

Participation and Expenditure Patterns of African-American, Hispanic, and Female Hunters and Anglers

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

Report 2006-11



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Wildlife-Associated Recreation*

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This report is intended to complement the National and State Reports for the 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. The conclusions in this report are the authors' and do not represent official positions of the U.S. Fish and Wildlife Service.

The author thanks Sylvia Cabrera and Richard Aiken for their input into this report.

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Introduction

In October of 2011 the Secretary of Interior touted the findings in a new report that identified several parks and historic areas with ties to minorities. National parks provide an excellent opportunity for American's to explore the outdoors and annually receive over 11 billion visitors. In his effort to identify more of these sites important to the nation's Hispanics and African-Americans, Secretary Salazar encouraged the Park Service "to identify more sites tied to minorities that could be added to the park system." Presently less than 3 percent of all national landmarks are designated for women, Hispanics or African-Americans (Venessa Feldman, Associated Press, *The Washington Post* 1/5/11).

The following report provides the latest information regarding under-represented populations of hunters and anglers: women, Hispanics, and African-Americans. This information is provided to help policy makers and sportspersons who are faced with decision-making on game management in the U.S. The report identifies who minority and women sportspersons are, where they fish and hunt, and the types of game or fish they seek. In addition to demographic information, this report also outlines differences for low participation groups expenditures and trends.

All data presented here are from the sportsperson section of the 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (FHWAR). It is the most comprehensive survey of wildlife recreation in the United States. Altogether, almost 22,000 angler and hunter interviews were completed with a response rate of 77 percent. The Survey focused on 2006 participation and expenditures by U.S. residents 16 years of age and older.



USFWS/Anna Harris

Sportspersons

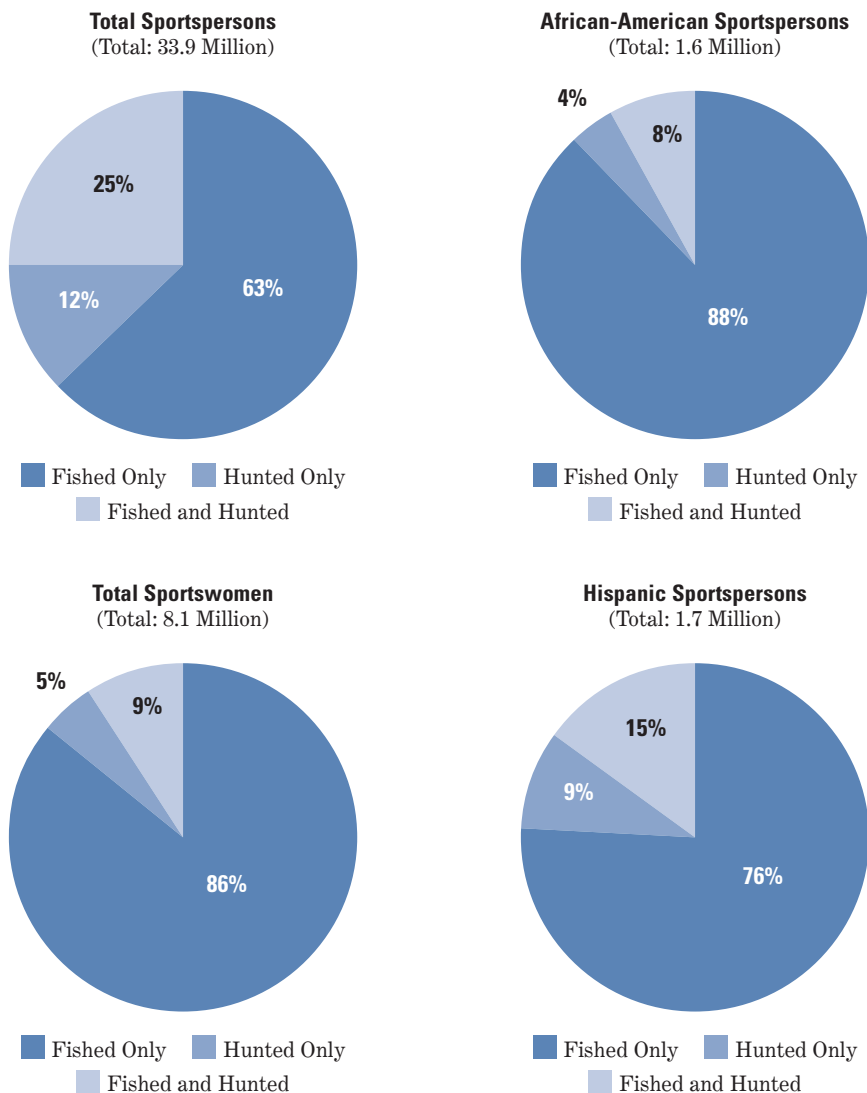
Almost 34 million Americans over the age of 16 participated in the traditional sports of hunting or fishing in 2006. Of the 34 million sportspersons there were eight million women, 1.7 million Hispanics and 1.6 million African-Americans.

A quarter of all sportspersons participated in both hunting and fishing in 2006. A look at the low participation groups reveals separation between the two sports. Fifteen percent of Hispanic sportsmen and women participated in both hunting and fishing. African-American hunters and anglers were even more specialized with only 8 percent of sportspersons participating in both hunting and fishing – the majority went fishing. Less than 10 percent of females went both hunting and fishing and 86 percent reported fishing only.

Youth and Female Sportspersons

In 2006 an estimated 1.6 million 6-to-15-year-old Americans hunted and 8.3 million fished. Of the hunters, 303,000 were female, 102,000 were non-White (sample size does not allow reliable African-American estimates), and 82,000 were Hispanic. That is nineteen, six, and five percent of all 6–15-year-old hunters, respectively. Of the anglers, 3.2 million were female, 911,000 were non-White (480,000 were African-American), and 704,000 were Hispanic. That is thirty-eight, eleven, and eight percent, respectively. Sixty-six percent of young sportspersons came from urban areas, which is slightly more than the fifty-nine percent of adult sportspersons.

Figure 1. Percent of Sportspersons by Type of Activity: 2006



Hunting Participation

Five percent of the U.S. population 16 years old and older went hunting in 2006. Participation in hunting by females, Hispanics and African-Americans reveals a consistent 1% participation rate across these subgroups.

Hunters 16 years old and older spent \$6.5 billion on their trips and \$5.4 billion on hunting equipment in 2006. These hunters spent, on average, \$521 a year on trips and \$429 on hunting equipment.

The 1.2 million females who hunted spent 11.7 million days afield seeking big game, small game, migratory birds and other animals. On average, they spent 10 days in the field hunting game. They took 9.9 million trips with an average of 9 trips per hunter. Over \$250 million was spent on trip-related expenses such as food, lodging and gas. Another \$278 million was spent on hunting equipment. On a per-hunter average, females spent less than the national average on hunting trips and equipment purchases.

Adventuresome at Any Age

This dynamic duo doesn't let age or a few wrinkles get in the way of their passion. While most women over the age of 80 prefer to spend time indoors, sisters Lauwana "Wanna" Woodruff, 90, and Druzilla "Boozie" Glenn, 82, prefer to spend their days camped out in the Mark Twain National Forest hunting wild turkeys. Residents of northeast Arkansas, Wanna and Boozie have been hunting since 1952 and see no sign of slowing down. "We enjoy watching the sun come up and the animals wake and then putting a big turkey or a deer in our sights," said Boozie. And there is no need for these ladies to be fearful in the woods, "who is going to mess with two crazy women with shotguns?" remarked Boozie (Jill J. Easton. *Adventures of Wanna and Boozie. Turkey Country*, Vol. 2, Issue 5. 06/11).

Figure 2. Percent of U.S. Population Participating in Hunting: 2006
(Population 16 years old and older.)

