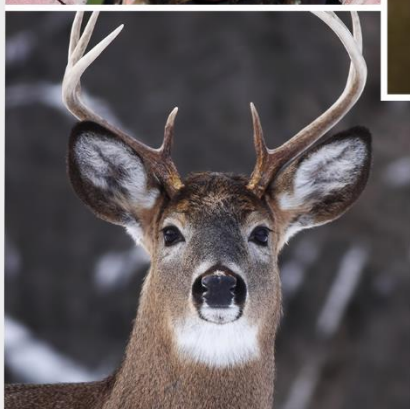




National Survey of
Fishing,
Hunting,
& Wildlife-Associated
Recreation

2022 Final Report

Missouri



Report prepared for:

Missouri Department of Conservation

Report prepared by:

NORC at the University of Chicago

For more information, please visit:

<https://www.norc.org/research/projects/survey-of-fishing-hunting-and-wildlife-recreation.html>



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Project Overview

The Missouri Department of Conservation leveraged the 2022 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (FHWAR) to collect high-quality, state-level participation and expenditure estimates. The National Survey has been conducted since 1955 and is one of the oldest and most comprehensive continuing recreation surveys. The Survey collects information on the number of anglers, hunters, and wildlife watchers, how often they participate, and how much they spend on their activities in the United States.

The National Survey

In coordination with the Association of Fish & Wildlife Agencies and the U.S. Fish and Wildlife Service (USFWS), NORC at the University of Chicago administered the 2022 National Survey. To establish a sustainable model moving forward, the survey underwent a major methodological redesign, including:

- A mixed-mode approach where interviews were conducted via web, telephone, and self-administered paper questionnaires sent through the mail instead of costly in-person interviewing.
- A blended sample design that primarily used AmeriSpeak®, NORC's probability-based panel, and an address-based sample (ABS) to provide full rural coverage, reduce avidity bias, and reduce nonresponse bias.
- The inclusion of sample from nonprobability online panels to provide a cost-effective approach for state-level data. NORC employed our TrueNorth capability to combine probability and nonprobability samples to create reliable estimates that meet the state-level precision requirements.
- A streamlined questionnaire to focus on key estimates and reduce respondent burden.

Data collection for the Survey was carried out in two phases by NORC at the University of Chicago. The first phase consisted of a screening interview, conducted January through April 2022. NORC interviewed a sample of 42,340 households nationwide. Through these interviews, one adult household member provided information for up to four adults age 16 and older and up to four children ages 6 to 15 in the household. This interview covered 2021 participation in fishing, hunting, wildlife watching and other outdoor recreation activities, as well as expectations for participation in 2022. In total, data was collected for about 97,415 household members.

The second phase of data collection covered 2022 activities in detail and consisted of three detailed interview waves. The first wave was conducted May through August 2022. The second wave was conducted September through December 2022. The final wave was conducted January through March 2023. Interviews were conducted with samples of likely anglers, hunters, and wildlife watchers who were identified in the initial screening phase. Interviews were conducted via the web, telephone, and self-administered questionnaire. Respondents in the second survey phase were limited to those

who were at least 16 years old. Each respondent provided information pertaining only to his or her activities and expenditures. Sample sizes were designed to provide statistically reliable results at the national level. During the second phase, 105,698 completed any survey, including 24,720 who completed the angler survey, 11,655 who completed the hunter survey, 58,704 who completed the wildlife watching survey, and 10,619 who did not participate in any of the three activities and were not asked detailed questions about them.

Missouri-Specific Data Collection

Missouri responses were collected as part of the larger, national effort allowing the state to collect detailed, reliable information about fishing, hunting and wildlife watching activities in Missouri at a much lower price than if they had collected the data in a standalone project. Surveys were administered using the National Survey methodology including the mixed-mode approach with three sample sources (see Sampling and Weighting Strategy section below for more details). Because Missouri survey responses were used for both the National and Missouri data, all mailing materials used the AFWA and USFWS branding. Survey respondents received a \$5 or \$10 post-incentive for completing the screener and each wave. Missouri-specific questions were added to the National Survey questionnaire to tailor data collection to Missouri needs.

Question Updates

In consultation with AFWA, NORC redesigned the survey instruments for 2022 to address concerns about survey bias, reduce omitting events from survey reports, and reduce the length of the survey instruments with special attention to items AFWA/FWS specifically requested be addressed. This process included cognitive and debriefing interviews and a pilot test to improve data quality and reduce respondent burden.

Wildlife Watching Question Changes

As in previous rounds, the 2022 FHWAR Wildlife Watching questionnaire asked respondents about six separate activities constituting around-the-home wildlife watching: observing wildlife, photographing wildlife, feeding wildlife, maintaining natural areas, maintaining plantings, and visiting parks or natural areas. In the 2022 survey, these detailed activities were also asked about at the end of the Fishing and Hunting questionnaires to match around-the-home wildlife-watching questions on the Wildlife Watching questionnaire. In previous rounds, there was only a single yes/no question about wildlife watching on the Fishing and Hunting questionnaires. In addition, the question asking about photographing wildlife was edited to clarify that cell phone pictures of wildlife count as a form of wildlife photography. Lastly, around-the-home wildlife-watching questions were asked first then away-from-home wildlife watching and associated expenditures. Switching this order seemed to aid in better recall and resulted in less confusion.

Question Order

For the screener, NORC rearranged the order of the sections so that respondents were asked about wildlife watching first, followed by fishing, then hunting. This was done so that respondents would be first presented with questions on activities the general population is more likely to have participated in. Since fewer people have hunted, these questions were moved later in the questionnaire.

Question Grouping

The Screener questionnaire was reworked to simply ask if a household member had engaged in an activity. Respondents were asked to report on activities for their entire household, selecting one person at a time then cycling through all types of activities.

Removed Questions

AFWA/ FWS requested that certain questions be reviewed before the 2022 administration to reduce the survey length and respondent burden. Questions about 2022 hunting, fishing, and wildlife-watching activity were removed from the screener questionnaire knowing that few would have

participated in these activities already at that early point of 2022. Instead, the first four months of the year were asked about in the Wave 1 questionnaire. Fishing questions were reworked to not explicitly ask about fishing in the Great Lakes. Instead, fishing in the Great Lakes was included through freshwater fishing questions. Instead of asking for the number of days one fished for shellfish and finfish, the 2022 questionnaires asked what kind of saltwater fishing was done in each coastal state in which one reported fishing, including fishing for finfish, shellfish, or both, to shorten the survey. The Wave 3 fishing questionnaire did not ask specifically about bass boats when asking about large purchases made in 2022. Instead, they were included in the “motorboat” category. The hunting questionnaire removed species-specific questions and asked instead about four broad categories: big game, small game, migratory birds, and other animals.

Sampling and Weighting Strategy

Sampling Overview

NORC used three sampling sources for the 2022 FHWAR project. An address-based sample (ABS) and AmeriSpeak®, NORC's probability-based panel, were used throughout the project while opt-in panels were incorporated in Wave 3.

Screeners sample included ABS and AmeriSpeak®. The ABS sample was developed from the United State Postal Service's Delivery Sequence File (DSF), which allowed for oversampling counties with high hunting participation identified by hunting license lists. The sample was stratified by state.

Individuals identified through the screener phase were contacted in the remaining three waves. Supplemental ABS and AmeriSpeak® samples were incorporated in later waves to improve the precision of the results. Nonprobability, online panels were used in Wave 3 as a cost-effective approach for state-level data collection for the 23 coastal states and states who purchased state-level data.

Missouri Sample

The Missouri-level data collection included a sample of 19,318 Missouri addresses as part of the ABS sample, which included an oversample of Census tracts with high percentages of people of color. In total, Wave 3 data were collected from 5,208 Missouri residents, including 2,229 ABS completes, 409 AmeriSpeak completes, and 2,570 online panel completes. Missouri-specific survey questions were not asked on the paper questionnaire resulting in 5,156 responses to state-specific questions.

Weighting Overview

NORC weighted data after the screener and Wave 3. Weights accounted for probability of selection, nonresponse, and population characteristics across the various sample sources.

- **ABS Weighting**

- Base weights: Inverse of the probability of selection of the sampled household
- Nonresponse weights: Used county-level hunting license data and market data used to predict hunting and fishing participation
- Population weights: Based on Census Division using age, sex, education, race, ethnicity, and urbanicity

- **AmeriSpeak Weighting**

- Base weights: Used the AmeriSpeak® panel weight and the probability of selection of the sampled panelist
- Nonresponse weights: Used AmeriSpeak® panel profile data and market data
- Population weights: Based on Census Division using age, sex, education, race, ethnicity, and urbanicity

- **Opt-in Panel Weighting**

- Base and Nonresponse weights: Not calculated due to the nonprobability nature of the panels
- Population weights: Calculated within each opt-in state/rest of Census Division using age, sex, education, race, ethnicity, and urbanicity, and within each Census Division by sex using 2022 hunting, fishing and wildlife watching participation

The three combined data sources were raked within each opt-in state/rest of Census Division using age, sex, education, race, ethnicity, and urbanicity and within each opt-in state/rest of Census Division by age. Small area modeling was used to generate the 2022 hunting, fishing, and wildlife watching participation estimates and refine estimates of the number of anglers in coastal states and the ratio of freshwater and saltwater anglers in coastal states using 2011 FHWAR data.

Missouri Highlights



Wildlife Related Recreation

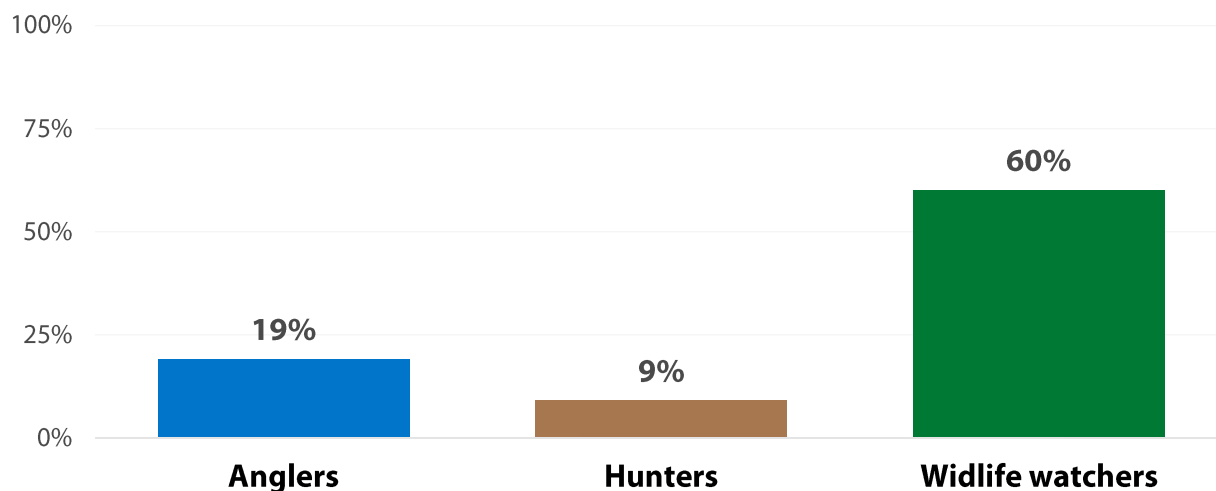
2022 Participation in Missouri by Residents and Nonresidents

In 2022, 2.9 million¹ Missouri residents age 16 and older participated in wildlife associated recreation activities in their state. Among these participants, 912,000 fished, 439,000 hunted, and 2.9 million participated in wildlife watching activities, such as observing, feeding, and photographing wildlife. The sum of anglers, hunters, and wildlife watchers exceeds the total number of participants in wildlife-related recreation because many individuals engaged in more than one wildlife-related activity.

