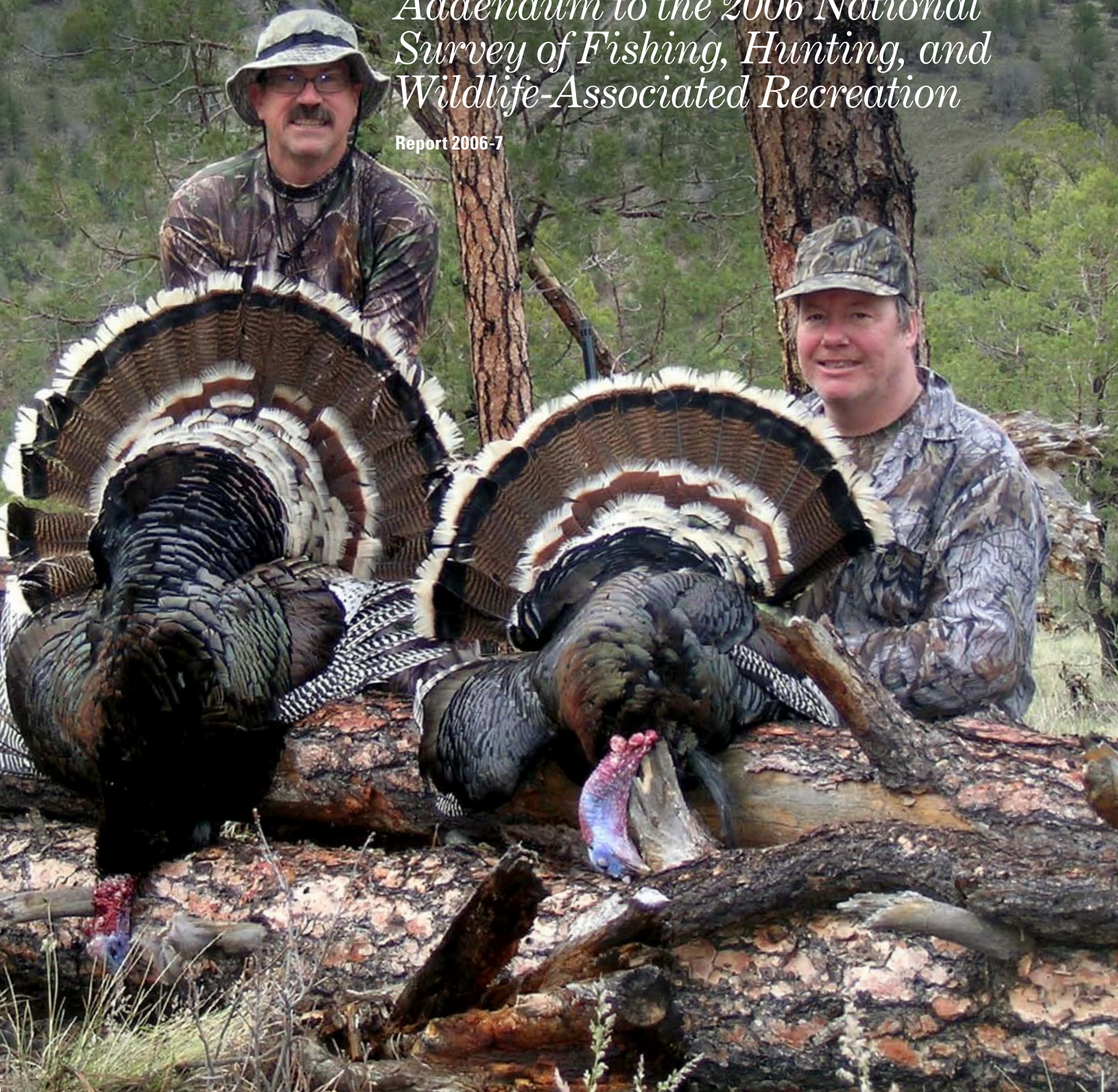


# Turkey Hunting in 2006: An Analysis of Hunter Demographics, Trends, and Economic Impacts

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

Report 2006-7







# Turkey Hunting in 2006: An Analysis of Hunter Demographics, Trends, and Economic Impacts

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

Report 2006-7



July 2010

Anna Harris  
Wildlife and Sport Fish Restoration Programs  
Division of Policy and Programs  
U.S. Fish and Wildlife Service  
Arlington, VA

*This report is intended to complement the National and State Reports for the  
2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation.*

# Acknowledgements

Thanks to Sylvia Cabrera and Richard Aiken who helped develop the analysis and provided editorial and organizational support of this effort as it worked its way to completion. Also thanks to Thomas McCoy whose comments and early review were most helpful.

Conversations with wild turkey hunters provided regional perspectives, advice, and encouragement—in particular many thanks to Wayne Doyle, Kansas Department of Wildlife and Parks; Bill Cline, Florida Fish and Wildlife Conservation Commission; and Mark Cousins, Colorado Division of Wildlife.

Perceptive criticisms were offered by Gordon Batcheller, New York State Department of Environmental Conservation; Corky Pugh, Alabama Department of Conservation and Natural Resources; Dr. Daniel Decker, Cornell University; Dr. Jonathan Gassett, Kentucky Department of Fish and Wildlife Resources; Andrew Laughland and James Caudill, U.S. Fish and Wildlife Service; Tom Allen, Southwick Associates; and Mike Schiavone, New York State Department of Environmental Conservation. Their assistance in interpretation of data and insights into hunter behavior were invaluable.

Special thanks to Stephen and Lori Robertson, Gypsy Hanks, and Brittany Petersen for providing impressive photos for this report.

Finally, thank you to Craig Matson—a good friend and avid hunter who gave me the opportunity to fulfill my newfound desire to hunt wild turkeys. Through his patience, knowledge of the land, and skills from years afield, I was able to experience first-hand the blood-pumping, adrenalin racing excitement I heard so many turkey hunters describe while writing this report.

While all of these people provided valuable assistance, the conclusions in this report are the author's and do not represent any official positions of the U.S. Fish and Wildlife Service, state agencies, or other affiliated parties.

# Contents

<b>Acknowledgements</b> .....	<b>2</b>
<b>Introduction</b> .....	<b>4</b>
<b>Hunting Participation</b> .....	<b>5</b>
<b>General Demographic Characteristics</b> .....	<b>8</b>
Population Density .....	8
Geographic Divisions .....	8
Age .....	8
Gender .....	8
Ethnicity and Race .....	8
Education .....	8
Income .....	8
<b>Land Ownership and Wildlife Watching Patterns</b> .....	<b>10</b>
Hunting Land Ownership and Leasing .....	10
Public and Private Land Hunting Days .....	11
Wildlife-Watching Patterns .....	11
<b>Trends</b> .....	<b>12</b>
Population Density: 1996–2006 .....	13
Hunting Land Leasing and Ownership: 1996–2006 .....	13
Geographic Division: 1996–2006 .....	13
Age: 1996–2006 .....	14
Gender: 1996–2006 .....	15
Education: 1996–2006 .....	15
Income: 1996–2006 .....	15
<b>The Economic Activity of Wild Turkey Hunters</b> .....	<b>16</b>
Expenditures and Effort .....	16
State-Level Economic Activity .....	18
<b>Summary</b> .....	<b>20</b>
<b>References</b> .....	<b>21</b>
<b>Appendix. Economic Multipliers</b> .....	<b>22</b>

## Tables

Table 1. All Hunters by Species Type .....	5
Table 2. Hunters by State Where Hunting Occurred .....	6
Table 3. Days of Hunting by State Where Hunting Occurred .....	7
Table 4. Selected Demographic Characteristics of the U.S. Population and Hunters .....	9
Table 5. Hunting Land Ownership and Leasing .....	10
Table 6. Private and Public Land Hunting Days .....	11
Table 7. Wildlife-Watching Patterns by Hunters .....	11
Table 8.a. Trends in Turkey Hunters' Demographics .....	13
Table 8.b. Trends in Turkey Hunters' Income .....	15
Table 9. Hunting by Type, Days and Expenditures .....	16
Table 10. Top 10 States Ranked by Retail Sales In-State .....	18
Table 11. Economic Impacts of Turkey Hunting—State and National Totals: 2006 .....	19
Table A-1. Deer and Turkey Hunting Expenditure Distribution by Category .....	22