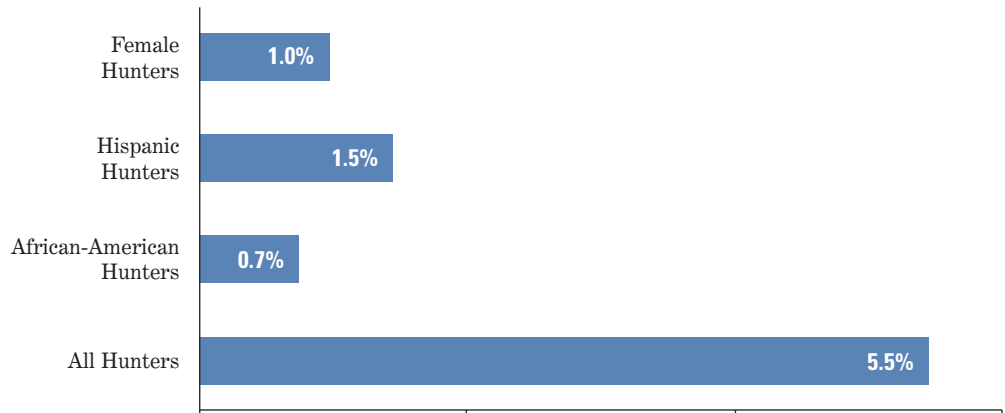


Table 1. Hunters, Days, Trips and Expenditures: 2006
(Population 16 years old and older. Numbers in thousands.)

	All Hunters	African-American Hunters	Hispanic Hunters	Female Hunters
Hunters	12,510	194	424	1,159
Days of Hunting	219,925	3,188	4,432	11,681
Mean Days of Hunting	18	17	11	10
Trips	185,399	2,649	4,392	9,860
Mean Hunting Trips	15	14	10	9
Total Trip Expenditures	\$6,519,021	\$119,017	\$185,568	\$256,811
Mean Trip Expenditures	\$521	\$613	\$438	\$222
Total Equipment Expenditures	\$5,366,357	\$68,296	\$118,714	\$278,649
Mean Equipment Expenditures	\$429	\$352	\$280	\$240

** All expenditures are depicted in 2006 dollars. Trip expenditures do not include heating and cooking fuel and equipment expenditures do not include auxiliary expenditures. These exclusions were necessary to make the estimates comparable with the trends section of this report.

The 194 thousand African-Americans who hunted in 2006 spent 3.2 million days afield with an average of 17 hunting days. They took 2.6 million trips with an average of 14 trips per hunter. African-American hunters spent more than the national average for all hunters on trip-related expenditures (\$613).

Over four hundred thousand Hispanics went hunting in 2006. They spent 4.4 million days pursuing game, with an average of 11 days per hunter. The 4.4 million hunting trips they took averaged 10 trips per hunter. Expenditures for Hispanic hunters totaled \$186 million for trip-related purchases and \$119 million for equipment such as decoys, game calls, and ammunition. They averaged \$438 per hunter for trips and \$280 per hunter for equipment.

Regional Distribution

Information on the regional distribution of general and diverse populations of sportspeople in the U.S. can help natural resource managers and policymakers effectively plan and provide opportunities for all groups.

Figure 5 shows the distribution of all hunters and subpopulations throughout the country. For all hunters, the South (38 percent) and Midwest (33 percent) have the highest proportion of hunters living there. The only reportable region for African-American hunters was the South where 87 percent of all African-American hunters in the U.S. lived there. Over half the population of Hispanic hunters also live in South (55 percent). The West had a large proportion of Hispanic hunters (32 percent) compared to all other hunters and subgroups. Sample sizes were also too small to show for Hispanic Hunters in the Northeast region. The largest regional proportion of female hunters was in the Midwest (37 percent) followed closely by the South (35 percent).

Figure 3. Mean Hunting Days: 2006

(Population 16 years old and older.)

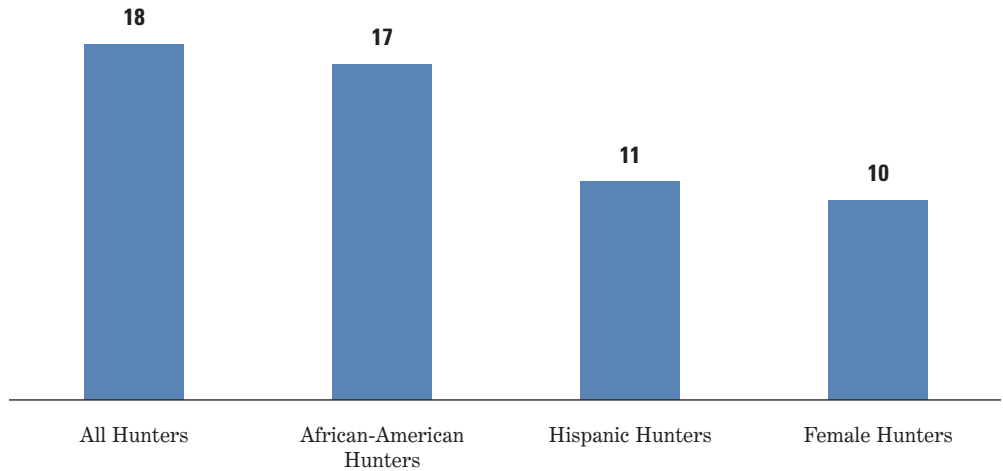


Figure 4. Mean Hunting Trips: 2006

(Population 16 years old and older.)

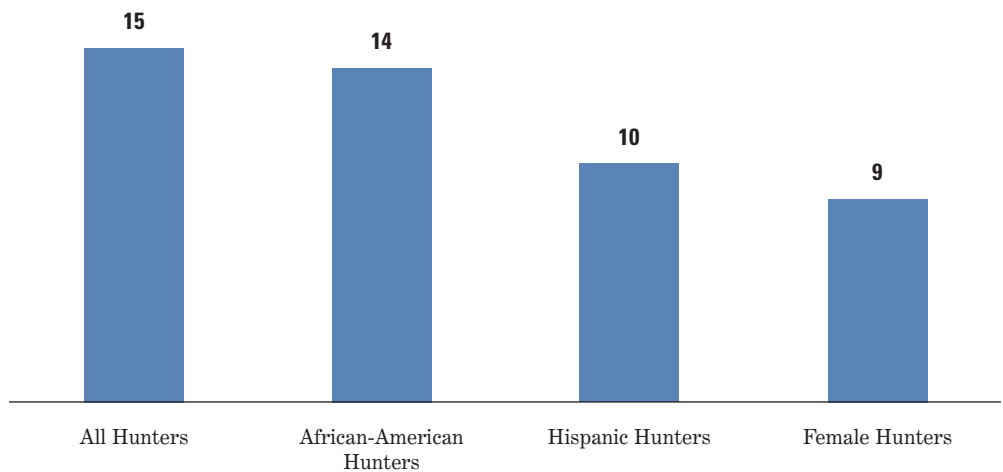
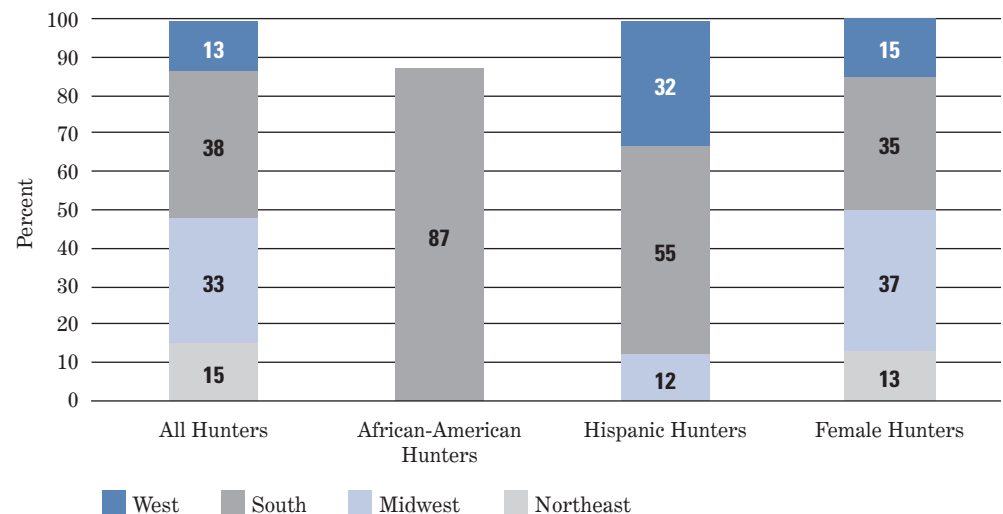


Figure 5. Regional Distribution of Hunters: 2006

(Population 16 years old and older.)



