

## Big-Game Hunters: Demographic Characteristics and Expenditures

Addendum to the 2022 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation

Report 2022-6 | February 2025





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This report complements the 2022 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. The conclusions are the authors' and do not represent official positions of the U.S. Fish and Wildlife Service.

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This project was supported by Multistate Conservation Grant F20AP00134, funded from the Wildlife Restoration Fund and the Sport Fish Restoration and Boating Trust Fund, and jointly managed by the U.S. Fish and Wildlife Service and the Association of Fish and Wildlife Agencies.

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#### **Suggested Citation**

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Big-Game Hunters: Demographic Characteristics and Expenditures, Addendum to the 2022 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.





### Introduction



Big-game hunting is unquestionably the most popular type of hunting in the United States. Big-game hunters pursue deer, elk, bear, wild turkey, moose, wild sheep, feral goat, or some other large animal. There were 11.5 million big-game hunters in 2022. For people 16 years of age and over, about 1 in every 23 Americans and 8 in 10 hunters hunted big game. Their total hunting-related trip and equipment expenditures while seeking big game totaled \$15.6 billion.

Big game has not always been the most popular, and its ascendance reflects a species restoration success story that deserves to be told. Back in 1955, the first year of the *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*, small-game hunters outnumbered big-game hunters more than two to one. There were 9.8 million small-game hunters compared to 4.4 million who pursued big game. From 1960 through 1980 small-game hunters continued to exceed big-game hunters. That changed in 1985, and since then, the number of big-game hunters has remained higher. By 2022, the number of big-game hunters outnumbered small-game hunters by more than two to one: 11.5 million big game and 5.3 million small game.

There are certainly a number of factors related to the ascendance of big-game hunting, and among those is certainly the increase in big-game hunting opportunities. Wildlife restoration since the Pittman-Robertson Act in 1937 has been impressive, particularly for two highly important big-game animals: deer and turkey. Eleven states had no hunting seasons for deer in 1937, and in other states that did have some hunting, the seasons were far shorter than they are today. Similarly, for turkey, 33 states had no hunting season in 1937, and now it is present in all but Alaska.<sup>1</sup>

This report provides information about big-game hunter demographic characteristics, spending patterns, and days afield. It also quantifies their participation in wildlife watching. It is intended to be used as an informational tool by resource managers, academics, product manufacturers, and other interested parties. This report examines the size and geographic dispersion of the big-game hunting population. Widely used demographic features such as income, age, sex, and geographic location are included.

1 For more details of opportunity changes over time see Andrew Loftus Consulting and Southwick Associates' "The Financial Returns and Benefits of Hunting and Fishing Excise Taxes," produced on behalf of the Association of Fish and Wildlife Agencies, February 2011, Washington, D.C.

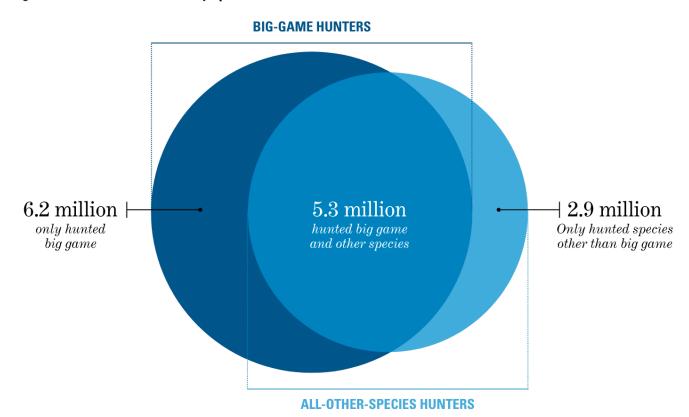
# **Demographics of Big-Game and Non-Big-Game Hunters**

Big game is clearly the top choice for the majority of hunters in the United States. Table 1 indicates that 80 percent or 11.5 million of the 14.4 million hunters pursued big game in 2022. The number of all hunters who hunt only big game punctuates the significance of the pursuit—about 6.2 million or 43 percent of hunters hunted big game and nothing else; 5.3 million hunters, 37 percent, sought big game and other types of game such as waterfowl, squirrels, and upland birds. Comparatively, 2.9 million hunters or 20 percent of all hunters did not hunt big game at all. In this report, "non-big-game hunters" refers to these hunters. Figure 1 displays the population of all hunters graphically.

