46	354	34
New Jersey	1,834	31	1,255	19
New Mexico	378	34	342	23
New York	3,638	26	2,723	18
North Carolina	2,008	39	2,051	31
North Dakota	151	32	114	22
Ohio	3,437	41	2,670	30
Oklahoma	1,045	43	909	33
Oregon	908	41	995	34
Pennsylvania	3,672	39	2,938	30
Rhode Island	319	41	237	28
South Carolina	808	31	878	26
South Dakota	173	33	208	35
Tennessee	1,480	39	1,589	34
Texas	3,342	27	3,332	20
Utah	331	29	365	20
Vermont	235	53	215	42
Virginia	1,854	39	1,813	31
Washington	1,757	47	1,513	30
West Virginia	533	38	528	36
Wisconsin	1,787	48	1,534	35
Wyoming	126	37	120	30

Birders

When people think of wildlife watching they often think first of birdwatching. Birding is certainly a major part of wildlife watching. In 2006 an estimated 47.7 million people, 94% of all wildlife observers, closely observed or attempted to identify birds. 88% of birders did it around the home and 42% observed birds away from home. The trend in birding over the last four surveys began with a large drop from 1991–1996 and ended with a leveling off from 1996–2006. 30% of Americans 16 years old and older birded in 1991 and 21% in 2006.

States with the most resident birders per capita in 2006 were Montana, Maine, Vermont, Iowa, Minnesota, South Dakota, and New Hampshire. States with the lowest proportion of resident birders were Hawaii, North Dakota, New Jersey, Texas, California, Louisiana, and New York.

Table 35. Birders by State of Residence: 1991–2006

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

	<i>1991 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	56,307	30	47,693	21
Alabama	921	30	692	19
Alaska	175	47	148	30
Arizona	799	30	778	17
Arkansas	582	32	603	28
California	4,988	22	4,050	15
Colorado	834	33	910	25
Connecticut	762	30	797	29
Delaware	157	30	130	19
Florida	3,026	29	2,464	17
Georgia	1,198	25	1,077	16
Hawaii	141	17	107	11
Idaho	301	40	314	28
Illinois	2,457	28	1,630	17
Indiana	1,465	34	1,165	24
Iowa	804	37	798	34
Kansas	629	33	470	22
Kentucky	809	29	902	28
Louisiana	745	24	520	15
Maine	452	47	423	39
Maryland	1,107	30	853	20
Massachusetts	1,460	31	1,209	24
Michigan	2,540	36	1,768	23
Minnesota	1,601	48	1,346	33
Mississippi	522	27	421	19
Missouri	1,427	36	1,407	31
Montana	229	38	304	40
Nebraska	454	38	329	24
Nevada	244	27	311	16
New Hampshire	358	41	337	32
New Jersey	1,566	26	965	14
New Mexico	351	31	352	23
New York	3,193	23	2,282	15
North Carolina	1,516	30	1,289	19
North Dakota	151	32	70	14
Ohio	2,743	33	2,330	26
Oklahoma	838	35	739	27
Oregon	851	38	821	28
Pennsylvania	3,076	33	2,480	25
Rhode Island	266	34	216	26
South Carolina	543	21	649	20
South Dakota	163	31	198	33
Tennessee	1,168	31	1,469	31
Texas	2,832	23	2,450	14
Utah	370	32	388	21
Vermont	220	49	191	38
Virginia	1,422	30	1,402	24
Washington	1,600	43	1,546	31
West Virginia	401	28	268	18
Wisconsin	1,643	44	1,144	26
Wyoming	128	37	125	31

Attention is now shifted from state resident participation numbers to total in-state participation numbers, i.e., the participation of both state residents and nonresidents. Looking at the trend from 1991 to 2006, nationally there was a 15% drop in birder numbers. The states with the biggest percentage drops were North Dakota, New Jersey, West Virginia, and Louisiana. Only three states had significant increases: Alaska, Utah, and Tennessee.

Figure 8. In-State Bird Watching Participation Trends: 1991–2006

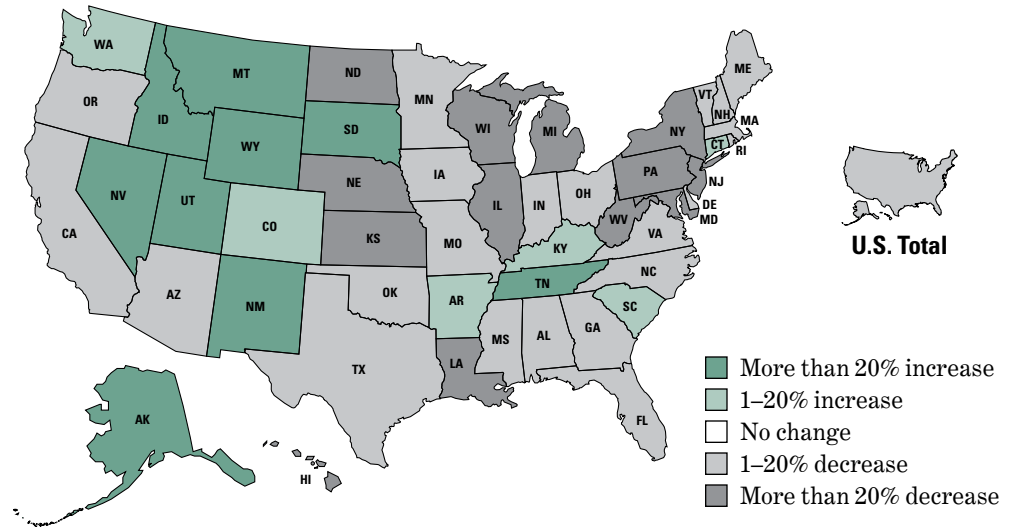


Table 36. Birders by State Where Activity Took Place: 1991–2006

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

	<i>1991</i> <i>Participants</i>	<i>2006</i> <i>Participants</i>	<i>Percent Change</i>
U.S. Total	56,307	47,693	-15
Alabama	1,002	828	-17
Alaska	269	429	59
Arizona	1,065	1,038	-3
Arkansas	721	764	6
California	5,388	4,493	-17
Colorado	1,185	1,229	4
Connecticut	842	857	2
Delaware	205	189	-8
Florida	3,778	3,101	-18
Georgia	1,338	1,210	-10
Hawaii	330	205	-38
Idaho	410	557	36
Illinois	2,532	1,784	-30
Indiana	1,563	1,345	-14
Iowa	861	842	-2
Kansas	667	493	-26
Kentucky	905	1,041	15
Louisiana	805	552	-31
Maine	724	622	-14
Maryland	1,293	980	-24
Massachusetts	1,621	1,377	-15
Michigan	2,684	1,997	-26
Minnesota	1,764	1,448	-18
Mississippi	587	535	-9
Missouri	1,647	1,576	-4
Montana	471	571	21
Nebraska	505	364	-28
Nevada	409	518	27
New Hampshire	573	548	-4
New Jersey	1,728	1,132	-34
New Mexico	483	641	33
New York	3,449	2,517	-27
North Carolina	1,802	1,586	-12
North Dakota	176	83	-53
Ohio	2,805	2,405	-14
Oklahoma	920	765	-17
Oregon	1,157	1,046	-10
Pennsylvania	3,408	2,669	-22
Rhode Island	308	297	-4
South Carolina	713	809	13
South Dakota	225	283	26
Tennessee	1,375	1,838	34
Texas	2,963	2,476	-16
Utah	446	639	43
Vermont	390	364	-7
Virginia	1,665	1,572	-6
Washington	1,761	1,853	5
West Virginia	595	398	-33
Wisconsin	1,901	1,454	-24
Wyoming	338	448	33

Mammal Observers

In second place after the 47.7 million birders in 2006 were the 41.9 million watchers of land mammals. The trend in mammal observing differs from the trend in birding. Between 1991 and 2006 nationally birding initially had a big drop and then flattened out, while mammal observing had a significant drop from 1991 to 2001 and a significant increase from 2001 to 2006.⁶ Overall mammal observing dropped half as much as birding (–7% compared to –15%). The states with the biggest 1991–2006 percentage drops were North Dakota, Hawaii, Illinois, and West Virginia. The one state with a significant increase was Tennessee.

⁶ See Appendix Tables 7–9 for each survey’s estimates of birding and mammal observing.

Table 37. Mammal Observers by State Where Activity Took Place: 1991–2006

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

	1991 <i>Participants</i>	2006 <i>Participants</i>	<i>Percent Change</i>
U.S. Total	45,164	41,936	–7
Alabama	792	680	–14
Alaska	273	368	35
Arizona	763	842	10
Arkansas	635	655	3
California	3,992	3,646	–9
Colorado	1,222	1,184	–3
Connecticut	605	738	22
Delaware	142	155	9
Florida	2,628	2,328	–11
Georgia	977	1,174	20
Hawaii	160	64	–60
Idaho	370	506	37
Illinois	2,082	1,348	–35
Indiana	1,348	1,157	–14
Iowa	710	794	12
Kansas	532	436	–18
Kentucky	758	950	25
Louisiana	708	479	–32
Maine	565	508	–10
Maryland	987	872	–12
Massachusetts	1,195	1,177	–2
Michigan	2,226	1,882	–15
Minnesota	1,416	1,260	–11
Mississippi	491	454	–8
Missouri	1,408	1,411	0
Montana	503	625	24
Nebraska	400	333	–17
Nevada	311	393	26
New Hampshire	514	466	–9
New Jersey	1,231	900	–27
New Mexico	375	490	31
New York	2,873	2,111	–27
North Carolina	1,296	1,288	–1
North Dakota	157	59	–62
Ohio	2,073	2,184	5
Oklahoma	685	700	2
Oregon	884	976	10
Pennsylvania	2,863	2,484	–13
Rhode Island	229	251	10
South Carolina	475	612	29
South Dakota	222	298	34
Tennessee	1,259	1,610	28
Texas	2,314	2,180	–6
Utah	380	512	35
Vermont	329	320	–3
Virginia	1,424	1,277	–10
Washington	1,551	1,447	–7
West Virginia	602	395	–34
Wisconsin	1,604	1,305	–19
Wyoming	439	488	11

The land mammal watcher group can be disaggregated into watchers of large mammals (e.g., bears, elk, and deer) and small mammals (e.g., rabbits, squirrels, and chipmunks), albeit only for 1996, 2001, and 2006. The 1991 Survey asked only for all mammal observing. The number of large mammal observers increased 12% from 1996–2006.

Nationally 12% of Americans observed large mammals in 2006. The states of Montana, Wyoming, Maine, and Vermont had the highest proportions of state resident large mammal observers, and Hawaii, Florida, Nevada, and Louisiana the lowest.

Figure 9. In-State Mammal Watching Participation Trends: 1991–2006

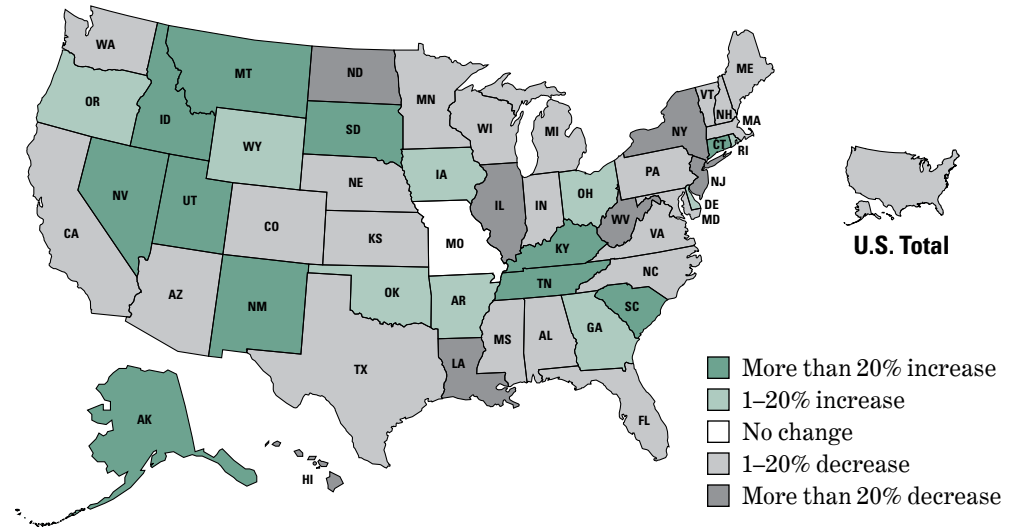


Table 38. Large Mammal Observers by State of Residence: 1996–2006

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

	<i>1996 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	24,900	12	27,869	12
Alabama	297	9	427	12
Alaska	142	33	127	25
Arizona	261	8	334	7
Arkansas	279	15	402	19
California	2,187	9	1,848	7
Colorado	684	23	623	17
Connecticut	338	13	540	20
Delaware	79	14	64	10
Florida	579	5	820	6
Georgia	581	10	663	10
Hawaii	19	2	21	2
Idaho	155	18	224	20
Illinois	1,281	14	827	8
Indiana	705	16	758	16
Iowa	452	21	499	21
Kansas	308	16	203	10
Kentucky	466	16	593	18
Louisiana	174	5	206	6
Maine	252	26	302	28
Maryland	536	14	553	13
Massachusetts	515	11	575	11
Michigan	1,298	18	1,134	15
Minnesota	624	18	866	22
Mississippi	147	7	259	12
Missouri	761	19	898	20
Montana	202	30	272	36
Nebraska	154	13	170	13
Nevada	95	8	112	6
New Hampshire	168	19	225	22
New Jersey	682	11	514	8
New Mexico	132	10	150	10
New York	1,179	8	1,409	9
North Carolina	686	12	760	11
North Dakota	49	10	46	9
Ohio	1,260	15	1,701	19
Oklahoma	300	12	484	18
Oregon	325	13	546	19
Pennsylvania	1,458	16	1,657	17
Rhode Island	54	7	103	12
South Carolina	261	9	298	9
South Dakota	90	17	125	21
Tennessee	518	13	873	19
Texas	966	7	1,522	9
Utah	210	15	252	14
Vermont	137	30	138	27
Virginia	854	17	731	12
Washington	798	19	776	16
West Virginia	228	16	275	19
Wisconsin	802	21	817	19
Wyoming	104	28	120	30

Note: The 1991 Survey did not have mammals categorized as large and small.

Once again the focus moves from state resident activity to all in-state (state residents and nonresidents) activity. As mentioned above, the number of large mammal observers nationally increased significantly from 1996–2006. One state had a significant drop: Illinois. Four states had significant increases: Mississippi, Tennessee, Texas, and Ohio.

Table 39. Large Mammal Observers by State Where Activity Took Place: 1996–2006
(Numbers in thousands. Population 16 years old and older)

	1996 <i>Participants</i>	2006 <i>Participants</i>	<i>Percent Change</i>
U.S. Total	24,900	27,869	12
Alabama	330	481	46
Alaska	367	337	-8
Arizona	427	471	10
Arkansas	357	436	22
California	2,019	2,044	1
Colorado	1,018	868	-15
Connecticut	350	526	50
Delaware	67	80	19
Florida	657	884	35
Georgia	582	734	26
Hawaii	13	15	15
Idaho	264	405	53
Illinois	1,175	790	-33
Indiana	736	782	6
Iowa	469	531	13
Kansas	296	213	-28
Kentucky	513	668	30
Louisiana	116	207	78
Maine	403	374	-7
Maryland	618	597	-3
Massachusetts	537	570	6
Michigan	1,336	1,216	-9
Minnesota	623	889	43
Mississippi	165	337	104
Missouri	849	937	10
Montana	396	581	47
Nebraska	139	172	24
Nevada	143	193	35
New Hampshire	249	321	29
New Jersey	688	557	-19
New Mexico	280	333	19
New York	1,258	1,465	16
North Carolina	816	873	7
North Dakota	65	51	-22
Ohio	1,232	1,678	36
Oklahoma	351	467	33
Oregon	480	692	44
Pennsylvania	1,711	1,813	6
Rhode Island	50	130	160
South Carolina	318	373	17
South Dakota	285	235	-18
Tennessee	667	1,140	71
Texas	1,058	1,473	39
Utah	389	434	12
Vermont	219	236	8
Virginia	951	814	-14
Washington	917	870	-5
West Virginia	417	385	-8
Wisconsin	1,026	1,022	-0
Wyoming	521	462	-11

Note: The 1991 Survey did not have mammals categorized as large and small.

The number of small mammal observers dropped 6% nationally from 1996–2006. This is strikingly different from the 12% increase in large mammal observers. 17% of Americans observed small mammals in 2006. The states with the highest proportion of small mammal observers were Vermont, Maine, Montana, New Hampshire, Iowa, and Wyoming (which is very similar to the large mammal observer list). The states with the lowest proportion of small mammal observers were Hawaii, North Dakota, Nevada, California, and New Jersey.

Table 40. Small Mammal Observers by State of Residence: 1996–2006

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

	<i>1996 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	40,839	20	38,283	17
Alabama	596	18	501	14
Alaska	120	28	122	24
Arizona	501	15	588	13
Arkansas	372	19	537	25
California	3,715	16	3,030	11
Colorado	834	28	819	23
Connecticut	487	19	697	25
Delaware	131	23	98	15
Florida	2,069	18	1,913	13
Georgia	1,049	19	960	14
Hawaii	31	3	27	3
Idaho	214	24	248	23
Illinois	2,137	24	1,195	12
Indiana	1,088	24	917	19
Iowa	588	27	670	29
Kansas	421	22	399	19
Kentucky	622	21	776	24
Louisiana	590	18	432	13
Maine	338	35	359	33
Maryland	852	22	684	16
Massachusetts	1,014	21	1,068	21
Michigan	1,911	26	1,544	20
Minnesota	817	24	1,109	28
Mississippi	271	13	275	12
Missouri	1,136	28	1,215	27
Montana	201	30	250	33
Nebraska	294	24	273	20
Nevada	135	11	179	9
New Hampshire	273	31	303	29
New Jersey	1,055	17	772	11
New Mexico	186	15	238	16
New York	1,777	13	1,807	12
North Carolina	1,258	22	1,019	15
North Dakota	74	15	45	9
Ohio	1,912	22	1,908	21
Oklahoma	517	21	642	23
Oregon	652	26	656	23
Pennsylvania	2,265	24	2,007	20
Rhode Island	156	21	172	20
South Carolina	508	18	472	14
South Dakota	100	18	171	28
Tennessee	876	21	1,151	24
Texas	2,263	16	1,984	12
Utah	231	17	227	13
Vermont	137	30	182	36
Virginia	1,347	26	1,011	17
Washington	1,054	25	1,153	23
West Virginia	259	18	254	17
Wisconsin	1,210	31	1,054	24
Wyoming	114	31	116	29

Note: The 1991 Survey did not have mammals categorized as large and small.