Note: Does not equal 100 when subcategory has too small a sample size.

Hunting Expenditures

Hunting expenditures are divided into two categories: trip-related expenditures such as food, lodging and transportation and equipment expenditures such as ammunition, decoys and clothing. Figure 6 illustrates a comparison of mean trip expenditures for hunters. African-American hunters consistently spent more on average (\$613) for hunting trips than all hunters (\$521). The other subpopulations spent less on average per year than all hunters who spent \$521 per year. Hispanics spent \$438 while females spent the least, \$222.

Average spending for hunting equipment is shown in Figure 7. In this case, each of the subpopulations averaged less than the national average for all hunters (\$429). Of the subpopulations, African-Americans again spent the most (\$352), while Hispanics spent \$280 and females spent \$240.

Hunting Licenses

Eighty percent of all hunters purchased a hunting license in 2006. Some individuals were exempt from buying a license because they were landowners, were above a certain age or had a disability. Hunting license purchases were lower for the subpopulations. Seventy-two percent of female hunters, 71 percent of Hispanic hunters and 64 percent of African-American hunters purchased one or more hunting licenses in 2006.

Figure 6. Average Hunting Trip Expenditures: 2006

(Population 16 years old and older.)

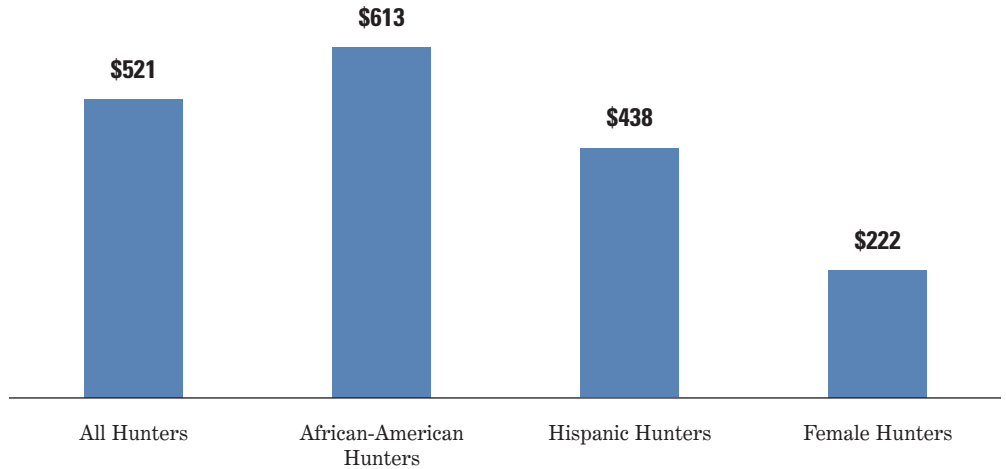


Figure 7. Average Hunting Equipment Expenditures: 2006

(Population 16 years old and older.)

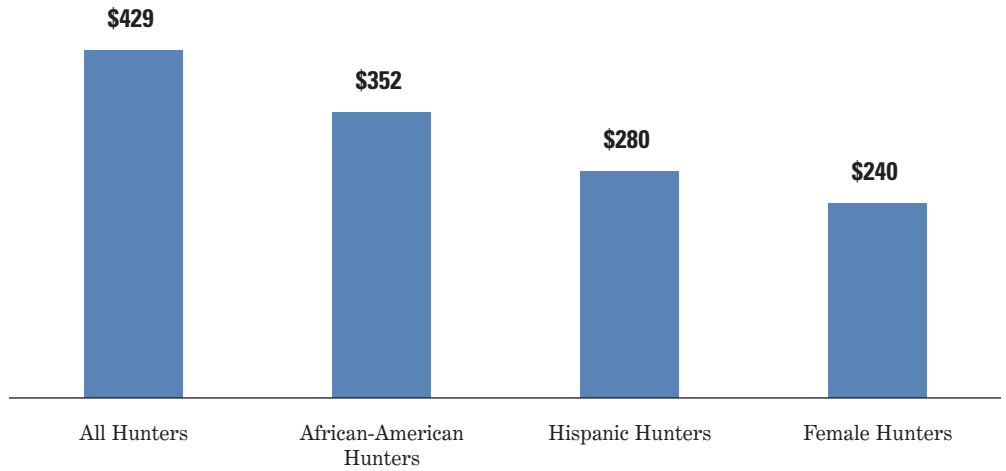
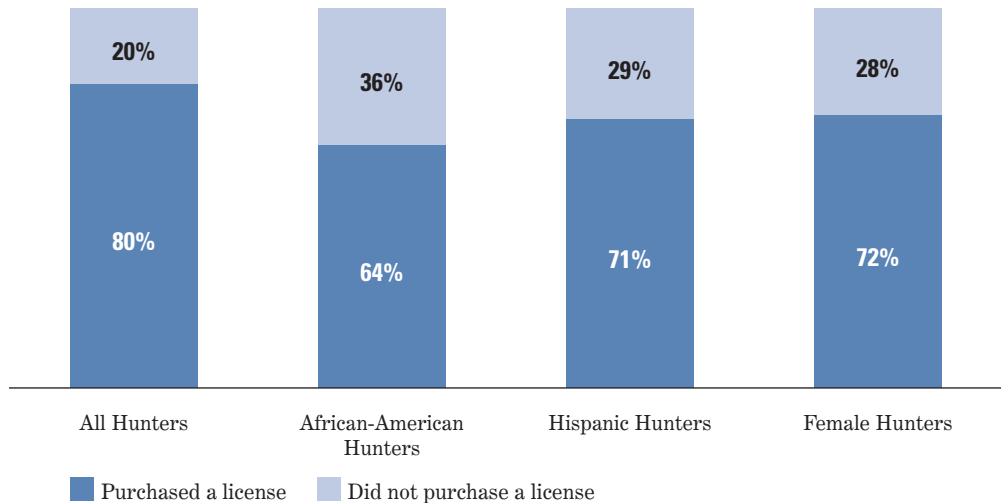


Figure 8. Hunters Who Purchased Licenses: 2006

(Population 16 years old and older.)



Public and Private Land Hunting

Private land continues to be the most popular place for hunters to take to the field. Over 80 percent of all hunters accessed private land to hunt and 39 percent went on public land in search of wild game. For women, 79 percent hunted on private land while 29 percent accessed public hunting land. African-American hunters were more likely to use private land with 86 percent hunting on private land and another 17 percent accessing public land. 74 percent of Hispanic hunters hunted on private land; 33 percent hunted public land.

Type of Hunting

The FHWAR Survey categorizes hunting into four distinctive types: Big Game (deer, elk, wild turkey), Small Game (squirrel, rabbit), Migratory Bird (geese, ducks), and Other Animal (coyotes, foxes) hunting.

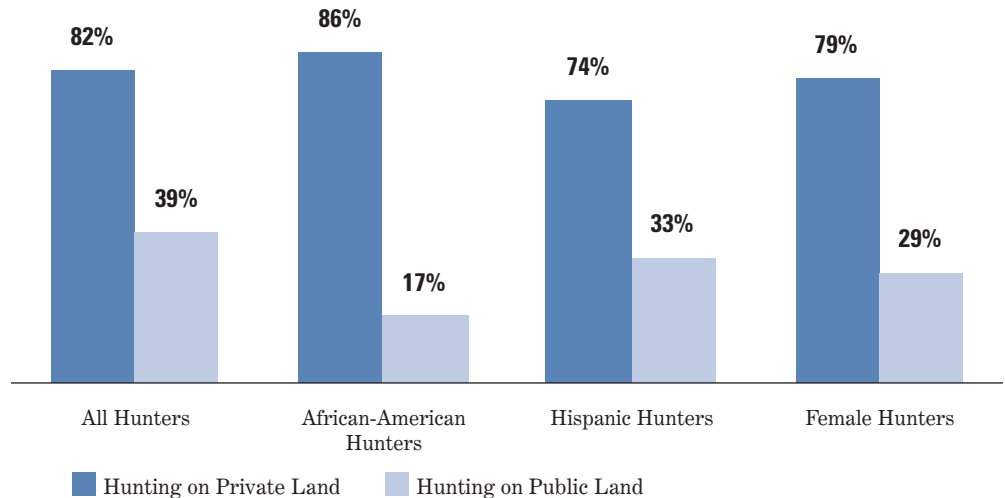
In 1955 small game hunting was the most popular, but today it's big game that reigns on top. Eighty-five percent of all hunters pursued big game; and for females, this proportion was even higher (87 percent). Big game hunting was preferred by African-American hunters as well as Hispanic hunters with 81 and 79 percent respectively.

