



WISCONSIN

Bridging the 50-State Survey  
of Fishing, Hunting, and Wildlife-  
Associated Recreation with  
Previous National Survey of  
Fishing, Hunting, and Wildlife-  
Associated Recreation Trends

## Final Methodology Overview

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# OVERVIEW

In 2016, the Rockville Institute conducted the 50-State Survey of Fishing, Hunting and Wildlife-Associated Recreation (FHWAR); see more details in Rockville Institute (2018). Concurrently, the Census Bureau conducted the 2016 National Survey of FHWAR; see more details in U.S. Department of the Interior, U.S. Fish & Wildlife Service, and U.S. Department of Commerce U.S. Census Bureau (2018). The two surveys were based on samples of addresses intended to be representative of the United States population living in households, and used questionnaires as nearly identical as possible. Both surveys identified likely sports-persons and wildlife watchers within sampled households, and individual participation surveys covered all of calendar year 2016. However, differences in sample design, sample selection process and mode of data collection resulted in estimates that were substantially different between the surveys.

Estimates from the 2016 National Survey of FHWAR are directly comparable to those from previous surveys such as the 2011 National Survey of FHWAR; see U.S. Department of the Interior, U.S. Fish & Wildlife Service, and U.S. Department of Commerce U.S. Census Bureau (2014). Due to its modest sample size, it can only produce reliable estimates at the national and census division level. In contrast, the 50-State Survey of FHWAR produced state-level estimates, but these estimates are not directly comparable to those from previous surveys. The Rockville Institute therefore completed a project to create new state-level estimates that are calibrated to those of the 2016 National Survey of FHWAR. The dual purpose of these calibrated estimates is to maintain the fine level of granularity of the 50-State Survey of FHWAR but enable comparison to previous National Surveys of FHWAR.

Through this bridging project, the Rockville Institute created new state-level tables showing adjusted survey

estimates by state of residency of the participants. These tables show the estimated demographics, participation, days, trips and expenditures, for fishing, hunting and wildlife-related activities for residents of each of the 50 states and DC. The tables correspond to Tables 5, 15, 22, 28, 30, 33, 35, and 36 in the state reports released by the Rockville Institute in 2018, with the exception of Tables 28 and 33, where we report an extended set of statistics compared to those reported in the 50-State Survey of FHWAR report.

The calibration procedure used to create these tables involved a combination of data harmonization and statistical modeling of the differences between the two surveys. The procedure consisted of the following major steps. First, the estimated demographic compositions of both surveys were aligned at the census division level, using survey calibration methods. Second, a statistical model was developed to account for the differences in participation rates in hunting, fishing and wildlife-related activities between the two surveys. This “bridging model” was used to predict state-level participating rates that are consistent with those obtained using the Census Bureau methodology. By combining these predicted participation rates with the harmonized population estimates, calibrated estimates of the numbers of participants in each state were obtained. Third, the characteristics of the participants’ activities, such as the number and type of activities, days of participation and types of associated expenditures, were adjusted by means of estimated products or ratios of these characteristics between the two surveys. Finally, applying these products or ratios to the calibrated estimates of the participant numbers made it possible to produce the calibrated tables of estimates mentioned above. For more details about the bridging project, see Rockville Institute (2020).

## References

- Rockville Institute. 2018. *2016 50-State Survey of Fishing, Hunting, and Wildlife-Related Recreation: National*.
- Rockville Institute. 2020. *Bridging the 50-State Surveys of Fishing, Hunting, and Wildlife-Associated Recreation with Previous National Survey of Fishing, Hunting, and Wildlife-Associated Recreation Trends. Final Methodology Report*.
- U.S. Department of the Interior, U.S. Fish and Wildlife Service, and U.S. Department of Commerce U.S. Census Bureau. 2014. *2011 National Survey of Fishing, Hunting, and Wildlife-Related Recreation*.
- U.S. Department of the Interior, U.S. Fish and Wildlife Service, and U.S. Department of Commerce U.S. Census Bureau. 2018. *2016 National Survey of Fishing, Hunting, and Wildlife-Related Recreation*.



# APPENDIX A: POINT ESTIMATES

The tables in Appendix A depict the calibrated point estimates, subject to rounding error. The format of the calibrated tables in this appendix matches closely the format used in the 50-State Survey of FHWAR reports. Summary statistics reported in the calibrated tables are described below, by table.

**Table 5**

*Fishing and hunting, participation, days, and trips*

- Total fishing participation and total hunting participation: product-type statistics derived using model predictions for percent participation in the population and total population based on adjusted 50-State Survey of FHWAR weights.
- Total freshwater, freshwater except Great Lakes, Great Lakes, and saltwater fishing participation, total big game, small game, migratory birds, and other animals hunting participation: product-type statistics derived using total fishing participation, total hunting participation, percent participation of freshwater, freshwater except Great Lakes, Great Lakes, and saltwater fishing in all fishing, and percent participation of big game, small game, migratory birds, and other animals hunting in all hunting (columns denoted by %).
- Total fishing (all and subcategories) days/trips of participation and total hunting (all and subcategories) days/trips of participation: product-type statistics derived using total number of fishing (all and subcategories) participants, total number of hunting (all and subcategories) participants, and days/trips per participant (not displayed).
- Percent participation (columns denoted by %): statistics constructed using full adjusted 50-State Survey of FHWAR final weights, using data from the fishing or hunting survey for the fishing and hunting sections, respectively.