The drop in the number of small mammal observers from 1996–2006 is the opposite of the trend in large mammal observers. There were two states with significant drops: Illinois and Virginia. No other state had a significant change in small mammal observing.

Table 41. Small Mammal Observers by State Where Activity Took Place: 1996–2006
(Numbers in thousands. Population 16 years old and older)

	1996 <i>Participants</i>	2006 <i>Participants</i>	<i>Percent Change</i>
U.S. Total	40,839	38,283	-6
Alabama	645	579	-10
Alaska	280	261	-7
Arizona	778	791	2
Arkansas	451	585	30
California	3,743	3,381	-10
Colorado	1,192	1,074	-10
Connecticut	527	701	33
Delaware	156	142	-9
Florida	2,326	2,195	-6
Georgia	1,113	1,058	-5
Hawaii	149	58	-61
Idaho	301	403	34
Illinois	2,125	1,228	-42
Indiana	1,157	1,007	-13
Iowa	695	693	-0
Kansas	454	404	-11
Kentucky	710	867	22
Louisiana	596	450	-24
Maine	531	472	-11
Maryland	1,010	806	-20
Massachusetts	1,114	1,125	1
Michigan	2,015	1,705	-15
Minnesota	928	1,141	23
Mississippi	299	365	22
Missouri	1,281	1,298	1
Montana	378	420	11
Nebraska	297	301	1
Nevada	215	360	67
New Hampshire	375	424	13
New Jersey	1,084	857	-21
New Mexico	357	473	32
New York	1,862	1,941	4
North Carolina	1,482	1,172	-21
North Dakota	91	50	-45
Ohio	1,938	1,919	-1
Oklahoma	584	660	13
Oregon	909	847	-7
Pennsylvania	2,485	2,184	-12
Rhode Island	194	231	19
South Carolina	604	581	-4
South Dakota	299	269	-10
Tennessee	1,107	1,427	29
Texas	2,425	1,977	-18
Utah	422	427	1
Vermont	251	306	22
Virginia	1,567	1,125	-28
Washington	1,231	1,259	2
West Virginia	365	343	-6
Wisconsin	1,473	1,201	-18
Wyoming	497	362	-27

Note: The 1991 Survey did not have mammals categorized as large and small.

Observers of Other Animals

The number of people watching other animals dropped 16% from 1991 to 2006. 12% of Americans observed these animals in 2006. States with the highest proportions of state resident other animal observers were Vermont, Maine, Wyoming, New Hampshire, and Montana. The states with the lowest proportions were North Dakota, Hawaii, Nevada, New York, Delaware, Texas, and North Carolina.

Table 42. "Other Animal" Observers by State of Residence: 1991–2006

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

	<i>1991 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	32,285	17	27,055	12
Alabama	431	14	461	13
Alaska	125	34	73	15
Arizona	532	20	481	10
Arkansas	367	20	264	12
California	2,989	13	2,890	11
Colorado	475	19	527	15
Connecticut	443	18	451	16
Delaware	102	19	53	8
Florida	2,374	23	2,013	14
Georgia	504	10	772	11
Hawaii	91	11	76	7
Idaho	190	25	191	17
Illinois	1,219	14	867	9
Indiana	739	17	713	15
Iowa	377	17	430	18
Kansas	301	16	261	12
Kentucky	442	16	517	16
Louisiana	464	15	318	9
Maine	221	23	263	24
Maryland	645	18	485	11
Massachusetts	952	21	707	14
Michigan	1,402	20	888	11
Minnesota	774	23	503	13
Mississippi	292	15	214	10
Missouri	736	19	725	16
Montana	130	22	144	19
Nebraska	210	17	156	11
Nevada	157	17	146	8
New Hampshire	211	24	203	19
New Jersey	960	16	577	9
New Mexico	224	20	230	15
New York	1,796	13	1,167	8
North Carolina	729	14	556	8
North Dakota	55	12	25	5
Ohio	1,548	19	1,197	13
Oklahoma	441	18	424	15
Oregon	463	21	405	14
Pennsylvania	1,905	20	1,267	13
Rhode Island	141	18	148	18
South Carolina	252	10	369	11
South Dakota	65	12	77	13
Tennessee	695	18	731	16
Texas	1,667	13	1,398	8
Utah	193	17	165	9
Vermont	121	27	141	28
Virginia	847	18	680	12
Washington	1,036	28	826	17
West Virginia	237	17	176	12
Wisconsin	883	24	562	13
Wyoming	80	23	82	20

Note: "Other animals" include fish, marine mammals, reptiles, and insects.

Moving the focus from state resident participation to in-state participation by state residents and nonresidents, the states with the biggest percentage drops from 1991 to 2006 were West Virginia, Louisiana, Minnesota, and Wisconsin. One state had a statistically significant increase: Georgia.

Table 43. "Other Animal" Observers by State Where Activity Took Place: 1991–2006
(Numbers in thousands. Population 16 years old and older)

	1991 <i>Participants</i>	2006 <i>Participants</i>	<i>Percent Change</i>
U.S. Total	32,285	27,055	-16
Alabama	487	530	9
Alaska	211	308	46
Arizona	680	598	-12
Arkansas	477	319	-33
California	3,382	3,242	-4
Colorado	638	644	1
Connecticut	499	456	-9
Delaware	137	95	-31
Florida	3,075	2,517	-18
Georgia	608	861	42
Hawaii	295	183	-38
Idaho	269	290	8
Illinois	1,173	875	-25
Indiana	809	753	-7
Iowa	387	447	16
Kansas	322	272	-16
Kentucky	536	571	7
Louisiana	535	343	-36
Maine	450	354	-21
Maryland	770	532	-31
Massachusetts	1,009	790	-22
Michigan	1,453	1,009	-31
Minnesota	842	549	-35
Mississippi	349	272	-22
Missouri	900	778	-14
Montana	295	213	-28
Nebraska	235	145	-38
Nevada	335	249	-26
New Hampshire	359	280	-22
New Jersey	1,014	681	-33
New Mexico	345	359	4
New York	1,916	1,302	-32
North Carolina	912	688	-25
North Dakota	58	31	-47
Ohio	1,530	1,208	-21
Oklahoma	483	429	-11
Oregon	624	561	-10
Pennsylvania	1,985	1,358	-32
Rhode Island	168	207	23
South Carolina	398	486	22
South Dakota	100	114	14
Tennessee	894	916	2
Texas	1,763	1,455	-17
Utah	238	275	16
Vermont	202	234	16
Virginia	993	732	-26
Washington	1,169	1,052	-10
West Virginia	381	238	-38
Wisconsin	1,061	686	-35
Wyoming	242	183	-24

Note: "Other animals" include fish, marine mammals, reptiles, and insects.

Figure 10. In-State "Other Animal" Observers Participation Trends: 1991–2006

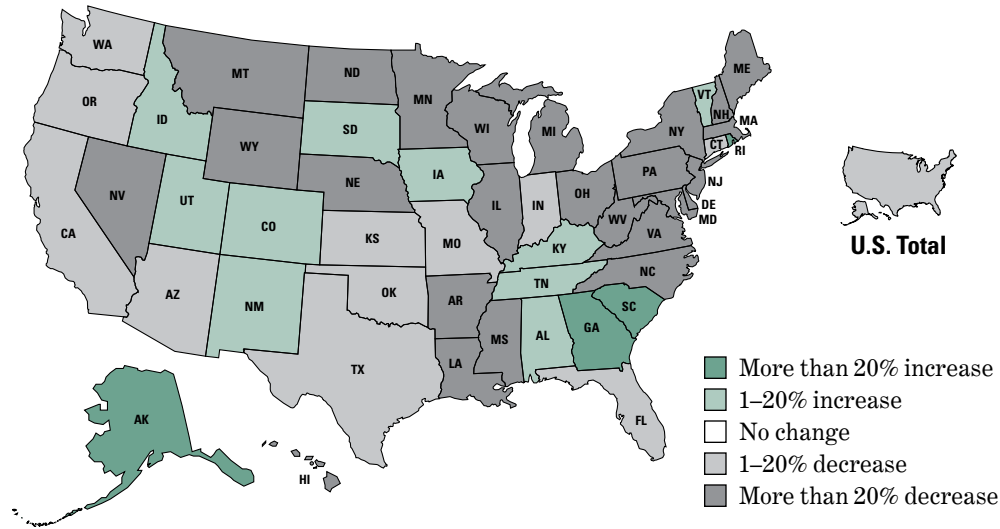
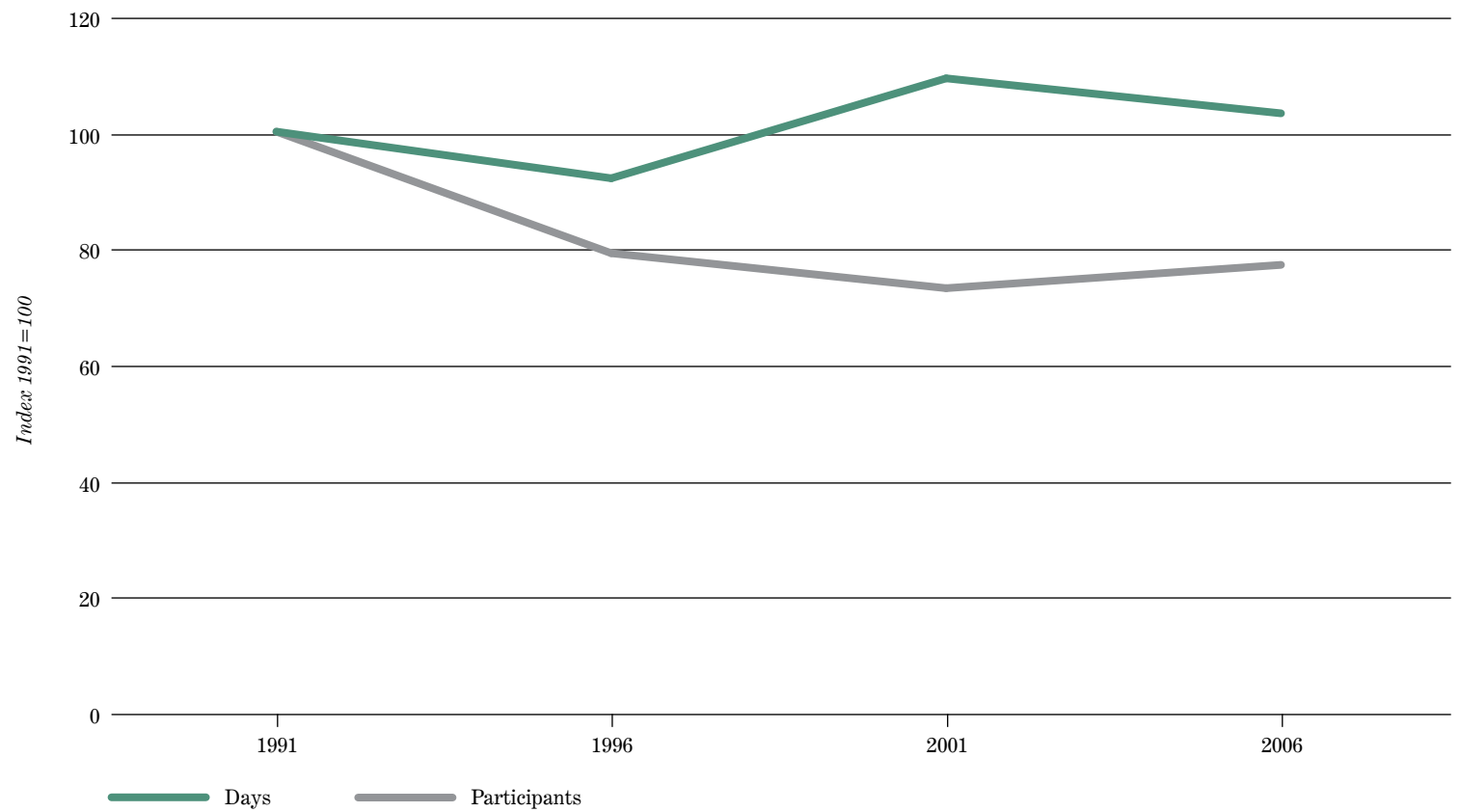


Figure 11. Index of Trends in Away-From-Home Participation and Days



Days of Wildlife Watching

While away-from-home wildlife-watching participant numbers declined 23% from 1991 to 2006, the total number of days afield stayed level. The average days per participant were 11 in 1991, 13 in 1996, 17 in 2001, and 15 in 2006. From 1991–2006 two states had statistically significant increases in wildlife-watching days by away-from-home participants (both state residents and nonresidents): Missouri and Tennessee. One state had a significant decrease: Wisconsin.

Table 44. Away-From-Home Wildlife Watching Days by State Where Activity Took Place: 1991–2006

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

	<i>1991 Days</i>	<i>Average Days</i>	<i>2006 Days</i>	<i>Average Days</i>	<i>Percent Change in Total Days</i>
U.S. Total	342,406	11	352,070	15	3
Alabama	3,286	7	7,292	15	122
Alaska	3,745	11	4,126	12	10
Arizona	5,922	7	5,281	8	-11
Arkansas	3,202	7	4,148	10	30
California	42,353	11	45,010	16	6
Colorado	9,037	8	9,404	11	4
Connecticut	4,098	10	4,184	16	2
Delaware	835	7	855	8	2
Florida	17,786	7	16,551	11	-7
Georgia	4,536	8	4,097	9	-10
Hawaii	2,608	8	1,109	7	-57
Idaho	3,439	9	5,165	10	50
Illinois	8,464	8	5,686	7	-33
Indiana	7,135	10	7,761	10	9
Iowa	4,415	10	4,013	10	-9
Kansas	2,248	6	3,244	13	44
Kentucky	4,636	8	4,155	7	-10
Louisiana	2,603	7	3,199	14	23
Maine	4,502	7	4,778	12	6
Maryland	6,580	10	4,782	11	-27
Massachusetts	8,222	8	8,461	13	3
Michigan	14,159	9	10,043	10	-29
Minnesota	10,378	11	8,040	13	-23
Mississippi	2,584	9	1,302	5	-50
Missouri	7,019	7	14,757	18	110
Montana	4,317	8	3,081	6	-29
Nebraska	1,813	7	906	5	-50
Nevada	2,940	7	2,298	6	-22
New Hampshire	3,337	7	3,165	9	-5
New Jersey	5,472	7	7,965	13	46
New Mexico	3,272	8	5,429	11	66
New York	12,729	7	13,521	10	6
North Carolina	6,737	8	4,868	7	-28
North Dakota	698	7	264	7	-62
Ohio	12,769	9	7,816	7	-39
Oklahoma	4,043	8	7,098	19	76
Oregon	7,038	8	8,162	12	16
Pennsylvania	20,062	10	11,972	10	-40
Rhode Island	1,204	8	2,948	15	145
South Carolina	3,421	9	4,759	11	39
South Dakota	1,552	7	1,382	5	-11
Tennessee	7,445	8	15,486	15	108
Texas	15,544	10	13,120	14	-16
Utah	2,985	7	3,927	8	32
Vermont	2,364	8	2,459	9	4
Virginia	7,144	7	5,745	8	-20
Washington	11,470	11	9,104	9	-21
West Virginia	3,584	8	4,005	14	12
Wisconsin	12,914	10	5,547	8	-57
Wyoming	3,526	6	3,009	6	-15

1991–2006 Expenditure Trend

Another measure of interest in wildlife watching is people's expenditures for equipment and trip-related items. Interestingly, while the number of wildlife watchers decreased and the number of days by trip-takers stayed level from 1991–2006, total expenditures increased. Expenditures rose 30% from 1991 to 2006.⁷

Three states had significant increases in expenditures from 1991 to 2006: Georgia, South Carolina, and Maine. No state had a statistically significant drop in expenditures.

⁷ The long-term expenditure trend of 1991–2006 does not include the same categories as the short-term trend of 2001–2006, because the 1991 Survey did not include the same list of expenditure categories as later surveys did. To provide an apples-to-apples comparison, the 2006 expenditure list was modified to match the 1991 list. Some of the deleted categories are land leasing and ownership, boating costs, and food for wildlife other than birds.

Table 45. Wildlife-Watching Expenditures by State of Residence: 1991–2006

(Numbers in thousands. Population 16 years old and older. 2006 dollars.)