Thirty-eight percent of all hunters sought small game. Small game was even more popular for African-American hunters with over half seeking them (54 percent). Hispanic hunters were active small game hunters with 48 percent seeking small game in 2006. Small game was not as popular for female hunters where less than a quarter (24 percent) pursued squirrel, rabbit, and other small game.

Migratory bird hunting, which includes doves, geese and ducks, were sought by 18 percent of all hunters. Compared to all other hunters, Hispanics were one and a half times more likely to hunt migratory birds (28 percent). Eleven percent of women pursued migratory birds. African-American hunters had a sample size too small to report data reliably for migratory bird hunting.

Figure 9. Hunting on Public and Private Land: 2006

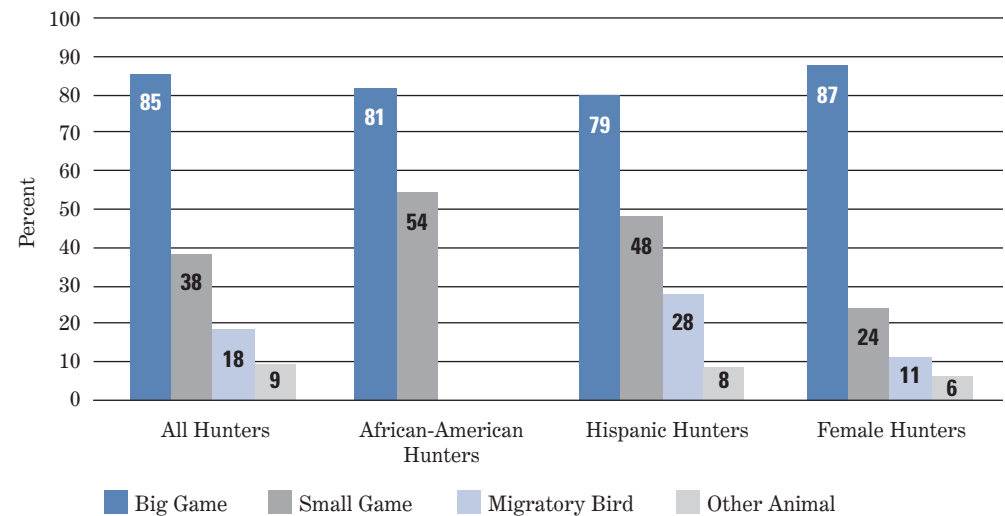
(Population 16 years old and older.)



Note: Detail does not add to 100 because hunters can hunt on more than one type of land.

Figure 10. Percent of Hunters, by Type of Game: 2006

(Population 16 years old and older.)

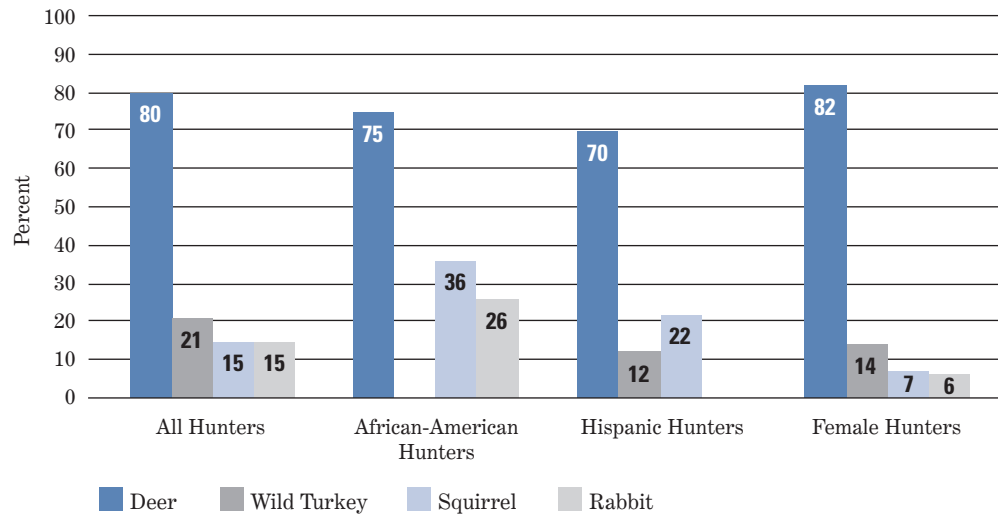


Type of Game

Deer, including white-tails and mulies, are by far the most popular type of game hunted in America. Eighty percent of all hunters sought deer in 2006. Eighty-two percent of all female hunters, three quarters (75 percent) of all African-American hunters, and 70 percent of all Hispanic hunters hunted deer. Wild turkey was another popular big game species with 21 percent of all hunters going afield for them. Fourteen percent of females and 12 percent of Hispanic hunters sought wild turkey in 2006. For small game, squirrel and rabbit are popular with 15 percent of hunters in the U.S. hunting them. Squirrel hunting was even more popular for African-American hunters where 36 percent hunted squirrel and 26 percent sought rabbit. Squirrel hunting was popular for Hispanic hunters too; 22 percent hunted them. For women, small game was not as popular; less than 10 percent of females hunted either squirrel or rabbit.

Figure 11. Hunters by Selected Species: 2006

(Population 16 years old and older.)



USFWS/Anna Harris

Trends

There has been a decline in hunting over the past decade. Between 1991 and 2006 there was a decline of 12 percent in hunting participation in the U.S. The trend between 1996 and 2006 for African-American hunters is even more alarming. African-American hunters reached a high of 303 thousand hunters in 1996 and by 2006 the number of hunters fell to less than 200 thousand. For both Hispanic and female hunters the trend was level, showing no statistical significance between 1996 and 2006.

Days afield is another way to measure hunter avidity. Overall, all hunting days have declined 17 percent between 1996 and 2006. For the subpopulations, there was no statistically significant change between the number of days hunters spent in the field between 1996 and 2006.

Spending for hunting trips has been steady between 1996 and 2006. During this ten-year period hunters spent around \$6 billion on food, lodging, and transportation. The subpopulations of African-American, Hispanic and female hunters saw no change in spending patterns for trip-related expenditures between 1996 and 2006. Equipment purchases made by all hunters saw a 33 percent decline in spending between 1996 and 2006. For the subpopulations, there were no significant differences in spending between those ten years.

Key to the Future: Female Hunters

Are female hunters increasing in number? Despite recent popularization (high visibility within the media and popular culture) of female hunters, past FHWR Survey results point to a more complicated story. A comparison of results from the 1991, 1996, 2001, and 2006 shows a slight increase in the number of female hunters but this result is not statistically significant. In 1991, 1.1 million females reported hunting. In 1996 that number increased to 1.2 million and has remained constant in both 2001 and 2006. Results from the 2011 Survey may help to validate this claim of increasing participation by female hunters.