Overall, 19% of the Missouri population age 16 and older fished, 9% hunted, and 60% participated in wildlife watching in 2022.

2.9 million Missouri residents age 16+ participated in wildlife associated recreation activities in 2022.

Percent Missouri residents age 16 and older



¹ Numbers are reported rounded to the hundreds' place (e.g., 4,190 becomes 4,200) place thousands' place (e.g., 516,136 becomes 516,000), hundred thousands' place (e.g., 1,553,013 becomes 1.6 million), ten millions' place (e.g., 99,352,033 becomes 99 million) or hundred millions' place (e.g., 12,533,867,266 becomes 12.5 billion).

When considering activities by both residents and nonresidents age 16 and older, there were 1.3 million anglers, 528,000 hunters, and 4.3 million wildlife watchers.

Of the Total anglers, 912,000 were Missouri state residents while 435,000 were nonresidents. Of the total hunters, 439,000 were Missouri residents while 90,000 were nonresidents.

Among the total wildlife watchers, 2.8 million Missouri state residents observed wildlife around the home and 1.2 million Missouri state residents observed wildlife away from home. Many individuals did both. Another 1.4 million were nonresidents who were observing wildlife while on trips away from home.

Overall, almost 1.9 million Missouri residents participated in wildlife watching only, while the same number did not participate in fishing, hunting, or wildlife watching. Almost 300,000 Missouri residents participated in all three activities.

	<i>Participation in Multiple Activities among Missouri Residents</i>
Fishing Only	57,500
Hunting Only	8,000
Wildlife Watching Only	1,888,500
Fishing and Hunting	12,000
Fishing and Wildlife Watching	553,500
Hunting and Wildlife Watching	130,000
Fishing, Hunting, and Wildlife Watching	289,000
None of these activities	1,856,000

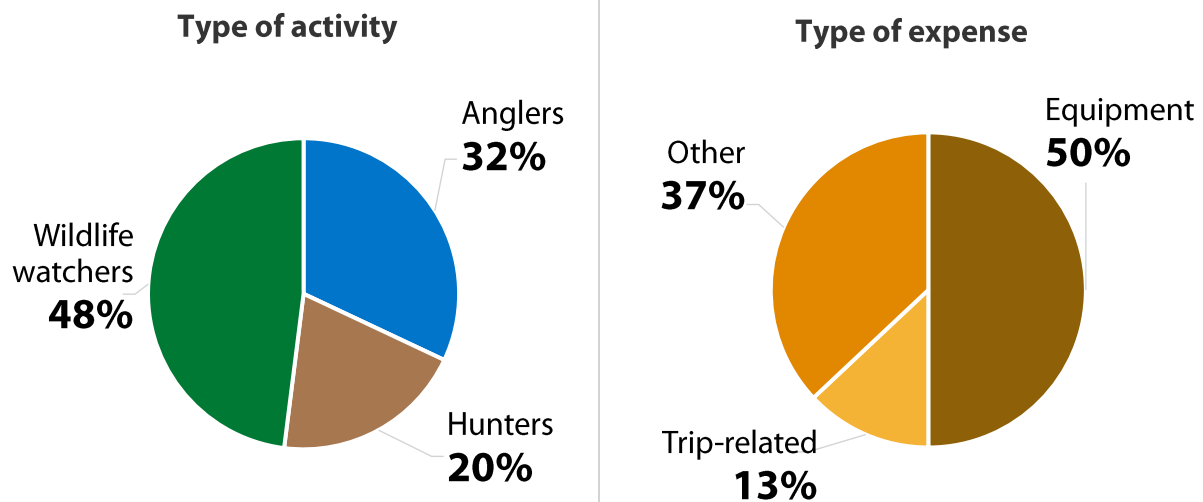
2022 Expenditures in Missouri by Residents and Nonresidents

In total, state residents and nonresidents spent \$8.9 billion on wildlife associated recreation in Missouri in 2022. Anglers spent \$2.9 billion, hunters spent \$1.8 billion, and wildlife watchers spent \$4.2 billion.

Among these total expenditures, \$4.4 billion was spent on equipment costs; \$1.2 billion on trip-related costs, such as food, lodging, and transportation; and \$3.3 billion on other costs, such as licenses, dues, and owning or leasing land.

Overall, state residents and nonresidents spent \$8.9 billion on wildlife associated recreation in Missouri in 2022.

Percent total 2022 expenditures



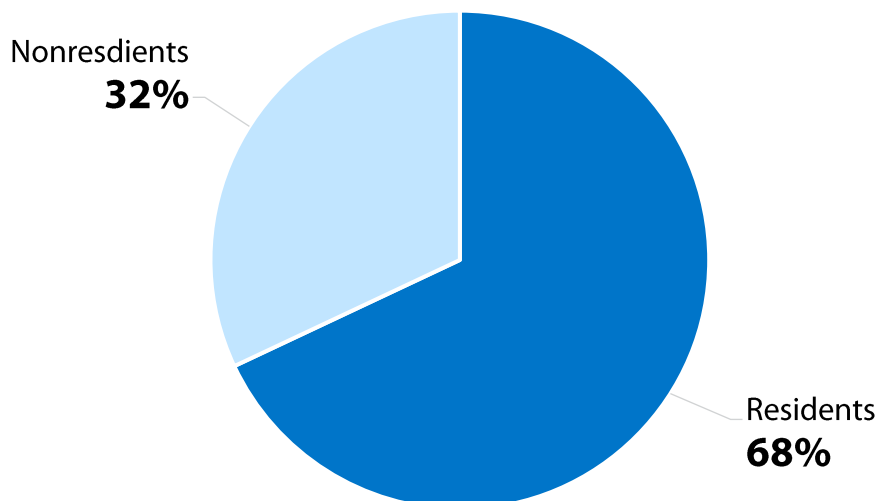
2022 Participation in Missouri by Residents and Nonresidents

Overall, 1.3 million state residents and nonresidents age 16 and older fished in Missouri in 2022, accounting for 7.4 million fishing trips and 13.5 million days spent fishing.

Of these anglers, 912,000 were Missouri state residents while 435,000 were nonresidents.

Overall, 1.3 million state residents and nonresidents age 16 and older fished in Missouri in 2022.

Percent anglers in Missouri age 16 and older



The following demographics refer to participation among Missouri residents only, and cover any type of recreational fishing.

Among Missouri residents, 16% of those living in an urban area and 28% of those living in a rural area fished in 2022.

In terms of the age breakdown, 23% of Missouri residents age 16 to 34 fished in 2022, along with 21% of those 35 to 54 and 15% of those age 55 and older.

With regard to gender, 28% of Missouri resident men fished in 2022, as did 11% of Missouri resident women.

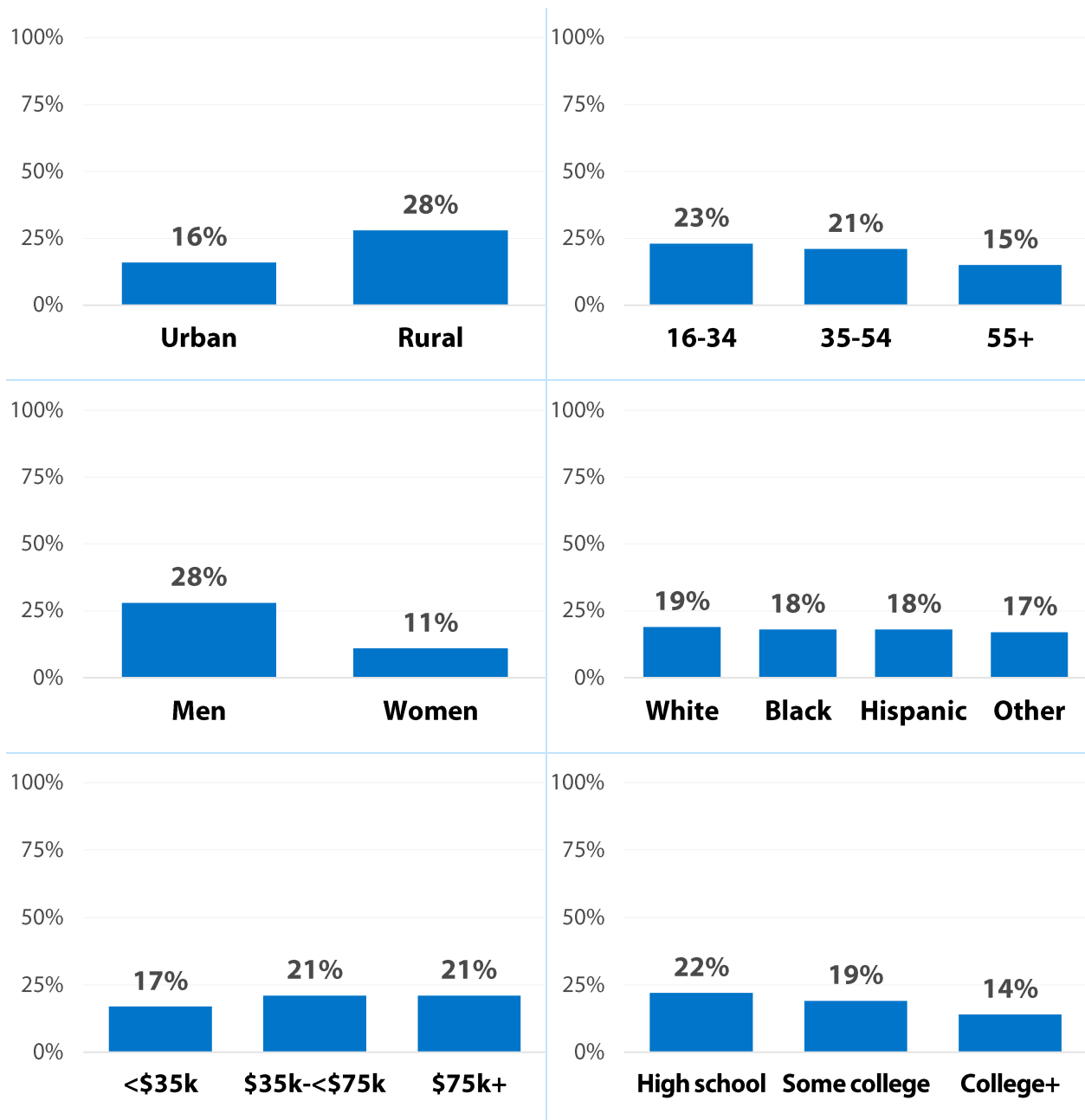
The participation rate by race and ethnicity was 19% of white Missouri residents, 18% of Black residents, 18% of Hispanic residents, and 17% of residents of another race fished in 2022.