	<i>1991</i> <i>Expenditures</i>	<i>2006</i> <i>Expenditures</i>	<i>Percent Change</i>
U.S. Total	27,367,673	35,589,664	30
Alabama	272,172	452,751	66
Alaska	214,505	121,100	-44
Arizona	482,702	646,824	34
Arkansas	293,777	424,572	45
California	3,886,289	4,179,052	8
Colorado	563,544	726,094	29
Connecticut	425,481	528,175	24
Delaware	57,592	116,246	102
Florida	1,804,225	1,924,656	7
Georgia	294,032	1,025,224	249
Hawaii	78,600	54,153	-31
Idaho	103,767	132,533	28
Illinois	976,895	1,233,636	26
Indiana	396,805	776,535	96
Iowa	191,673	345,531	80
Kansas	140,964	192,349	36
Kentucky	291,897	557,310	91
Louisiana	331,889	324,093	-2
Maine	166,077	349,344	110
Maryland	421,765	661,697	57
Massachusetts	735,039	831,838	13
Michigan	1,346,586	1,379,914	2
Minnesota	555,752	864,537	56
Mississippi	355,115	189,367	-47
Missouri	657,408	778,453	18
Montana	153,424	121,389	-21
Nebraska	127,810	165,982	30
Nevada	282,047	424,655	51
New Hampshire	178,349	121,978	-32
New Jersey	690,946	556,633	-19
New Mexico	316,756	172,567	-46
New York	1,697,592	1,459,556	-14
North Carolina	409,225	951,905	133
North Dakota	26,891	27,181	1
Ohio	841,726	1,055,844	25
Oklahoma	343,490	449,365	31
Oregon	562,190	679,964	21
Pennsylvania	1,700,120	1,417,651	-17
Rhode Island	100,606	104,248	4
South Carolina	127,351	343,758	170
South Dakota	58,978	96,169	63
Tennessee	448,705	730,990	63
Texas	1,304,649	2,735,172	110
Utah	253,708	188,606	-26
Vermont	86,737	79,675	-8
Virginia	568,106	600,517	6
Washington	775,752	1,018,820	31
West Virginia	99,545	177,373	78
Wisconsin	736,564	581,405	-21
Wyoming	77,394	133,833	73

The general increase in long-term overall wildlife-watching expenditures did not hold for trip-related expenditures. These expenditures did not change statistically from 1991 to 2006 nationally. Two states had significant decreases in trip-related expenditures: Florida and Maryland. The only state with a significant increase was South Carolina.

Table 46. Trip-Related Wildlife-Watching Expenditures by State of Residence: 1991–2006
(Numbers in thousands. Population 16 years old and older. 2006 dollars.)

	<i>1991</i> <i>Expenditures</i>	<i>2006</i> <i>Expenditures</i>	<i>Percent Change</i>
U.S. Total	11,088,432	12,577,701	13
Alabama	109,087	194,382	78
Alaska	72,654	64,995	-11
Arizona	151,032	297,710	97
Arkansas	66,494	69,749	5
California	1,715,913	2,197,444	28
Colorado	195,725	293,172	50
Connecticut	140,208	239,382	71
Delaware	23,288	12,456	-47
Florida	824,534	432,603	-48
Georgia	158,002	283,211	79
Hawaii	48,967	29,981	-39
Idaho	58,632	84,643	44
Illinois	645,343	427,164	-34
Indiana	177,646	205,928	16
Iowa	90,667	102,694	13
Kansas	67,828	90,546	33
Kentucky	88,825	163,000	84
Louisiana	89,925	117,518	31
Maine	58,776	103,117	75
Maryland	175,224	94,615	-46
Massachusetts	321,015	248,554	-23
Michigan	444,859	518,651	17
Minnesota	269,551	451,906	68
Mississippi	86,789	75,010	-14
Missouri	187,842	356,311	90
Montana	50,646	57,445	13
Nebraska	57,253	55,757	-3
Nevada	108,336	106,713	-1
New Hampshire	46,256	60,359	30
New Jersey	311,865	194,354	-38
New Mexico	90,690	79,622	-12
New York	564,535	874,969	55
North Carolina	171,396	324,669	89
North Dakota	14,392	8,282	-42
Ohio	408,592	361,388	-12
Oklahoma	120,805	288,668	139
Oregon	176,379	175,053	-1
Pennsylvania	676,010	575,270	-15
Rhode Island	44,882	42,447	-5
South Carolina	34,609	142,782	313
South Dakota	28,257	45,632	61
Tennessee	188,667	236,536	25
Texas	627,209	869,859	39
Utah	87,213	114,891	32
Vermont	30,030	25,661	-15
Virginia	209,922	150,312	-28
Washington	443,031	290,789	-34
West Virginia	48,438	83,475	72
Wisconsin	208,345	187,757	-10
Wyoming	35,821	51,803	45

An increase in equipment expenditures accounted for the increase in overall wildlife-watching expenditures. There was an increase of 41% in equipment expenditures for 1991–2006. The states with the biggest 1991–2006 increases were Georgia, Indiana, Illinois, and Maryland. The states with the biggest decreases were Alaska, New Mexico, Mississippi, and Utah.

Table 47. Wildlife-Watching Equipment Expenditures by State of Residence: 1991–2006
(Numbers in thousands. Population 16 years old and older. 2006 dollars.)

	<i>1991</i> <i>Expenditures</i>	<i>2006</i> <i>Expenditures</i>	<i>Percent Change</i>
U.S. Total	16,279,241	23,011,963	41
Alabama	163,085	258,369	58
Alaska	141,852	56,105	-60
Arizona	331,669	349,114	5
Arkansas	227,282	354,823	56
California	2,170,376	1,981,608	-9
Colorado	367,819	432,922	18
Connecticut	285,273	288,793	1
Delaware	34,304	103,790	203
Florida	979,691	1,492,053	52
Georgia	136,030	742,013	445
Hawaii	29,634	24,172	-18
Idaho	45,135	47,890	6
Illinois	331,552	806,472	143
Indiana	219,159	570,607	160
Iowa	101,006	242,837	140
Kansas	73,136	101,803	39
Kentucky	203,072	394,310	94
Louisiana	241,964	206,575	-15
Maine	107,301	246,227	129
Maryland	246,540	567,082	130
Massachusetts	414,024	583,284	41
Michigan	901,726	861,263	-4
Minnesota	286,201	412,631	44
Mississippi	268,326	114,357	-57
Missouri	469,566	422,142	-10
Montana	102,778	63,944	-38
Nebraska	70,558	110,225	56
Nevada	173,712	317,942	83
New Hampshire	132,092	61,619	-53
New Jersey	379,081	362,279	-4
New Mexico	226,067	92,945	-59
New York	1,133,057	584,587	-48
North Carolina	237,828	627,236	164
North Dakota	12,500	18,899	51
Ohio	433,134	694,456	60
Oklahoma	222,685	160,697	-28
Oregon	385,812	504,911	31
Pennsylvania	1,024,110	842,381	-18
Rhode Island	55,723	61,801	11
South Carolina	92,741	200,976	117
South Dakota	30,721	50,537	65
Tennessee	260,038	494,454	90
Texas	677,440	1,426,498	111
Utah	166,495	73,715	-56
Vermont	56,707	54,014	-5
Virginia	358,184	450,205	26
Washington	332,721	728,031	119
West Virginia	51,107	93,898	84
Wisconsin	528,219	393,648	-25
Wyoming	41,572	82,030	97

Note: In addition to equipment, these estimates include expenditures for magazines, books, membership dues, contributions, and plantings.

Demographic Trends

Examining the socio-demographic characteristics of people who participate gives great insight into participation trends. Whereas the number of wildlife watchers first declined and then increased from 1991–2006, the percentage of Americans who wildlife watched dropped from 40% in 1991 to 31% in 1996 and then stayed level at 31% in 2001 and 2006.

There is an enduring difference between the participation levels of

urbanites and ruralites. Ruralites were nearly twice as likely to wildlife watch in 2006 as urbanites. Also, while urbanite participation rates have declined over the past four surveys (36% of urbanites wildlife watched in 1991, 28% in 1996, 27% in 2001, and 26% in 2006), ruralite rates have increased since 1996 (51% of ruralites wildlife watched in 1991, 39% in 1996, 44% in 2001, and 47% in 2006) (see Table 48).

Using Census Metropolitan Statistical Areas⁸ (MSAs) we can explore the behavior of urbanites further. Dividing MSAs into large (a million inhabitants or more), medium (a quarter million to

⁸ Except in the New England states, a Metropolitan Statistical Area is a county or group of counties containing at least one city of 50,000 or more inhabitants. In New England a Metropolitan Statistical Area consists of towns and cities instead of counties.

Table 48. Wildlife Watching by Urban/Rural Residents: 1991–2006

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

	1991					1996				
	Total U.S. population	Percent	Participants	Percent who participated	Percent	Total U.S. population	Percent	Participants	Percent who participated	Percent
Total persons	189,964	100	76,111	40	100	201,472	100	62,868	31	100
Urban	138,191	73	49,501	36	65	144,760	72	40,696	28	65
Rural	51,773	27	26,610	51	35	56,712	28	22,173	39	35

Table 49. Wildlife Watching by Metropolitan Statistical Area (MSA): 1991–2006

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

	1991					1996				
	Total U.S. population	Percent	Participants	Percent who participated	Percent	Total U.S. population	Percent	Participants	Percent who participated	Percent
Total persons	189,964	100	76,111	40	100	201,472	100	62,868	31	100
1 million or more	81,346	43	27,430	34	36	99,738	50	27,557	28	44
250,000 to 999,999	45,601	24	19,379	42	25	39,800	20	12,701	32	20
Less than 249,999	20,392	11	9,244	45	12	19,280	10	6,966	36	11
Outside MSA	42,625	22	20,058	47	26	42,654	21	15,645	37	25

Table 50. Wildlife Watching by Age Groups: 1991–2006

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

	1991					1996				
	Total U.S. population	Percent	Participants	Percent who participated	Percent	Total U.S. population	Percent	Participants	Percent who participated	Percent
Total persons	189,964	100	76,111	40	100	201,472	100	62,868	31	100
16–17	6,530	3	2,062	32	3	7,080	4	1,303	18	2
18–24	23,023	12	6,489	28	9	20,423	10	3,443	17	5
25–34	42,931	23	17,678	41	23	34,973	17	9,700	28	15
35–44	38,341	20	17,705	46	23	44,376	22	15,842	36	25
45–54	27,021	14	11,070	41	15	35,867	18	12,711	35	20
55–64	21,085	11	9,288	44	12	23,311	12	8,400	36	13
65 and up	31,032	16	11,819	38	16	35,442	18	11,470	32	18

nearly a million inhabitants), and small (fifty thousand to nearly a quarter million inhabitants), the size of the areas has an inverse relationship to the level of participation in wildlife watching. In 2006, 26% of the inhabitants of large MSAs wildlife watched, compared to 33% of medium MSA inhabitants and 36% of small MSA inhabitants. However, the trend in wildlife-watching participation is not uniform across MSAs. Large MSAs have seen drops in the proportion of residents who wildlife watched, with 34% in 1991, 28% in 1996, 26% in 2001, and 26% in 2006. Medium MSAs have seen drops and a slight increase, with 42% in 1991, 32% in 1996, 31% in 2001, and 33% in 2006. Participation in small MSAs dropped from 45% in 1991 to 36% in 1996, then increased in 2001 to 41%, and dropped again in 2006 to 36%. In general, small MSAs and medium MSAs

have inhabitants with similar levels of interest in wildlife watching, and large MSAs have inhabitants with lower levels of interest in wildlife watching. Around-the-home wildlife watching makes up the bulk of total wildlife watching, and people in the most dense MSAs have less opportunity to watch wildlife within a mile of their homes than do people in the rest of the country (see Table 49).

In general as age increases so does participation up to 65 years old, after which the participation rate falls. In 2006 people below 35 years old were less likely than the average American to participate, and people above 34 years old were more likely to participate. Comparing 1991 to 2006, participation rates for every age cohort dropped, although barely so for 55 years old and older. From 2001 to 2006 participation rates for all but two

age cohorts stayed nearly the same. The two age cohorts which varied from this trend were 16–17 years olds and 25–34 year olds, for which participation rates decreased (see Table 50).

2001					2006				
Total U.S. population	Percent	Participants	Percent who participated	Percent	Total U.S. population	Percent	Participants	Percent who participated	Percent
212,298	100	66,105	31	100	229,245	100	71,132	31	100
157,943	74	42,214	27	64	176,740	77	46,641	26	66
54,355	26	23,891	44	36	52,504	23	24,491	47	34

2001					2006				
Total U.S. population	Percent	Participants	Percent who participated	Percent	Total U.S. population	Percent	Participants	Percent who participated	Percent
212,298	100	66,105	31	100	229,245	100	71,132	31	100
112,984	53	29,724	26	45	120,356	53	31,523	26	44
41,469	20	12,880	31	19	46,506	20	15,483	33	22
16,693	8	6,811	41	10	23,562	10	8,471	36	12
41,151	19	16,691	41	25	38,820	17	15,655	40	22

2001					2006				
Total U.S. population	Percent	Participants	Percent who participated	Percent	Total U.S. population	Percent	Participants	Percent who participated	Percent
212,298	100	66,105	31	100	229,245	100	71,132	31	100
7,709	4	1,678	22	3	8,272	4	1,441	17	2
22,234	10	3,051	14	5	23,292	10	3,279	14	5
35,333	17	8,869	25	13	37,468	16	7,813	21	11
44,057	21	14,939	34	23	45,112	20	14,881	33	21
40,541	19	14,491	36	22	44,209	19	16,542	37	23
25,601	12	10,326	40	16	32,867	14	13,544	41	19
36,823	17	12,752	35	19	38,024	17	13,633	36	19

Table 51. Wildlife Watching by Gender: 1991–2006

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

	1991					1996				
	Total U.S. population	Percent	Participants	Percent who participated	Percent	Total U.S. population	Percent	Participants	Percent who participated	Percent
Total persons	189,964	100	76,111	40	100	201,472	100	62,868	31	100
Male	90,369	48	37,188	41	49	96,660	48	29,505	31	47
Female	99,595	52	38,924	39	51	104,812	52	33,363	32	53

Table 52. Wildlife Watching by Race: 1991–2006

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

	1991					1996				
	Total U.S. population	Percent	Participants	Percent who participated	Percent	Total U.S. population	Percent	Participants	Percent who participated	Percent
Total persons	189,964	100	76,111	40	100	201,472	100	62,868	31	100
White	162,367	85	71,065	44	93	167,497	83	58,556	35	93
Black	18,395	10	3,111	17	4	18,728	9	1,955	10	3
Other	9,202	5	1,934	21	3	15,247	8	2,358	15	4

Table 53. Wildlife Watching by Hispanic/NonHispanic Groups: 1991–2006

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

	1991					1996				
	Total U.S. population	Percent	Participants	Percent who participated	Percent	Total U.S. population	Percent	Participants	Percent who participated	Percent
Total persons	189,964	100	76,111	40	100	201,472	100	62,868	31	100
Hispanic	13,098	7	2,715	21	4	16,505	8	2,328	14	4
Non-Hispanic	176,866	93	73,396	41	96	184,967	92	60,541	33	96

Females historically have participated as much in wildlife watching as males. In 2006 32% of females wildlife watched and 30% of males did, while in 1991 41% of males and 39% of females did. The overall decrease in male and female participation rates from 1991 to 2006 are steep drops, but the leveling off of their participation rates from 1996 to 2006 demonstrates a recent stability in wildlife watching (see Table 51).

Whites make up over 90% of all wildlife watchers, so their participation trend dominates the racial analysis. 44% of whites wildlife watched in 1991 and 35% did in 1996, 2001, and 2006. 17% of blacks wildlife watched in 1991, 10% in 1996, 9% in 2001, and 10% in 2006. All other races also had an overall downward trend from 1991 to 2006, although it bounced up in 2006: 21% in 1991, 15% in 1996, 14% in 2001, and 18% in 2006 (see Table 52).

On average Hispanics are less likely to wildlife watch than non-Hispanics. In 1991 21% of Hispanics watched wildlife, compared to 41% of non-Hispanics. In 2006 14% of Hispanics watched wildlife, compared to 34% of non-Hispanics.

2001					2006				
Total U.S. population	Percent	Participants	Percent who participated	Percent	Total U.S. population	Percent	Participants	Percent who participated	Percent
212,298	100	66,105	31	100	229,245	100	71,132	31	100
101,916	48	30,695	30	46	110,273	48	33,397	30	47
110,381	52	35,409	32	54	118,972	52	37,735	32	53

2001					2006				
Total U.S. population	Percent	Participants	Percent who participated	Percent	Total U.S. population	Percent	Participants	Percent who participated	Percent
212,298	100	66,105	31	100	229,245	100	71,132	31	100
181,129	85	62,781	35	95	189,255	83	65,961	35	93
21,708	10	2,029	9	3	25,925	11	2,630	10	4
9,461	4	1,295	14	2	14,065	6	2,541	18	4

2001					2006				
Total U.S. population	Percent	Participants	Percent who participated	Percent	Total U.S. population	Percent	Participants	Percent who participated	Percent
212,298	100	66,105	31	100	229,245	100	71,132	31	100
21,910	10	2,699	12	4	29,218	13	4,055	14	6
190,388	90	63,406	33	96	200,027	87	67,077	34	94



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Table 54. Wildlife Watching by Income Groups: 1991–2006

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

	1991					1996				
	Total U.S. population	Percent	Participants	Percent who participated	Percent	Total U.S. population	Percent	Participants	Percent who participated	Percent
Total persons	189,964	100	76,111	40	100	201,472	100	62,868	31	100
Below median income	95,942	51	33,890	35	45	103,234	51	28,179	27	45
Above median income	94,022	49	42,221	45	55	98,238	49	34,688	35	55

Note: Unreported income imputed using the same proportions as reported income.

Note: Total U.S. population median income is not exactly 50/50 because survey income is reported using ranges, not exact amounts, so the sample could not be split at the exact median point.