Table 1 addresses the distribution of the big-game and non-big-game hunter<sup>2</sup> populations among widely used demographic characteristics such as income,

age, sex, education, and geographic location. The 'Number' columns indicate the number of 16 and over population named by each row characteristic. For example, the 'Number of Big-Game Hunters' column indicates that 6.3 million big-game hunters resided in 'Urban' areas and 5.2 million lived in 'Rural' areas. The percent columns immediately to the right of the number columns indicate the distribution of the relevant population. Hence, 55 percent of the 11.5 million big-game hunters lived in urban areas. This compares to 80 percent of the general population. Biggame hunters are more rural based than the general population. The 'Participation Rate' columns gives the percent of that row's general population demographic cohort that were big-game and non-big-game hunters. Hence, three percent of the urban population hunted big game and one percent hunted, but not for big game.

Figure 1. Distribution of Hunters by Species Pursued in the United States in 2022



2 A "big-game hunter" hunted for big game in 2022 and could have hunted another type of wild game. A "non-big-game hunter" hunted for anything except big game.

Table 1. Big-Game and Non-Big-Game Hunters by Demographic Cohort in the United States in 2022

	U.S. Population (thousands)	Percent	Number of Big-Game Hunters (thousands)	Percent	Participation Rate	Number of Non-Big-Game Hunters (thousands)	Percent	Participation Rate
Total	254,724	100	11,522	100	5	2,853	100	1
Urban	203,601	80	6,285	55	3	1,988	70	1
Rural	51,123	20	5,190	45	10	852	30	2
Census Divisions								
$New\ England$	11,841	5	326	3	3	85	3	1
Middle Atlantic	32,376	13	1,338	12	4	207	7	1
East North Central	36,209	14	2,268	20	6	501	18	1
West North Central	16,379	6	1,244	11	8	275	10	2
South Atlantic	51,790	20	1,765	15	3	538	19	1
East South Central	14,812	6	1,308	11	9	231	8	2
West South Central	30,839	12	1,590	14	5	414	15	1
Mountain	19,405	8	832	7	4	173	6	1
Pacific	41,073	16	852	7	2	430	15	1
Age								
16-24	34,961	14	1,567	14	4	647	23	2
25-34	43,373	17	1,782	15	4	521	18	1
35-44	42,214	17	2,318	20	5	488	17	1
45-54	39,288	15	1,645	14	4	348	12	1
55-64	41,306	16	2,098	18	5	487	17	1
65+	53,582	21	2,093	18	4	354	12	1
Sex								
Male	123,073	48	9,176	80	7	1,864	65	2
Female	129,980	51	2,224	19	2	931	33	1
Household Income (dollars)	,		<u> </u>					
0-49,999	91,595	36	4,043	35	4	1,448	51	2
50,000 - 99,999	76,698	30	3,901	34	5	790	28	1
100,000 - 149,999	37,708	15	1,747	15	5	292	10	1
150,000 - 199,999	17,773	7	968	8	5	132	5	1
200,000+	18,966	7	593	5	3	136	5	1
Race	20,000	•			-			
White	172,710	68	9,212	80	5	1,792	63	1
	33,985	13	1,032	9	3	513	18	2
African American	8,515	3	684	6	8	117	4	1
Asian American  Other, including Pacific Islander and Native American and individuals claiming multiple races	52,901	21	1,111	10	2	574	20	1
Ethnicity								
Hispanic	44,032	17	1,243	11	3	708	25	2
Non-Hispanic	209,720	82	10,197	89	5	2,132	75	1
Marital Status								
Married	127,990	50	6,700	58	5	1,272	45	1
Widowed	11,689	5	325	3	3	124	4	1
Divorced	19,602	8	914	8	5	224	8	1
Separated	4,017	2	218	2	5	64	2	2
Never married	62,436	25	1,894	16	3	791	28	1
Living with partner	21,846	9	923	8	4	260	9	1