## Figures

Figure 1. Trends for the U.S. Population and Hunters .....	12
Figure 2. Turkey Hunter Participation Rate in the U.S.: 1996–2006 .....	14
Figure 3. Turkey Hunting Expenditures by Major Category .....	17
Figure 4. Trip Expenditures for Turkey Hunting: 2006 .....	17

# Introduction

*For my own part I wish the Bald Eagle had not been chosen the Representative of our Country. He is a bird of bad moral character...For the truth the **turkey** is in comparison a much more respectable bird, and withal a true original Native of America...He is besides, though a little vane and silly, a **Bird of Courage**...*

~ Benjamin Franklin, 1784

In the early 1900s, faced with unregulated hunting and largely non-sustainable land management practices, wild turkeys in the United States were on the brink of extinction. Today, populations have rebounded to more than 7 million birds across North America thanks to the ambitious restoration efforts of state, federal, and nongovernmental conservation organizations (U.S. DOI, 2009). “The comeback of the wild turkey is arguably one of the greatest conservation success stories in our nation’s history,” said James Earl Kennamer, Ph.D., National Wild Turkey Federation Chief Conservation Officer. Because of these efforts, wild turkey hunting has become one of the fastest growing hunting activities in the U.S.

This report provides an analysis of wild turkey hunters using data from the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (Survey). The Survey has been conducted since 1955, and provides the most comprehensive database on fishing, hunting, and wildlife-related recreation in the U.S. This report offers information about the demographic characteristics of turkey hunters as well as land ownership and leasing behavior and how these aspects have changed over time. It also includes spending patterns and the economic activity supported by turkey hunting in the U.S. It is intended to be used as an informational tool by



NYDEC/Gordon Batcheller

resource managers, academics, product manufacturers, and other interested parties.

To help make this information more useful, this report often contrasts turkey hunters with all other types of hunters. These categories are mutually exclusive. For the “wild turkey” category, a hunter could have hunted another species but must have hunted turkey to be considered as such. The “all other” hunter category implies that a hunter hunted for anything **except** wild turkey.

All reported data contained herein are from the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation and all participation, dollar expenditures, and hunter demographics statistics are representative of 2006, unless otherwise specified. Additionally, all data represents persons age 16 years and older.<sup>1</sup>

<sup>1</sup> Survey documents are available on the U.S. Fish and Wildlife Service webpage: <http://wsfrprograms.fws.gov/Subpages/NationalSurvey/NatSurveyIndex.htm>.



# Hunting Participation

In 2006, 5% of the U.S. population (12.5 million people) 16 years old or older went hunting. Of these 12.5 million hunters, 21% (2.6 million) went wild turkey hunting, making turkey one of the most popular game species, second only to deer. Table 1 indicates that 80% of all hunters (10.1 million) participated in deer hunting, the most popular type of hunting. Squirrel and rabbit hunting ranked third with almost 2 million hunters apiece followed by several bird species at 1 to 1.6 million.

The final two columns of Table 1 provide additional information on the other hunting activities of turkey hunters. The third column labeled “Hunters who also Hunted Turkey” indicates the number of other game hunters pursuing turkeys. For example, this table indicates that there were 1.1 million duck hunters in the U.S., and 358 thousand of these duck hunters hunted wild turkey. The fourth column labeled “Percent Turkey Hunters” measures the proportion of other species hunters that hunt wild turkey. Following this example, the 358 thousand duck hunters who also hunt wild turkey represented 31% of all duck hunters.

The “Percent Turkey Hunters” column reveals that hunters who pursue other animals such as bear, woodchuck (“groundhog”), fox, and raccoon are likely to hunt turkey. Foxhunters are most likely to turkey hunt but the small sample size calls into question the reliability of this estimate. Fifty-eight percent of bear hunters also hunt turkeys. Twenty-three percent of deer hunters pursue turkey, while only 15% of elk hunters participate in turkey hunting. Thirty percent of migratory bird hunters (geese, ducks, and doves) also hunt turkey.

**Table 1. All Hunters by Species Type**

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

Type of Game	Number	Percent of All Hunters	Hunters who also Hunted Turkey	Percent Turkey Hunters
<b>All Hunting</b>	<b>12,510</b>	<b>100</b>	<b>2,569</b>	<b>21</b>
Total, big game	10,682	85	2,569	24
Deer	10,062	80	2,293	23
Elk	799	6	119	15
Bear	399	3	233	58
Turkey	2,569	21	2,569	100
Other big game	578	5	162	28
Total, all small game	4,797	38	1,321	28
Rabbit	1,923	15	727	38
Quail	1,046	8	318	30
Grouse	800	6	286	36
Squirrel	1,845	15	650	35
Pheasant	1,632	13	409	25
Other small game	325	3	*83	*26
Total, all migratory birds	2,293	18	692	30
Geese	700	6	239	34
Ducks	1,147	9	358	31
Doves	1,238	10	405	33
Other migratory birds	150	1	*29	*19
Total, all other animals	1,128	9	477	42
Groundhog	248	2	*128	*52
Raccoon	305	2	155	51
Fox	194	2	*130	*67
Coyote	665	5	334	50
Other animals	153	1	*30	*19

\*Estimate based on a sample size of 10–29. Use results with caution.

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

There is one additional question of interest with respect to the other species hunting as compared with the activity of turkey hunters. Given the 21% crossover rate of other species hunting with turkey hunting, one might be inclined to ask the

question: how many hunters seek turkey and nothing else? While it is not evident in Table 1, about 125 thousand or only 5% of wild turkey hunters pursue wild turkeys and nothing else.

Tables 2 and 3 contain state-by-state estimates of turkey hunting participation (number of hunters, percent of all hunters) and effort (total and average number of days, percent of all days), respectively. Fourteen states have sample sizes too small to report estimates on turkey hunting participation.

Pennsylvania has the most wild turkey hunters with 369 thousand. Along with Pennsylvania, Texas, New York, Wisconsin and Missouri rank as the top five states for participation in wild turkey hunting. Tennessee has the highest proportion (36%) of hunters pursuing turkey. Among other things, Table 2 reveals that turkey hunting is popular throughout the U.S. At least 16% of hunters in all but a few states hunt wild turkey, and five states had 30% or more of all hunters pursuing wild turkey.

**Table 2. Hunters by State Where Hunting Occurred**  
(Population 16 years of age or older. Numbers in thousands)

<i>State</i>	<i>Total, all Hunters</i>		<i>Wild Turkey Hunters</i>	
	<i>Number</i>	<i>Number</i>	<i>Percent</i>	
<b>US Total</b>	<b>12,510</b>	<b>2,569</b>	<b>21</b>	
Alabama	391	98	25	
Arkansas	354	86	24	
Arizona	159	...	...	
California	281	51	18	
Colorado	257	...	...	
Connecticut	38	...	...	
Delaware	42	...	...	
Florida	236	*82	*35	
Georgia	481	*79	*16	
Hawaii	18	...	...	
Iowa	251	51	20	
Idaho	187	*25	*13	
Illinois	316	*61	*19	
Indiana	272	*35	*13	
Kansas	271	51	19	
Kentucky	291	*76	*26	
Louisiana	268	*47	*18	
Massachusetts	73	*14	*19	
Maryland	160	*25	*16	
Maine	175	*21	*12	
Michigan	753	*81	*11	
Minnesota	532	...	...	
Missouri	606	155	26	
Mississippi	304	*67	*22	
Montana	197	...	...	
North Carolina	304	*75	*24	
North Dakota	128	...	...	
Nebraska	118	*22	*19	
New Hampshire	61	*13	*21	
New Jersey	89	*27	*30	
New Mexico	99	*23	*23	
Nevada	61	...	...	
New York	566	164	29	
Ohio	500	*96	*19	
Oklahoma	251	72	29	
Oregon	237	...	...	
Pennsylvania	1,044	369	35	
Rhode Island	14	...	...	
South Carolina	208	*64	*31	
South Dakota	171	*12	*7	
Tennessee	329	120	36	
Texas	1,099	182	17	
Utah	166	...	...	
Virginia	413	120	29	
Vermont	73	*15	*21	
Washington	180	...	...	
Wisconsin	697	159	23	
West Virginia	269	*73	*27	
Wyoming	102	...	...	