Table 55. Wildlife Watching by Level of Education: 1991–2006

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

	1991					1996				
	Total U.S. population	Percent	Participants	Percent who participated	Percent	Total U.S. population	Percent	Participants	Percent who participated	Percent
Total persons	189,964	100	76,111	40	100	201,472	100	62,868	31	100
High school graduate or less	113,199	60	40,319	36	53	104,841	52	27,033	26	43
1 or more years college	76,765	40	35,792	47	47	96,630	48	35,836	37	57

In 1991 and 1996 55% of wildlife watchers had household incomes above the U.S. median. In 2001 and 2006 this became more pronounced with 64% and 58%, respectively, of wildlife watchers having household incomes above the U.S. median. The median income of wildlife watchers in 1991 was about \$50,000⁹, compared to the \$44,500 median income for all Americans. The median income of wildlife watchers in 2006 was \$58,750,

⁹ Income estimates are in 2006 dollars. Median incomes were calculated from the Survey income ranges by assuming an even distribution of income-earners within each income range.

compared to \$50,000 for all Americans. Another way to look at it is in 1991 35% of Americans with below-median income were wildlife watchers and 45% of Americans with above-median income were wildlife watchers. In 2006 26% of Americans with below-median income were wildlife watchers and 37% of Americans with above-median income were wildlife watchers.

Finally, individuals with a high school education or less comprised 53% of all wildlife watchers in 1991 and those with a college education, 47%. In 2006 40% of all wildlife watchers were high school or less educated and 60% were college

educated. Wildlife watchers as a group have become more educated than the general population.

Looking at participation rates, in 1991 36% of people with high school or less education were wildlife watchers. 47% of college-educated people were wildlife watchers. In 2006 26% of all people with high school or less education participated in wildlife watching and 36% of college-educated people were wildlife watchers.

<i>2001</i>					<i>2006</i>				
<i>Total U.S. population</i>	<i>Percent</i>	<i>Participants</i>	<i>Percent who participated</i>	<i>Percent</i>	<i>Total U.S. population</i>	<i>Percent</i>	<i>Participants</i>	<i>Percent who participated</i>	<i>Percent</i>
212,298	100	66,105	31	100	229,245	100	71,132	31	100
95,311	45	24,082	25	36	116,723	51	29,997	26	42
116,987	55	42,022	36	64	112,523	49	41,134	37	58

<i>2001</i>					<i>2006</i>				
<i>Total U.S. population</i>	<i>Percent</i>	<i>Participants</i>	<i>Percent who participated</i>	<i>Percent</i>	<i>Total U.S. population</i>	<i>Percent</i>	<i>Participants</i>	<i>Percent who participated</i>	<i>Percent</i>
212,298	100	66,105	31	100	229,245	100	71,132	31	100
106,539	50	28,355	27	43	112,694	49	28,738	26	40
105,758	50	37,749	36	57	116,550	51	42,394	36	60

Avid and Casual Wildlife Observer Trends

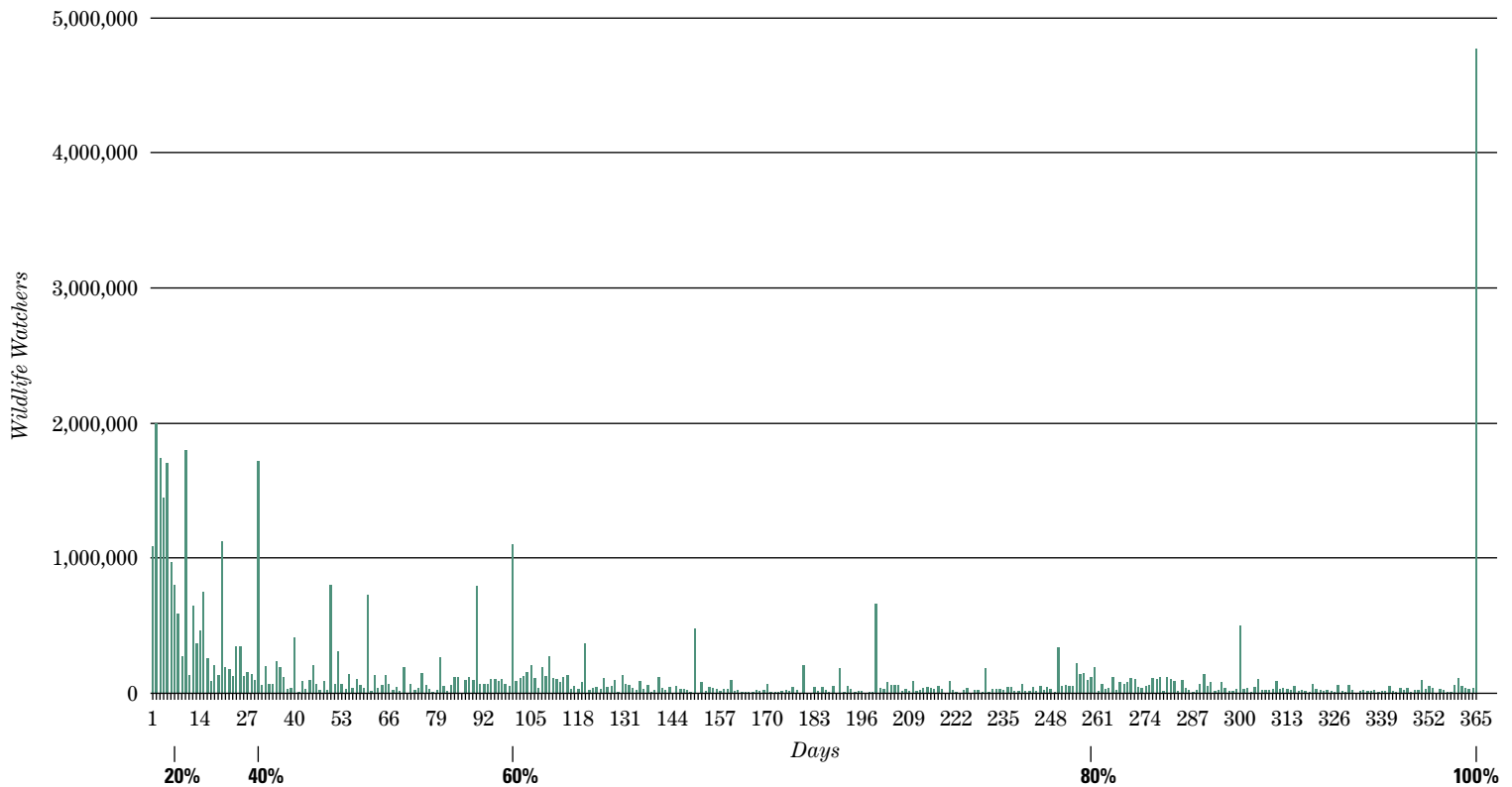
How different are avid wildlife watchers from casual ones? Indeed, how does one demonstrate these qualities? Possible ways a wildlife watcher can experience avidity for his/her recreation is by emotional investment, research into the subject, money spent, and/or days afield. The Survey's database allows exploration of wildlife watching avidity using the measures of expenditures and days. The extent of recreation expenditures is usually due to a combination of avidity and income, whereas the extent of days afield is usually due to a combination of avidity

and time available. It seems more appropriate to use days afield rather than recreation expenditures as the avidity criterion, since everyone has 365 days a year to use, but not everyone has the same income.

Figure 11 depicts the frequency of days observing wildlife in 2006, both around the home and away from home. There is the expected clump of participants at the low end of the spectrum, a leveling off at low levels, and then a grouping of participants at the high end. 4.8 million people observed wildlife

every day of the year. The high end participants begins at approximately 80% of total participants. Based on this observation, the top 20% of observers are defined as avid. Since statistical analysis of two equal-sized groups is simplest, the bottom 20% are defined as casual. A person who observes wildlife 260 days or more was avid, and a person who observes wildlife 7 days or fewer was casual. For all four Survey years, the top and bottom 20% of wildlife observers, grouped by days of observing wildlife, will be classified avid and casual, respectively.

Figure 11. Days of Observing Wildlife: 2006



About three-fifths of all observing days in 2006 were supplied by the avid wildlife watchers. Their average days amounted to about eleven months of watching wildlife daily. Conversely, one percent of all observing days was provided by the casual wildlife watchers. The average days for a typical casual participant were 3.5 days. This illustrates the wide diversity of participation in wildlife watching.

A majority of avid wildlife watchers were female, urban, and have median household incomes above the U.S. median. They were almost entirely white and non-Hispanic. The proportion of avid wildlife watchers that was over 45 years old has increased over time, with 62% of them 45 years old and older in 1991 and 75% in 2006.

Table 56. Avid Wildlife Observers: 1991–2006

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

Year	Total Participants	Avid Participants	Percent of Participants	Total Days	Avid Days	Percent of Days	Mean Avid Days
1991	59,613	11,927	20	4,814,100	2,753,683	57	231
1996	48,521	9,856	20	4,351,715	2,734,387	63	277
2001	46,239	9,321	20	5,409,490	3,067,114	57	329
2006	48,969	9,970	20	5,899,001	3,380,289	57	339

Table 57. Casual Wildlife Observers: 1991–2006

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

Year	Total Participants	Casual Participants	Percent of Participants	Total Days	Casual Days	Percent of Days	Mean Casual Days
1991	59,613	12,498	21	4,814,100	44,668	1	4
1996	48,521	10,457	22	4,351,715	38,528	1	4
2001	46,239	9,463	20	5,409,490	38,841	1	4
2006	48,969	9,764	20	5,899,001	36,109	1	4

Table 58. Avid Wildlife Observers by Selected Characteristics: 1991–2006

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

	1991		1996		2001		2006	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
U.S Total	11,927	100	9,853	100	9,321	100	9,970	100
Sex								
Male	5,393	45	4,340	44	4,008	43	4,420	44
Female	6,533	55	5,513	56	5,313	57	5,550	56
Age								
16–17	127	1	13	(Z)	122	1	46	(Z)
18–24	377	3	152	2	212	2	84	1
25–34	1,653	14	936	9	651	7	694	7
35–44	2,388	20	1,932	20	1,543	17	1,655	17
45–54	2,089	18	2,296	23	2,428	26	2,501	25
55–64	2,260	19	1,671	17	1,835	20	2,618	26
65 and older	3,033	25	2,853	29	2,529	27	2,373	24
Ethnicity								
Hispanic	164	1	177	2	230	2	214	2
Non-Hispanic	11,763	99	9,676	98	9,091	98	9,756	98
Race								
White	11,542	97	9,377	95	8,889	95	9,593	96
Black	288	2	260	3	213	2	165	2
Other	97	1	217	2	219	2	211	2
Urban/Rural								
Urban	6,551	55	5,857	59	5,234	56	5,783	58
Rural	5,376	45	3,996	41	4,087	44	4,187	42
Household Income								
Below median	5,639	47	4,895	50	3,724	40	4,387	44
Above median	6,288	53	4,958	50	5,597	60	5,583	56

Note: Unreported income imputed using the same proportions as reported income.
(Z) Less than 0.5 percent.

Table 59. Casual Wildlife Observers by Selected Characteristics: 1991–2006

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

	1991		1996		2001		2006	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
U.S Total	12,498	100	10,457	100	9,463	100	9,764	100
Sex								
Male	6,625	53	5,458	52	4,912	52	5,201	53
Female	5,873	47	4,998	48	4,551	48	4,563	47
Age								
16–17	566	5	479	5	374	4	282	3
18–24	1,663	13	1,065	10	581	6	758	8
25–34	4,100	33	2,052	20	2,054	22	1,374	14
35–44	2,983	24	3,109	30	2,467	26	2,776	28
45–54	1,400	11	1,489	14	2,078	22	2,254	23
55–64	908	7	996	10	958	10	1,418	15
65 and older	878	7	1,267	12	951	10	903	9
Ethnicity								
Hispanic	512	4	452	4	634	7	876	9
Non-Hispanic	11,986	96	10,005	96	8,830	93	8,888	91
Race								
White	11,535	92	9,714	93	8,453	89	8,795	90
Black	540	4	202	2	494	5	476	5
Other	423	3	541	5	516	5	493	5
Urban/Rural								
Urban	8,582	69	7,170	69	6,854	72	6,932	71
Rural	3,917	31	3,287	31	2,605	28	2,832	29
Household Income								
Below median	4,907	39	4,440	42	2,970	31	3,710	38
Above median	7,591	61	6,017	58	6,493	69	6,054	62

Note: Unreported income imputed.

A majority of casual wildlife watchers are male, urban, and have income above the U.S. median. They are more likely to be urban and have above median income than avid wildlife watchers.

There is a higher proportion of Hispanics in the casual group than in the overall participant group. Like avid wildlife watchers, the average casual wildlife watcher was more likely to be over 45 years old in 2006 than in 1991. 25% of casual wildlife watchers were 45 years old and older in 1991 and 47% were in 2006.

Nearly all avid wildlife watchers observe wildlife and feed birds around the home. In 2006 25% of them fished and 12% hunted. Interestingly, casual wildlife watchers fished slightly more and hunted as much as avid wildlife watchers did (29% and 12%, respectively). Another interesting finding is casual wildlife

watchers in 2006 were more likely than avids to go on a trip to observe wildlife. But only two-thirds of them observed wildlife and one-half of them fed birds around the home, compared to nearly all avids. And they were less likely than avids to participate in all other types of around-the-home wildlife watching.

Table 60. Avid Wildlife Observers by Wildlife-Related Activity 1991–2006

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

	1991		1996		2001		2006	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Avid Participants	11,927	100	9,856	100	9,321	100	9,970	100
Away-From-Home	6,434	54	4,852	49	4,099	44	4,402	44
Around-The-Home								
Observing	11,907	100	9,837	100	9,299	100	9,965	100
Photographing	4,808	40	4,150	42	3,358	36	4,250	43
Bird Feeding	11,391	96	9,336	95	8,546	92	8,917	89
Other Animal Feeding	6,805	57	4,984	51	4,235	45	4,521	45
Park Visiting	3,264	27	2,340	24	1,950	21	2,446	25
Natural Area Maintaining	3,004	25	2,354	24	2,437	26	2,958	30
Plant Maintaining	2,490	21	2,736	28	2,507	27	2,812	28
Sportsperson								
Fishing	4,193	35	3,417	35	2,719	29	2,524	25
Hunting	1,630	14	1,221	12	1,111	12	1,157	12

Table 61. Casual Wildlife Observers by Wildlife-Related Activity: 1991–2006

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

	1991		1996		2001		2006	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
U.S. Total	12,498	100	10,457	100	9,463	100	9,764	100
Away-From-Home	6,534	52	5,060	48	4,864	51	4,565	47
Around-The-Home								
Observing	8,017	64	6,651	64	5,949	63	6,423	66
Photographing	1,773	14	1,199	11	1,660	18	1,961	20
Bird Feeding	7,810	62	6,434	62	5,366	57	4,666	48
Other Animal Feeding	2,480	20	2,038	19	1,785	19	1,537	16
Park Visiting	2,207	18	1,563	15	1,713	18	1,746	18
Natural Area Maintaining	832	7	557	5	731	8	765	8
Plant Maintaining	641	5	841	8	802	8	681	7
Sportsperson								
Fishing	4,209	34	3,345	32	3,271	35	2,877	29
Hunting	1,662	13	1,460	14	1,201	13	1,141	12

Summary

In 2006 71.1 million U.S. residents 16 years old and older wildlife watched (i.e., observed, photographed, fed wildlife) around their homes and on trips. This was an increase of 8% over 2001 and 13% over 1996. The highpoint of wildlife watching's popularity was in the early 1990's, with 76.1 million participants. Activity around the home is most common; over 90% of all participants wildlife watched within a mile of their home. There was an increase of 12% in around-the-home wildlife watching from 1996 to 2006 after an 18% drop from 1991 to 1996. Photographing wildlife in 2006 stood out as the only wildlife-related activity that has increased relative to 1991, a 10% increase in participants. Feeding wildlife remains the most popular activity, although the number of feeders has not significantly changed since 1996.

The region with the highest rate of wildlife watching in 2006 was the West North Central, where more than 4 out of 10 people participated. The region with the lowest rate was the Pacific, with 1 out of 4 people participating.

Ranking states by the popularity of wildlife watching for state residents in 2006 has northern, less-populated states at the high end of the participation spectrum. Thirty-four states had participation rates above the national average of 31%. The most-populated states have participation rates below the national average. This is at least partly due to the high degree of urbanization in those states. High population density has a negative effect on wildlife-related recreation.

Four states saw significant increases in state resident wildlife watching from 1991–2006: Colorado, Montana, Nevada, and Tennessee. The four states with the biggest decreases were Hawaii, Illinois, Louisiana, and North Dakota.

The national upward trend for all wildlife watching from 2001–2006 was particularly evident in the participation of state residents of Georgia, Texas,



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Rhode Island, and Missouri. The states that had statistically significant drops were Wisconsin, Alaska, Nebraska, and Washington. All other states maintained or increased their participation.

Since 1991 wildlife watchers have become more likely to be rural and older. Women are more likely to participate than men. Higher educated, higher income people are more likely to participate than lower educated, lower income people. White, non-Hispanic people are more likely to participate than other races and ethnic groups.

From 1991 to 2006 avid wildlife watchers became more active in their avocation, with an average of 231 wildlife-watching days in 1991 and 339 in 2006. Casual wildlife watchers had an average of four days of activity per year. From 1991 to 2006 the fewer people who wildlife

watched were doing it as much or more than before, in terms of the number of observing days. Therefore, despite the drop in participant numbers, the days of wildlife-watching activity did not decrease.

Another important measure of interest in wildlife watching participation did not reflect the drop in participation from 1991 to 2006. Expenditures for wildlife watching increased 30% from 1991 to 2006. Expenditure items included food, lodging, transportation, binoculars, bird food, day packs, camping equipment, land leasing and owning, and big-ticket equipment items (campers, off-road vehicles, and boats). Equipment purchases were primarily responsible for the overall expenditure increase. Equipment purchases increased 41%, while trip-related purchases increased only 13%.

Appendix Tables

These tables have estimates for every Survey year from 1991 to 2006.