 $Notes: \quad Population\ column\ from\ the\ screen.$ 

 $Big\mbox{-}Game\ hunters\ who\ did\ not\ report\ their\ income\ are\ not\ included\ in\ the\ income\ characteristic.$ 

Urban is defined as all territory, population, and housing units located within boundaries that encompass densely settled territory, consisting of core census block groups or blocks that have a population density of at least 1,000 people per square mile, and surrounding census blocks that have an overall density of at least 500 people per square mile.

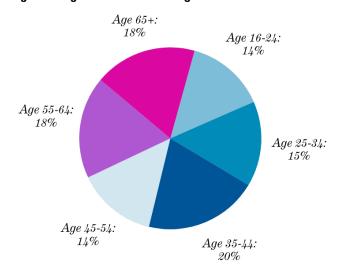


#### Age

The age category with the greatest number of participants was 35 to 44 years old, 2.3 million or 20 percent of all big-game hunters. The age categories with the highest participation rates were 35 to 44 years and 55 to 64 years, at five percent. All other age groups had a four percent participation rate. The participation rates of all groups were close, either four or five percent. The age category with the smallest number of participants was 16 to 24 years, 1.6 million.

Eighteen percent of big-game hunters were over the age of 65, whereas 21 percent of Americans are 65 years old and older. Baby boomers have surpassed 65 or will soon; this indicates a continuing change in big-game hunting participation. Relatively more big-game hunters are baby boomers than non-big-game hunters. Twelve percent of non-big-game hunters are 65 years old or older.

Figure 2. Age Distribution of Big-Game Hunters: 2022

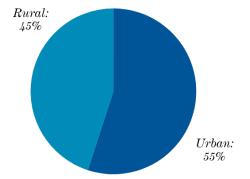


#### **Urban vs Rural Residence**

Big-game hunters were less likely to live in urban areas than non-big-game hunters. Non-big-game hunters were more likely to live in an urban area (70 percent) compared to big-game hunters (55 percent). Ten percent of the U.S. population living in rural areas hunted big game in 2022.

## Figure 3. Urban/Rural Distribution of Big-Game Hunters: 2022

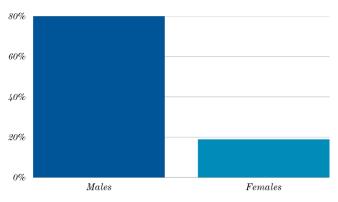
16 years of age and older



#### Sex

Big-game hunters are more heavily male than non-biggame hunters. Eighty percent of big-game hunters were male while 65 percent of non-big-game hunters were male. Nevertheless, there were a substantial number of female hunters. Over 2.2 million females hunted big game in 2022.

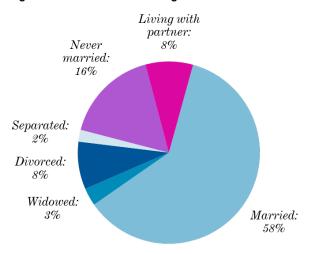
Figure 4. Sex Distribution of Big-Game Hunters: 2022