\*Estimate based on a sample size of 10–29. Use results with caution.  
... Sample size too small to report data reliably.



**Table 3. Days of Hunting by State Where Hunting Occurred**

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

State	<i>Total, All Hunting</i>		<i>Wild Turkey Hunting</i>	
	<i>Number</i>	<i>Number</i>	<i>Average Per Hunter</i>	<i>Percent</i>
<b>US Total</b>	<b>219,925</b>	<b>25,828</b>	<b>10</b>	<b>12</b>
Alabama	8,649	1,482	15	17
Arkansas	7,882	1,006	12	13
Arizona	1,509	...	...	...
California	3,374	144	3	4
Colorado	2,376	...	...	...
Connecticut	509	...	...	...
Delaware	654	...	...	...
Florida	3,769	*935	*11	*25
Georgia	8,228	*1173	*15	*14
Hawaii	420	...	...	...
Iowa	3,849	335	7	9
Idaho	2,117	*63	*3	*3
Illinois	4,688	*422	*7	*9
Indiana	4,808	*232	*7	*5
Kansas	3,017	323	6	11
Kentucky	5,429	*423	*6	*8
Louisiana	5,979	*552	*12	*9
Massachusetts	1,149	*54	*4	*5
Maryland	2,260	*89	*4	*4
Maine	2,283	*159	*8	*7
Michigan	11,905	*830	*10	*7
Minnesota	6,492	...	...	...
Missouri	9,714	2,022	13	21
Mississippi	6,835	*630	*9	*9
Montana	2,142	...	...	...
North Carolina	4,880	*474	*6	*10
North Dakota	1,344	...	...	...
Nebraska	1,611	*191	*9	*12
New Hampshire	1,057	*110	*8	*10
New Jersey	1,457	*204	*8	*14
New Mexico	852	*148	*6	*17
Nevada	615	...	...	...
New York	10,289	1,383	8	13
Ohio	10,633	*668	*7	*6
Oklahoma	5,534	515	7	9
Oregon	2,729	...	...	...
Pennsylvania	16,863	2,722	7	16
Rhode Island	155	...	...	...
South Carolina	4,318	*1040	*16	*24
South Dakota	1,719	*102	*8	*6
Tennessee	5,729	1,189	10	21
Texas	14,050	2,056	11	15
Utah	1,714	...	...	...
Virginia	6,771	1,714	14	25
Vermont	1,111	*122	*8	*11
Washington	2,126	...	...	...
Wisconsin	10,059	1,187	7	12
West Virginia	3,940	*727	*10	*18
Wyoming	904	...	...	...

\*Estimate based on a sample size of 10–29. Use results with caution.

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

With 2.7 million days afield, Pennsylvania hunters spent more time pursuing turkeys than hunters in any other state (Table 3). Texas and Missouri follow closely with 2 million days apiece. About a quarter of all hunting days in Virginia, Florida, and South Carolina were spent pursuing wild turkey.

Another measure of wild turkey hunters' avidity is the average days afield. South Carolina has the highest, with an average of 16 hunting days spent pursuing turkey. Alabama and Georgia, where turkey hunters average 15 days afield, follow this closely.

# General Demographic Characteristics

This section focuses on the demographics of wild turkey hunters, including comparisons with other hunters and the U.S. population. Presented in Table 4 is the distribution of the U.S. resident, wild turkey hunter, and all other hunter populations for widely used demographic characteristics such as age, income, gender, race, and geographic location. The first two columns present the distribution of the U.S. population for the demographic variables of interest. The “Number” column indicates the distribution in quantity, and the second column, “Percent,” presents the proportion of total individuals that appear in each representative category for the demographic variables of interest. For example, the first column reports that 11 million people live in New England and the second column indicates that New England’s population represents 5% of the total U.S. population. The “Number” and “Percent” columns within the Wild Turkey Hunters and All Other Hunter categories are handled similarly. The “Percent of U.S. Population” under each indicates the proportion of the U.S. population that participates in each hunting category. For example, 1% of the U.S. population hunts wild turkey and 4% hunts other species such as deer, doves, and squirrels.

## Population Density

As the population of rural America continues to shrink, where people live and how they perceive the basics of life will continue to change from an agriculturally dominated economy to an industry-information driven economy. This has a significant bearing on the future of hunting in America. Rural residents are the minority in the U.S., but represent a majority when it comes to hunting. Almost 60% of wild turkey hunters live in rural areas, while in the U.S. overall, less than a quarter of the population resides in rural areas.

## Geographic Divisions

The proportion of the U.S. population participating in turkey hunting is 2% or less in all nine U.S. Census Bureau divisions (Table 4; see the “Percent of U.S. population” column). For hunters pursuing other species, the proportion of the U.S. population participating in all other hunting is highest in the West North Central division (10%) and lowest in the Pacific division (2%).

As for wild turkey hunters, the Middle Atlantic division has the largest proportion of turkey hunters (20%) followed closely by the South Atlantic (19%). The East North Central division has the highest proportion of hunters pursuing game other than wild turkeys (20%).

## Age

Hunters are on average older than the U.S. population. In 2006, the median age for wild turkey hunters was 44 years old and for all other hunters it was 43 years old. As for the U.S. population, in 2006, the median age was 36 years old (U.S. Census Bureau, 2006). The age distribution of both hunting categories is very similar (Table 4). Eight percent of all hunters are between 18 and 24 years old. Half of all hunters are between 35 and 54 years old. This is consistent with the U.S. population where the majority of people are between the ages of 35 and 54 years old. Nine percent of wild turkey hunters are 65 years old or older compared to 10% of all other hunters. One area that cannot be analyzed, given data constraints, is the popularity of youth turkey hunting. Several states offer youth wild turkey hunting opportunities to encourage youth participation. Because the Survey only asks about hunters 16 years and older, there is no way to measure the number of wild turkey hunters under 16.

## Gender

In America, females outnumber males in the general population. Yet, for hunting, 90% of hunters are male. Six percent of all wild turkey hunters (157 thousand) are female. There were over 1 million women hunting game other than turkeys in the U.S. in 2006.

## Ethnicity and Race

Hispanics make up 13% of the U.S. population but only 4% of all other hunters identify themselves as Hispanic. Even fewer Hispanics participate in wild turkey hunting (2%). Hunters are predominately white, representing 97% of all wild turkey hunters and 96% of all other hunters. Only 2% of all other hunters are Black and about 2% of hunters identify themselves as a race other than White, Black, or Asian.

## Education

Turkey hunting is a popular activity for hunters of all educational backgrounds. Half of all turkey hunters went to college, which is higher than all other hunters (46%). Thirty-nine percent of turkey hunters have only a high school education and 11% have less than a high school education. The proportion of turkey hunters with 4 years of college or more is 22%, while 21% of all other hunters completed 4 years of college or more.

## Income

The percent of the U.S. population that hunts wild turkey increases as income increases, making wild turkey hunting positively correlated with income. Compared to all other hunters, a slightly higher proportion of wild turkey hunters come from households earning \$100,000 or more (18% vs. 15%).