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Appendix Table 1. Wildlife Watching by State of Residence: 1991–2006

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

	<i>1991 Participants</i>	<i>Percent of Population</i>	<i>1996 Participants</i>	<i>Percent of Population</i>	<i>2001 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	76,111	40	62,868	31	66,105	31	71,132	31
Alabama	1,229	40	988	30	965	28	1,006	28
Alaska	229	62	216	50	241	53	207	42
Arizona	1,083	40	999	31	1,107	30	988	22
Arkansas	812	45	658	34	778	39	859	40
California	6,480	29	5,959	25	5,491	21	5,799	21
Colorado	1,161	46	1,244	42	1,213	38	1,459	40
Connecticut	1,075	43	774	31	883	35	1,102	40
Delaware	211	40	192	34	170	28	212	32
Florida	3,866	37	2,840	25	2,856	23	3,520	25
Georgia	1,756	36	1,622	29	1,326	22	1,819	26
Hawaii	230	27	123	14	126	14	160	16
Idaho	385	52	355	40	388	40	432	39
Illinois	3,451	39	3,137	35	2,492	27	2,355	24
Indiana	2,033	48	1,542	35	1,786	39	1,825	38
Iowa	1,060	49	828	38	983	45	1,111	48
Kansas	876	47	607	32	735	36	787	37
Kentucky	1,191	42	951	32	1,264	40	1,341	41
Louisiana	1,060	34	861	27	840	25	712	21
Maine	548	58	443	46	520	52	600	56
Maryland	1,456	40	1,323	34	1,311	32	1,334	31
Massachusetts	1,882	41	1,638	35	1,493	31	1,725	34
Michigan	3,273	47	2,585	36	2,424	32	2,947	38
Minnesota	1,953	59	1,325	38	1,993	54	1,946	48
Mississippi	742	39	458	23	579	27	618	28
Missouri	2,006	51	1,623	40	1,612	38	2,059	46
Montana	312	52	315	47	362	52	412	55
Nebraska	602	50	428	35	498	39	438	32
Nevada	337	37	258	21	334	23	420	22
New Hampshire	449	52	394	44	450	47	471	45
New Jersey	2,152	36	1,574	26	1,694	27	1,537	23
New Mexico	466	41	370	29	471	35	490	33
New York	4,301	31	3,169	23	3,524	25	3,548	24
North Carolina	2,152	42	1,984	35	1,884	32	2,267	34
North Dakota	200	42	112	23	135	28	134	26
Ohio	3,696	44	2,816	33	2,768	32	3,379	38
Oklahoma	1,146	48	860	35	1,042	40	1,082	39
Oregon	1,123	51	1,048	42	1,286	49	1,266	44
Pennsylvania	4,103	44	3,442	37	3,522	38	3,638	37
Rhode Island	368	47	243	32	242	32	312	37
South Carolina	863	33	829	29	1,079	35	943	28
South Dakota	228	43	165	30	251	45	266	44
Tennessee	1,701	45	1,507	37	1,706	40	1,966	42
Texas	4,016	32	3,553	25	3,088	20	4,111	24
Utah	504	44	415	30	572	37	574	32
Vermont	276	62	217	48	287	60	279	55
Virginia	2,070	44	1,905	37	2,168	40	2,126	36
Washington	2,076	56	1,621	39	2,234	49	2,007	40
West Virginia	584	41	452	31	517	36	585	40
Wisconsin	2,058	56	1,651	42	2,159	53	1,710	39
Wyoming	190	55	143	39	172	46	194	48

Appendix Table 2. Trend in Around-The-Home Wildlife Watching 1991–2006

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

	<i>1991 Participants</i>	<i>Percent of Population</i>	<i>1996 Participants</i>	<i>Percent of Population</i>	<i>2001 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	73,904	39	60,751	30	62,928	30	67,756	30
Alabama	1,214	39	970	29	925	27	989	28
Alaska	216	59	204	47	221	49	202	41
Arizona	1,041	38	977	30	1,063	29	950	21
Arkansas	791	44	647	34	762	38	811	38
California	6,117	27	5,707	24	4,853	19	5,259	19
Colorado	1,092	43	1,187	41	1,127	35	1,393	39
Connecticut	1,061	42	766	30	859	34	1,063	39
Delaware	205	39	188	34	168	28	206	31
Florida	3,802	37	2,744	24	2,635	22	3,274	23
Georgia	1,730	36	1,562	28	1,305	21	1,798	26
Hawaii	217	26	111	12	120	13	145	14
Idaho	360	48	320	36	333	34	395	36
Illinois	3,411	38	2,976	33	2,379	26	2,258	23
Indiana	1,996	47	1,509	34	1,727	38	1,786	37
Iowa	1,030	48	782	36	939	43	1,059	45
Kansas	844	45	592	31	718	36	723	34
Kentucky	1,175	42	923	31	1,234	40	1,235	38
Louisiana	1,049	33	835	26	802	24	671	20
Maine	542	57	433	45	501	50	576	54
Maryland	1,421	39	1,267	32	1,261	31	1,322	31
Massachusetts	1,866	40	1,549	33	1,443	30	1,647	33
Michigan	3,167	45	2,506	34	2,361	31	2,826	36
Minnesota	1,912	58	1,259	36	1,932	52	1,908	47
Mississippi	727	38	451	22	576	27	606	27
Missouri	1,958	50	1,600	39	1,514	36	1,966	43
Montana	280	47	300	45	341	49	389	52
Nebraska	573	47	407	33	469	37	407	30
Nevada	307	34	233	19	300	21	371	20
New Hampshire	441	51	386	44	445	47	451	43
New Jersey	2,099	35	1,561	25	1,640	26	1,483	22
New Mexico	436	39	326	26	449	34	437	29
New York	4,172	30	3,078	22	3,442	24	3,465	23
North Carolina	2,112	41	1,957	35	1,815	31	2,237	33
North Dakota	191	40	106	22	125	26	128	25
Ohio	3,621	44	2,714	32	2,653	31	3,272	37
Oklahoma	1,128	47	819	33	997	39	976	36
Oregon	1,059	48	972	39	1,204	46	1,129	39
Pennsylvania	4,011	43	3,383	36	3,371	36	3,502	36
Rhode Island	363	47	241	32	237	31	298	35
South Carolina	855	32	817	29	1,045	34	924	28
South Dakota	214	41	155	29	241	43	257	43
Tennessee	1,649	43	1,451	35	1,655	38	1,853	39
Texas	3,848	31	3,473	24	2,930	19	3,861	23
Utah	463	41	380	27	515	33	491	27
Vermont	271	61	211	46	280	58	274	54
Virginia	2,031	43	1,877	36	2,105	38	2,082	35
Washington	2,033	55	1,564	37	2,105	47	1,927	39
West Virginia	569	40	446	30	492	34	559	38
Wisconsin	1,979	53	1,592	41	2,076	51	1,703	39
Wyoming	165	48	131	36	154	41	180	44

Appendix Table 3. Trend in Away-From-Home Wildlife Watching 1991–2006, by State of Residence

(Numbers in thousands. Population 16 years old and older. State residents taking a trip away from home anywhere in the U.S.)

	<i>1991 Participants</i>	<i>Percent of Population</i>	<i>1996 Participants</i>	<i>Percent of Population</i>	<i>2001 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	29,999	16	23,652	12	21,823	10	22,977	10
Alabama	347	11	259	8	280	8	348	10
Alaska	143	39	128	30	118	26	68	14
Arizona	435	16	432	13	329	9	381	8
Arkansas	279	15	212	11	190	10	304	14
California	3,408	15	2,391	10	2,191	8	2,565	9
Colorado	571	23	603	21	531	17	531	15
Connecticut	361	14	257	10	248	10	290	11
Delaware	84	16	77	14	43	7	49	7
Florida	1,678	16	1,088	10	1,279	11	988	7
Georgia	400	8	553	10	302	5	371	5
Hawaii	84	10	57	6	50	5	55	5
Idaho	224	30	157	18	214	22	183	17
Illinois	1,182	13	1,370	15	683	7	756	8
Indiana	664	16	444	10	484	11	611	13
Iowa	398	18	367	17	354	16	344	15
Kansas	323	17	215	11	286	14	234	11
Kentucky	382	14	357	12	329	11	540	17
Louisiana	306	10	306	9	250	8	234	7
Maine	217	23	140	14	174	17	213	20
Maryland	531	15	528	14	413	10	305	7
Massachusetts	868	19	697	15	427	9	531	11
Michigan	1,395	20	1,075	15	747	10	827	11
Minnesota	782	24	511	15	562	15	579	14
Mississippi	231	12	100	5	103	5	145	7
Missouri	740	19	528	13	581	14	709	16
Montana	185	31	162	24	195	28	184	24
Nebraska	237	20	192	16	150	12	151	11
Nevada	175	19	121	10	128	9	168	9
New Hampshire	186	22	169	19	139	15	127	12
New Jersey	765	13	623	10	564	9	513	8
New Mexico	231	21	186	15	205	15	220	15
New York	1,611	12	1,027	7	1,112	8	1,178	8
North Carolina	540	11	556	10	367	6	402	6
North Dakota	78	16	40	8	48	10	30	6
Ohio	1,373	17	921	11	887	10	1,174	13
Oklahoma	394	16	289	12	340	13	414	15
Oregon	524	24	408	16	561	21	481	17
Pennsylvania	1,790	19	1,311	14	1,173	13	1,038	11
Rhode Island	116	15	84	11	58	8	96	11
South Carolina	179	7	274	10	282	9	332	10
South Dakota	96	18	74	14	77	14	116	19
Tennessee	632	17	401	10	375	9	725	15
Texas	1,481	12	1,289	9	1,043	7	1,176	7
Utah	284	25	220	16	323	21	255	14
Vermont	109	24	96	21	109	23	82	16
Virginia	786	17	757	15	581	11	603	10
Washington	875	24	664	16	874	19	686	14
West Virginia	214	15	127	9	166	11	129	9
Wisconsin	958	26	691	18	769	19	424	10
Wyoming	112	32	86	23	95	25	82	20

Appendix Table 4. Trend in Around-The-Home Observers 1991–2006

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

	<i>1991</i> <i>Participants</i>	<i>Percent of</i> <i>Population</i>	<i>1996</i> <i>Participants</i>	<i>Percent of</i> <i>Population</i>	<i>2001</i> <i>Participants</i>	<i>Percent of</i> <i>Population</i>	<i>2006</i> <i>Participants</i>	<i>Percent of</i> <i>Population</i>
U.S. Total	54,653	29	44,063	22	42,111	20	44,467	19
Alabama	934	30	633	19	634	19	676	19
Alaska	176	48	127	29	145	32	146	29
Arizona	733	27	690	21	791	21	705	15
Arkansas	586	32	413	22	473	24	620	29
California	4,531	20	4,306	18	3,072	12	3,479	13
Colorado	789	31	876	30	745	23	799	22
Connecticut	754	30	540	21	614	24	788	29
Delaware	146	28	146	26	108	18	123	18
Florida	2,999	29	2,093	19	1,663	14	2,364	17
Georgia	1,235	26	1,071	19	908	15	1,138	16
Hawaii	127	15	75	8	71	8	88	9
Idaho	268	36	224	25	240	25	280	25
Illinois	2,514	28	2,197	24	1,551	17	1,460	15
Indiana	1,488	35	1,161	26	1,295	28	1,092	23
Iowa	780	36	608	28	699	32	804	34
Kansas	586	31	445	23	477	24	451	21
Kentucky	800	28	637	21	703	23	794	24
Louisiana	777	25	624	19	505	15	491	14
Maine	448	47	333	34	351	35	405	38
Maryland	1,051	29	930	24	865	21	813	19
Massachusetts	1,398	30	1,091	23	1,007	21	1,167	23
Michigan	2,442	35	1,952	27	1,566	21	1,664	21
Minnesota	1,538	46	895	26	1,226	33	1,384	34
Mississippi	523	27	306	15	387	18	402	18
Missouri	1,398	35	1,278	32	1,003	24	1,300	29
Montana	212	35	210	31	282	40	285	38
Nebraska	410	34	276	22	306	24	302	22
Nevada	208	23	170	14	194	13	254	13
New Hampshire	360	42	264	30	329	34	334	32
New Jersey	1,542	26	1,142	19	1,085	17	843	13
New Mexico	318	28	202	16	326	24	306	20
New York	3,215	23	2,006	14	2,401	17	2,183	15
North Carolina	1,510	30	1,314	23	980	17	1,229	18
North Dakota	146	31	76	16	84	17	56	11
Ohio	2,610	31	1,973	23	1,626	19	2,185	25
Oklahoma	795	33	545	22	627	24	632	23
Oregon	810	36	714	29	824	31	770	27
Pennsylvania	2,925	31	2,406	26	2,325	25	2,349	24
Rhode Island	260	33	182	24	143	19	194	23
South Carolina	551	21	577	20	585	19	618	19
South Dakota	156	30	111	21	176	31	174	29
Tennessee	1,118	29	871	21	1,059	25	1,353	29
Texas	2,833	23	2,532	18	2,050	13	2,252	13
Utah	348	31	273	20	372	24	335	19
Vermont	219	49	167	37	207	43	193	38
Virginia	1,366	29	1,457	28	1,512	28	1,273	22
Washington	1,585	43	1,187	28	1,476	33	1,432	29
West Virginia	415	29	298	20	344	24	267	18
Wisconsin	1,526	41	1,274	33	1,521	37	1,059	24
Wyoming	121	35	103	28	114	30	129	32

Appendix Table 5. Trend in Around-The-Home Photographers 1991–2006

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

	<i>1991</i> <i>Participants</i>	<i>Percent of</i> <i>Population</i>	<i>1996</i> <i>Participants</i>	<i>Percent of</i> <i>Population</i>	<i>2001</i> <i>Participants</i>	<i>Percent of</i> <i>Population</i>	<i>2006</i> <i>Participants</i>	<i>Percent of</i> <i>Population</i>
U.S. Total	16,990	9	16,021	8	13,937	7	18,763	8
Alabama	221	7	233	7	144	4	258	7
Alaska	135	37	155	36	109	24	86	17
Arizona	199	7	288	9	232	6	261	6
Arkansas	176	10	157	8	154	8	231	11
California	1,475	7	1,245	5	1,052	4	1,593	6
Colorado	315	13	390	13	326	10	387	11
Connecticut	283	11	232	9	228	9	271	10
Delaware	43	8	40	7	37	6	60	9
Florida	1,148	11	1,001	9	716	6	1,230	9
Georgia	301	6	385	7	244	4	386	6
Hawaii	29	3	26	3	25	3	41	4
Idaho	98	13	75	9	98	10	114	10
Illinois	685	8	540	6	476	5	688	7
Indiana	410	10	436	10	382	8	424	9
Iowa	214	10	202	9	254	12	240	10
Kansas	171	9	122	6	161	8	162	8
Kentucky	175	6	200	7	201	6	335	10
Louisiana	210	7	198	6	125	4	125	4
Maine	158	17	135	14	129	13	204	19
Maryland	354	10	362	9	299	7	372	9
Massachusetts	434	9	410	9	303	6	464	9
Michigan	921	13	834	11	520	7	990	13
Minnesota	431	13	331	10	512	14	470	12
Mississippi	134	7	93	5	61	3	112	5
Missouri	401	10	431	11	319	8	541	12
Montana	80	13	111	17	93	13	111	15
Nebraska	114	9	94	8	90	7	95	7
Nevada	76	8	62	5	69	5	78	4
New Hampshire	148	17	126	14	129	14	166	16
New Jersey	482	8	477	8	378	6	468	7
New Mexico	106	9	82	6	141	11	127	8
New York	1,109	8	890	6	834	6	946	6
North Carolina	342	7	476	8	336	6	521	8
North Dakota	44	9	23	5	25	5	30	6
Ohio	838	10	647	8	480	6	833	9
Oklahoma	202	8	197	8	170	7	274	10
Oregon	216	10	296	12	281	11	247	9
Pennsylvania	1,052	11	1,020	11	780	8	713	7
Rhode Island	65	8	59	8	37	5	88	10
South Carolina	142	5	172	6	145	5	174	5
South Dakota	54	10	43	8	41	7	60	10
Tennessee	299	8	259	6	336	8	370	8
Texas	516	4	625	4	565	4	1,411	8
Utah	82	7	101	7	131	8	185	10
Vermont	78	17	84	18	95	20	82	16
Virginia	510	11	562	11	470	9	493	8
Washington	577	16	485	12	578	13	588	12
West Virginia	159	11	95	6	95	7	165	11
Wisconsin	531	14	476	12	485	12	445	10
Wyoming	43	12	44	12	47	12	47	12