Among Missouri residents making less than \$35,000 a year, 17% fished, as did 21% of those making between \$35,000 and \$74,999, and 21% of those making \$75,000 or more.

When looking at fishing by educational levels, 22% of Missouri residents with a high school education or less fished in 2022, along with 19% of those with some college education, and 14% of those with a college degree or higher.

Demographics among Missouri resident anglers.

Percent Missouri residents age 16 and older who fished

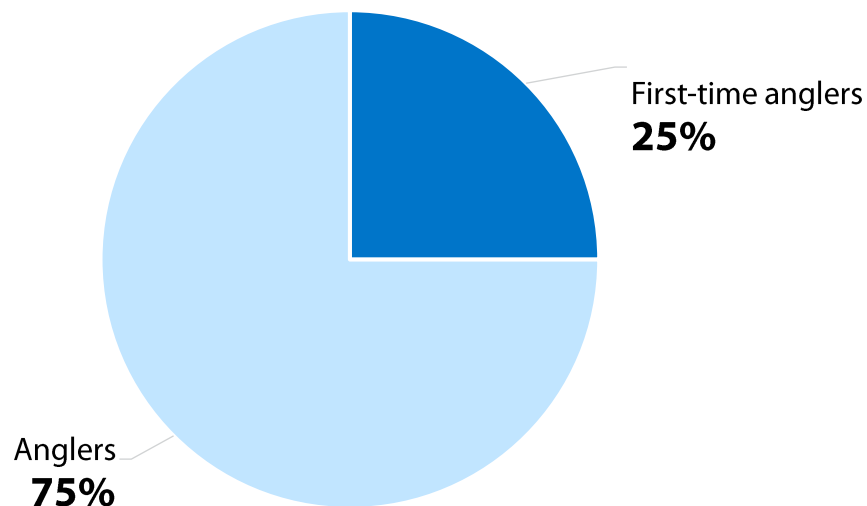


2021 Participation in Missouri by 6- to 15-Year-Old Residents

While the focus of the 2022 FHWAR Survey is on the wildlife associated recreation activities and participation of those age 16 and older, the Screener portion of the survey, which was conducted in early 2022, provides information about fishing by 6- to 15-year-olds in 2021. The following calculations capture the 2021 participation of Missouri residents, although the activities could have happened anywhere in the United States.

Overall, 252,000 Missouri state residents age 6 to 15 fished in 2021, including 62,000 who fished for the first time.

Percent Missouri resident anglers age 6 to 15

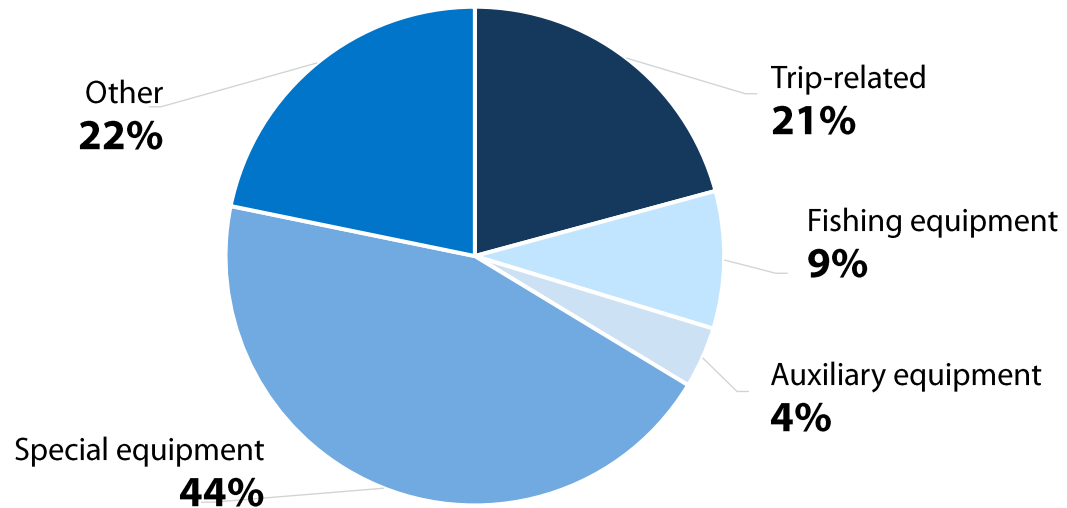


2022 Expenditures in Missouri by Residents and Nonresidents

Overall, anglers in Missouri spent \$2.9 billion in 2022. Of this total, \$606 million was spent on trip-related expenses such as food, lodging, and transportation. An additional \$1.6 billion was spent on equipment, including \$255 million on fishing equipment, \$111 million on auxiliary equipment for fishing such as camping equipment or clothing, and \$1.3 billion on special equipment for fishing such as boats or other vehicles. Finally, anglers spent \$620 million on other expenditures such as licenses, permits, or land for fishing.

Overall, anglers in Missouri spent \$2.9 billion in 2022.

Percent total angler expenditures



The average expenditures per angler were \$2,100 in total, including \$500 on trip related costs, \$1,200 on equipment, and \$500 on other costs.



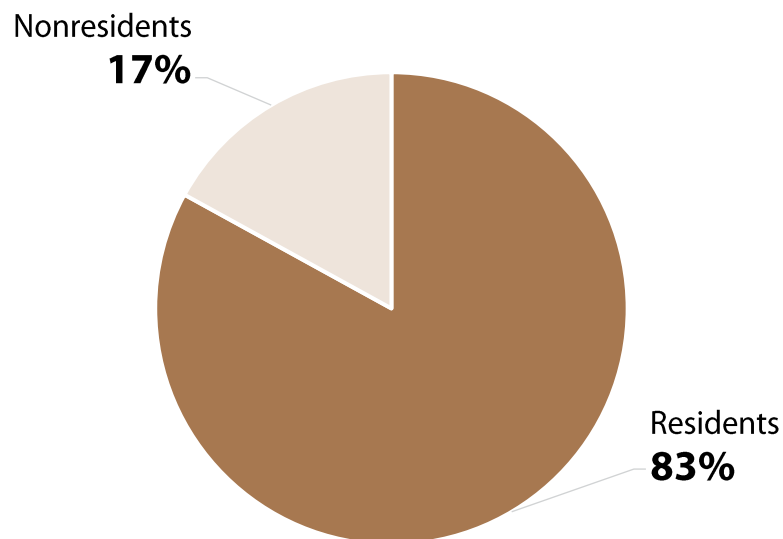
Hunters

2022 Participation in Missouri by Residents and Nonresidents

Overall, 528,000 state residents and nonresidents age 16 and older hunted in Missouri in 2022, accounting for 3.4 million hunting trips and 4.7 million days spent hunting.

Overall, 528,000 state residents and nonresidents age 16 and older hunted in Missouri in 2022.

Percent hunters in Missouri age 16 and older



Eighty-two percent (431,000) of these participants hunted big game, accounting for 57% of the total hunting trips and 61% of the total hunting days in Missouri.

Another 28% (149,000) hunted small game, accounting for 17% of all hunting trips and 17% of all hunting days.

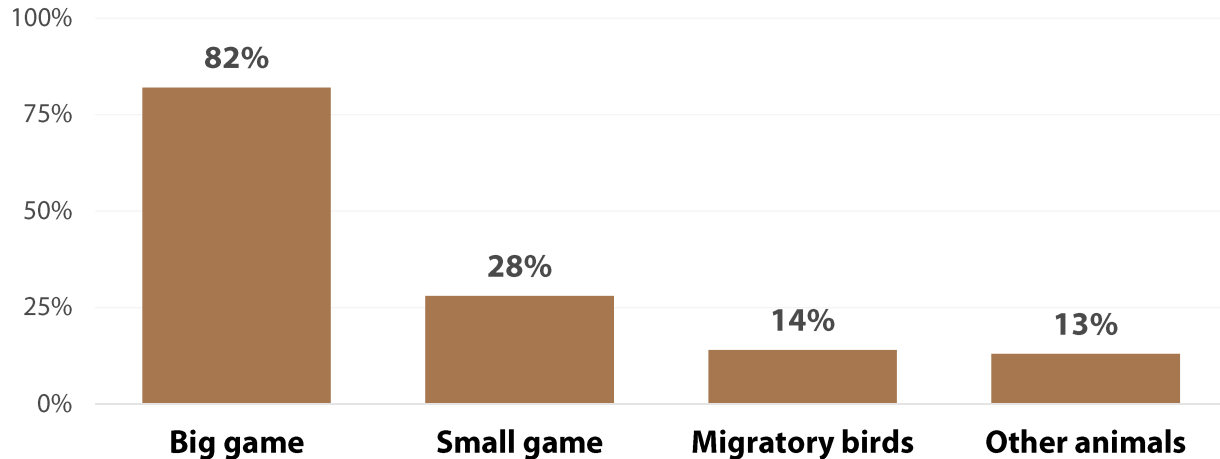
Fourteen percent (74,000) hunted migratory birds, making up 8% of all hunting trips and 8% of all hunting days.

And 13% (68,000) hunted other animals, accounting for 18% of all hunting trips and 14% of all hunting days.

The sum of big game, small game, migratory bird, and other animal hunting exceeds the total number of hunters because many individuals engaged in more than one type of hunting.

Overall, 528,000 state residents and nonresidents age 16 and older hunted in Missouri in 2022.

Percent hunters in Missouri age 16 and older



The following demographics refer to participation among Missouri residents only, and cover any type of recreational hunting.

Among Missouri residents, 5% of those living in an urban area and 18% of those living in a rural area did any hunting in 2022.

In terms of the age breakdown, 10% of Missouri residents age 16 to 34 hunted in 2022, along with 10% of those 35 to 54 and 8% of those age 55 and older.

With regard to gender, 15% of Missouri resident men hunted in 2022, as did 4% of Missouri resident women.