**Table 4. Selected Demographic Characteristics of the U.S. Population and Hunters**

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

Characteristic	U.S. population		Wild Turkey Hunters			All Other Hunters		
	Number	Percent	Number	Percent	Percent of U.S. Population	Number	Percent	Percent of U.S. Population
<b>Total persons</b>	<b>229,245</b>	<b>100</b>	<b>2,569</b>	<b>100</b>	<b>1</b>	<b>9,940</b>	<b>100</b>	<b>4</b>
<b>Population Density of Residence</b>								
Urban	176,740	77	1,067	42	1	4,549	46	3
Rural	52,504	23	1,502	58	3	5,383	54	10
<b>Census Geographic Division</b>								
New England	11,233	5	59	2	1	315	3	3
Middle Atlantic	31,518	14	507	20	2	1,013	10	3
East North Central	35,609	16	431	17	1	1,945	20	5
West North Central	15,458	7	285	11	2	1,494	15	10
South Atlantic	43,965	19	477	19	1	1,407	14	3
East South Central	13,722	6	315	12	2	786	8	6
West South Central	25,407	11	373	15	1	1,438	14	6
Mountain	15,651	7	47	2	(Z)	821	8	5
Pacific	36,681	16	76	3	(Z)	722	7	2
<b>Age</b>								
16 to 17 years	8,272	4	*54	*2	*1	447	4	5
18 to 24 years	23,292	10	217	8	1	751	8	3
25 to 34 years	37,468	16	410	16	1	1,647	17	4
35 to 44 years	45,112	20	616	24	1	2,459	25	5
45 to 54 years	44,209	19	647	25	1	2,223	22	5
55 to 64 years	32,867	14	404	16	1	1,448	15	4
65 years and older	38,024	17	221	9	1	965	10	3
<b>Gender</b>								
Male	110,273	48	2,412	94	2	8,939	90	8
Female	118,972	52	157	6	(Z)	1,001	10	1
<b>Ethnicity</b>								
Hispanic	29,218	13	*52	*2	(Z)	373	4	1
Non-Hispanic	200,027	87	2,518	98	1	9,568	96	5
<b>Race</b>								
White	189,255	83	2,493	97	1	9,536	96	5
Black	25,925	11	...	...	...	165	2	1
Asian	10,104	4	...	...	...	45	(Z)	(Z)
All others	3,960	2	*43	*2	*1	195	2	5
<b>Education</b>								
11 years or less	34,621	15	277	11	1	1,448	15	4
12 years	78,073	34	1,012	39	1	3,884	39	5
1 to 3 years college	53,019	23	717	28	1	2,517	25	5
4 years college	39,506	17	354	14	1	1,396	14	4
5 years or more college	24,025	10	209	8	1	695	7	3
<b>Annual Household Income</b>								
Less than \$10,000	10,673	5	*58	*2	*1	165	2	2
\$10,000 to \$19,999	15,373	7	102	4	1	477	5	3
\$20,000 to \$24,999	11,374	5	111	4	1	375	4	3
\$25,000 to \$29,999	10,524	5	*84	*3	*1	483	5	5
\$30,000 to \$34,999	11,161	5	150	6	1	587	6	5
\$35,000 to \$39,999	10,349	5	180	7	2	490	5	5
\$40,000 to \$49,999	17,699	8	220	9	1	989	10	6
\$50,000 to \$74,999	33,434	15	549	21	2	2,205	22	7
\$75,000 to \$99,999	21,519	9	302	12	1	1,437	14	7
\$100,000 or more	29,159	13	458	18	2	1,519	15	5
Not reported	57,981	25	355	14	1	1,213	12	2

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

Note: Percent of U.S. Population shows the percent of each row's population who participated in the activity named by the column (the percent of males who hunted turkeys, etc.). Percent columns show the percent of each column's participants who are described by the row heading (percent of turkey hunters who are male, etc.).



# Land Ownership and Wildlife Watching Patterns

The demand for land to lease or own for hunting has grown rapidly in the U.S. This is attributable primarily to the decline in public access opportunities for hunting (Benson, 2001). The following section breaks down hunters who own or lease land and those who do not. It also provides estimates on the number of hunters who engage in another type of recreational activity: wildlife watching. Wildlife watching around-the-home denotes hunters who closely observed, fed, or photographed wildlife within a one-mile radius of their homes or maintained natural areas around their home primarily to benefit wildlife. Wildlife watching away-from-home refers to hunters who took trips at least one mile from their homes for the primary purpose of observing, photographing, or feeding wildlife.

## Hunting Land Ownership and Leasing

Table 5 presents the number of hunters who own and lease hunting land as well as those who do not. The majority of wild turkey hunters (84%) do not own land for the primary purpose of hunting. An even higher proportion of all other hunters (91%) do not own hunting land. As for leasing hunting land, turkey hunters are more likely to lease land for hunting compared with all other hunters.

**Table 5. Hunting Land Ownership and Leasing**

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

	Wild Turkey Hunters	Percent of Wild Turkey Hunters	All Other Hunters	Percent of All Other Hunters
<b>Total Hunters</b>	<b>2,569</b>	<b>100</b>	<b>9,941</b>	<b>100</b>
<b>Own Land for Hunting</b>				
Does Own	401	16	935	9
Does Not Own	2,134	84	8,938	91
<b>Lease Land for Hunting</b>				
Does Lease	269	11	591	6
Does Not Lease	2,266	89	9,286	94

*Note: Detail does not add to total because of nonresponse. Leasing or owning hunting land is defined as owning or leasing land either singly or in cooperation with others for the primary purpose of hunting on it.*



USFWS/Steve Maslowski

### Public and Private Land Hunting Days

Interestingly, both types of hunters spend three quarters or more of their days hunting on private land even though less than 20% either own or lease land for the primary purpose of hunting (Table 6). Turkey hunters are more likely to hunt on private land compared to other species hunters. This supports the previous findings that turkey hunters were more likely to own or lease hunting land.

These results underline the importance of access to both public and private lands. Successful game management in the U.S., particularly in the eastern and central regions, is highly dependent on hunter access (Brown et. al., 1984; Cordell et al., 1999). Restricted access limits hunting opportunities, which in turn dampen interest in hunting and license sales (Brown et. al., 1984).

### Wildlife-Watching Patterns

A large proportion of hunters engage in wildlife-watching activities (Table 7). Wild turkey hunters are wildlife enthusiasts. Sixty-six percent of wild turkey hunters watched wildlife while only 55% of all other hunters engaged in some type of wildlife-watching activity.

Closely observing, feeding, or photographing wildlife around-the-home was the most popular form of wildlife watching. Fifty-eight percent of wild turkey hunters and almost half of all other hunters observed wildlife around-the-home. Thirty-eight percent of all wild turkey hunters and 28% of all other hunters took trips at least a mile from their homes to observe, photograph, or feed wildlife.

**Table 6. Private and Public Land Hunting Days**

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

	<i>Wild Turkey Hunters</i>	<i>Percent of Wild Turkey Hunters</i>	<i>All Other Hunters</i>	<i>Percent of All Other Hunters</i>
<b>Total Hunting Days</b>	<b>25,828</b>	<b>100</b>	<b>194,097</b>	<b>100</b>
Private Land Days <sup>1</sup>	18,635	78	145,684	75
Public Land Days <sup>2</sup>	5,279	22	49,154	25

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

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

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

**Table 7. Wildlife-Watching Patterns by Hunters**

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

	<i>Wild Turkey Hunters</i>	<i>Percent of Wild Turkey Hunters</i>	<i>All Other Hunters</i>	<i>Percent of All Other Hunters</i>
<b>Total Hunters</b>	<b>2,569</b>	<b>100</b>	<b>9,941</b>	<b>100</b>
Did not engage in wildlife-watching activities	874	34	4,487	45
Engaged in wildlife-watching activities	1,695	66	5,454	55
Around the home	1,491	58	4,704	47
Away from home	966	38	2,739	28

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

# Trends

Millions of Americans deepen their appreciation and understanding of the land and its wildlife through hunting. By purchasing hunting licenses and paying federal excise taxes on hunting equipment and ammunition, individual hunters have made huge contributions toward ensuring the future of many species of wildlife and habitat. Due in large part to restoration programs, improved habitat conditions and better protection through hunting regulations, wild turkey populations in the U.S. have flourished over the last 45 years. Populations are estimated at around 7 million birds in the U.S.

Just as the population of wild turkeys has changed over time, the characteristics of wild turkey hunters have also evolved. This section focuses on the trends in turkey hunting participation from 1996 to 2006. As a reminder, for this report, a turkey hunter is someone who hunted for turkey during the specific survey year, resided in the U.S. and was 16 years of age or older. All measures of statistical significance in this report are at the 90% confidence level.

Figure 1 displays the U.S. population, all other hunters, and wild turkey hunters from 1996 to 2006. During this period, participation by all other hunters decreased by 19%.<sup>2</sup> However, during the same period, turkey hunting saw a 15% increase in participation! A significant increase in participation occurred between 1996 and 2001, where the number of turkey hunters rose by 13%. Between 2001 and 2006, the number of turkey hunters remained steady at around 2.5 million participants (Figure 1). The trends in turkey hunting are broken down into a select group of demographic characteristics in Table 8.a.

<sup>2</sup> Decreased participation in small game, migratory bird, and other animal hunting are the main factors contributing to this decline.