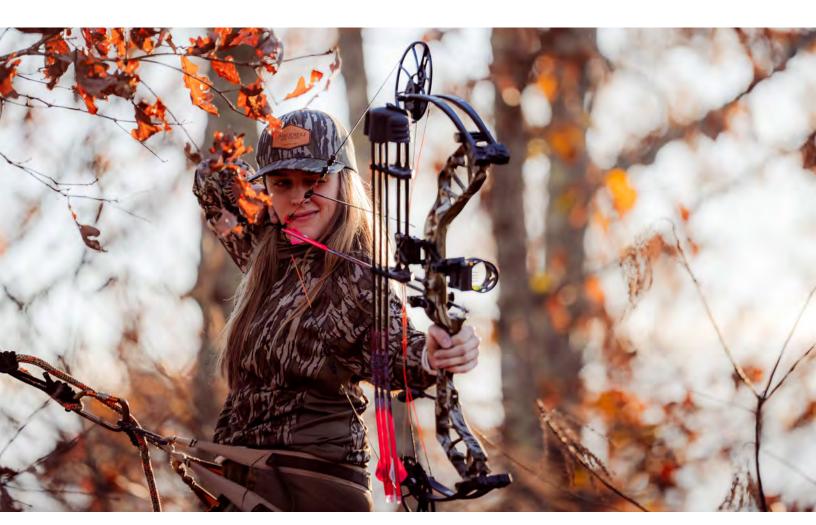


#### **Marital Status**

Big-game hunters are more likely to be married than the U.S. population altogether, as well as non-biggame hunters. Half of the U.S. population 16 years old or older were married, which compares to 58 percent of big-game hunters. A comparatively lower 45 percent of non-big-game hunters were married. This is likely due in part to the finding above that non-biggame hunters tend to be younger.

Figure 5. Marital Status of Big-Game Hunters: 2022

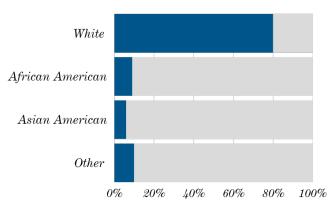




#### Race

While people of all races hunted in 2022, the majority were White. Eighty percent of big-game hunters were White, 9 percent African American, 6 percent Asian American, and 10 percent other races. The race distribution of non-big-game hunters was not as heavily weighted toward the White population, with 63 percent White, 18 percent African American, 4 percent Asian American, and 20 percent other races.

Figure 6: Race Distribution of Big-Game Hunters: 2022 16 years of age and older

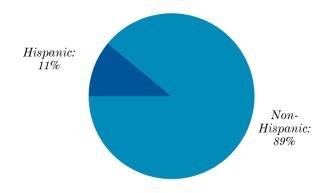


Note: Other includes Pacific Islander, Native American and individuals claiming multiple races.

#### **Ethnicity**

Hispanics made up a smaller share of big-game hunters than in the U.S. population and non-big-game hunters. Eleven percent of big-game hunters were Hispanic. Seventeen percent of the of the U.S. population were Hispanic. The share of non-big-game hunters that were Hispanic goes up to a full 25 percent, or 708,000.

**Figure 7: Ethnicity Distribution of Big-Game Hunters: 2022** 16 years of age and older







#### **Household Income**

The distribution of big-game hunters by income was nearly identical to the U.S. population, but big-game hunters tend to have higher incomes than non-big-game hunters. Thirty-five percent of big-game hunters were from households earning less than

\$50,000 per year, and 29 percent were from households with more than \$100,000. For non-big-game hunters, the respective percentages are 51 percent and 20 percent. Because incomes tend to go up with age, and big-game hunters tend to be older, this finding is not surprising.

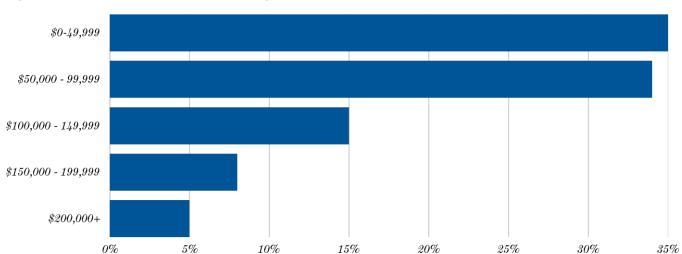


Figure 8. Household Income Distribution of Big-Game Hunters: 2022

Note: The missing 5% is "not reported." Big-game hunters who did not report their income are not included in the income characteristic.