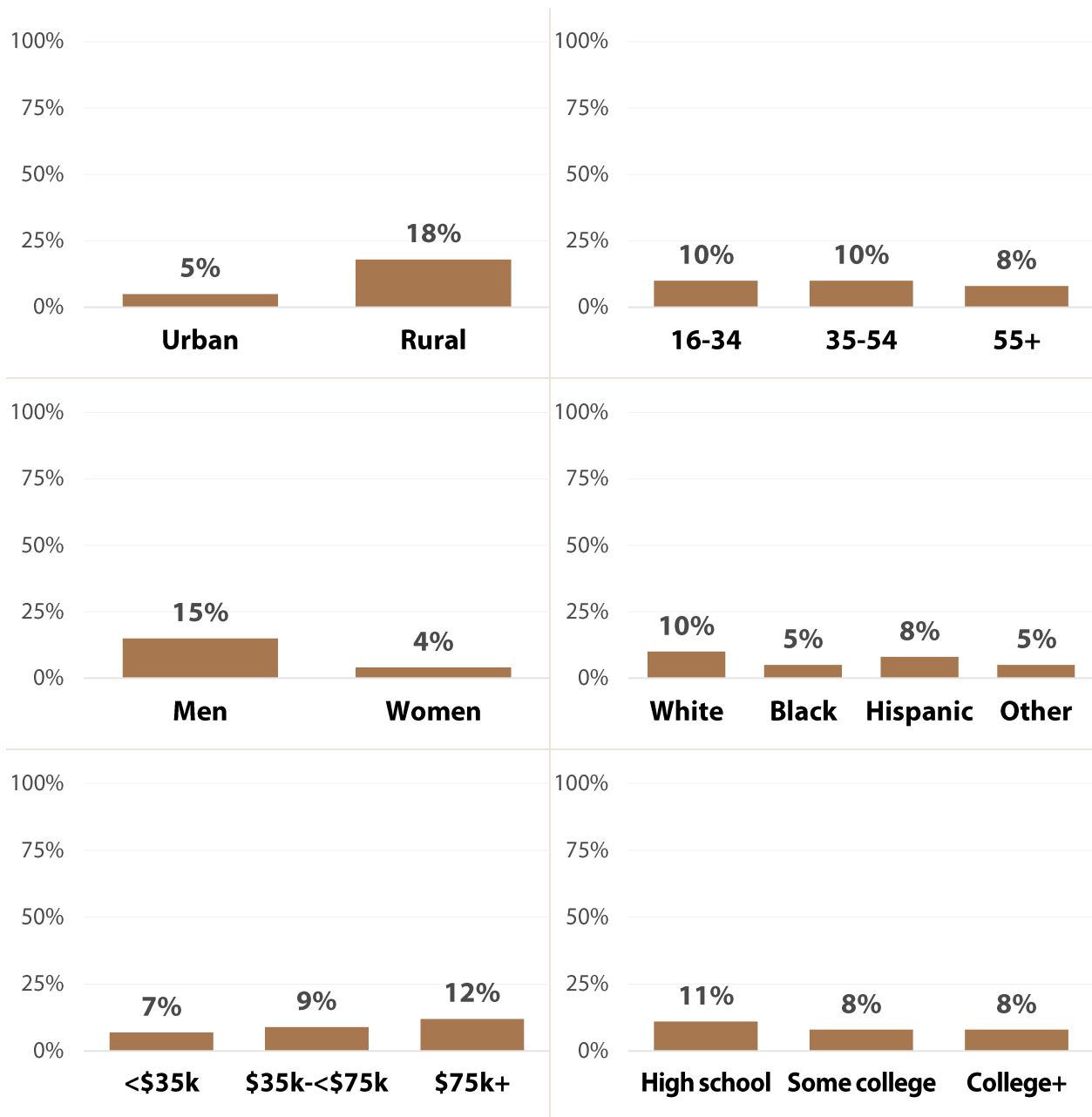
The participation rate by race and ethnicity was 10% of white Missouri residents, 5% of Black residents, 8% of Hispanic residents, and 5% of residents of another race hunted in 2022.

Among Missouri residents making less than \$35,000 a year, 7% hunted, as did 9% of those making between \$35,000 and \$74,999, and 12% of those making \$75,000 or more.

When looking at hunting by educational levels, 11% of Missouri residents with a high school education or less hunted in 2022, along with 8% of those with some college education, and 8% of those with a college degree or higher.

Demographics among Missouri resident hunters.

Percent Missouri residents age 16 and older who hunted

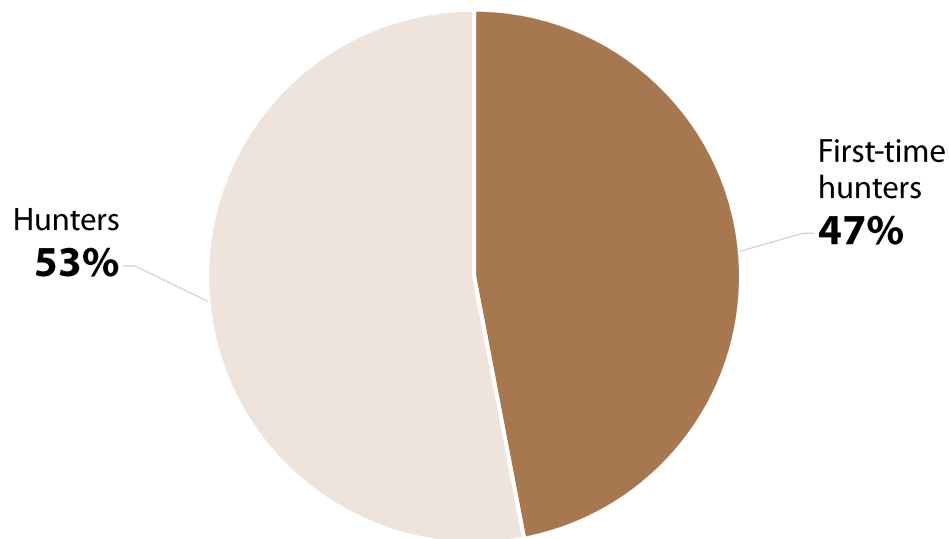


2021 Participation in Missouri by 6- to 15-Year-Old Residents

Based on the Screener portion of the survey, 58,000 Missouri residents age 6 to 15 hunted in 2021, with 27,000 doing so for the first time. These activities could have happened anywhere in the United States.

Overall, 58,000 Missouri residents age 6 to 15 hunted in 2021 including 27,000 who hunted for the first time.

Percent of Missouri resident hunters age 6-15

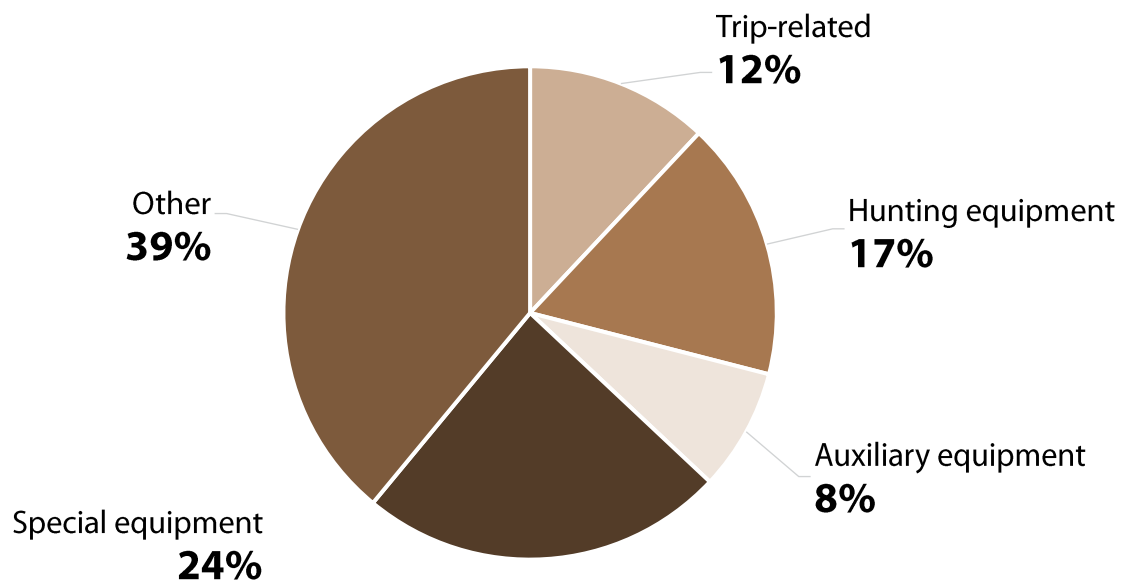


2022 Expenditures in Missouri by Residents and Nonresidents

Overall, hunters in Missouri spent \$1.8 billion in 2022. Of this total, \$204 million was spent on trip-related expenses such as food, lodging, and transportation. An additional \$884 million was spent on equipment, including \$305 million on hunting equipment, \$149 million on auxiliary equipment for hunting such as camping equipment or clothing, and \$430 million on special equipment for hunting such as boats or other vehicles. Finally, hunters spent \$681 million on other expenditures such as licenses, permits, or land for hunting.

Overall, hunters in Missouri spent \$1.8 billion in 2022.

Percent total hunter expenditures



The average expenditures per hunter were \$3,300 in total, including \$400 on trip related costs, \$1,700 on equipment, and \$1,300 on other costs.



Wildlife Watchers

2022 Participation in Missouri by Residents and Nonresidents

Overall, 4.3 million state residents and nonresidents age 16 and older watched wildlife in Missouri in 2022, accounting for 20.0 million wildlife watching trips and 239 million days spent wildlife watching.

Among the total wildlife watchers, 2.8 million Missouri state residents observed wildlife around the home and 1.2 million Missouri state residents observed wildlife away from home. Many individuals did both. Another 1.4 million were nonresidents who were observing wildlife while on trips away from home.