Table 2. Trends in Hunter Participation, Days, and Expenditures: 1991 to 2006

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

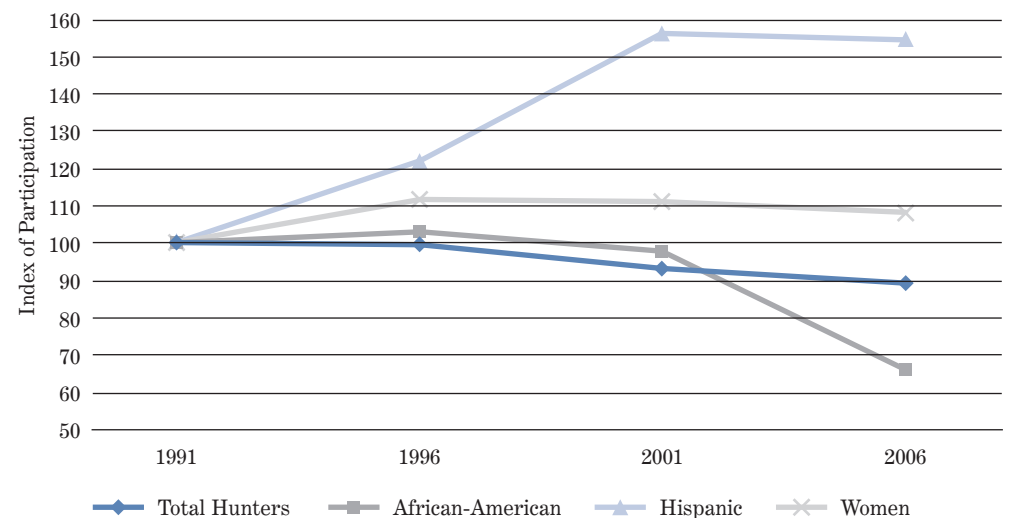
	1991	1996	2001	2006	1996–2006
Hunters					
Total Hunters	14,006	13,975	13,034	12,510	-12%
African-American	294	303	288	194	-56%
Hispanic	274	335	428	424	*
Women	1,069	1,192	1,189	1,159	*
Days					
Total Days	235,806	256,676	228,367	219,925	-17%
African-American	5,499	4,839	5,382	3,188	*
Hispanic	3,229	4,363	5,139	4,432	*
Women	13,512	13,074	14,068	11,681	*
Hunting Expenditures					
Total Trip Expenditures	5,108,033	\$6,288,733	\$5,895,252	\$6,519,021	*
African-American	97,970	\$105,036	\$120,647	\$119,017	*
Hispanic	74,950	\$238,123	\$262,382	\$185,568	*
Women	274,708	\$281,941	\$220,870	\$256,811	*
Total Equipment Expenditures	4,875,493	\$7,125,247	\$5,195,568	\$5,366,357	-33%
African-American	75,746	\$111,951	\$105,205	\$68,296	*
Hispanic	83,055	\$147,962	\$140,501	\$118,714	*
Women	220,651	\$291,088	\$218,890	\$278,649	*

The "*" denotes that the percentage is not different from zero at the 90 percent confidence level. Thus for 90 percent of all possible samples, the estimate between one survey year is not different from another survey year. Expenditures are in 2006 dollars.

** All expenditures are depicted in 2006 dollars. Two changes are made to the 2006 and 2001 expenditures to be consistent with 1991 and 1996 estimates. First, trip expenditures for 2001 and 2006 do not include heating and cooking fuel. Second, the 2001 and 2006 equipment expenditures do not include auxiliary expenditures. These exclusions were necessary to make the estimates comparable with previous publications.

Figure 12. Indexed Hunting Trend

(Population 16 years old and older.)



Fishing

In 2006 almost 30 million anglers took to the varied fresh and marine waters of the U.S. Out of this group, 7.6 million were female, 1.6 million Hispanic and 1.5 million anglers were African-American.

Thirteen percent of the U.S. population 16 years old and older went fishing in 2006. For African-Americans and females the participation rate was 6 percent and for Hispanics, participation was even lower at only 5 percent in 2006.



USFWS/Steve Hillebrand

Figure 13. Participation Rates for Fishing: 2006
(Population 16 years old and older.)

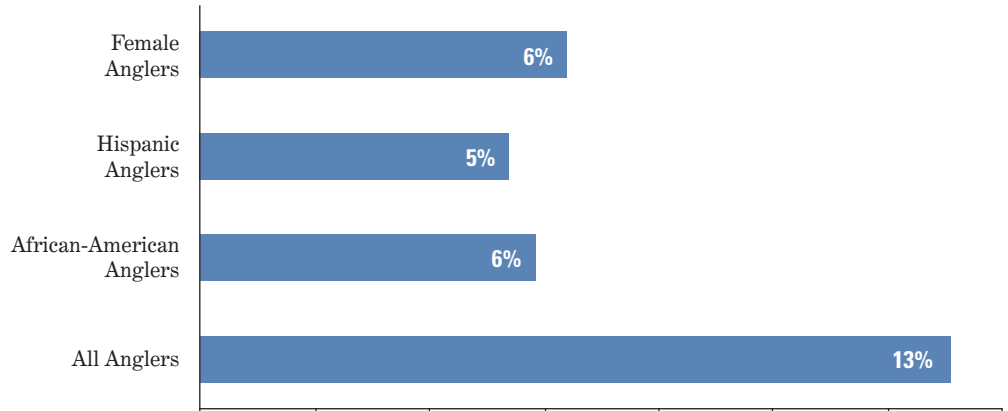


Table 3. Participation, Days, Trips, and Expenditures: 2006
(Population 16 years old and older. Numbers in thousands.)

	<i>All Anglers</i>	<i>African-American Anglers</i>	<i>Hispanic Anglers</i>	<i>Female Anglers</i>
Anglers	29,952	1,515	1,576	7,615
Days of Fishing	516,781	28,474	24,477	89,058
Mean Days of Fishing	17	20	16	12
Trips	403,492	23,927	21,277	71,063
Mean Fishing Trips	13	17	14	10
Trip Expenditures	\$17,704,656	\$684,430	\$679,337	\$2,170,788
Mean Trip Expenditures	\$591	\$452	\$431	\$285
Equipment Expenditures	\$5,332,401	\$285,219	\$343,214	\$789,333
Mean Equipment Expenditures	\$178	\$188	\$218	\$104

The average U.S. angler spent 17 days on the water fishing. African-American anglers had a slightly higher average, with 20 days fishing. Hispanic anglers were just under the national average with 16 days fishing. Female anglers had an average of 12 days on the water.

Since trips can include multiple fishing days, the average number of fishing trips for all anglers in 2006 was 13. Hispanic anglers took an average of 14 fishing trips and African-American anglers, on average, took the most: 17 trips. Female anglers took an average of 10 fishing trips in 2006.

Region

A breakdown by region paints a broad picture of where anglers are fishing in different parts of the country. As a whole, the South had the highest percent of all anglers (42 percent). It also had the highest shares of Hispanic (52 percent) and female anglers (44 percent). Almost three quarters (74 percent) of African-American anglers lived in the South too. The West had a large proportion of Hispanic anglers (35 percent), and the Midwest a large share of female anglers (30 percent). The Northeast had the lowest share of all anglers (13 percent) and low shares of all subpopulations.

Figure 14. Average Fishing Days: 2006

(Population 16 years old and older.)

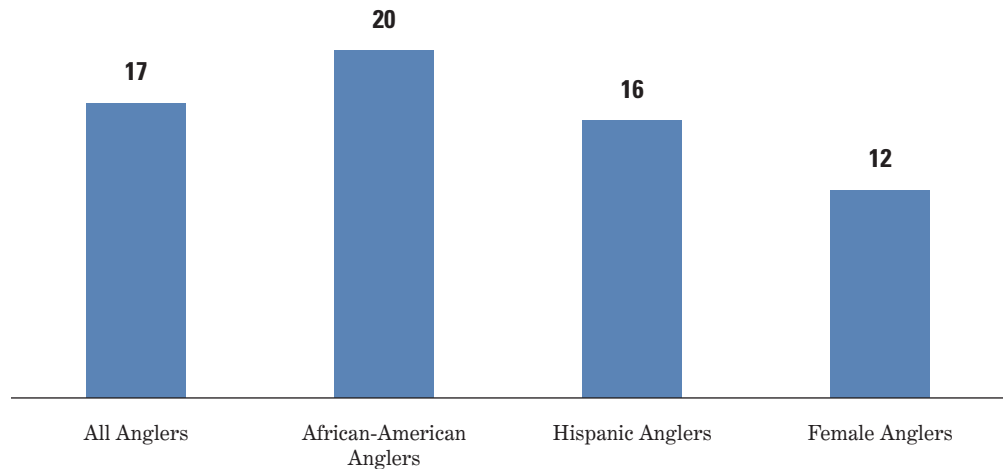


Figure 15. Average Fishing Trips: 2006

(Population 16 years old and older.)