**Figure 1. Trends for the U.S. Population and Hunters**  
(Population 16 years of age and older. Numbers in millions)





### Population Density: 1996–2006

Between 1996 and 2006, the number of rural residents participating in turkey hunting increased by 21%. Conversely, the U.S. rural population decreased by 8% from 1996 to 2006. One possible explanation for the 21% increase in turkey hunting participation by rural residents involves the number of turkeys available for hunters to take. More birds mean more opportunity for hunters to participate in turkey hunting. Generally, rural areas exhibit the kind of habitat suitable for wild turkeys, including open areas for mating and forested areas for protection and roosting. This gives rural residents, who usually live within a closer proximity to these habitats, more access to hunt wild turkeys.

### Hunting Land Leasing and Ownership: 1996–2006

Land ownership can affect whether or not someone participates in turkey hunting. “Access to hunting land is a major obstacle in keeping the rich hunting tradition alive...” (Rob Keck, CEO of the NWFT). As previously mentioned (Table 6), turkey hunters were more likely to own or lease land for the primary purpose of hunting compared with other hunters. Have turkey hunters increased their ownership of private land? A look at Table 8.a. reveals that between 1996 and 2006, the number of turkey hunters who owned or leased land primarily for hunting increased by 27%. This trend will continue as long as hunters remain active and access to hunting land continues to decline.

### Geographic Division: 1996–2006

The increase in wild turkey hunting was not distributed evenly across the U.S. (Table 8.a). From 1996 to 2006, the West South Central division experienced the greatest increase in participation (40%), followed by the East North Central division (32%). Although the Middle Atlantic, South Atlantic and Pacific divisions all experienced what appear to be declines in turkey hunting participation, these results were not statistically significant. Yet, even without an increase in participation, the Middle Atlantic division is home to the most turkey hunters (507,000 in 2006) of any division in the U.S.

**Table 8.a. Trends in Turkey Hunters’ Demographics**

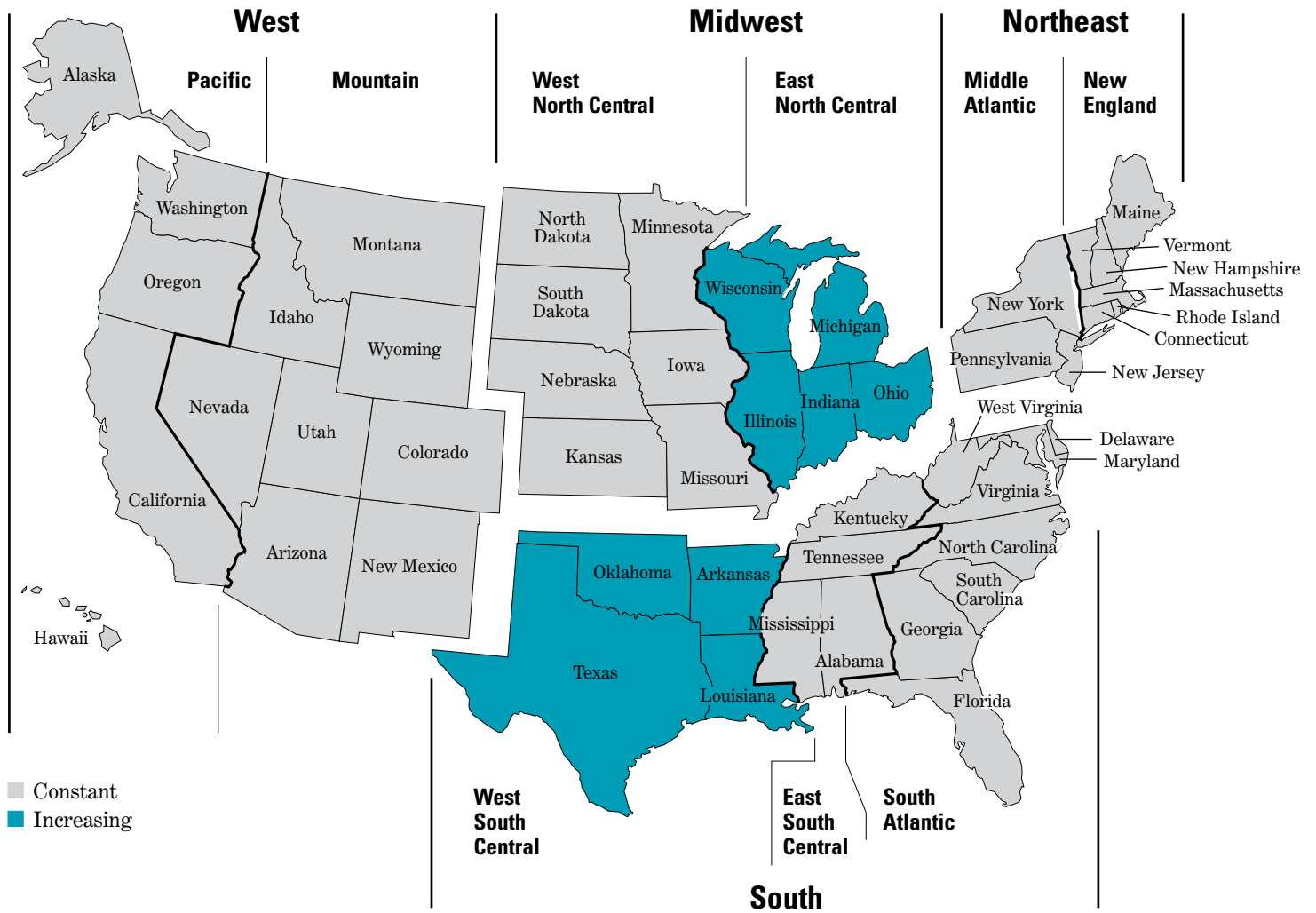
(Population 16 years of age or older. Numbers in thousands)

<i>Characteristic</i>	<i>1996 Number</i>	<i>2001 Number</i>	<i>2006 Number</i>	<i>96–06 Percent Change</i>
<b>Total Turkey Hunters</b>	<b>2,189</b>	<b>2,504</b>	<b>2,569</b>	<b>15</b>
<b>Population Density of Residence</b>				
Urban	1,001	1,025	1,067	6
Rural	1,188	1,479	1,502	21
<b>Own or Lease Land</b>				
Does Own or Lease	453	664	624	27
<b>Census Geographic Division</b>				
New England	46	60	59	21
Middle Atlantic	525	565	507	-4
East North Central	295	386	431	32
West North Central	242	277	285	15
South Atlantic	514	466	477	-8
East South Central	224	290	315	29
West South Central	224	326	373	40
Mountain	39	58	47	18
Pacific	*80	76	76	*-5
<b>Age</b>				
16–17 years	*72	102	*54	*-33
18–24 years	162	220	217	25
25–34 years	439	437	410	-7
35–44 years	696	649	616	-13
45–54 years	505	628	647	22
55–64 years	176	286	404	56
65 years and older	139	183	221	37
<b>Gender</b>				
Male	2,073	2,330	2,412	14
Female	116	174	157	27
<b>Education</b>				
11 years or less	253	309	277	8
12 years	930	1,051	1,012	8
1 to 3 years college	479	588	717	33
4 years college	278	407	354	21
5 years or more college	248	148	209	-19

*The percents in italics are statistically significant at the 90% confidence level. This means that for 90% of all possible samples, the estimate from one survey year is different from the estimate for the other survey year*

*\*For these categories, the sample size for turkey hunting is small (N=10–29). Use the results with caution.*

**Figure 2. Turkey Hunter Participation Rate in the U.S.: 1996–2006**



Nationally turkey hunting has increased by 15% between 1996 and 2006, with the majority of increases observed in the Midwest and South (Figure 2). The regions in grey represent areas where wild turkey hunter participation has remained constant. The blue regions show where participation in wild turkey hunting has increased—in both cases by over 30%. As demonstrated by this map, the central regions of the U.S. have experienced substantial increases in the number of participants engaging in turkey hunting.

**Age: 1996–2006**

Age plays a role in determining whether someone participates in turkey hunting (Table 8). Previously, we saw that 45- to 54-year-olds made up the largest proportion of turkey hunters in 2006. The number of 45- to 54-year-olds participating in turkey hunting increased by 22% between 1996 and 2006, though this result is not statistically significant. The number of 55- to 64-year-olds participating in turkey hunting had the largest increase between 1996 and 2006 (56%). This result is consistent with the trend in the U.S. population, as the baby boomers continue to age.