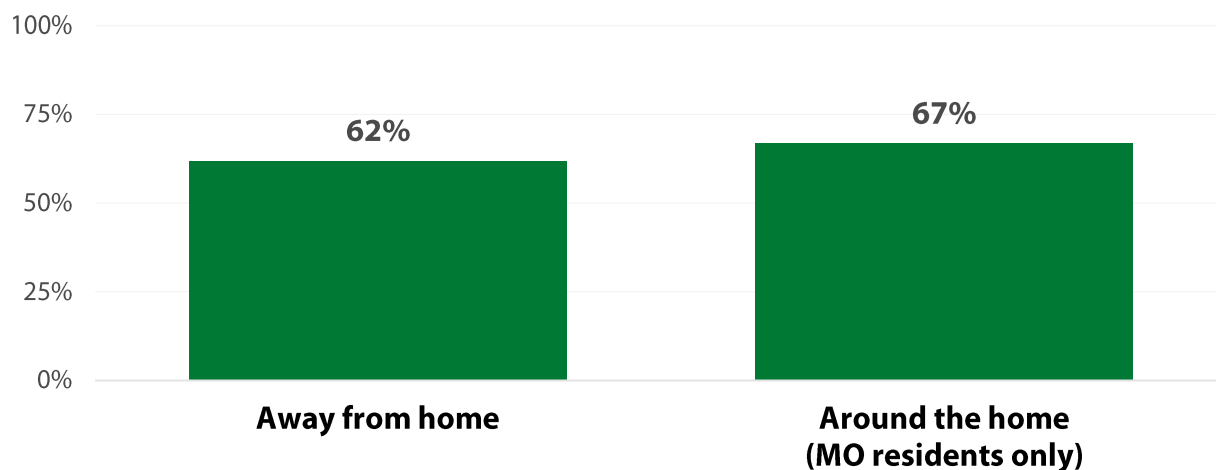
Sixty-two percent (2.6 million) of these resident and nonresident participants were observing wildlife away from home, accounting for 13% of the total wildlife watching days in Missouri.

And 67% (2.8 million) of these participants were observing wildlife around the home, making up 87% of the total wildlife watching days in Missouri.

The sum of around the home and away from home exceeds the total number of wildlife watchers because many individuals engaged in more than one type.

Overall, 4.3 million state residents and nonresidents age 16 and older watched wildlife in Missouri in 2022.

Percent wildlife watchers in Missouri age 16 and older



The following demographics refer to participation among Missouri residents only, and covers any type of wildlife watching, both around the home and away from home.

Among Missouri residents, 57% of those living in an urban area and 67% of those living in a rural area watched wildlife in 2022.

In terms of the age breakdown, 69% of Missouri residents age 16 to 34 watched wildlife in 2022, along with 57% of those 35 to 54 and 55% of those age 55 and older.

With regard to gender, 68% of Missouri resident men watched wildlife in 2022, as did 52% of Missouri resident women.

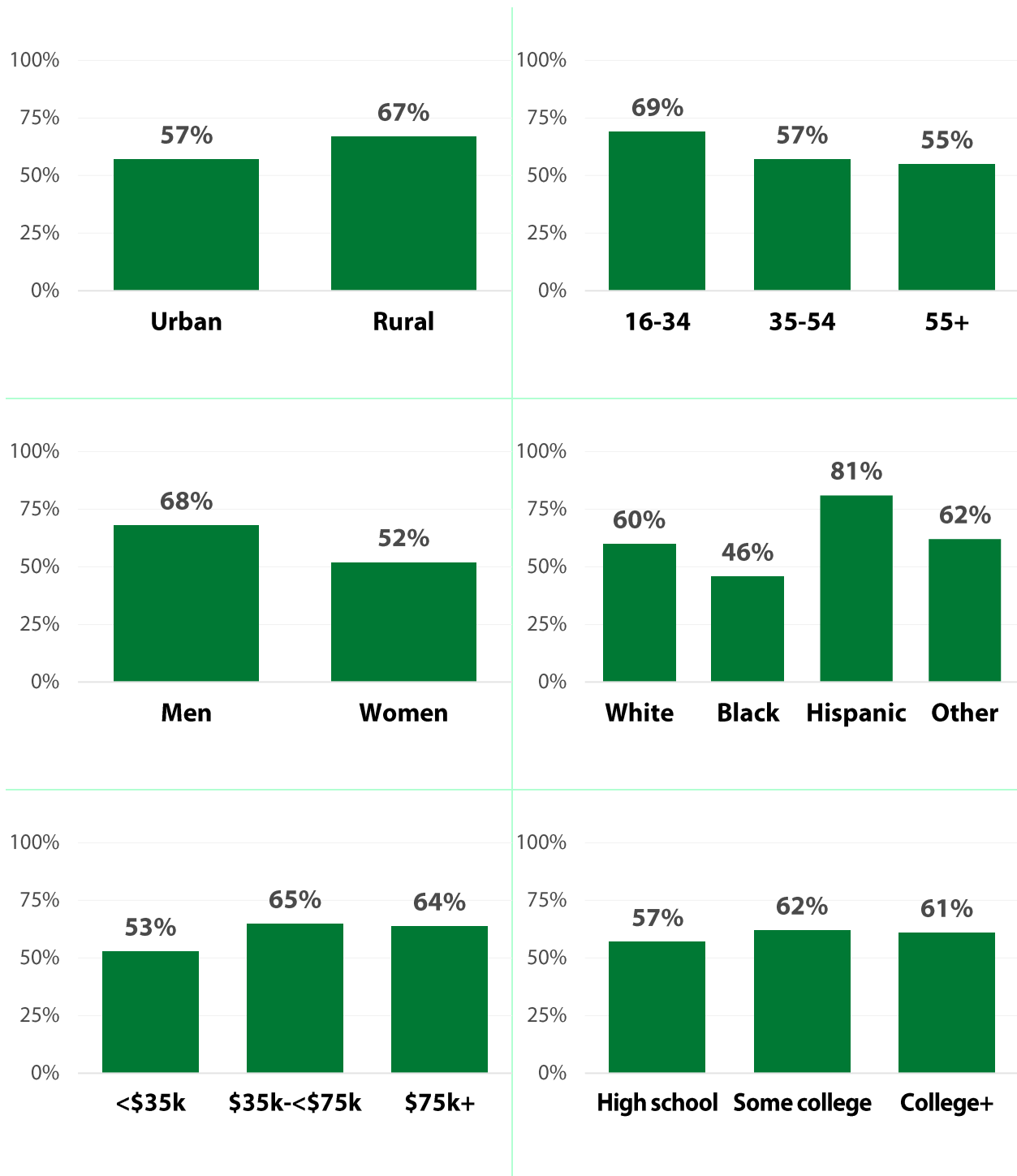
The participation rate by race and ethnicity was 60% of white Missouri residents, 46% of Black residents, 81% of Hispanic residents, and 62% of residents of another race watched wildlife in 2022.

Among Missouri residents making less than \$35,000 a year, 53% watched wildlife, as did 65% of those making between \$35,000 and \$74,999, and 64% of those making \$75,000 or more.

When looking at wildlife-watching by educational levels, 57% of Missouri residents with a high school education or less watched wildlife in 2022, along with 62% of those with some college education, and 61% of those with a college degree or higher.

Demographics among Missouri resident wildlife watchers.

Percent Missouri residents age 16 and older who watched wildlife

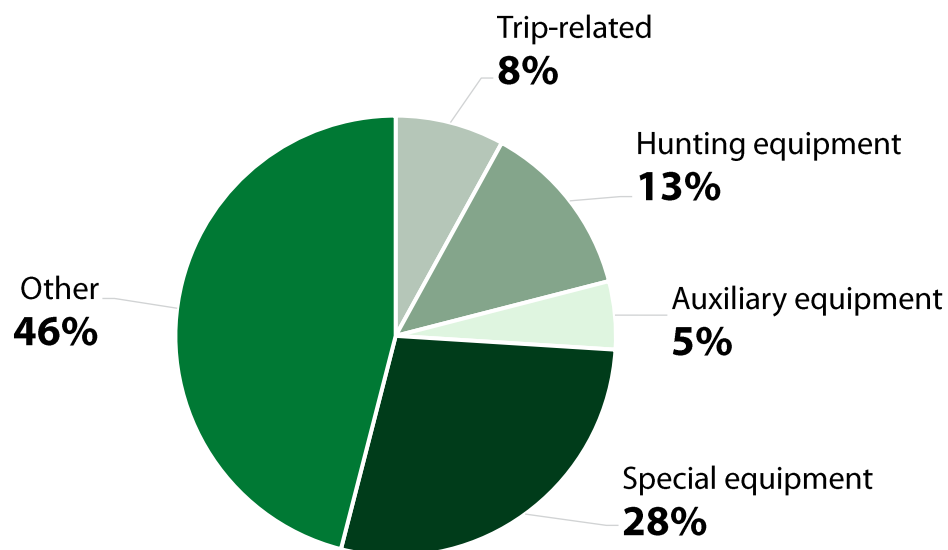


2022 Expenditures in Missouri by Residents and Nonresidents

Overall, wildlife watchers in Missouri spent \$4.2 billion in 2022. Of this total, \$357 million was spent on trip-related expenses such as food, lodging, and transportation. An additional \$1.9 billion was spent on equipment, including \$545 million on wildlife watching equipment, \$195 million on auxiliary equipment for wildlife watching such as camping equipment or clothing, and \$1.2 billion on special equipment for wildlife watching such as boats or other vehicles. Finally, wildlife watchers spent \$2.0 billion on other expenditures such as dues or land for wildlife watching.

Overall, wildlife watchers in Missouri spent \$4.2 billion in 2022.

Percent total wildlife watcher expenditures



The average expenditures per wildlife watcher were \$1,00 in total, including \$100 on trip related costs, \$400 on equipment, and \$500 on other costs.

Other Outdoor Recreation Activities

2021 Participation in Missouri by Residents

In addition to fishing, hunting, and wildlife watching, the 2022 FHWAR Survey asked about participation in other outdoor recreation activities including recreational target shooting and archery (unrelated to hunting), and motorized boating. The following findings were part of the Screener portion of the survey, which was conducted in early 2022, and provides information about each activity by Missouri residents age 6 and older in 2021. These numbers capture participation anywhere in the United States for each activity.