Appendix Table 6. Trend in Around-The-Home Feeders 1991–2006

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

	<i>1991 Participants</i>	<i>Percent of Population</i>	<i>1996 Participants</i>	<i>Percent of Population</i>	<i>2001 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	65,423	34	54,122	27	53,988	25	55,512	24
Alabama	1,111	36	924	28	835	24	924	26
Alaska	146	40	142	33	129	28	120	24
Arizona	902	33	792	24	860	23	659	14
Arkansas	728	40	596	31	710	36	722	33
California	4,899	22	4,336	18	3,763	14	3,447	13
Colorado	897	36	912	31	904	28	936	26
Connecticut	972	39	719	29	756	30	857	31
Delaware	192	36	180	32	141	24	181	27
Florida	3,268	32	2,420	22	2,092	17	2,474	17
Georgia	1,594	33	1,452	26	1,204	20	1,494	22
Hawaii	182	22	91	10	91	10	88	9
Idaho	273	37	227	26	233	24	299	27
Illinois	3,076	35	2,663	30	2,171	23	1,945	20
Indiana	1,844	43	1,397	31	1,615	35	1,578	33
Iowa	921	43	668	31	878	40	922	39
Kansas	761	40	557	29	627	31	569	27
Kentucky	1,085	38	848	28	1,126	36	1,029	32
Louisiana	954	30	756	23	714	22	598	17
Maine	487	51	401	42	426	42	502	47
Maryland	1,248	34	1,137	29	1,077	26	1,134	26
Massachusetts	1,654	36	1,436	30	1,263	26	1,259	25
Michigan	2,922	42	2,306	32	2,078	27	2,384	31
Minnesota	1,643	50	1,067	31	1,663	45	1,639	41
Mississippi	657	34	437	22	531	25	525	24
Missouri	1,753	44	1,480	36	1,372	33	1,684	37
Montana	211	35	246	37	246	35	248	33
Nebraska	502	41	388	31	403	32	325	24
Nevada	250	27	186	15	229	16	283	15
New Hampshire	401	46	348	39	398	42	354	34
New Jersey	1,834	31	1,380	23	1,322	21	1,255	19
New Mexico	378	34	271	21	387	29	342	23
New York	3,638	26	2,811	20	2,847	20	2,723	18
North Carolina	2,008	39	1,842	33	1,706	29	2,051	31
North Dakota	151	32	93	19	105	22	114	22
Ohio	3,437	41	2,614	31	2,364	27	2,670	30
Oklahoma	1,045	43	735	30	956	37	909	33
Oregon	908	41	880	36	997	38	995	34
Pennsylvania	3,672	39	2,914	31	2,812	30	2,938	30
Rhode Island	319	41	228	30	210	27	237	28
South Carolina	808	31	761	27	972	32	878	26
South Dakota	173	33	133	25	191	34	208	35
Tennessee	1,480	39	1,397	34	1,570	36	1,589	34
Texas	3,342	27	3,329	23	2,528	16	3,332	20
Utah	331	29	287	21	368	24	365	20
Vermont	235	53	178	39	243	51	215	42
Virginia	1,854	39	1,755	34	1,804	33	1,813	31
Washington	1,757	47	1,351	32	1,583	35	1,513	30
West Virginia	533	38	415	28	464	32	528	36
Wisconsin	1,787	48	1,453	37	1,822	45	1,534	35
Wyoming	126	37	96	26	116	31	120	30

Appendix Table 7. Trend in State Resident Bird Observers 1991–2006

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

	1991 Participants	Percent of Population	1996 Participants	Percent of Population	2001 Participants	Percent of Population	2006 Participants	Percent of Population
U.S. Total	56,307	30	45,991	23	45,951	22	47,693	21
Alabama	921	30	639	19	653	19	692	19
Alaska	175	47	140	32	164	36	148	30
Arizona	799	30	730	23	840	23	778	17
Arkansas	582	32	392	20	499	25	603	28
California	4,988	22	4,351	18	3,698	14	4,050	15
Colorado	834	33	931	32	817	25	910	25
Connecticut	762	30	573	23	663	26	797	29
Delaware	157	30	143	26	111	19	130	19
Florida	3,026	29	2,172	19	1,954	16	2,464	17
Georgia	1,198	25	1,124	20	903	15	1,077	16
Hawaii	141	17	79	9	79	9	107	11
Idaho	301	40	230	26	295	30	314	28
Illinois	2,457	28	2,409	27	1,712	19	1,630	17
Indiana	1,465	34	1,214	27	1,343	29	1,165	24
Iowa	804	37	638	29	772	35	798	34
Kansas	629	33	459	24	513	25	470	22
Kentucky	809	29	699	23	740	24	902	28
Louisiana	745	24	637	20	526	16	520	15
Maine	452	47	335	35	364	36	423	39
Maryland	1,107	30	962	25	915	22	853	20
Massachusetts	1,460	31	1,280	27	1,112	23	1,209	24
Michigan	2,540	36	2,026	28	1,740	23	1,768	23
Minnesota	1,601	48	943	27	1,344	36	1,346	33
Mississippi	522	27	303	15	392	19	421	19
Missouri	1,427	36	1,262	31	1,129	27	1,407	31
Montana	229	38	228	34	309	44	304	40
Nebraska	454	38	317	26	327	26	329	24
Nevada	244	27	199	16	231	16	311	16
New Hampshire	358	41	273	31	334	35	337	32
New Jersey	1,566	26	1,186	19	1,181	19	965	14
New Mexico	351	31	229	18	372	28	352	23
New York	3,193	23	2,041	15	2,525	18	2,282	15
North Carolina	1,516	30	1,376	25	1,054	18	1,289	19
North Dakota	151	32	79	16	82	17	70	14
Ohio	2,743	33	2,023	24	1,797	21	2,330	26
Oklahoma	838	35	571	23	689	27	739	27
Oregon	851	38	752	30	933	35	821	28
Pennsylvania	3,076	33	2,468	27	2,470	27	2,480	25
Rhode Island	266	34	183	24	147	19	216	26
South Carolina	543	21	593	21	632	21	649	20
South Dakota	163	31	116	21	190	34	198	33
Tennessee	1,168	31	957	23	1,097	25	1,469	31
Texas	2,832	23	2,709	19	2,227	14	2,450	14
Utah	370	32	297	21	421	27	388	21
Vermont	220	49	173	38	209	44	191	38
Virginia	1,422	30	1,498	29	1,569	29	1,402	24
Washington	1,600	43	1,232	29	1,629	36	1,546	31
West Virginia	401	28	291	20	355	25	268	18
Wisconsin	1,643	44	1,333	34	1,677	41	1,144	26
Wyoming	128	37	108	30	131	35	125	31

Note: The 1991–2006 Surveys asked for birding information differently. The 1991 and 1996 Surveys had three questions that addressed the category of birding. They asked for participation in (1) birding around the home, (2) observing wildlife away from home, and (3) observing, photographing, and feeding (these three activities were lumped together; not asked individually) birds away from home. The 2001 and 2006 Surveys straightforwardly asked for participation in birding anywhere. To calculate the birding trend for 1991 and 1996 it was assumed that if (a) the wildlife watcher said he/she observed wildlife away from home and, (b), observed, photographed, or fed birds away from home, they observed birds away from home. Then those 1991–1996 wildlife watchers who birded around the home and/or birded away from home were aggregated into a birders total.

Appendix Table 8. Trend in Wildlife Watching by Total Birders, by State Where Activity Took Place

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

	1991 <i>Participants</i>	1996 <i>Participants</i>	2001 <i>Participants</i>	2006 <i>Participants</i>	1991–2006 <i>Percent Change</i>	2001–2006 <i>Percent Change</i>
U.S. Total	56,307	45,991	45,951	47,693	-15	4
Alabama	1,002	705	703	828	-17	18
Alaska	269	388	321	429	59	34
Arizona	1,065	1,007	1,168	1,038	-3	-11
Arkansas	721	490	548	764	6	39
California	5,388	4,520	3,987	4,493	-17	13
Colorado	1,185	1,231	1,077	1,229	4	14
Connecticut	842	605	732	857	2	17
Delaware	205	192	172	189	-8	10
Florida	3,778	2,809	2,363	3,101	-18	31
Georgia	1,338	1,193	1,063	1,210	-10	14
Hawaii	330	259	164	205	-38	25
Idaho	410	326	478	557	36	17
Illinois	2,532	2,459	1,815	1,784	-30	-2
Indiana	1,563	1,321	1,423	1,345	-14	-5
Iowa	861	787	813	842	-2	4
Kansas	667	481	569	493	-26	-13
Kentucky	905	756	803	1,041	15	30
Louisiana	805	641	608	552	-31	-9
Maine	724	588	595	622	-14	5
Maryland	1,293	1,170	1,068	980	-24	-8
Massachusetts	1,621	1,442	1,263	1,377	-15	9
Michigan	2,684	2,150	1,961	1,997	-26	2
Minnesota	1,764	1,111	1,471	1,448	-18	-2
Mississippi	587	347	437	535	-9	22
Missouri	1,647	1,485	1,299	1,576	-4	21
Montana	471	404	558	571	21	2
Nebraska	505	333	386	364	-28	-6
Nevada	409	322	343	518	27	51
New Hampshire	573	497	569	548	-4	-4
New Jersey	1,728	1,265	1,335	1,132	-34	-15
New Mexico	483	404	531	641	33	21
New York	3,449	2,154	2,802	2,517	-27	-10
North Carolina	1,802	1,691	1,296	1,586	-12	22
North Dakota	176	88	134	83	-53	-38
Ohio	2,805	2,079	1,899	2,405	-14	27
Oklahoma	920	630	760	765	-17	1
Oregon	1,157	1,034	1,187	1,046	-10	-12
Pennsylvania	3,408	2,690	2,721	2,669	-22	-2
Rhode Island	308	255	193	297	-4	54
South Carolina	713	729	742	809	13	9
South Dakota	225	289	271	283	26	4
Tennessee	1,375	1,179	1,420	1,838	34	29
Texas	2,963	2,848	2,268	2,476	-16	9
Utah	446	456	616	639	43	4
Vermont	390	294	383	364	-7	-5
Virginia	1,665	1,689	1,818	1,572	-6	-14
Washington	1,761	1,440	1,877	1,853	5	-1
West Virginia	595	475	428	398	-33	-7
Wisconsin	1,901	1,680	1,944	1,454	-24	-25
Wyoming	338	440	388	448	33	15

Note: See Appendix Table 7 footnote for an explanation of the derivation of these estimates.

Appendix Table 9. Trend in Wildlife Watching by Total Mammal Observers, by State Where Activity Took Place

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

	<i>1991 Participants</i>	<i>1996 Participants</i>	<i>2001 Participants</i>	<i>2006 Participants</i>	<i>1991–2006 Percent Change</i>	<i>2001–2006 Percent Change</i>
U.S. Total	45,164	43,168	40,193	41,936	-7	4
Alabama	792	665	567	680	-14	20
Alaska	273	370	300	368	35	23
Arizona	763	818	845	842	10	-0
Arkansas	635	522	443	655	3	48
California	3,992	3,840	3,080	3,646	-9	18
Colorado	1,222	1,318	1,130	1,184	-3	5
Connecticut	605	549	605	738	22	22
Delaware	142	160	131	155	9	18
Florida	2,628	2,388	1,702	2,328	-11	37
Georgia	977	1,203	859	1,174	20	37
Hawaii	160	155	83	64	-60	-23
Idaho	370	379	428	506	37	18
Illinois	2,082	2,315	1,611	1,348	-35	-16
Indiana	1,348	1,190	1,222	1,157	-14	-5
Iowa	710	748	685	794	12	16
Kansas	532	490	532	436	-18	-18
Kentucky	758	787	731	950	25	30
Louisiana	708	600	519	479	-32	-8
Maine	565	582	457	508	-10	11
Maryland	987	1,067	943	872	-12	-8
Massachusetts	1,195	1,156	984	1,177	-2	20
Michigan	2,226	2,114	1,675	1,882	-15	12
Minnesota	1,416	1,040	1,199	1,260	-11	5
Mississippi	491	317	360	454	-8	26
Missouri	1,408	1,350	1,226	1,411	0	15
Montana	503	447	567	625	24	10
Nebraska	400	303	325	333	-17	2
Nevada	311	252	256	393	26	54
New Hampshire	514	409	540	466	-9	-14
New Jersey	1,231	1,131	1,123	900	-27	-20
New Mexico	375	388	421	490	31	16
New York	2,873	2,058	2,460	2,111	-27	-14
North Carolina	1,296	1,546	1,057	1,288	-1	22
North Dakota	157	98	116	59	-62	-49
Ohio	2,073	2,003	1,696	2,184	5	29
Oklahoma	685	622	699	700	2	0
Oregon	884	975	1,067	976	10	-9
Pennsylvania	2,863	2,627	2,375	2,484	-13	5
Rhode Island	229	204	139	251	10	81
South Carolina	475	637	508	612	29	20
South Dakota	222	332	256	298	34	16
Tennessee	1,259	1,156	1,301	1,610	28	24
Texas	2,314	2,549	1,809	2,180	-6	21
Utah	380	455	551	512	35	-7
Vermont	329	287	339	320	-3	-6
Virginia	1,424	1,669	1,650	1,277	-10	-23
Washington	1,551	1,329	1,645	1,447	-7	-12
West Virginia	602	483	407	395	-34	-3
Wisconsin	1,604	1,608	1,773	1,305	-19	-26
Wyoming	439	580	419	488	11	16

Appendix Table 10. Trend in State Resident Large Mammal Observers 1996–2006

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

	<i>1996 Participants</i>	<i>Percent of Population</i>	<i>2001 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	24,900	12	24,853	12	27,869	12
Alabama	297	9	315	9	427	12
Alaska	142	33	128	28	127	25
Arizona	261	8	297	8	334	7
Arkansas	279	15	249	12	402	19
California	2,187	9	1,524	6	1,848	7
Colorado	684	23	570	18	623	17
Connecticut	338	13	423	17	540	20
Delaware	79	14	53	9	64	10
Florida	579	5	744	6	820	6
Georgia	581	10	455	7	663	10
Hawaii	19	2	14	2	21	2
Idaho	155	18	184	19	224	20
Illinois	1,281	14	861	9	827	8
Indiana	705	16	790	17	758	16
Iowa	452	21	417	19	499	21
Kansas	308	16	301	15	203	10
Kentucky	466	16	449	14	593	18
Louisiana	174	5	195	6	206	6
Maine	252	26	223	22	302	28
Maryland	536	14	549	13	553	13
Massachusetts	515	11	549	11	575	11
Michigan	1,298	18	890	12	1,134	15
Minnesota	624	18	869	24	866	22
Mississippi	147	7	194	9	259	12
Missouri	761	19	693	16	898	20
Montana	202	30	265	38	272	36
Nebraska	154	13	135	11	170	13
Nevada	95	8	88	6	112	6
New Hampshire	168	19	197	21	225	22
New Jersey	682	11	616	10	514	8
New Mexico	132	10	137	10	150	10
New York	1,179	8	1,561	11	1,409	9
North Carolina	686	12	434	7	760	11
North Dakota	49	10	56	12	46	9
Ohio	1,260	15	946	11	1,701	19
Oklahoma	300	12	355	14	484	18
Oregon	325	13	567	22	546	19
Pennsylvania	1,458	16	1,677	18	1,657	17
Rhode Island	54	7	49	6	103	12
South Carolina	261	9	276	9	298	9
South Dakota	90	17	121	22	125	21
Tennessee	518	13	637	15	873	19
Texas	966	7	999	6	1,522	9
Utah	210	15	360	23	252	14
Vermont	137	30	183	38	138	27
Virginia	854	17	759	14	731	12
Washington	798	19	1,006	22	776	16
West Virginia	228	16	305	21	275	19
Wisconsin	802	21	1,051	26	817	19
Wyoming	104	28	123	33	120	30

Note: The 1991 Survey did not have mammals categorized as large and small.

Appendix Table 11. Trend in State Resident Small Mammal Observers 1996–2006

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

	<i>1996 Participants</i>	<i>Percent of Population</i>	<i>2001 Participants</i>	<i>Percent of Population</i>	<i>2006 Participants</i>	<i>Percent of Population</i>
U.S. Total	40,839	20	37,215	18	38,283	17
Alabama	596	18	511	15	501	14
Alaska	120	28	114	25	122	24
Arizona	501	15	551	15	588	13
Arkansas	372	19	405	20	537	25
California	3,715	16	2,737	11	3,030	11
Colorado	834	28	751	23	819	23
Connecticut	487	19	532	21	697	25
Delaware	131	23	98	16	98	15
Florida	2,069	18	1,459	12	1,913	13
Georgia	1,049	19	725	12	960	14
Hawaii	31	3	36	4	27	3
Idaho	214	24	192	20	248	23
Illinois	2,137	24	1,434	16	1,195	12
Indiana	1,088	24	1,127	25	917	19
Iowa	588	27	626	28	670	29
Kansas	421	22	442	22	399	19
Kentucky	622	21	607	19	776	24
Louisiana	590	18	461	14	432	13
Maine	338	35	289	29	359	33
Maryland	852	22	784	19	684	16
Massachusetts	1,014	21	856	18	1,068	21
Michigan	1,911	26	1,445	19	1,544	20
Minnesota	817	24	992	27	1,109	28
Mississippi	271	13	336	16	275	12
Missouri	1,136	28	1,003	24	1,215	27
Montana	201	30	227	32	250	33
Nebraska	294	24	279	22	273	20
Nevada	135	11	148	10	179	9
New Hampshire	273	31	295	31	303	29
New Jersey	1,055	17	980	16	772	11
New Mexico	186	15	250	19	238	16
New York	1,777	13	2,012	14	1,807	12
North Carolina	1,258	22	885	15	1,019	15
North Dakota	74	15	67	14	45	9
Ohio	1,912	22	1,590	18	1,908	21
Oklahoma	517	21	617	24	642	23
Oregon	652	26	764	29	656	23
Pennsylvania	2,265	24	2,041	22	2,007	20
Rhode Island	156	21	120	16	172	20
South Carolina	508	18	457	15	472	14
South Dakota	100	18	144	26	171	28
Tennessee	876	21	929	22	1,151	24
Texas	2,263	16	1,767	11	1,984	12
Utah	231	17	324	21	227	13
Vermont	137	30	196	41	182	36
Virginia	1,347	26	1,349	25	1,011	17
Washington	1,054	25	1,337	30	1,153	23
West Virginia	259	18	309	21	254	17
Wisconsin	1,210	31	1,421	35	1,054	24
Wyoming	114	31	121	32	116	29

Note: The 1991 Survey did not have mammals categorized as large and small.