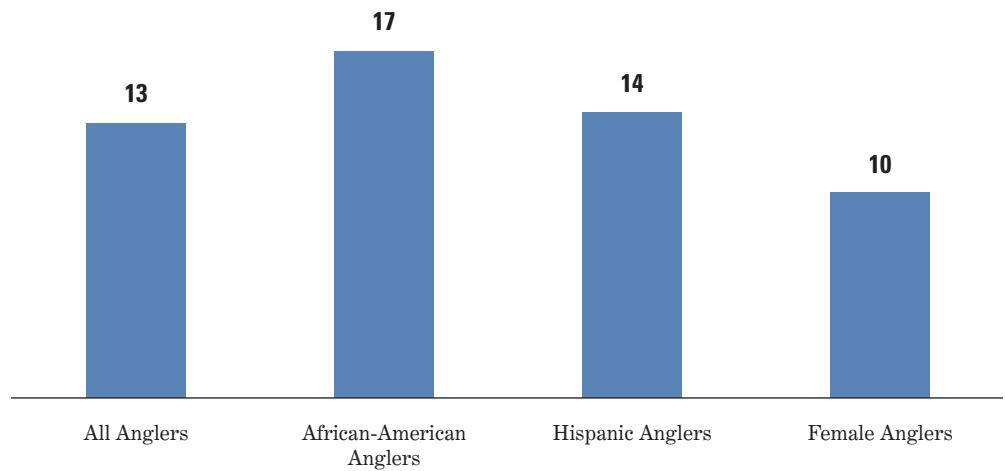
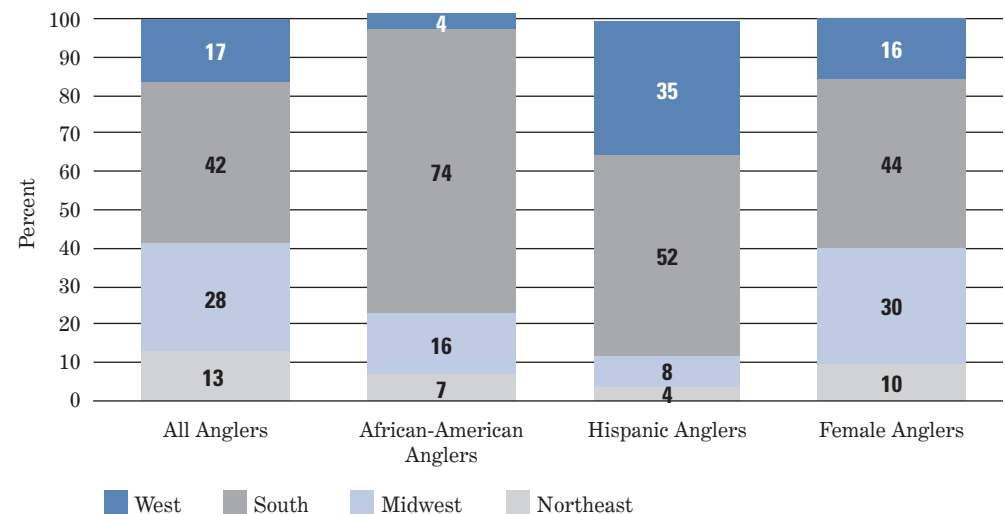


Figure 16. Regional Distribution of Anglers: 2006

(Population 16 years old and older.)



Fishing Types

Eighty-four percent of anglers in the U.S. fished in freshwater. For female anglers, the percent is almost the same (83 percent). Freshwater fishing was slightly less popular for African-American anglers (79 percent) and Hispanic anglers (72 percent). In 2006, 26 percent of all anglers fished in saltwater. Saltwater was more popular among the subpopulations with 44 percent of Hispanic anglers and 28 percent of African-American anglers fishing in saltwater. Five percent of all anglers fished in the Great Lakes but the Great Lakes had low shares of the demographic groups: 4 percent of African Americans and 3 percent of females fished in the Great Lakes. The sample size was too small to report Hispanics fishing in the Great Lakes.

Fishing For Selected Species

In freshwater, black bass tops the chart as having the most anglers fishing for that species (40 percent) in 2006. Yet a closer look at the demographics of freshwater anglers reveals catfish were a more popular species for Hispanic (40 percent) and African-American (48 percent) anglers. For females, panfish (32 percent) and black bass (32 percent) were among the most popular freshwater species female anglers sought.

Fly fishing is a special angling method in which an artificial “fly” is used to catch fish. It can be done in fresh or saltwater using a fly rod, reel and specialized weighted line. In the U.S. 6 percent of all anglers used a fly rod to fish in 2006. This was consistent among the subpopulations as well. Ice fishing is another special fishing mode that involves fishing on a frozen lake or stream through a hole in the ice. It was enjoyed by 10 percent of all anglers. Ice fishing was less popular among subpopulations with only 4 percent of female anglers and 2 percent of Hispanic and African-American anglers participating.

Figure 17. Percent of Anglers, by Water Type: 2006

(Population 16 years old and older.)

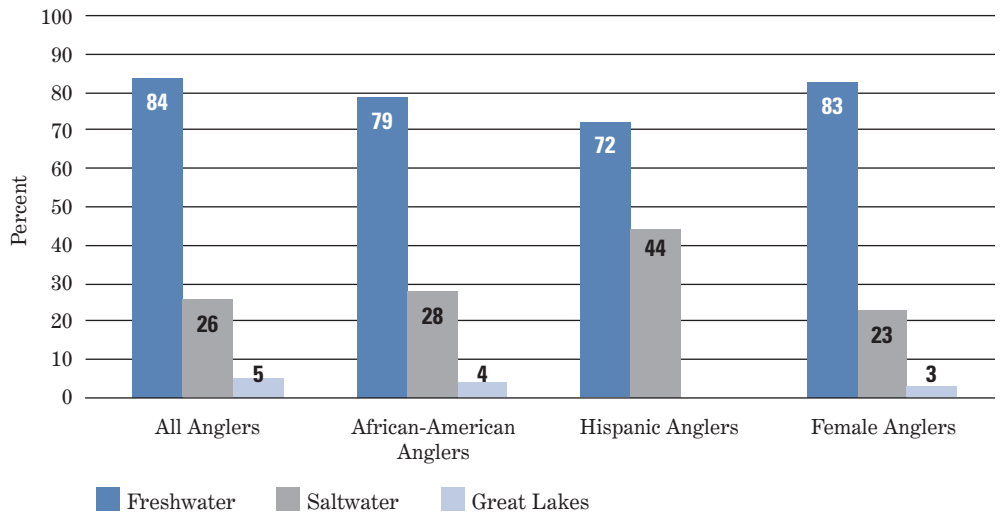


Figure 18. Percent of Anglers, by Freshwater Species: 2006

(Population 16 years old and older.)

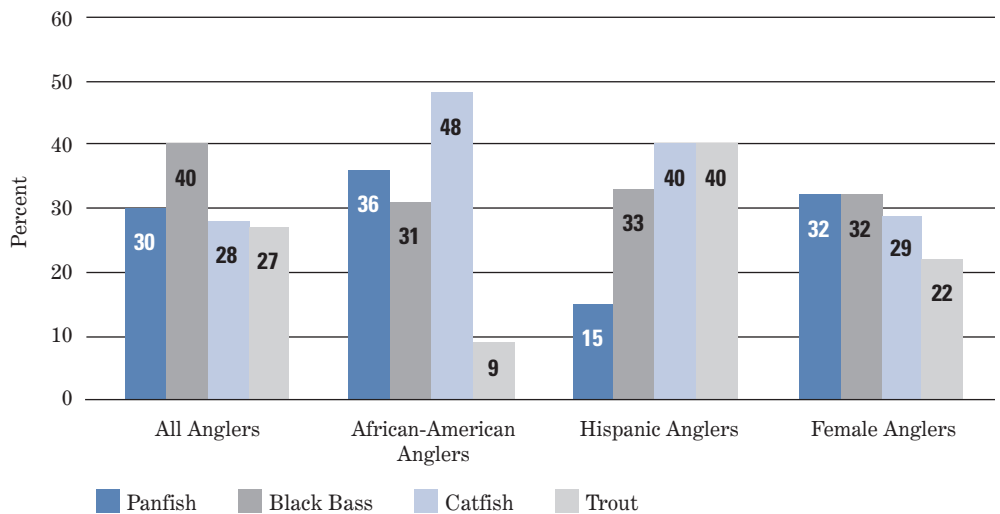
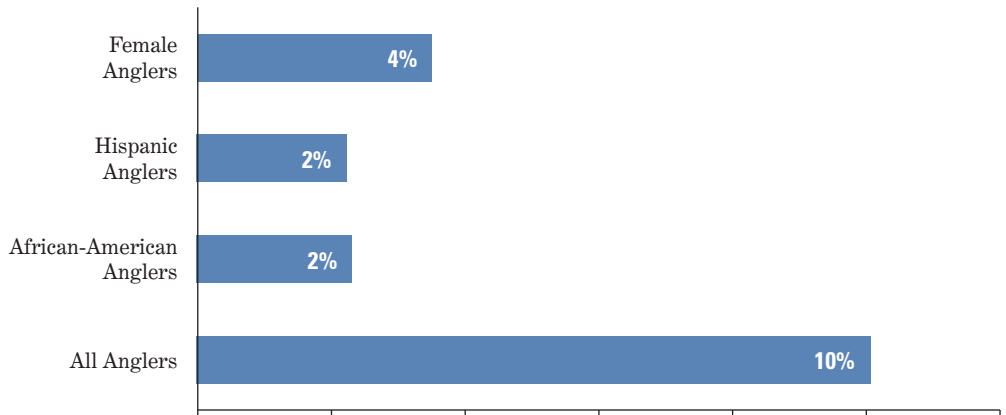