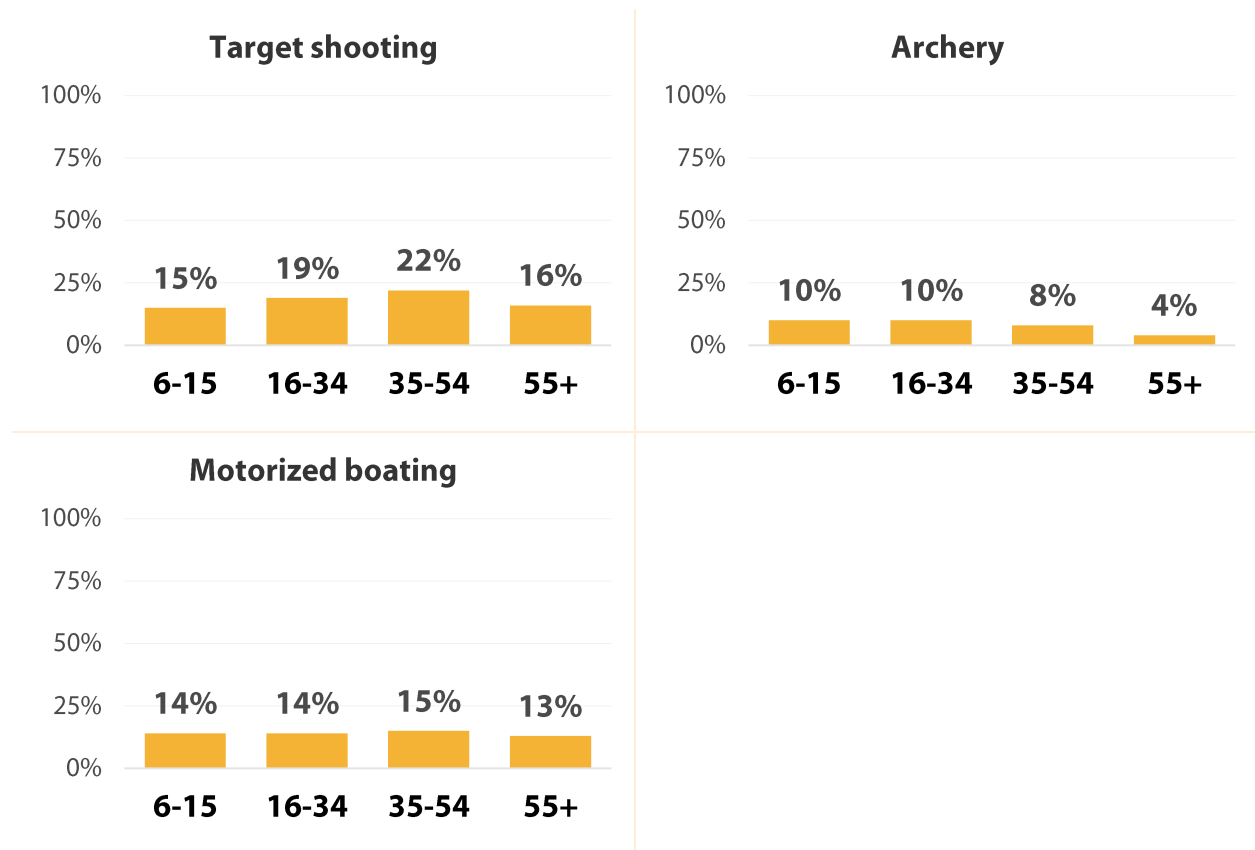
Overall, 1.0 million Missouri residents participated in recreational target shooting in 2021. Of these participants, 114,000 were age 6 to 15; 273,000 were age 16 to 34; 314,000 were age 35 to 54; and 294,000 were age 55 or older.

Additionally, 404,000 Missouri residents participated in recreational archery in 2021. 78,000 were age 6 to 15; 137,000 were age 16 to 34; 114,000 were age 35 to 54; and 72,000 were age 55 or older.

And 779,000 Missouri residents used a motorized boat in 2021, including 112,000 age 6 to 15; 201,000 age 16 to 34; 224,000 age 35 to 54; and 239,000 age 55 or older.

Participation in other outdoor activities among Missouri residents in 2021.

Percent of Missouri residents



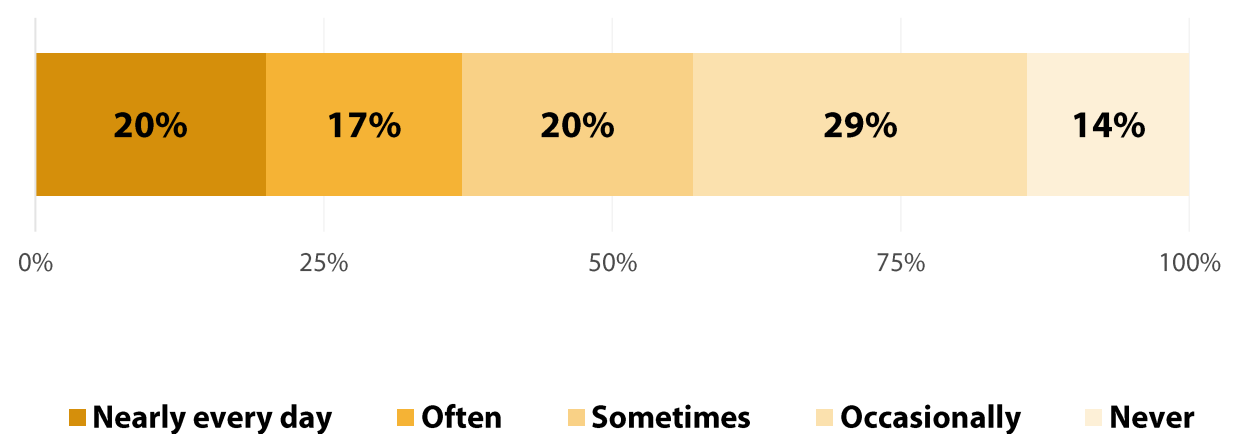
Missouri Specific Questions

In addition to the data from the national questionnaires, NORC provided states with the opportunity to collect state-level data through Wave 3 of the 2022 FHWAR survey. Doing so allowed state agencies to collect detailed, reliable information about fishing, hunting and wildlife watching activities in their state. The following calculations capture the findings of these tailored state questions asked of Missouri state residents.

Missouri residents are divided when it comes to how much they experience nature close to where they live. About a third, 36%, say they experience nature frequently, including 20% who experience it every day. Another 20% experience it sometimes, while 44% only experience nature close to where they live occasionally or less often.

In the last 3 months, how often, if at all, did you experience nature close to where you live?

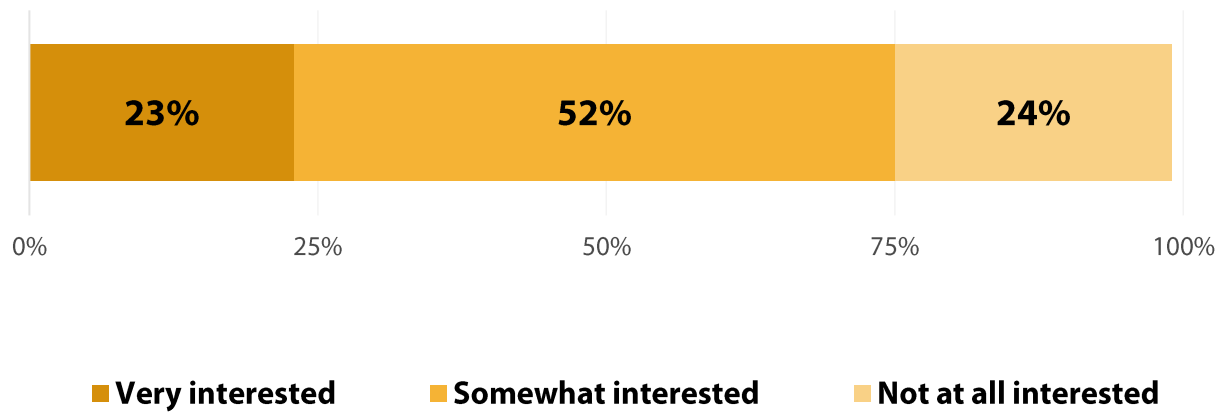
Percent Missouri residents age 16 and older



Twenty-three percent of Missouri residents are very interested in their state's fish, forests and wildlife, and 52% are somewhat interested.

In the last 3 months, how interested are you in Missouri's fish, forests, and wildlife?

Percent Missouri residents age 16 and older

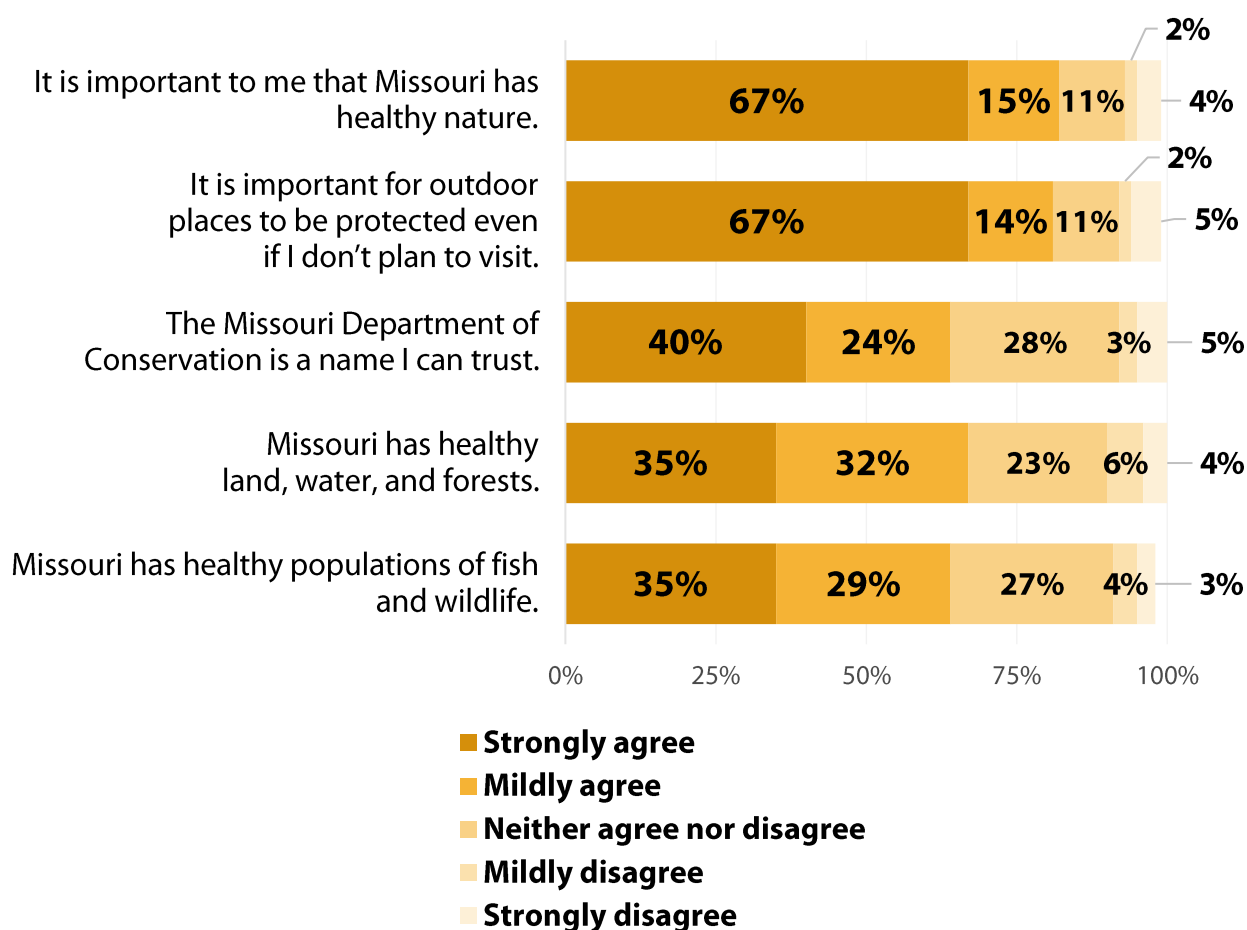


And when it comes to the states' wildlife and nature, a large majority of Missouri residents agree that it is important that the state has healthy nature, and that outdoor places are protected, with 67% strongly agreeing with both statements.