### Gender: 1996–2006

Turkey hunting is a male dominated sport where females made up less than 10% of all turkey hunters in 2006. Males have increased in participation in turkey hunting by 14%. On the other hand, females have become more actively engaged in turkey hunting, where the 10-year-trend from 1996 to 2006 reveals an increase of 27% (not statistically significant).

*A combination of outreach efforts by government and non-government agencies have targeted female participation in outdoor activities. The National Wild Turkey Federation has spotlighted women hunters and is making a conscious effort to use them in their wild turkey hunting advertising and promotional material. In addition, state agencies have a number of youth hunting opportunities, with the focus on recruiting young hunters. These programs have lead to mothers attending turkey-hunting events, and, in some cases, even acting as mentors in the actual youth hunt. Finally, programs like “Becoming an Outdoors Woman” and “Women in the Outdoors” are specifically designed to train women to enjoy the outdoors and recruit future female hunters.*

### Education: 1996–2006

In 2006, half of all turkey hunters were college educated. Turkey hunters completing 1 to 3 years of college has increased by 33% between 1996 and 2006. The trend in the other education categories were not found to be statistically significant and the unexpected decrease in the number of turkey hunters completing 5 years or more of college does not follow the U.S. trend in overall higher-level education.

### Income: 1996–2006

Income can affect whether or not someone goes wild turkey hunting because it usually requires money to buy a hunting license and equipment to conduct the hunt. In 1996 more than half of all turkey hunters were below the median U.S. household income (Table 8.b.). During the ten year period between 1996 and 2006 wild turkey hunters have continually increased their household incomes, surpassing the median

household income, and creating a majority of hunters with above average incomes. In 2001 65% of wild turkey hunters earned more than the median U.S. household income. This dropped slightly in 2006 (59%) but continues to show a trend of wild turkey hunters earning more than the average U.S. household income. This result supports the rise in land purchased specifically for hunting. More disposable income for hunters can mean more opportunity to acquire hunting land.

**Table 8.b. Trends in Turkey Hunters' Income**

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

Household Income	1996		2001		2006	
	All Participants	Percent of total	All Participants	Percent of total	All Participants	Percent of total
Total	1,944	100	2,047	100	2,214	100
Below median	1,063	55	714	35	905	41
Above median	881	45	1,333	65	1,309	59

Note: “All Participants” totals do not match totals from other non-income tables because all respondents did not report their income.



Julie Clements/El Dorado Times



# The Economic Activity of Wild Turkey Hunters

Hunting is not only an important outdoor experience; it is also a huge contributor to our nation's economy. In 2006, hunters spent \$22.9 billion on equipment, trips, and other hunting-related expenses. How do retail sales for wild turkey hunting fit into these equipment and trip-related expenses? The following section breaks expenditures into five different hunting types: (1) Wild Turkey, (2) Deer, Elk, Bear, (3) Small Game, (4) Migratory Birds, and (5) Other Animals. Then, the focus is on wild turkey hunting expenditures by state and the economic activity related to wild turkey hunting.

## Expenditures and Effort

Trip expenditures are directly related to hunting trips (Table 9). They include but are not limited to food, drink, lodging, and transportation costs. Equipment expenditures include both hunting equipment such as shotguns, ammunition, and decoys and auxiliary equipment bought primarily for hunting such as camping equipment, clothing, and taxidermy services. Special equipment such as boats, campers, trucks, and cabins used primarily for hunting are also included in the equipment expenditures. Per person spending is defined as the total spending divided by the total number of wild turkey hunters or non-

turkey hunters. Other expenditures for licenses, land leasing, and land ownership were not included in these expenditure estimates.

The average number of hunting days for turkey hunters is 10 days while deer, elk and bear hunters averaged 17 days of hunting in 2006 (Table 9). Small game hunters averaged 11 hunting days while migratory birds had the lowest average with 9 days. Hunters who pursued other animals like fox and coyote had an average of 13 days afield. The average number of trips had a very similar pattern: turkey-hunting trips were less than the average trips taken by deer, elk and bear hunters. Migratory bird hunters averaged the same number of trips (7) as wild turkey hunters, while the average number of trips taken to pursue other animals was 11 and small game was 9 trips.

In 2006, big game hunting expenditures totaled \$11.8 billion.<sup>3</sup> Wild turkey hunters are responsible for \$1.6 billion or 13% of the total, while deer, elk, and bear hunters make up the difference with \$10.2 billion. Small game hunters

spent \$2.4 billion in 2006 while migratory bird expenditures totaled \$1.3 billion. Expenditures by hunters who pursued other animals totaled \$208 million. In 2006, wild turkey hunters spent \$614 per person on trip and equipment expenditures with an average of \$298 on trip-related expenditures and \$316 on equipment expenditures. Deer, elk, and bear hunters spent the most per person per trip (\$478). Migratory bird hunters averaged \$301 on trips while small game hunters spent \$249 per person on trips. A shorter hunting season may explain why spending patterns by turkey hunters are lower than other species hunters. The average per trip costs may appear high, but these averages include spending on food, lodging, transportation, public and private land use fees, guide fees, and other trip-related expenses.

Equipment averages include the cost of items owned primarily for hunting including, but not limited to, rifles, shotguns, muzzleloaders, pistols, archery equipment, game calls, decoys, and ammunition. The equipment cost averages also include big ticket items like cabins, pickups, boats, and RVs used primarily for hunting as well as auxiliary equipment like sleeping bags, special hunting clothes and taxidermy services.

<sup>3</sup> The Survey defines wild turkey as a big game species.

**Table 9. Hunting by Type, Days and Expenditures**

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

	<i>Big Game Hunters</i>	<i>Wild Turkey Hunters</i>	<i>Deer, Elk, &amp; Bear Hunters</i>	<i>Small Game Hunters</i>	<i>Migratory Bird Hunters</i>	<i>Other Animal Hunters</i>
<b>Hunters</b>	<b>10,682</b>	<b>2,569</b>	<b>8,113</b>	<b>4,797</b>	<b>2,293</b>	<b>1,128</b>
<b>Days of Hunting</b>	<b>164,061</b>	<b>25,828</b>	<b>138,233</b>	<b>52,395</b>	<b>19,770</b>	<b>15,205</b>
Mean Days of Hunting	15	10	17	11	9	13
<b>Trips</b>	<b>115,255</b>	<b>18,213</b>	<b>97,042</b>	<b>40,856</b>	<b>16,390</b>	<b>12,898</b>
Mean Hunting Trips	11	7	12	9	7	11
<b>Total Hunting Expenditures</b>	<b>\$11,754,122</b>	<b>\$1,578,207</b>	<b>\$10,175,915</b>	<b>\$2,365,778</b>	<b>\$1,349,148</b>	<b>\$207,856</b>
Trip	\$4,648,341	\$766,790	\$3,881,551	\$1,196,318	\$691,288	\$142,667
Per Person Trip	\$435	\$298	\$478	\$249	\$301	\$126
Equipment	\$7,105,781	\$811,418	\$6,294,363	\$1,169,460	\$657,860	\$65,189
Per Person Equipment	\$665	\$316	\$776	\$244	\$287	\$58

Note: 'Deer, Elk, Bear' includes all big game hunters except those who hunted turkey.

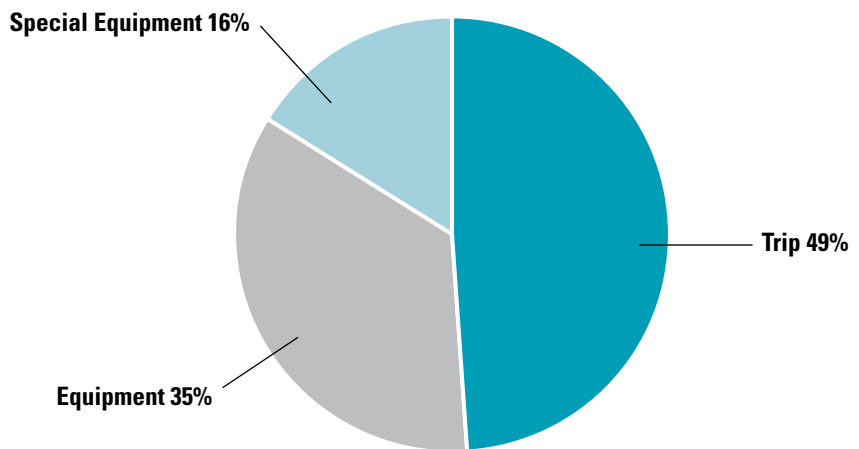
Again, deer, elk, and bear hunters spent the most per person on equipment averaging \$776 per person in 2006. Wild turkey hunters averaged \$316 per person on equipment while small game hunters spent an average of \$244 per person on equipment. Migratory bird hunters averaged \$287 on equipment while other animal hunters spent the least amount on equipment averaging \$58 per person.