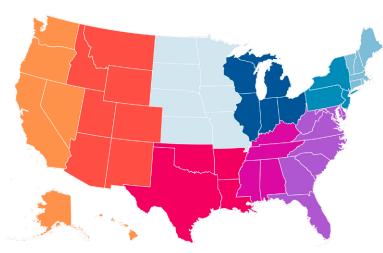
#### **Geographic Divisions**

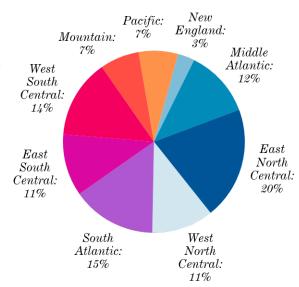
Figure 9 displays the distribution of big-game hunters by the U.S. Census Bureau's geographic divisions. The top three regions that had the highest percent of big-game hunters were as follows. East North Central region had the highest percent of big-game hunters (20 percent), with 2.3 million participants; South Atlantic

(15 percent) with 1.8 million participants; and West South Central (14 percent) with 1.0 million participants. The East South Central had the highest participation rate of big-game hunters at 9 percent. New England had the fewest big-game hunters, 326,000, and the Pacific had the lowest participation rate, 2 percent.

Figure 9. Divisional Distribution of Big-Game Hunters: 2022











#### Wildlife Watching Patterns

In 2022 10.5 million big-game hunters watched wildlife in addition to hunting. Wildlife watching is defined as closely observing, feeding, and photographing wildlife, maintaining plantings and natural areas around the home for the benefit of wildlife, and visiting public parks within a mile of home to wildlife watch. These wildlife-watching activities are split into around-the-home (within a mile of home) and away-from-home (at least one mile from home) categories.

Ninety-one percent of all big-game hunters watched wildlife, which is considerably higher than the 57 percent of the U.S. population that watched wildlife. These results indicate that crossover of big-game hunters into the wildlife watching realm is higher than one might expect. It is also noteworthy that in answering questions related to wildlife watching, respondents are instructed to not include activities related to hunting. Around-the-home wildlife watching was more popular than away-from-home with 76 percent of big-game hunters feeding, photographing, or observing wildlife around their home and 62 percent away from home. Over seven million big-game hunters took trips at least one mile from their home for the primary purpose of watching wildlife.

Table 2. Participation in Wildlife Watching by Big-Game Hunters in the United States in 2022

	Number (thousands)	Percent
$Big ext{-}Game\ Hunters$	11,522	100
Wildlife Watched	10,454	91
$Around\ the\ Home$	8,754	76
Photographed	8,178	71
Feed	7,637	66
Visited parks or natural areas to view	7,040	61
Maintained natural areas	5,936	52
Maintain plantings	5,779	50
Away from Home	7,131	62

## **Expenditures and Days Afield**



A basic summary of big-game hunting trip and equipment expenditures are shown in Table 3. It is important to understand that the expenditures in Table 3 are intended to be estimates of spending that is related to big-game hunting. They are not estimates of all spending by big-game hunters. Those numbers would be considerably higher. Nearly half of all biggame hunters also hunt other species. Equipment spending among those hunters for big game are obtained by apportioning equipment spending to big game using a ratio of big-game days afield to total hunting days<sup>3</sup>. Trip expenditures were directly related to big-game hunting trips, so no apportionment is required. They included but were not limited to food, drink, lodging, and transportation costs. Equipment expenditures included both hunting equipment such as rifles, ammunition, and hunting dogs, and auxiliary equipment used primarily for hunting (that is camping equipment, clothing, and taxidermy costs). Special equipment primarily included purchases of big-ticket items such as boats, campers, trucks, and cabins that were used primarily for hunting. Some highlights of Table 3 include the following.