Most residents also agree that the Missouri Department of Conservation is a trustworthy name, that the state has healthy land, water, and forests, and that the state has healthy populations of fish and wildlife. However, about a quarter of residents neither agree nor disagree with these statements.

Thinking about the last 3 months, how strongly do you agree or disagree with the following statements?

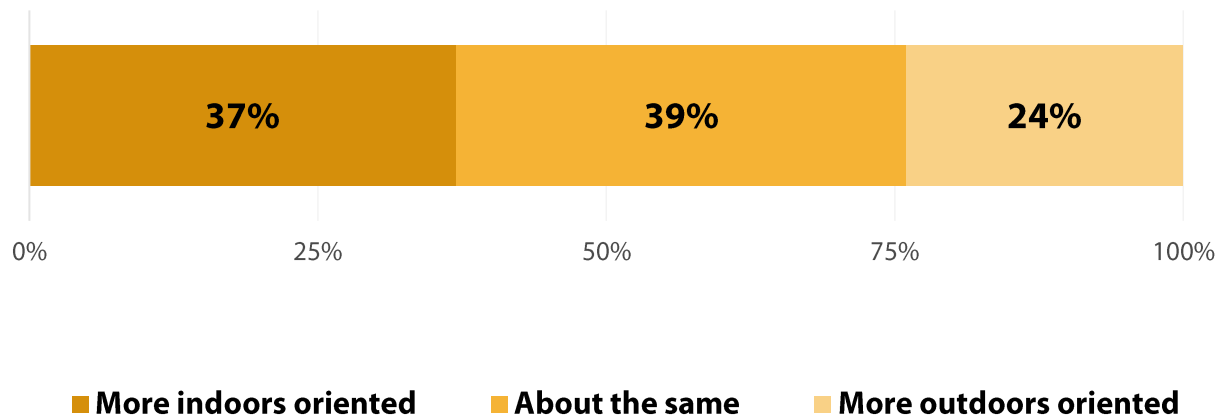
Percent Missouri residents age 16 and older



And Missouri residents are divided when it comes to whether most of their hobbies are indoors or outdoors oriented.

In general, would you say your pastimes, hobbies, and recreational interests are...?

Percent Missouri residents age 16 and older



Missouri Specific Questions by Demographics

MO1: In the last 3 months, how often, if at all, did you experience nature close to where you live?

	<i>Never</i>	<i>Occasionally</i>	<i>Sometimes</i>	<i>Often</i>	<i>Nearly every day</i>
Overall	14	29	20	17	20
n-size	367	1322	1046	1159	1253
Urban	15	34	22	15	14
Rural	12	17	15	21	35
16-34	10	30	26	16	18
35-54	17	28	20	20	15
55+	16	29	14	16	25
Men	13	30	20	17	20
Women	16	29	19	17	19
White	13	30	18	17	21
Black	31	26	21	13	10
Hispanic	14	34	23	15	14
Other	7	26	30	18	18
<\$35k	17	29	20	15	19
\$35k-\$75k	14	29	19	19	21
\$75k+	11	30	22	18	19
High school	18	25	21	16	20
Some college	14	32	18	17	20
College+	10	32	20	19	19

Note: Figure may not sum to 100% due to rounding. Nine cases responded as Don't Know or skipped the question online.

MO2 Thinking about the last 3 months, how interested are you in Missouri's fish, forests, and wildlife?

	<i>Not at all interested</i>	<i>Somewhat interested</i>	<i>Very interested</i>
Overall	24	52	23
n-size	670	2657	1811
Urban	27	53	20
Rural	18	50	31
16-34	25	54	21
35-54	24	51	25
55+	24	51	25
Men	20	51	29
Women	28	53	19
White	22	53	25
Black	44	45	11
Hispanic	26	50	24
Other	24	56	20
<\$35k	30	49	21
\$35k-\$75k	22	53	25
\$75k+	17	56	26
High school	29	49	22
Some college	23	52	25
College+	20	56	24

Note: Figure may not sum to 100% due to rounding. Eighteen cases skipped the question online.

MO3A [The Missouri Department of Conservation is a name I can trust.] Thinking about the last 3 months, how strongly do you agree or disagree with the following statements?

	<i>Strongly disagree</i>	<i>Mildly disagree</i>	<i>Neither disagree nor agree</i>	<i>Mildly agree</i>	<i>Strongly agree</i>
Overall	5	3	28	24	40
n-size	270	160	1118	1170	2428
Urban	5	3	30	24	39
Rural	6	3	22	25	43
16-34	6	4	36	27	26
35-54	5	2	28	24	40
55+	4	3	20	22	50
Men	5	4	26	24	41
Women	5	3	29	24	39
White	5	3	24	24	43
Black	6	5	40	24	25
Hispanic	6	2	47	24	22
Other	5	3	33	24	32
<\$35k	7	3	32	23	35
\$35k-\$75k	5	4	25	23	43
\$75k+	4	3	23	27	44
High school	8	4	32	22	35
Some college	4	2	26	23	44
College+	3	2	23	28	43

Note: Figure may not sum to 100% due to rounding. Ten cases responded as Don't Know, skipped the question online, or refused to answer over the phone.

MO3B [It is important for outdoor places to be protected even if I don't plan to visit the area.] Thinking about the last 3 months, how strongly do you agree or disagree with the following statements?

	<i>Strongly disagree</i>	<i>Mildly disagree</i>	<i>Neither disagree nor agree</i>	<i>Mildly agree</i>	<i>Strongly agree</i>
Overall	5	2	11	14	67
n-size	262	89	376	642	3772
Urban	5	2	12	13	67
Rural	6	1	10	16	66
16-34	5	4	15	13	62
35-54	6	1	14	15	63
55+	5	1	6	14	74
Men	5	3	11	16	66
Women	6	1	12	12	68
White	5	2	11	13	69
Black	9	5	13	18	54
Hispanic	5	1	19	18	57
Other	4	2	13	13	65
<\$35k	7	2	15	13	63
\$35k-\$75k	5	2	10	14	69
\$75k+	4	3	9	14	71
High school	7	3	17	13	60
Some college	5	1	10	14	69
College+	3	2	5	15	75

Note: Figure may not sum to 100% due to rounding. Fifteen cases skipped the question online.

MO3C [It is important to me that the state has healthy nature.] Thinking about the last 3 months, how strongly do you agree or disagree with the following statements?

	<i>Strongly disagree</i>	<i>Mildly disagree</i>	<i>Neither disagree nor agree</i>	<i>Mildly agree</i>	<i>Strongly agree</i>
Overall	4	2	11	15	67
n-size	235	68	351	597	3889
Urban	4	2	11	15	67
Rural	5	1	9	16	69
16-34	4	3	13	14	64
35-54	5	1	14	14	65
55+	4	1	6	17	72
Men	4	2	9	17	67
Women	5	1	12	14	68
White	4	1	10	15	70
Black	8	6	12	19	55
Hispanic	4	2	14	22	58
Other	3	2	15	13	64
<\$35k	5	2	14	16	62
\$35k-\$75k	4	2	9	15	69
\$75k+	4	0	8	14	72
High school	5	2	15	17	60
Some college	4	1	10	15	69
College+	3	2	5	14	76

Note: Figure may not sum to 100% due to rounding. Sixteen cases skipped the question online or refused to answer over the phone.

MO3D [Missouri has healthy land, water, and forests.] Thinking about the last 3 months, how strongly do you agree or disagree with the following statements?

	<i>Strongly disagree</i>	<i>Mildly disagree</i>	<i>Neither disagree nor agree</i>	<i>Mildly agree</i>	<i>Strongly agree</i>
Overall	4	6	23	32	35
n-size	189	265	964	1693	2025
Urban	4	7	25	31	33
Rural	3	5	18	35	39
16-34	4	11	27	33	25
35-54	4	5	27	32	32
55+	3	4	16	31	45
Men	3	5	20	34	37
Women	4	7	25	31	33
White	3	5	21	33	37
Black	6	12	33	24	25
Hispanic	6	10	30	27	27
Other	2	12	19	38	28
<\$35k	4	8	24	30	33
\$35k-\$75k	3	7	25	29	35
\$75k+	3	3	17	38	38
High school	5	8	25	29	32
Some college	2	5	21	33	38
College+	2	6	21	36	35

Note: Figure may not sum to 100% due to rounding. Twenty cases responded as Don't Know, skipped the question online, or refused to answer over the phone.

MO3E [Missouri has healthy populations of fish and wildlife.] Thinking about the last 3 months, how strongly do you agree or disagree with the following statements?

	<i>Strongly disagree</i>	<i>Mildly disagree</i>	<i>Neither disagree nor agree</i>	<i>Mildly agree</i>	<i>Strongly agree</i>
Overall	3	4	27	29	35
n-size	171	211	1138	1532	2075
Urban	3	5	31	28	33
Rural	4	3	17	32	42
16-34	3	8	34	29	26
35-54	3	3	31	30	32
55+	3	3	18	29	46
Men	4	5	23	30	39
Women	3	4	31	29	33
White	3	4	24	30	39
Black	6	9	41	19	24
Hispanic	5	4	39	26	26
Other	3	7	29	33	25
<\$35k	3	4	30	27	34
\$35k-\$75k	3	5	28	29	34
\$75k+	3	4	21	33	38
High school	4	6	29	26	34
Some college	2	4	24	31	38
College+	3	4	27	32	35

Note: Figure may not sum to 100% due to rounding. Twenty-nine cases responded as Don't Know, skipped the question online, or refused to answer over the phone.

MO4 In general, would you say your pastimes, hobbies, and recreational interests are...

	<i>More indoors oriented</i>	<i>More outdoors oriented</i>	<i>About the same indoors and outdoors oriented</i>
Overall	37	24	39
n-size	1367	1561	2214
Urban	41	21	38
Rural	27	30	42
16-34	36	24	40
35-54	33	27	39
55+	41	21	38
Men	31	31	38
Women	42	17	40
White	36	25	39
Black	46	16	37
Hispanic	31	30	39
Other	34	22	42
<\$35k	39	21	40
\$35k-\$75k	37	22	40
\$75k+	34	31	35
High school	35	24	40
Some college	36	23	40
College+	41	24	36

Note: Figure may not sum to 100% due to rounding. Fourteen cases skipped the question online.