Appendix Table 12. Trend in State Resident Other Animal Observers 1991–2006

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

	1991 Participants	Percent of Population	1996 Participants	Percent of Population	2001 Participants	Percent of Population	2006 Participants	Percent of Population
U.S. Total	32,285	17	30,502	15	23,761	11	27,055	12
Alabama	431	14	379	11	329	10	461	13
Alaska	125	34	104	24	113	25	73	15
Arizona	532	20	521	16	469	13	481	10
Arkansas	367	20	278	15	204	10	264	12
California	2,989	13	3,225	14	2,071	8	2,890	11
Colorado	475	19	687	23	528	16	527	15
Connecticut	443	18	313	12	326	13	451	16
Delaware	102	19	100	18	61	10	53	8
Florida	2,374	23	1,927	17	1,278	11	2,013	14
Georgia	504	10	854	15	412	7	772	11
Hawaii	91	11	76	8	59	6	76	7
Idaho	190	25	165	19	144	15	191	17
Illinois	1,219	14	1,450	16	785	8	867	9
Indiana	739	17	739	17	558	12	713	15
Iowa	377	17	380	17	358	16	430	18
Kansas	301	16	297	16	294	15	261	12
Kentucky	442	16	441	15	342	11	517	16
Louisiana	464	15	441	14	283	9	318	9
Maine	221	23	207	21	175	17	263	24
Maryland	645	18	630	16	583	14	485	11
Massachusetts	952	21	739	16	573	12	707	14
Michigan	1,402	20	1,235	17	867	11	888	11
Minnesota	774	23	530	15	596	16	503	13
Mississippi	292	15	196	10	156	7	214	10
Missouri	736	19	690	17	603	14	725	16
Montana	130	22	169	25	179	26	144	19
Nebraska	210	17	190	15	148	12	156	11
Nevada	157	17	146	12	134	9	146	8
New Hampshire	211	24	208	23	187	20	203	19
New Jersey	960	16	701	11	644	10	577	9
New Mexico	224	20	166	13	204	15	230	15
New York	1,796	13	1,335	10	1,206	8	1,167	8
North Carolina	729	14	989	18	456	8	556	8
North Dakota	55	12	37	8	28	6	25	5
Ohio	1,548	19	1,306	15	987	11	1,197	13
Oklahoma	441	18	382	15	379	15	424	15
Oregon	463	21	450	18	611	23	405	14
Pennsylvania	1,905	20	1,943	21	1,242	13	1,267	13
Rhode Island	141	18	119	16	68	9	148	18
South Carolina	252	10	409	14	321	10	369	11
South Dakota	65	12	70	13	79	14	77	13
Tennessee	695	18	624	15	458	11	731	16
Texas	1,667	13	1,648	12	962	6	1,398	8
Utah	193	17	209	15	260	17	165	9
Vermont	121	27	105	23	146	30	141	28
Virginia	847	18	1,022	20	808	15	680	12
Washington	1,036	28	823	20	1,089	24	826	17
West Virginia	237	17	156	11	167	12	176	12
Wisconsin	883	24	603	15	715	18	562	13
Wyoming	80	23	80	22	91	24	82	20

Note: "Other animals" include fish, marine mammals, reptiles, and insects.

Appendix Table 13. Trend in Wildlife Watching by Large Mammal Observers 1996–2006, by State Where Activity Took Place

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

	<i>1996 Participants</i>	<i>2001 Participants</i>	<i>2006 Participants</i>	<i>1996–2006 Percent Change</i>	<i>2001–2006 Percent Change</i>
U.S. Total	24,900	24,853	27,869	12	12
Alabama	330	318	481	46	51
Alaska	367	287	337	-8	17
Arizona	427	483	471	10	-2
Arkansas	357	248	436	22	76
California	2,019	1,538	2,044	1	33
Colorado	1,018	797	868	-15	9
Connecticut	350	454	526	50	16
Delaware	67	59	80	19	36
Florida	657	684	884	35	29
Georgia	582	496	734	26	48
Hawaii	13	25	15	15	-40
Idaho	264	331	405	53	22
Illinois	1,175	814	790	-33	-3
Indiana	736	797	782	6	-2
Iowa	469	434	531	13	22
Kansas	296	337	213	-28	-37
Kentucky	513	505	668	30	32
Louisiana	116	196	207	78	6
Maine	403	310	374	-7	21
Maryland	618	571	597	-3	5
Massachusetts	537	552	570	6	3
Michigan	1,336	1,012	1,216	-9	20
Minnesota	623	922	889	43	-4
Mississippi	165	201	337	104	68
Missouri	849	800	937	10	17
Montana	396	527	581	47	10
Nebraska	139	147	172	24	17
Nevada	143	191	193	35	1
New Hampshire	249	371	321	29	-13
New Jersey	688	623	557	-19	-11
New Mexico	280	236	333	19	41
New York	1,258	1,684	1,465	16	-13
North Carolina	816	531	873	7	64
North Dakota	65	86	51	-22	-41
Ohio	1,232	944	1,678	36	78
Oklahoma	351	373	467	33	25
Oregon	480	677	692	44	2
Pennsylvania	1,711	1,810	1,813	6	0
Rhode Island	50	48	130	160	171
South Carolina	318	271	373	17	38
South Dakota	285	197	235	-18	19
Tennessee	667	870	1,140	71	31
Texas	1,058	850	1,473	39	73
Utah	389	484	434	12	-10
Vermont	219	293	236	8	-19
Virginia	951	955	814	-14	-15
Washington	917	1,012	870	-5	-14
West Virginia	417	336	385	-8	15
Wisconsin	1,026	1,236	1,022	-0	-17
Wyoming	521	377	462	-11	23

Note: The 1991 Survey did not have mammals categorized as large and small.

Appendix Table 14. Trend in Wildlife Watching by Small Mammal Observers 1996–2006, by State Where Activity Took Place

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

	<i>1996 Participants</i>	<i>2001 Participants</i>	<i>2006 Participants</i>	<i>1996–2006 Percent Change</i>	<i>2001–2006 Percent Change</i>
U.S. Total	40,839	37,215	38,283	-6	3
Alabama	645	523	579	-10	11
Alaska	280	218	261	-7	20
Arizona	778	803	791	2	-1
Arkansas	451	424	585	30	38
California	3,743	2,846	3,381	-10	19
Colorado	1,192	957	1,074	-10	12
Connecticut	527	567	701	33	24
Delaware	156	126	142	-9	13
Florida	2,326	1,633	2,195	-6	34
Georgia	1,113	802	1,058	-5	32
Hawaii	149	77	58	-61	-25
Idaho	301	314	403	34	28
Illinois	2,125	1,466	1,228	-42	-16
Indiana	1,157	1,172	1,007	-13	-14
Iowa	695	632	693	-0	10
Kansas	454	492	404	-11	-18
Kentucky	710	669	867	22	30
Louisiana	596	505	450	-24	-11
Maine	531	431	472	-11	10
Maryland	1,010	877	806	-20	-8
Massachusetts	1,114	923	1,125	1	22
Michigan	2,015	1,601	1,705	-15	6
Minnesota	928	1,055	1,141	23	8
Mississippi	299	340	365	22	7
Missouri	1,281	1,140	1,298	1	14
Montana	378	442	420	11	-5
Nebraska	297	305	301	1	-1
Nevada	215	203	360	67	77
New Hampshire	375	416	424	13	2
New Jersey	1,084	1,059	857	-21	-19
New Mexico	357	395	473	32	20
New York	1,862	2,183	1,941	4	-11
North Carolina	1,482	970	1,172	-21	21
North Dakota	91	102	50	-45	-51
Ohio	1,938	1,645	1,919	-1	17
Oklahoma	584	662	660	13	-0
Oregon	909	952	847	-7	-11
Pennsylvania	2,485	2,223	2,184	-12	-2
Rhode Island	194	134	231	19	72
South Carolina	604	463	581	-4	25
South Dakota	299	222	269	-10	21
Tennessee	1,107	1,169	1,427	29	22
Texas	2,425	1,680	1,977	-18	18
Utah	422	448	427	1	-5
Vermont	251	298	306	22	3
Virginia	1,567	1,517	1,125	-28	-26
Washington	1,231	1,475	1,259	2	-15
West Virginia	365	363	343	-6	-6
Wisconsin	1,473	1,621	1,201	-18	-26
Wyoming	497	349	362	-27	4

Note: The 1991 Survey did not have mammals categorized as large and small.

Appendix Table 15. Trend in Wildlife Watching by Other Animal Observers 1991–2006, by State Where Activity Took Place

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

	1991 Participants	1996 Participants	2001 Participants	2006 Participants	1991–2006 Percent Change	2001–2006 Percent Change
U.S. Total	32,285	30,502	23,761	27,055	-16	14
Alabama	487	445	320	530	9	66
Alaska	211	368	262	308	46	18
Arizona	680	723	563	598	-12	6
Arkansas	477	367	223	319	-33	43
California	3,382	3,353	2,347	3,242	-4	38
Colorado	638	882	633	644	1	2
Connecticut	499	345	353	456	-9	29
Delaware	137	123	105	95	-31	-10
Florida	3,075	2,537	1,661	2,517	-18	52
Georgia	608	904	490	861	42	76
Hawaii	295	270	141	183	-38	30
Idaho	269	220	238	290	8	22
Illinois	1,173	1,384	762	875	-25	15
Indiana	809	743	564	753	-7	34
Iowa	387	457	362	447	16	23
Kansas	322	301	328	272	-16	-17
Kentucky	536	507	375	571	7	52
Louisiana	535	449	315	343	-36	9
Maine	450	426	304	354	-21	16
Maryland	770	801	682	532	-31	-22
Massachusetts	1,009	882	644	790	-22	23
Michigan	1,453	1,268	944	1,009	-31	7
Minnesota	842	624	649	549	-35	-15
Mississippi	349	251	171	272	-22	59
Missouri	900	822	681	778	-14	14
Montana	295	286	294	213	-28	-28
Nebraska	235	175	164	145	-38	-12
Nevada	335	209	161	249	-26	55
New Hampshire	359	300	301	280	-22	-7
New Jersey	1,014	746	716	681	-33	-5
New Mexico	345	258	313	359	4	15
New York	1,916	1,432	1,291	1,302	-32	1
North Carolina	912	1,236	564	688	-25	22
North Dakota	58	48	70	31	-47	-56
Ohio	1,530	1,339	1,013	1,208	-21	19
Oklahoma	483	434	410	429	-11	5
Oregon	624	664	796	561	-10	-30
Pennsylvania	1,985	2,168	1,326	1,358	-32	2
Rhode Island	168	160	98	207	23	111
South Carolina	398	522	372	486	22	31
South Dakota	100	173	118	114	14	-3
Tennessee	894	792	650	916	2	41
Texas	1,763	1,754	1,002	1,455	-17	45
Utah	238	336	350	275	16	-21
Vermont	202	187	227	234	16	3
Virginia	993	1,206	933	732	-26	-22
Washington	1,169	996	1,179	1,052	-10	-11
West Virginia	381	303	194	238	-38	23
Wisconsin	1,061	824	861	686	-35	-20
Wyoming	242	322	243	183	-24	-25

Note: "Other animals" include fish, marine mammals, reptiles, and insects.

Appendix Table 16. Trend in Away-From-Home Wildlife Watching Days 1991–2006, by State Where Activity Took Place

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

	1991 Days	Average Days	1996 Days	Average Days	2001 Days	Average Days	2006 Days	Average Days	Percent Change	91–06	Percent Change	01–06
U.S. Total	342,406	11	313,790	13	372,006	17	352,070	15	3	3	5	
Alabama	3,286	7	3,105	9	3,643	13	7,292	15	122	15	100	
Alaska	3,745	11	5,689	14	3,892	13	4,126	12	4,126	10	6	
Arizona	5,922	7	9,447	13	4,584	7	5,281	8	5,281	-11	15	
Arkansas	3,202	7	4,589	14	1,562	7	4,148	10	4,148	30	166	
California	42,353	11	24,587	10	23,807	10	45,010	16	45,010	6	89	
Colorado	9,037	8	11,328	11	9,510	11	9,404	11	9,404	4	-1	
Connecticut	4,098	10	1,887	7	7,241	26	4,184	16	4,184	2	-42	
Delaware	835	7	958	9	722	8	855	8	855	2	18	
Florida	17,786	7	14,658	8	21,388	14	16,551	11	16,551	-7	-23	
Georgia	4,536	8	5,108	8	4,868	12	4,097	9	4,097	-10	-16	
Hawaii	2,608	8	2,407	9	1,718	12	1,109	7	1,109	-57	-35	
Idaho	3,439	9	2,107	7	3,610	8	5,165	10	5,165	50	43	
Illinois	8,464	8	9,416	8	7,656	12	5,686	7	5,686	-33	-26	
Indiana	7,135	10	5,912	10	11,999	25	24,013	32	24,013	237	100	
Iowa	4,415	10	4,816	10	6,393	21	4,013	10	4,013	-9	-37	
Kansas	2,248	6	2,960	12	2,416	8	3,244	13	3,244	44	34	
Kentucky	4,636	8	5,811	13	5,689	15	4,155	7	4,155	-10	-27	
Louisiana	2,603	7	2,713	10	2,432	8	3,199	14	3,199	23	32	
Maine	4,502	7	2,942	6	4,981	12	4,778	12	4,778	6	-4	
Maryland	6,580	10	5,717	9	6,809	13	4,782	11	4,782	-27	-30	
Massachusetts	8,222	8	9,193	11	10,198	19	8,461	13	8,461	3	-17	
Michigan	14,159	9	16,162	14	13,999	16	10,043	10	10,043	-29	-28	
Minnesota	10,378	11	6,807	11	13,234	21	8,040	13	8,040	-23	-39	
Mississippi	2,584	9	1,914	12	3,288	25	1,302	5	1,302	-50	-60	
Missouri	7,019	7	8,598	11	12,448	17	14,757	18	14,757	110	19	
Montana	4,317	8	2,697	7	4,612	9	3,081	6	3,081	-29	-33	
Nebraska	1,813	7	1,866	9	2,240	12	906	5	906	-50	-60	
Nevada	2,940	7	1,394	5	1,567	5	2,298	6	2,298	-22	47	
New Hampshire	3,337	7	4,191	10	3,178	7	3,165	9	3,165	-5	-9	
New Jersey	5,472	7	7,363	12	9,873	14	7,965	13	7,965	46	-19	
New Mexico	3,272	8	3,326	8	6,381	16	5,429	11	5,429	66	-15	
New York	12,729	7	9,457	8	21,583	16	13,521	10	13,521	6	-37	
North Carolina	6,737	8	10,334	11	5,947	10	4,868	7	4,868	-28	-18	
North Dakota	698	7	411	7	523	6	264	7	264	-62	-50	
Ohio	12,769	9	11,418	12	19,814	22	7,816	7	7,816	-39	-61	
Oklahoma	4,043	8	5,129	15	4,058	10	7,098	19	7,098	76	75	
Oregon	7,038	8	6,579	9	8,517	9	8,162	12	8,162	16	-4	
Pennsylvania	20,062	10	13,123	8	18,990	15	11,972	10	11,972	-40	-37	
Rhode Island	1,204	8	1,202	9	1,414	14	2,948	15	2,948	145	108	
South Carolina	3,421	9	3,791	9	4,616	14	4,759	11	4,759	39	3	
South Dakota	1,552	7	2,338	7	1,923	11	1,382	5	1,382	-11	-28	
Tennessee	7,445	8	4,452	7	6,144	9	15,486	15	15,486	108	152	
Texas	15,544	10	14,838	10	7,711	8	13,120	14	13,120	-16	70	
Utah	2,985	7	2,802	6	4,414	8	3,927	8	3,927	32	-11	
Vermont	2,364	8	2,340	9	3,717	12	2,459	9	2,459	4	-34	
Virginia	7,144	7	5,422	6	8,906	12	5,745	8	5,745	-20	-35	
Washington	11,470	11	12,418	15	11,256	11	9,104	9	9,104	-21	-19	
West Virginia	3,584	8	2,452	7	2,619	12	4,005	14	4,005	12	53	
Wisconsin	12,914	10	12,154	12	16,499	16	5,547	8	5,547	-57	-66	
Wyoming	3,526	6	2,875	5	3,924	9	3,009	6	3,009	-15	-23	

Appendix Table 17. Trend in Overall Wildlife Watching Expenditures 1991–2006, by State of Residence

(Numbers in thousands. Population 16 years old and older. 2006 dollars.)