Figure 18a. Ice Fishing Participation Rates: 2006

(Population 16 years old and older.)



In 2006, almost half (48 percent) of all Hispanic anglers fished for red drum in saltwater compared to only a quarter of all U.S. anglers (24 percent). Flatfish was popular for both African-American (28 percent) and female (35 percent) anglers. Striped bass was sought by 21 percent of African-American anglers, 11 percent of Hispanic anglers, and 10 percent of female anglers.

Expenditures

The 30 million anglers in the U.S. spent over \$17 billion on trip-related expenses including transportation, lodging, food and guide fees. The average angler in the U.S. spent \$591 on trip expenses. Equipment expenses for items such as rods, reels, and bait totaled \$5.3 billion in 2006. The average angler spent \$178 per year on fishing equipment.

African-American anglers spent \$684 million on trip-related expenses, with an average of \$452 per angler. Hispanics had a slightly lower average of \$431 per angler with a total of \$679 million on their trips. Female anglers spent over \$2 billion on fishing trip-related items and had an average of \$285 per angler. The average expenditures for both African-American (\$188) and Hispanic (\$218) anglers were higher than the average of all anglers. Female anglers were again the lowest spenders, on average, out of the three subpopulations.

Trends

Fishing participation has seen a decrease from over 35 million anglers in 1996 to fewer than 30 million in 2006.

Angling days, another way to measure avidity, also saw a decline between 1996 and 2006. The 1996 FHWAR Survey recorded a high of 626 million fishing days; but, by 2006, the number of

Figure 19. Percent of Anglers, by Saltwater Species: 2006

(Population 16 years old and older.)

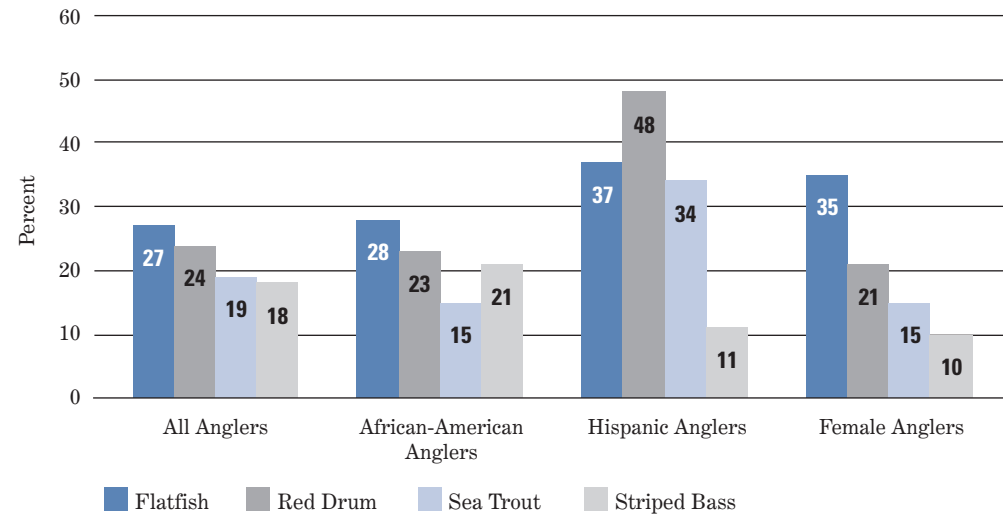


Figure 20. Mean Fishing Trip Expenditures: 2006

(Population 16 years old and older.)

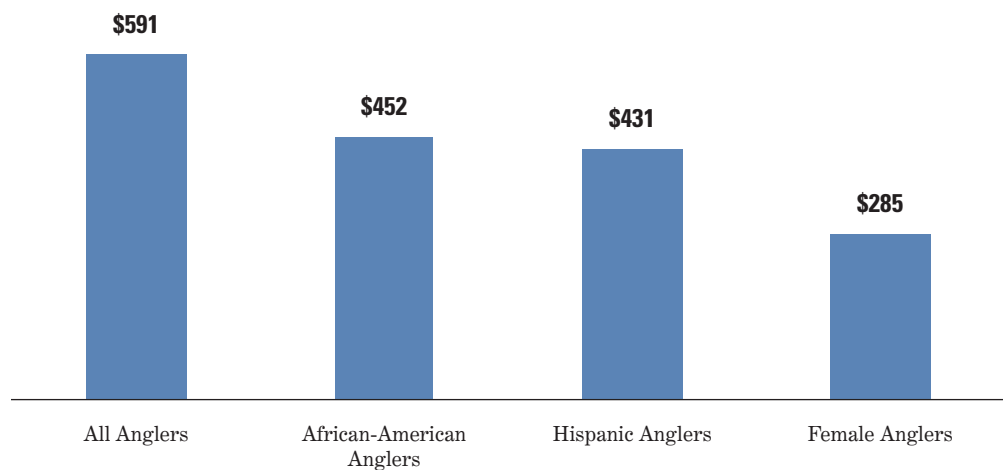
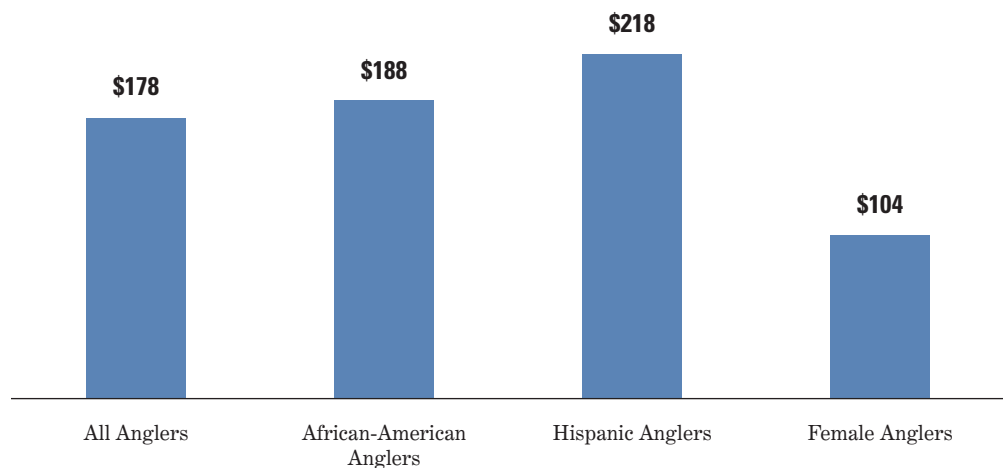


Figure 21. Mean Fishing Equipment Expenditures

(Population 16 years old and older.)



fishing days dwindled by 21 percent. Expenditures for anglers have remained steady with a slight decrease in equipment spending.

Between 1996 and 2006 African-American anglers did not see a statistically significant change in participation while Hispanics had a 25 percent increase in participation during that time period. Female anglers were similar to all anglers with a decline in participation between those ten years.