Appendix: Additional Data Tables

Table 1. Anglers, Hunters and Wildlife Watchers 16 Years Old and Older, Days of Participation, and Trips: 2022

Type of activity	Participants		Days of Participation		Trips	
	Number	Percent	Number	Percent	Number	Percent
<i>Fishing</i>						
Total, all fishing	1,308,184	100	13,486,092	100	7,359,593	100
<i>Hunting</i>						
Total, all hunting	528,225	100	4,666,020	100	3,403,193	100
Big game	430,938	82	2,848,115	61	1,923,962	57
Small game	149,315	28	815,016	17	589,510	17
Migratory birds	73,926	14	365,142	8	281,938	8
Other animals	68,356	13	637,748	14	607,784	18
<i>Wildlife watching</i>						
Total, all wildlife watching	4,252,798	100	239,322,310	100	19,871,227	100
Away from home	2,630,924	62	30,962,078	13	19,871,227	100
Around the home	2,841,327	67	208,360,232	87	NA	NA

Table 2. Selected Characteristics of Anglers, Hunters, and Wildlife Watchers: 2022

Characteristic	State Population 16+		Fishing			Hunting			Wildlife Watching		
	Number	Percent	Number	Percent who participated	Percent	Number	Percent who participated	Percent	Number	Percent who participated	Percent
Total persons	4,794,178	100	11,712	19	100	38,610	9	100	,860,728	60	100
Population Density of Residence											
Urban	3,443,036	72	535,199	16	59	188,963	5	43	1,962,322	57	69
Rural	1,342,387	28	375,685	28	41	248,336	18	57	895,048	67	31
Population Size of Residence											
Metropolitan Statistical Area (MSA)											
1,000,000 or more	2,699,330	56	435,568	16	48	174,640	6	40	1,565,222	58	55
250,000 to 999,999	382,887	8	70,843	19	8	42,012	11	10	225,659	59	8
50,000 to 249,999	540,451	11	110,271	20	12	44,117	8	10	331,941	61	12
Micropolitan (10,000 to 50,000)	557,003	12	131,173	24	14	68,130	12	16	349,078	63	12
Outside MSA	605,752	13	163,029	27	18	108,400	18	25	385,470	64	13
Age											
16 to 17 years	297,402	6	107,578	36	12	59,034	20	13	229,569	77	8
18 to 24 years	358,397	7	66,370	19	7	31,775	9	7	277,050	77	10
25 to 34 years	786,621	16	151,091	19	17	56,110	7	13	481,511	61	17
35 to 44 years	778,234	16	167,311	21	18	84,020	11	19	442,711	57	15
45 to 54 years	699,379	15	136,015	19	15	64,246	9	15	397,915	57	14
55 to 64 years	814,564	17	134,474	17	15	60,467	7	14	464,356	57	16
65 years and older	1,049,058	22	148,230	14	16	82,541	8	19	565,544	54	20
65 to 74 years	642,828	13	108,444	17	12	51,409	8	12	378,419	59	13
75 and older	406,230	8	39,785	10	4	31,132	8	7	187,125	46	7
Sex											
Male	2,296,491	48	648,350	28	71	338,034	15	77	1,554,126	68	54
Female	2,443,863	51	259,025	11	28	94,558	4	22	1,267,512	52	44
Other gender	49,867	1	3,534	7	0	5,569	11	1	35,132	70	1

Characteristic	State Population 16+		Fishing			Hunting			Wildlife Watching		
	Number	Percent	Number	Percent who participated	Percent	Number	Percent who participated	Percent	Number	Percent who participated	Percent
Race											
White, non-Hispanic	3,714,467	77	722,205	19	79	380,648	10	87	2,234,523	60	78
Black, non-Hispanic	476,572	10	85,186	18	9	24,188	5	6	218,986	46	8
Hispanic	181,913	4	32,242	18	4	13,702	8	3	147,696	81	5
All others, non-Hispanic	421,227	9	72,079	17	8	20,072	5	5	259,523	62	9
Annual Household Income											
Less than \$10,000	587,438	12	109,950	19	12	42,484	7	10	292,157	50	10
\$10,000 to \$14,999	258,850	5	50,481	20	6	21,536	8	5	138,275	53	5
\$15,000 to \$24,999	552,673	12	81,665	15	9	34,680	6	8	296,731	54	10
\$25,000 to \$34,999	565,788	12	95,546	17	10	38,277	7	9	314,909	56	11
\$35,000 to \$49,999	711,803	15	139,419	20	15	55,150	8	13	439,099	62	15
\$50,000 to \$74,999	762,204	16	163,171	21	18	81,863	11	19	514,951	68	18
\$75,000 to \$99,999	527,753	11	106,257	20	12	63,201	12	14	318,854	60	11
\$100,000 to \$149,999	479,727	10	84,761	18	9	58,650	12	13	308,277	64	11
\$150,000 to \$199,999	164,343	3	46,222	28	5	24,487	15	6	112,454	68	4
\$200,000 or more	96,563	2	24,401	25	3	11,859	12	3	74,219	77	3
Not reported	87,037	2	9,839	11	1	6,423	7	1	50,801	58	2
Education											
Less than HS	290,134	6	85,597	30	9	33,774	12	8	162,634	56	6
High school degree	1,665,758	35	336,349	20	37	173,215	10	39	946,842	57	33
Some college	1,388,816	29	258,769	19	28	105,915	8	24	857,016	62	30
Bachelor's Degree	756,151	16	103,673	14	11	59,579	8	14	445,622	59	16
Graduate School	643,905	13	93,773	15	10	49,803	8	11	406,542	63	14

Table 3. Expenditures for Fishing: 2022

Expenditure item	Expenditures			Spenders	
	Amount (dollars)	Average per angler (dollars)	Number	Percent of anglers	Average per spender (dollars)
Total, all items	2,869,528,226	2,194	1,267,156	97	2,265
Total trip-related	605,683,648	463	1,204,457	92	503
Fishing Equipment	255,180,225	195	968,966	74	263
Auxiliary Equipment	110,729,365	85	421,347	32	263
Special Equipment	1,278,218,139	977	243,374	19	5,252
Other Expenditures	619,716,849	474	1,011,683	77	613

Table 4. Expenditures for Hunting: 2022

Expenditure item	Expenditures			Spenders	
	Amount (dollars)	Average per hunter (dollars)	Number	Percent of hunters	Average per spender (dollars)
Total, all items	1,768,953,258	3,349	510,653	97	3,464
Total trip-related	204,154,111	386	424,125	80	481
Hunting Equipment	305,139,016	578	400,136	76	763
Auxiliary Equipment	148,840,175	282	327,291	62	455
Special Equipment	429,616,509	813	118,385	22	3,629
Other Expenditures	681,203,447	1,290	441,166	84	1,544

Table 5. Expenditures for Wildlife Watching: 2022

Expenditure item	Expenditures		Spenders		
	Amount (dollars)	Average per watcher	Number	Percent of wildlife-watching participants	Average per spender (dollars)
Total, all items	4,233,598,661	995.49	2,219,472	52	1,907
Total trip-related	357,355,265	84.03	649,745	15	550
Wildlife-watching Equipment	545,317,871	128.23	1,734,778	41	314
Auxiliary Equipment	194,670,276	45.77	817,375	19	238
Special Equipment	1,169,897,374	275.09	593,379	14	1,972
Other Expenditures	1,966,357,874	462.37	1,619,394	38	1,214

Table 6. Selected Characteristics of Wildlife Watchers: 2022

	State Population 16+		Away from home			Around the home		
	Number	Percent	Number	Percent who participated	Percent	Number	Percent who participated	Percent
Total persons	4,794,178	100	1,238,854	26	100	2,841,327	59	100
Population Density of Residence								
Urban	3,443,036	72	857,767	25	69	1,944,919	56	68
Rural	1,342,387	28	379,775	28	31	893,051	67	31
Population Size of Residence								
Metropolitan Statistical Area (MSA)								
1,000,000 or more	2,699,330	56	684,712	25	55	1,551,388	57	55
250,000 to 999,999	382,887	8	89,724	23	7	225,634	59	8
50,000 to 249,999	540,451	11	125,742	23	10	328,659	61	12
Micropolitan (10,000 to 50,000)	557,003	12	166,467	30	13	348,816	63	12
Outside MSA	605,752	13	170,899	28	14	383,473	63	13
Age								
16 to 17 years	297,402	6	103,590	35	8	227,561	77	8
18 to 24 years	358,397	7	144,793	40	12	273,683	76	10
25 to 34 years	786,621	16	240,347	31	19	477,169	61	17
35 to 44 years	778,234	16	229,605	30	19	440,029	57	15
45 to 54 years	699,379	15	167,630	24	14	395,324	57	14
55 to 64 years	814,564	17	177,369	22	14	461,269	57	16
65 years and older	1,049,058	22	173,596	17	14	564,221	54	20
65 to 74 years	642,828	13	125,255	19	10	377,096	59	13
75 and older	406,230	8	48,342	12	4	187,125	46	7
Sex								
Male	2,296,491	48	697,406	30	56	1,546,016	67	54
Female	2,443,863	51	521,361	21	42	1,256,221	51	44
Other gender	49,867	1	18,560	37	1	35,132	70	1

	State Population 16+		Away from home			Around the home		
	Number	Percent	Number	Percent who participated	Percent	Number	Percent who participated	Percent
Race								
Black, non-Hispanic	476,572	10	91,274	19	7	217,722	46	8
Hispanic	181,913	4	58,311	32	5	145,890	80	5
All others, non-Hispanic	421,227	9	119,761	28	10	252,687	60	9
Annual Household Income								
Less than \$10,000	587,438	12	122,074	21	10	290,587	49	10
\$10,000 to \$14,999	258,850	5	65,001	25	5	138,275	53	5
\$15,000 to \$24,999	552,673	12	129,926	24	10	296,372	54	10
\$25,000 to \$34,999	565,788	12	138,169	24	11	312,266	55	11
\$35,000 to \$49,999	711,803	15	191,625	27	15	433,100	61	15
\$50,000 to \$74,999	762,204	16	218,516	29	18	511,303	67	18
\$75,000 to \$99,999	527,753	11	148,168	28	12	316,713	60	11
\$100,000 to \$149,999	479,727	10	132,085	28	11	306,528	64	11
\$150,000 to \$199,999	164,343	3	47,972	29	4	111,590	68	4
\$200,000 or more	96,563	2	29,102	30	2	74,219	77	3
Not reported	87,037	2	16,217	19	1	50,375	58	2
Education								
Less than HS	290,134	6	72,093	25	6	157,530	54	6
High school degree	1,665,758	35	404,105	24	33	943,588	57	33
Some college	1,388,816	29	378,954	27	31	851,728	61	30
Bachelor's Degree	756,151	16	187,715	25	15	442,461	59	16
Graduate School	643,905	13	178,499	28	14	403,947	63	14