As demonstrated, turkey hunters spend money on a variety of goods and services for trip-related and equipment-related purchases not including land leasing and ownership costs and license fees. Almost half of all turkey-hunting purchases are made on trip expenses (Figure 3). Retail sales on auxiliary and hunting equipment account for 35% of hunters' spending and the rest (16%) is comprised of special equipment purchases.

A closer look at the trip expenses (Figure 4) reveals that transportation expenses account for 42% of the total, while food and lodging combined make up 40% of the trip-related expenses. Other expenses for items such as guide fees and equipment rentals comprise the remaining 18%.

**Figure 3. Turkey Hunting Expenditures by Major Category**

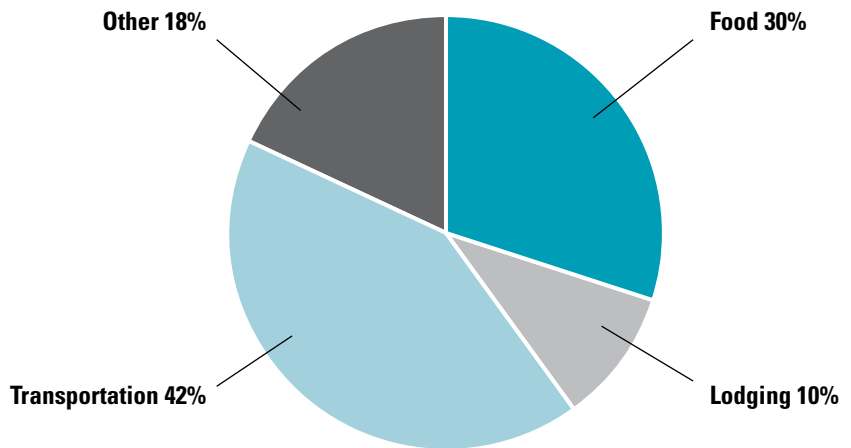
(Population 16 years of age or older.)



*Note: Equipment includes both hunting equipment (e.g. guns, rifles, decoys, etc.) and auxiliary equipment (e.g. camping equipment, hunting clothing, binoculars, etc.).*

**Figure 4. Trip Expenditures for Turkey Hunting: 2006**

(Population 16 years of age or older.)



*Note: 'Other' trip expenditures includes guide fees, equipment rentals, public and private land use fees, etc.*

## State-Level Economic Activity

The spending patterns of wild turkey hunters help demonstrate how important hunting is to the U.S. economy. When we do a state-by-state comparison of hunting-related retail sales, Texas has the highest amount of retail sales attributable to turkey hunting with \$214 million (Table 10). Pennsylvania ranks second with \$173 million and Missouri is third with just under \$100 million.

Direct expenditures listed in Table 9 are only part of the contribution of turkey hunting to the U.S. economy. The effect on the economy over and above direct expenditures is known as the multiplier effect (See the appendix for more detailed information on how the multipliers were generated). For example, an individual may purchase a game call to use while turkey hunting. Part of the purchase price will stay with the local retailer. The local retailer, in turn, pays a wholesaler who in turn pays the manufacturer of the game calls. When enough money is spent on an activity like wild turkey hunting, businesses benefit from the rippling cycle by adding new employees, whose wages and salaries, when spent, will support still more jobs. Taxes will be generated, too. Economic multipliers, while subtle, can be immensely important.<sup>4</sup>

<sup>4</sup> A state's economic multiplier is typically smaller than the multiplier for the United States as a whole because a state multiplier will reflect all interactions between businesses and industry throughout that state only. Any flows of dollars to businesses outside the state are leakages that are not included in the multiplier. As the geographic area expands to include more businesses and industries that supply goods and services, the size of the multiplier increases.

**Table 10. Top 10 States Ranked by Retail Sales In-State**

(Sales in thousands)

State	2006 Retail Sales	Number of Turkey Hunters
Texas	\$214,226	182,427
Pennsylvania	\$173,304	369,299
Missouri	\$98,889	154,831
Virginia	\$88,476	119,704
Florida*	\$72,641	81,947
Tennessee	\$70,734	119,547
Arkansas	\$72,825	85,597
New York	\$61,662	164,461
Louisiana*	\$56,225	46,770
Alabama	\$51,065	98,115

\*For these states, the sample size for turkey hunting is small (N=10-29). Use the results with caution.

*This report presents the economic activity related to wild turkey hunting. We choose to distinguish between economic activity and economic impacts. The economic impacts of expenditures depends on the assumptions regarding hunting and its substitutes. If hunters would have gone outside the U.S. to hunt, then impacts are appropriate because a net loss of that activity would have occurred. On the other hand, if hunters found a substitute activity with a similar amount and type of spending, a loss in U.S. recreational hunting expenditures would have been offset by a gain in some other type of expenditures, resulting in little net change in impacts.*

The \$1.6 billion spent by turkey hunters in 2006 rippled through the U.S. economy generating \$4.1 billion in total economic output (Table 11). Total output includes the direct, indirect, and induced effects of the expenditures associated with turkey hunting. Increases in wild turkey hunting creates greater demand for turkey game calls and leads to a direct increase in game call manufacturing (the direct effect). The game call manufacturer,

in turn, must increase its purchases of inputs from other businesses to meet the increased demand for more game calls, which leads to increased output in other industries (the indirect effect). Induced effects refer to the changes in economic activity that result from changes in household income (and spending) as a result of changes in employment associated with the direct and indirect effects. On the state level, Texas, Pennsylvania and Missouri generated the largest amount of total output with \$376 million, \$303 million, and \$167 million, respectively.

In 2006, wild turkey hunting supported over 37 thousand jobs. The states with the most jobs supported were Texas (4,412), Pennsylvania (2,698), and Florida (2,302). This includes both full- and part-time jobs with a job defined as one person working for at least part of the calendar year. Federal and state tax revenue are derived from turkey hunting-related spending. In 2006, \$272 million in state tax revenue and \$313 million in federal tax revenue were generated. As for states with the largest amount of tax revenue generated from turkey hunting-related spending, again Texas ranked first, followed by Pennsylvania and Missouri.



**Table 11. Economic Impacts of Turkey Hunting—State and National Totals: 2006**

(Dollars values are in thousands)