	1991	1996	91–96	2001	96–01	91–01	2006	01–06	96–06	91–06
	Expenditures	Expenditures	Percent Change	Expenditures	Percent Change	Percent Change	Expenditures	Percent Change	Percent Change	Percent Change
U.S. Total	27,367,673	33,048,021	21	35,002,529	6	28	35,589,664	2	8	30
Alabama	272,172	320,157	18	545,439	70	100	452,751	-17	41	66
Alaska	214,505	292,465	36	108,437	-63	-49	121,100	12	-59	-44
Arizona	482,702	823,970	71	1,073,160	30	122	646,824	-40	-21	34
Arkansas	293,777	200,329	-32	314,680	57	7	424,572	35	112	45
California	3,886,289	3,411,532	-12	2,545,267	-25	-35	4,179,052	64	22	8
Colorado	563,544	770,459	37	403,364	-48	-28	726,094	80	-6	29
Connecticut	425,481	563,186	32	255,919	-55	-40	528,175	106	-6	24
Delaware	57,592	72,589	26	44,471	-23	-23	116,246	161	60	102
Florida	1,804,225	1,800,550	-0	1,531,856	-15	-15	1,924,656	26	7	7
Georgia	294,032	736,326	150	352,937	-52	20	1,025,224	190	39	249
Hawaii	78,600	86,846	10	73,200	-16	-7	54,153	-26	-38	-31
Idaho	103,767	152,386	47	190,590	25	84	132,533	-30	-13	28
Illinois	976,895	1,566,908	60	806,021	-49	-17	1,233,636	53	-21	26
Indiana	396,805	404,111	2	514,200	27	30	776,535	51	92	96
Iowa	191,673	298,361	56	263,186	-12	37	345,531	31	16	80
Kansas	140,964	179,116	27	192,946	8	37	192,349	-0	7	36
Kentucky	291,897	431,735	48	605,400	40	107	557,310	-8	29	91
Louisiana	331,889	309,806	-7	193,959	-37	-42	324,093	67	5	-2
Maine	166,077	120,007	-28	229,460	91	38	349,344	52	191	110
Maryland	421,765	893,545	112	819,592	-8	94	661,697	-19	-26	57
Massachusetts	735,039	879,453	20	496,440	-44	-32	831,838	68	-5	13
Michigan	1,346,586	1,474,918	10	784,502	-47	-42	1,379,914	76	-6	2
Minnesota	555,752	504,719	-9	586,977	16	6	864,537	47	71	56
Mississippi	355,115	221,533	-38	243,213	10	-32	189,367	-22	-15	-47
Missouri	657,408	450,343	-31	457,944	2	-30	778,453	70	73	18
Montana	153,424	148,410	-3	282,252	90	84	121,389	-57	-18	-21
Nebraska	127,810	149,398	17	139,814	-6	9	165,982	19	11	30
Nevada	282,047	291,959	4	319,171	9	13	424,655	33	45	51
New Hampshire	178,349	142,702	-20	139,695	-2	-22	121,978	-13	-15	-32
New Jersey	690,946	1,407,123	104	1,008,413	-28	46	556,633	-45	-60	-19
New Mexico	316,756	388,971	23	449,213	15	42	172,567	-62	-56	-46
New York	1,697,592	1,685,638	-1	1,686,152	0	-1	1,459,556	-13	-13	-14
North Carolina	409,225	682,476	67	608,927	-11	49	951,905	56	39	133
North Dakota	26,891	28,362	5	27,651	-3	3	27,181	-2	-4	1
Ohio	841,726	656,530	-22	852,891	30	1	1,055,844	24	61	25
Oklahoma	343,490	301,076	-12	181,008	-40	-47	449,365	148	49	31
Oregon	562,190	751,330	34	531,510	-29	-5	679,964	28	-9	21
Pennsylvania	1,700,120	1,174,024	-31	1,313,860	12	-23	1,417,651	8	21	-17
Rhode Island	100,606	172,524	71	42,374	-75	-58	104,248	146	-40	4
South Carolina	127,351	314,146	147	257,235	-18	102	343,758	34	9	170
South Dakota	58,978	63,652	8	55,456	-13	-6	96,169	73	51	63
Tennessee	1,304,649	1,351,188	4	1,716,628	27	32	2,735,172	59	102	110
Texas	253,708	173,476	-32	426,362	146	68	188,606	-56	9	-26
Utah	86,737	81,420	-6	116,911	44	35	79,675	-32	-2	-8
Virginia	568,106	944,735	66	736,261	-22	30	600,517	-18	-36	6
Washington	775,752	868,971	12	1,213,828	40	56	1,018,820	-16	17	31
West Virginia	99,545	97,204	-2	157,942	62	59	177,373	12	82	78
Wisconsin	736,564	711,362	-3	1,158,246	63	57	581,405	-50	-18	-21
Wyoming	77,394	76,384	-1	139,500	83	80	133,833	-4	75	73

Note: These estimates do not match those published in preceding USFWS reports, due to the manipulation required to make the estimates comparable.

Appendix Table 18. Trend in Trip-Related Wildlife Watching Expenditures 1991–2006, by State of Residence

(Numbers in thousands. Population 16 years old and older: 2006 dollars.)

	1991	1996	91–96	2001	96–01	91–01	2006	01–06	96–06	91–06
	Expenditures	Expenditures	Percent Change	Expenditures	Percent Change	Percent Change	Expenditures	Percent Change	Percent Change	Percent Change
U.S. Total	11,089,432	11,602,432	5	8,889,560	-23	-20	12,571,701	41	8	13
Alabama	109,087	73,634	-33	120,583	64	11	194,382	61	164	78
Alaska	72,654	127,632	76	52,279	-59	-28	64,995	24	-49	-11
Arizona	151,032	207,685	38	197,990	-5	31	297,710	50	43	97
Arkansas	66,494	57,702	-13	80,549	40	21	69,749	-13	21	5
California	1,715,913	1,872,984	9	986,167	-47	-43	2,197,444	123	17	28
Colorado	195,725	407,757	108	204,775	-50	5	293,172	43	-28	50
Connecticut	140,208	267,981	91	86,004	-68	-39	239,382	178	-11	71
Delaware	23,288	32,804	41	13,310	-59	-43	12,456	-6	-62	-47
Florida	824,534	562,837	-32	527,037	-6	-36	432,603	-18	-23	-48
Georgia	158,002	310,839	97	193,613	-38	23	283,211	46	-9	79
Hawaii	48,967	52,215	7	36,269	-31	-26	29,981	-17	-43	-39
Idaho	58,632	67,882	16	65,868	-3	12	84,643	29	25	44
Illinois	645,343	850,396	32	286,394	-66	-56	427,164	49	-50	-34
Indiana	177,646	115,660	-35	157,354	36	-11	205,928	31	78	16
Iowa	90,667	121,247	34	85,356	-30	-6	102,694	20	-15	13
Kansas	67,828	69,075	2	91,757	33	35	90,546	-1	31	33
Kentucky	88,825	96,304	8	105,994	10	19	163,000	54	69	84
Louisiana	89,925	142,579	59	54,572	-62	-39	117,518	115	-18	31
Maine	58,776	35,546	-40	50,303	42	-14	103,117	105	190	75
Maryland	175,224	418,201	139	214,720	-49	23	94,615	-56	-77	-46
Massachusetts	321,015	325,301	1	164,613	-49	-49	249,554	51	-24	-23
Michigan	444,859	499,808	12	373,280	-25	-16	518,651	39	4	17
Minnesota	269,551	194,950	-28	134,063	-31	-50	451,906	237	132	68
Mississippi	86,789	62,138	-28	35,007	-44	-60	75,010	114	21	-14
Missouri	187,842	208,210	11	147,472	-29	-21	356,311	142	71	90
Montana	50,646	65,444	29	80,156	22	58	57,445	-28	-12	13
Nebraska	57,253	63,150	10	38,550	-39	-33	55,757	45	-12	-3
Nevada	108,336	79,597	-27	56,543	-29	-48	106,713	89	34	-1
New Hampshire	46,256	52,969	15	50,871	-4	10	60,359	19	14	30
New Jersey	311,865	565,662	81	253,705	-55	-19	194,354	-23	-66	-38
New Mexico	90,680	55,187	-39	79,196	44	-13	79,622	1	44	-12
New York	564,535	369,744	-35	385,030	4	-32	874,969	127	137	55
North Carolina	171,396	178,848	4	136,313	-24	-20	324,669	138	82	89
North Dakota	14,392	12,181	-15	7,749	-36	-46	8,282	7	-32	-42
Ohio	408,592	219,159	-46	303,797	39	-26	361,388	19	65	-12
Oklahoma	120,805	102,484	-15	42,641	-58	-65	288,668	577	182	139
Oregon	176,379	228,361	29	197,539	-13	12	175,053	-11	-23	-1
Pennsylvania	676,010	431,967	-36	504,037	17	-25	575,270	14	33	-15
Rhode Island	44,882	35,915	-20	11,259	-69	-75	42,447	277	18	-5
South Carolina	34,609	114,086	230	85,110	-25	146	142,782	68	25	313
South Dakota	28,257	19,320	-32	15,599	-19	-45	45,632	193	136	61
Tennessee	188,667	187,662	-1	130,154	-31	-31	236,536	82	26	25
Texas	627,209	664,578	6	740,175	11	18	869,859	18	31	39
Utah	87,213	68,574	-21	99,132	45	14	114,891	16	68	32
Vermont	30,030	29,899	-0	32,246	8	7	25,661	-20	-14	-15
Virginia	209,922	303,605	45	255,138	-16	22	150,312	-41	-50	-28
Washington	443,031	317,064	-28	484,102	53	9	290,789	-40	-8	-34
West Virginia	48,438	26,970	-44	68,555	154	42	83,475	22	210	72
Wisconsin	208,345	198,935	-5	299,670	51	44	187,757	-37	-6	-10
Wyoming	35,821	27,468	-23	29,309	7	-18	51,803	77	89	45

Note: These estimates do not match those published in preceding USFWS reports, due to the manipulation required to make the estimates comparable.

Appendix Table 19. Trend in Wildlife Watching Equipment Expenditures 1991–2006, by State of Residence

(Numbers in thousands. Population 16 years old and older: 2006 dollars.)

	1991	1996	91–96	2001	96–01	91–01	2006	01–06	96–06	91–06
	Expenditures	Expenditures	Percent Change	Expenditures	Percent Change	Percent Change	Expenditures	Percent Change	Percent Change	Percent Change
U.S. Total	16,279,241	21,445,589	32	26,112,969	22	60	23,011,963	-12	7	41
Alabama	163,085	246,523	51	424,876	72	161	258,369	-39	5	58
Alaska	141,852	164,823	16	56,157	-66	-60	56,105	-0	-66	-60
Arizona	331,669	616,285	86	875,171	42	164	349,114	-60	-43	5
Arkansas	227,282	142,627	-37	234,131	64	3	354,823	52	149	56
California	2,170,376	1,538,548	-29	1,559,099	1	-28	1,981,608	27	29	-9
Colorado	367,819	362,701	-1	198,589	-45	-46	432,922	118	19	18
Connecticut	285,273	295,205	3	169,915	-42	-40	288,793	70	-2	1
Delaware	34,304	39,786	16	31,162	-22	-9	103,790	233	161	203
Florida	979,691	1,237,712	26	1,004,819	-19	3	1,492,053	48	21	52
Georgia	136,030	425,487	213	159,324	-63	17	742,013	366	74	445
Hawaii	29,634	34,631	17	36,931	7	25	24,172	-35	-30	-18
Idaho	45,135	84,503	87	124,722	48	176	47,890	-62	-43	6
Illinois	331,552	716,512	116	519,627	57	57	806,472	55	13	143
Indiana	219,159	288,451	32	356,846	24	63	570,607	60	98	160
Iowa	101,006	177,114	75	177,829	0	76	242,837	37	37	140
Kansas	73,136	110,041	50	101,189	-8	38	101,803	1	-7	39
Kentucky	203,072	335,431	65	499,417	49	146	394,310	-21	18	94
Louisiana	241,964	167,227	-31	139,387	-17	-42	206,575	48	24	-15
Maine	107,301	84,460	-21	179,158	112	67	246,227	37	129	129
Maryland	246,540	475,344	93	604,872	27	145	567,082	-6	19	130
Massachusetts	414,024	554,152	34	331,828	-40	-20	583,284	76	5	41
Michigan	901,726	975,110	8	411,222	-58	-54	861,263	109	-12	-4
Minnesota	286,201	309,768	8	452,914	46	58	412,631	-9	33	44
Mississippi	268,326	159,395	-41	208,205	-22	-22	114,357	-45	-28	-57
Missouri	469,566	242,133	-48	310,473	28	-34	422,142	36	74	-10
Montana	102,778	82,966	-19	202,097	144	97	63,944	-68	-23	-38
Nebraska	70,558	86,248	22	101,264	17	44	110,225	9	28	56
Nevada	173,712	212,361	22	262,628	24	51	317,942	21	50	83
New Hampshire	132,092	89,734	-32	88,824	-1	-33	61,619	-31	-31	-53
New Jersey	379,081	841,461	122	754,709	-10	99	362,279	-52	-57	-4
New Mexico	226,067	333,783	48	370,017	11	64	92,945	-75	-72	-59
New York	1,133,057	1,315,894	16	1,301,121	-1	15	584,587	-55	-56	-48
North Carolina	237,828	503,628	112	472,613	-6	99	627,236	33	25	164
North Dakota	12,500	16,181	29	19,902	23	59	18,899	-5	17	51
Ohio	433,134	437,371	1	549,094	26	27	694,456	26	59	60
Oklahoma	222,685	198,592	-11	138,367	-30	-38	160,697	16	-19	-28
Oregon	385,812	522,969	36	333,971	-36	-13	504,911	51	-3	31
Pennsylvania	1,024,110	742,057	-28	809,822	9	-21	842,381	4	14	-18
Rhode Island	55,723	136,609	145	31,115	-77	-44	61,801	99	-55	11
South Carolina	92,741	200,061	116	172,124	-14	86	200,976	17	0	117
South Dakota	30,721	44,332	44	39,858	-10	30	50,537	27	14	65
Tennessee	260,038	258,669	-1	192,129	-26	-26	494,454	157	91	90
Texas	677,440	686,610	1	976,454	42	44	1,426,498	46	108	111
Utah	166,495	104,901	-37	327,230	212	97	73,715	-77	-30	-56
Vermont	56,707	51,521	-9	84,665	64	49	54,014	-36	5	-5
Virginia	358,184	641,131	79	481,123	-25	34	450,205	-6	-30	26
Washington	332,721	551,907	66	729,726	32	119	728,031	0	32	119
West Virginia	51,107	70,234	37	89,387	27	75	93,898	5	34	84
Wisconsin	528,219	512,427	-3	858,577	68	63	393,648	-54	-23	-25
Wyoming	41,572	48,915	18	110,191	125	165	82,030	-26	68	97

*Note: In addition to equipment, these estimates include expenditures for magazines, books, membership dues, contributions, and plantings.
Note: These estimates do not match those published in preceding USFWS reports, due to the manipulation required to make the estimates comparable.*

Appendix Table 20. Trend in Away-From-Home Wildlife Watching, by State Where Activity Took Place

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

	1991 Participants			1996 Participants			2001 Participants			2006 Participants			Percentage Changes		
	1991	1996	% Change	1991	1996	% Change	1991	1996	% Change	1991	2006	% Change	1991	1996	% Change
U.S. Total	29,999	23,652	-21	21,823	21,823	-8	27	22,977	-23	5	-3	5	01-06		
Alabama	450	336	-25	276	276	-18	-39	471	5	40	71				
Alaska	340	407	20	292	292	-28	-14	354	4	-13	21				
Arizona	820	745	-9	638	638	-14	-22	644	-21	-14	1				
Arkansas	467	327	-30	211	211	-35	-55	435	-7	33	106				
California	3,845	2,362	-39	2,270	2,270	-4	-41	2,894	-25	23	27				
Colorado	1,164	1,042	-10	838	838	-20	-28	873	-25	-16	4				
Connecticut	410	254	-38	279	279	10	-32	266	-35	5	-5				
Delaware	124	108	-13	96	96	-11	-23	109	-12	1	14				
Florida	2,387	1,846	-23	1,503	1,503	-19	-37	1,560	-35	4	4				
Georgia	551	639	16	411	411	-36	-25	438	-21	-31	7				
Hawaii	321	255	-21	141	141	-45	-56	154	-52	-40	9				
Idaho	382	305	-20	451	451	48	18	32	32	66	12				
Illinois	1,126	1,247	11	638	638	-49	-43	837	-26	-33	31				
Indiana	748	565	-24	474	474	-16	-37	755	1	34	59				
Iowa	426	310	-27	17	17	-38	-27	404	-5	-19	30				
Kansas	347	250	-28	297	297	19	-14	248	-29	-1	-16				
Kentucky	580	463	-20	385	385	-17	-34	572	-1	24	49				
Louisiana	368	260	-29	314	314	21	-15	225	-39	-13	-28				
Maine	605	454	-25	419	419	-8	-31	399	-34	-12	-5				
Maryland	663	662	-0	533	533	-19	-20	419	-37	-37	-21				
Massachusetts	1,002	834	-17	542	542	-35	-46	655	-35	-21	21				
Michigan	1,546	1,117	-28	884	884	-21	-43	1,034	-33	-7	17				
Minnesota	921	646	-30	634	634	-2	-31	641	-30	1	1				
Mississippi	295	162	-45	131	131	-19	-56	246	-17	52	88				
Missouri	956	791	-17	738	738	-7	-23	842	-12	6	14				
Montana	558	394	-29	511	511	30	-8	512	-8	30	0				
Nebraska	276	216	-22	186	186	-14	-33	176	-36	-19	-5				
Nevada	451	271	-40	309	309	14	-31	416	-8	54	35				
New Hampshire	475	420	-12	425	425	1	-11	347	-27	-17	-18				
New Jersey	839	612	-27	688	688	12	-18	615	-27	0	-11				
New Mexico	422	413	-2	387	387	-6	-8	507	20	23	31				
New York	1,717	1,173	-32	1,330	1,330	13	-23	1,293	-25	10	-3				
North Carolina	892	932	4	588	588	-37	-34	686	-23	-26	17				
North Dakota	104	63	-39	93	93	48	-11	39	-63	-38	-58				
Ohio	1,358	953	-30	898	898	-6	-34	1,055	-22	11	17				
Oklahoma	478	347	-27	403	403	16	-16	372	-22	7	-8				
Oregon	882	715	-19	910	910	27	3	675	-23	-6	-26				
Pennsylvania	2,070	1,559	-25	1,279	1,279	-18	-38	1,168	-44	-25	-9				
Rhode Island	153	139	-9	98	98	-29	-36	203	33	46	107				
South Carolina	380	408	7	331	331	-19	-13	447	18	10	35				
South Dakota	236	318	35	181	181	-43	-23	270	14	-15	49				
Tennessee	957	655	-32	683	683	4	-29	1,007	5	54	47				
Texas	1,613	1,439	-11	1,002	1,002	-30	-38	956	-41	-34	-5				
Utah	415	433	4	530	530	22	28	518	25	20	-2				
Vermont	303	249	-18	307	307	23	1	265	-13	6	-14				
Virginia	1,082	942	-13	772	772	-18	-29	728	-33	-23	-6				
Washington	1,058	850	-20	1,065	1,065	25	1	959	-9	13	-10				
West Virginia	461	372	-19	219	219	-41	-52	282	-39	-24	29				
Wisconsin	1,311	1,045	-20	1,000	1,000	-4	-24	685	-48	-34	-32				
Wyoming	552	583	6	416	416	-29	-25	521	-6	-11	25				

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