In 2022 total trip and equipment expenditures for all hunting (big game and non-big game) was \$31.9 billion. Spending pursuant to big-game hunting was responsible for \$15.6 billion, or 49 percent of the total. Per-person spending of big-game hunters was \$1,352 for trip and equipment expenditures<sup>4</sup>. Per-spender numbers differ by type because not all big-game hunters have expenditures of every type. For example, the average of big-game hunters on 'Special Equipment' was \$334, but the average perspender was \$1,342. The majority of big-game hunters do not have any spending for 'Special Equipment': though 2.9 million out of 11.5 million did. For those big-game hunters that did have spending on 'Special Equipment,' their average spending was \$1,342.

In 2022 total days of big-game hunting were 134.7 million, 12 days per hunter. This average compares to seven days for small-game hunting, eight for migratory bird hunting, and nine days for other wildlife hunting. See Table 4.

- 3 The Survey does not have an expenditure category for big-game hunting. Therefore, total hunting equipment expenditures are prorated to get big-game expenditures by multiplying hunting expenditures by a ratio. The expenditure ratio is (total number of days hunting big game)/(sum of days hunting for the four types of game).
- 4 The expenditure categories of land leasing and ownership are not included in this analysis.



Table 3. Big-Game Hunter Expenditures for Trip-Related and Equipment Items in the United States in 2022

	Total Spending Dollars (thousands)	Percent of All Hunting Expenditures	Average per Big-Game Hunter Dollars	Spenders Number (thousands)	Average per Spender Dollars
All Trip and Equipment Spending	15,576,145	49	1,352	11,365	1,371
Trip Related	5,768,856	47	501	10,213	565
Hunting Equipment	3,863,686	49	335	8,892	435
Auxillary Equipment	2,091,002	53	181	7,282	287
Special Equipment	3,852,602	50	334	2,872	1,342

Table 4. Hunting Participants and Days by Species in the United States in 2022

	Participants (thousands)	$Days\ of\ Participation\\ (thousands)$	Avearge Number of Days per Participant
Total, all hunting	14,375	240,752	
Big game	11,522	134,684	12
Small game	5,290	38,056	7
Migratory birds	2,812	22,861	8
Other animals	2,300	19,903	9

## **Conclusion**



Of the 14.4 million hunters in 2022, 80 percent, or 11.5 million sought big game on 134.7 million days. Many big-game hunters (6.2 million) pursue big game exclusively, but another 5.3 million big-game hunters also pursue other species. Big-game hunters are most often White, Non-Hispanic, married males living in urban areas. However, a disproportionate percentage of them hail from rural areas. They reside all over the country, with the highest proportion living in the U.S. Census Bureau's East North Central division. Big-game hunters are more likely to be married than non-big-game hunters and earn an annual household income parallel to the general population, while non-big-game hunter income skews lower.

Big-game hunters are much more likely to participate in wildlife-watching activities than the general population. Ninety-one percent of big-game hunters engage in non-hunting related photography, feeding, or closely observing of wildlife. This compares to 57 percent of all U.S. residents.

Big-game animals are favored among hunters for numerous reasons that the Survey alone cannot ascertain. However, potential reasons include the numerous hunting opportunities that exist all through the country, they provide physical and mental challenges, and they are a good local source of nutritional protein. Hunting connects people to nature in a manner unlike any other. Big-game hunting naturally carries with it elements that lend to social cohesion with family and friends spending protracted time afield together. Moreover, hunters tend to share the harvested food, often with non-hunters and with organized food pantries helping to alleviate food insecurity. These reasons for hunting big game are not diminishing.

The findings in this report will be of use to natural resource managers, demographers, tourism and visitor bureaus, the firearms and archery industries, advertisers, and those concerned with expanding access to outdoor pursuits among underrepresent demographics.

Readers are encouraged to refer to this addendum's source material, the 2022 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.

https://www.fws.gov/media/2022-national-survey-fishing-hunting-and-wildlife-associated-recreation