Hispanic anglers spent more days fishing, as shown by the significant 32 percent increase in the number of fishing days. Female anglers had a 27 percent decline in angling days between 1996 and 2006 while African-American's angling days remained unchanged.

Expenditures for trip-related items were consistent for African-American and Hispanic anglers for both 1996 and 2006. However, female anglers decreased their spending (21 percent) on trip-expenses during that time period. Equipment purchases by all anglers saw a decline in spending (13 percent) between 1996 and 2006. However, Hispanic anglers spent more on fishing equipment and between 1996 and 2006; there was a 40 percent increase for Hispanic angling equipment expenditures.

Lapsed Sportsmen Programs

Hunting and fishing saw a decline in participation between 1996 and 2006. Participation is not the only measure of success or trends for these recreational sports. Research has shown many anglers and hunters who do not hunt or fish every year still consider themselves hunters and anglers, even though their licenses or participation have lapsed. In recent years states have designed lapsed angler and hunter recruitment programs in an effort to increase license sales and participation. Agency officials recognize state fish and wildlife resources greatly depend on a consistent flow of revenue from license sales and are using new advertising campaigns to increase sportsmen participation.

Table 4. Trends in Anglers Participation, Days, and Expenditures: 1991 to 2006

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

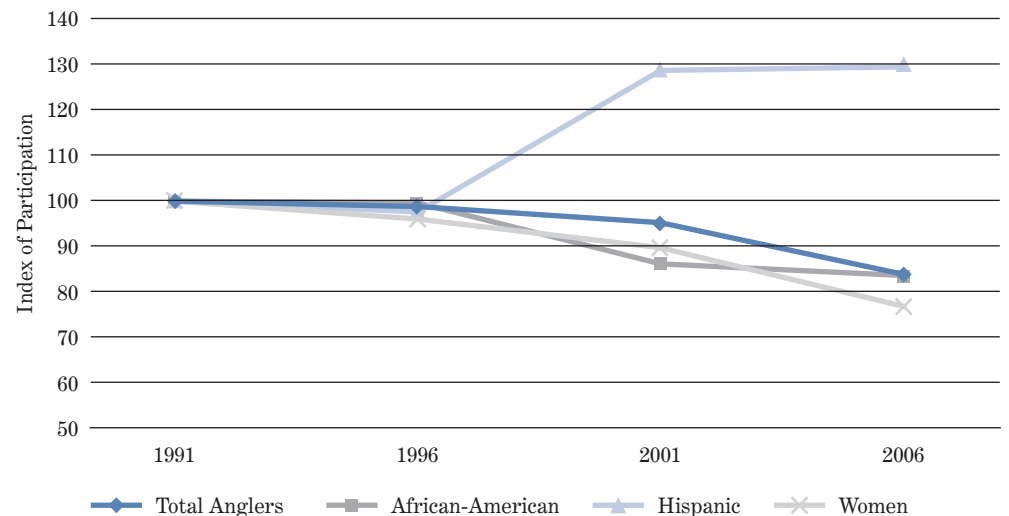
	1991	1996	2001	2006	1996–2006
Anglers					
Total Anglers	35,787	35,246	34,071	29,952	-18%
African-American	1,815	1,802	1,564	1,515	*
Hispanic	1,218	1,185	1,564	1,576	25%
Women	9,935	9,509	8,912	7,615	-25%
Days					
Total Days	511,328	625,893	557,394	516,781	-21%
African-American	23,273	40,131	24,702	28,474	*
Hispanic	14,375	16,685	19,060	24,477	32%
Women	97,699	112,841	107,692	89,058	-27%
Fishing Expenditures					
Total Trip Expenditures	\$15,443,868	\$17,299,985	\$14,578,102	\$17,704,656	*
African-American	\$569,120	\$659,450	\$401,003	\$684,430	*
Hispanic	\$385,395	\$577,791	\$532,569	\$679,337	*
Women	\$2,654,437	\$2,625,915	\$2,321,156	\$2,170,788	-21%
Total Equipment Expenditures	\$5,199,844	\$6,017,407	\$4,617,612	\$5,332,401	-13%
African-American	\$182,371	\$260,875	\$163,347	\$285,219	*
Hispanic	\$167,547	\$206,509	\$249,084	\$343,214	40%
Women	\$946,316	\$757,855	\$662,179	\$789,333	*

The "*" denotes that the percentage is not different from zero at the 90 percent confidence level. Thus for 90 percent of all possible samples, the estimate between one survey year is not different from another survey year. Expenditures are in 2006 dollars.

** All expenditures are depicted in 2006 dollars. Two changes are made to the 2006 and 2001 expenditures to be consistent with 1991 and 1996 estimates. First, trip expenditures for 2001 and 2006 do not include heating and cooking fuel. Second, the 2001 and 2006 equipment expenditures do not include auxiliary expenditures. These exclusions were necessary to make the estimates comparable with previous publications.

Figure 22. Indexed Fishing Trends

(Population 16 years old and older.)



Conclusion

This report has presented detailed information on the participation and expenditure patterns of African-American, Hispanic and female anglers and hunters. This information includes participation rates, days and trips level, expenditures, usage of public and private land, types of fishing and hunting and species pursued. Comparisons of this information among the different populations of hunters and anglers reveal that these populations are unique in many respects.

There are a number of ways wildlife professionals can use information in this report. The data can be used to improve hunting and fishing experiences for these low participation groups. For instance, the report indicates that subpopulations are less likely to purchase a license to hunt. Hunter safety and conservation programs could be designed for these demographic groups with an emphasis on the importance of buying a license and penalties for getting caught without one.

Since most state fish and game agency budgets are funded in part through license sales, hunter recruitment and retention is a big concern for current wildlife managers. Research has pointed to the loss of small game habitat as one reason for the decline in hunting participation. African-American and Hispanic hunters were avid small game hunters compared to all other hunters. Many hunters hunt predominantly on private land. To avoid overcrowding and over-hunting, resource managers could examine why private land is preferred over public land and increase efforts to make public land more favorable. This may include managing habitat for small game hunting opportunities to accommodate the demand.

Another use of the data is directing information toward the appropriate user groups. For instance, the report shows a large proportion of Hispanic



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and African-American anglers fish for catfish. Changes in fishing regulations or advisories for that species could have a large impact on this user group. Wildlife professionals could target information to this group in Spanish and English and choose the best medium to disseminate information.

Expenditure information can provide the hunting and fishing industry with a better understanding of their customers. Demographic profiles of trip and equipment expenditures can be used to better serve customers and for marketing purposes. Some key findings include

African-American hunters spending more on trip-related expenditures compared to the other hunter groups while the number of African-American hunters decreased significantly between 1996 and 2006. For fishing, Hispanic anglers are increasing, spending more days fishing and also reportedly spending more on average on equipment than any other group.

Appendix A. Selected Characteristics of Resident Anglers and Hunters by State: 2006

A state-by-state breakdown provides a closer look at where women and minority hunters and anglers reside. The first column entitled “Population” indicates the number of people in each state for the three subpopulations. The second “Sportspersons” column provides the number of minority and female hunters or anglers in each state. “Participation rate” is the proportion of the population that participated in hunting or fishing in 2006.

Almost 20 percent of females in Alaska went hunting, fishing, or both in 2006. This was by far the highest participation rate for women compared to the rest of the U.S. Overall, the average sportsperson participation rate for females was 7 percent. Other states with a high proportion of sportswomen included Minnesota (17 percent), North Dakota (15 percent), and Wyoming (16 percent).

Participation in hunting and fishing by state was tough to report for Hispanics due to small sample sizes at the state level. Overall, 7 percent of the Hispanic population in the U.S. went hunting or fishing. Wyoming had a huge proportion (37 percent) of its Hispanic population participating in hunting and fishing in 2006. Other reportable states with a high participation rate include New Mexico (17 percent) and Utah (13 percent).

The majority of states were unable to report sportsperson participation by African-American hunters and anglers due to small sample sizes. For those states that were reportable, 12 percent of African-Americans in South Carolina and Louisiana went hunting, fishing or both in 2006. That was double the sportsperson participation rate in the U.S. overall (6 percent of African-Americans). Mississippi, North Carolina, and Tennessee all had a 10 percent participation rate for African-American sportspersons.



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