<i>State</i>	<i>Trip &amp; Equipment Expenditures</i>	<i>Total Output</i>	<i>Job Income</i>	<i>State Tax Revenue</i>	<i>Federal Tax Revenue</i>
<b>United States</b>	<b>\$1,578,208</b>	<b>\$4,112,062</b>	<b>37,741</b>	<b>\$272,438</b>	<b>\$312,693</b>
Alabama	\$51,065	\$81,853	1,176	\$5,363	\$5,917
Arizona	...	...	...	...	...
Arkansas	\$72,825	\$114,420	1,551	\$8,172	\$7,592
California	\$16,741	\$29,614	277	\$2,269	\$2,397
Colorado	...	...	...	...	...
Connecticut	...	...	...	...	...
Delaware	...	...	...	...	...
Florida	\$72,641	\$127,638	2,302	\$7,915	\$11,066
Georgia*	\$35,545	\$59,150	798	\$4,310	\$4,616
Hawaii	...	...	...	...	...
Idaho*	\$15,861	\$25,089	339	\$1,961	\$1,951
Illinois*	\$20,518	\$36,839	362	\$2,573	\$2,991
Indiana*	\$11,067	\$18,199	220	\$1,279	\$1,376
Iowa	\$20,518	\$32,094	435	\$2,241	\$2,320
Kansas	\$23,197	\$40,032	561	\$2,643	\$2,887
Kentucky*	\$21,085	\$32,898	391	\$2,587	\$2,280
Louisiana	\$56,225	\$92,854	1,315	\$5,913	\$6,056
Maine*	\$6,165	\$9,286	115	\$775	\$671
Maryland*	\$9,814	\$16,431	196	\$1,348	\$1,426
Massachusetts*	\$5,765	\$9,812	99	\$701	\$930
Michigan*	\$22,695	\$36,973	375	\$3,005	\$2,788
Minnesota	...	...	...	...	...
Mississippi*	\$28,549	\$43,089	622	\$3,528	\$2,696
Missouri	\$98,889	\$166,603	1,694	\$12,015	\$11,716
Montana	...	...	...	...	...
Nebraska*	\$14,282	\$22,986	303	\$1,748	\$1,619
Nevada	...	...	...	...	...
New Hampshire*	\$4,912	\$7,770	90	\$525	\$725
New Jersey*	\$10,243	\$17,733	169	\$1,191	\$1,680
New Mexico*	\$15,639	\$26,304	304	\$1,672	\$1,727
New York	\$61,662	\$103,132	837	\$9,204	\$8,505
North Carolina*	\$38,892	\$64,846	686	\$4,026	\$4,747
North Dakota	...	...	...	...	...
Ohio*	\$33,055	\$57,714	507	\$3,366	\$3,579
Oklahoma	\$32,306	\$55,307	627	\$3,136	\$3,479
Oregon	...	...	...	...	...
Pennsylvania	\$173,304	\$302,620	2,698	\$21,604	\$22,839
Rhode Island	...	...	...	...	...
South Carolina*	\$11,975	\$18,173	288	\$1,424	\$1,410
South Dakota*	\$5,299	\$8,001	91	\$628	\$545
Tennessee	\$70,734	\$122,898	1,502	\$7,007	\$9,170
Texas	\$214,226	\$375,882	4,412	\$24,987	\$28,595
Utah	...	...	...	...	...
Vermont*	\$5,430	\$7,005	94	\$579	\$577
Virginia	\$88,476	\$146,317	1,639	\$9,026	\$11,584
Washington	...	...	...	...	...
West Virginia*	\$46,264	\$69,309	945	\$4,528	\$4,825
Wisconsin	\$44,152	\$68,421	771	\$6,535	\$4,808
Wyoming	...	...	...	...	...

\*For these states, the sample size for turkey hunting is often small (N=10-30). Use the results with caution.

... Sample size too small to report data reliably

# Summary

Over 2.5 million hunters throughout the United States pursued Ben Franklin's choice for our nation's bird, the wild turkey, in 2006. Due in large part to the rapid growth in wild bird populations, wild turkey hunting participation increased 15% from 1996 to 2006. The Mid-Atlantic Division has the most turkey hunters while the West South Central Division has seen the largest increase, 40%, in participation. Wild turkeys now roam all States except Alaska and hunters take advantage of their extended range by hunting in all corners of the U.S. Pennsylvania has the largest number of turkey hunters; South Carolina is the state with the most effort; and Tennessee has the largest proportion of all hunters pursuing wild turkey. Ninety-five percent of turkey hunters hunt another type of animal, with the most popular types including bear, fox, and woodchucks.

Wild turkey hunters reside in rural areas, particularly in the Middle and South Atlantic Divisions. They enjoy spending time hunting on private land, where they were more likely to own or lease private hunting land compared with all other hunters. Turkey hunters were also more likely to spend more days hunting on private land. Half of all turkey hunters are between 35 and 54 years old and 97% are white. Turkey hunters come from diverse educational backgrounds and a large majority make higher than average incomes.

On average, wild turkey hunters spent \$298 per hunter on trip expenses and \$316 per hunter on equipment purchases in 2006. Total wild turkey hunting expenditures in 2006 were \$1.6 billion, which generated \$4.1 billion in economic output. Turkey hunting supported over 37 thousand jobs and generated \$272 million and \$313 million in state and federal tax revenue, respectively. On the state level, Texas led the way with \$376 million in total output, supporting over 4 thousand jobs. Spending by turkey



USFWS/Stephen Robertson

hunters in Pennsylvania generated \$303 million in output and supported over 2 thousand jobs. In Missouri, spending by turkey hunters rippled through the state generating \$167 million in output and supporting over 16 hundred jobs.

Turkey hunting, like all hunting, continues to be a white male dominated activity. However, females are becoming even more engaged in wild turkey hunting with a 27% increase from 1996 to 2006 compared to the male increase of 14%. Also, in contrast with overall hunting, wild turkey hunting continued to grow as a sport increasing

15% from 1996 to 2006. Based on the results of the 2006 Survey, the future and legacy of turkey hunting in the U.S. looks bright. The findings of the 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation will help researchers establish which trends will dominate the future of wild turkey hunting in the U.S. These new results, projected to be available in 2012, will help us analyze one of America's fastest growing hunting activities.



# References

Benson, Delwin. 2001. *Survey of State Programs for Habitat, Hunting, and Nongame Management on Private Lands in the United States*. Wildlife Society Bulletin, Vol. 29:1.

Brown, Tommy, Daniel Decker, and John Kelley. 1984. *Access to Private Lands for Hunting in New York: 1962–1980*. Wildlife Society Bulletin. Vol. 12:4.

Cordell, K., Carter Betz, J. Michael Bowker, Donald English, Shela Mou, John Bergstrom, Jeff Teasley, Michael Tarrant and John Loomis. 1999. *Outdoor Recreation in American Life: A National Assessment of Demand and Supply Trends*. Champaign, IL: Sagamore Publishing.

National Wild Turkey Federation. 2010. *North American Wild Turkey Management Plan*. Accessed from: <http://www.nwtf.org/NAWTMP/> on March 19th, 2010.

Southwick Associates. 2007. *Hunting in America: An Economic Engine and Conservation Powerhouse*. Produced for the Association of Fish and Wildlife Agencies with funding from the Multistate Conservation Grant Program.

U.S. Census Bureau, 2006. Population Estimates Program. Accessed on June 1st, 2010 from < [http://factfinder.census.gov/servlet/GCTTable?\\_bm=y&-geo\\_id=01000US&-\\_box\\_head\\_nbr=GCT-T2-R&-ds\\_name=PEP\\_2006\\_EST&-format=US-9Sa](http://factfinder.census.gov/servlet/GCTTable?_bm=y&-geo_id=01000US&-_box_head_nbr=GCT-T2-R&-ds_name=PEP_2006_EST&-format=US-9Sa)>.

U.S. Department of Interior. 2009. *The State of the Birds, United States of America*. North American Bird Conservation Initiative, U.S. Committee, 2009. Washington, D.C. 36 pages.

U.S. Department of the Interior, Fish and Wildlife Service and U.S. Department of Commerce, Bureau of Census. *2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*. Issued October, 2007.



USFWS/Stephen Robertson



# Appendix. Economic Multipliers

Southwick Associates created state multipliers based on deer hunting data from the 2006 National Survey using IMPLAN input-output software and data. IMPLAN is widely used to model the interactions between economic sectors to estimate the output, income, and employment effects of changes in regional economies. As Table A-1 shows, the spending pattern of deer hunters is similar to that of turkey hunters. Both spend a similar proportion in each industrial sector even though the total amounts differ. Since this pattern is similar, the multipliers derived from deer hunting are used to estimate turkey-hunting impacts.

**Table A-1. Deer and Turkey Hunting Expenditure Distribution by Category**  
(Numbers are percentages of total expenditures)

<i>Spending Category</i>	<i>Deer Hunting</i>	<i>Turkey Hunting</i>
<b>Trip Expenses</b>	<b>37</b>	<b>49</b>
Food	13	15
Transportation	15	21
Lodging	3	5
Other	6	9
<b>Equipment</b>	<b>35</b>	<b>35</b>
Firearms	11	12
Ammunition	3	3
Gear	3	3
Auxillary	9	7
<b>Special</b>	<b>28</b>	<b>16</b>

*Note: This is only a snapshot of the expenditure distribution; therefore, not all categories are included in the table.*



U.S. Department of the Interior  
U.S. Fish & Wildlife Service  
<http://wsfrprograms.fws.gov>



July 2010