**Table 15**

*Fishing and hunting, demographics*

- Total population (all and subcategories): composite statistics constructed using 2-way composite factors to adjusted 50-State Survey of FHWAR final weights, using data from both the fishing and the hunting surveys.
- Total number of anglers and total number of hunters: product-type statistics derived using model predictions for percent participation in the population (columns denoted by % Pop.), and total population based on adjusted 50-State Survey of FHWAR final weights.
- Total number of sportspersons: ratio-type statistics derived using total number of anglers and percent anglers in sportspersons (not displayed).
- Total population, sportspersons, anglers, hunters, by demographics: product-type statistics, derived using total population, sportspersons, anglers, hunters participation, and percent demographic-specific participation in total participation (columns denoted by %).
- Percent demographic-specific population, sportspersons, anglers, hunters participation in total participation (columns denoted by %): composite statistics constructed using 2-way composite factors to adjusted 50-State Survey of FHWAR final weights, using data from the fishing and hunting surveys.
- Percent demographic-specific anglers and hunters participation in the total demographic-specific population (columns denoted by % Pop.): ratio-type statistics, derived using total demographic-specific anglers and hunters participation and total demographic-specific population.

- Percent total and demographic-specific sportspersons participation in the total and demographic-specific population (column denoted by % Pop.): ratio-type statistics, derived using total population and sportspersons participation.

**Table 22**

*Fishing and hunting, spenders and expenses*

- Total fishing and hunting expenditure (all and subcategories) amount, total fishing expenditure (all and subcategories) amount, total hunting expenditure (all and subcategories) amount, and total unspecified expenditure amount: product-type statistics derived using expenditure amount per participant (columns denoted by Average Per Sportsperson), and total sportspersons participation (all and subcategories), total anglers participation (all and subcategories), total hunters participation (all and subcategories) and total sportspersons participation, respectively.
- Expenditure amount per participant (columns denoted by Average Per Sportsperson) and expenditure amount per spender (columns denoted by Average Per Spender):
  - > Fishing section: statistics constructed using full adjusted 50-State Survey of FHWAR final weights, using data from the fishing survey only.
  - > Hunting section: statistics constructed using full adjusted 50-State Survey of FHWAR final weights, using data from the hunting survey only.
  - > Fishing and hunting, and unspecified sections: except for some expenses and spenders noted in the table footnotes, these are composite statistics constructed using 2-way composite factors to adjusted 50-State Survey of FHWAR final weights, using data from the fishing and hunting surveys.
- Total fishing and hunting (all and subcategories) number of spenders, total fishing (all and subcategories) number of spenders, total hunting (all and subcategories) number of spenders, and total unspecified number of spenders: product-type statistics derived using the percent spenders in total participation (not displayed), and total sportspersons participation (all and subcategories),

total anglers participation (all and subcategories), total hunters participation (all and subcategories) and total sportspersons participation, respectively.

**Table 28**

*Wildlife watching, participation, days, and trips*

- Total wildlife watching participation: product-type statistics derived using model predictions for percent participation in the population, and total population based on adjusted 50-State Survey of FHWAR final weights.
- Total away from home (all and subcategories) and around the home (all and subcategories) wildlife watching participation: product-type statistics derived using total wildlife watching participation, and percent participation of away from home (all and subcategories) and around the home (all and subcategories) wildlife watching in all wildlife watching (columns denoted by %).
- Total wildlife watching (all and subcategories) days/trips of participation: product-type statistics derived using total number of wildlife watching (all and subcategories) participants and days/trips per participant (not displayed).
- Percent participation (columns denoted by %): statistics constructed using full adjusted 50-State Survey of FHWAR final weights, using data from the wildlife watching survey.
- Percent participation in the total population (column denoted by % Pop.): ratio-type statistics, derived using total population from Table 30 and wildlife watching participation.

**Table 30**

*Wildlife watching, demographics*

- Total population (all and subcategories): composite statistics constructed using full adjusted 50-State Survey of FHWAR final weights, using data from the wildlife watching survey. Note that the total population estimates in Tables 15 and 30 differ due to demographic harmonization without state targets estimated from the National Survey of FHWAR (information not available); see Rockville Institute (2020) for more details about the demographic harmonization.

- Total number of wildlife watchers: product-type statistics derived using model predictions for percent participation in the population (columns denoted by % Pop.) and total population based on adjusted 50-State Survey of FHWAR weights.
- Total number of away from home or around the home wildlife watchers: product-type statistics derived using total number of wildlife watchers, and percent away from home or around the home wildlife watchers in all wildlife watchers (columns denoted by % Pop. in Table 35; not displayed).
- Total population, wildlife watchers, away from home, around the home, by demographics: product-type statistics, derived using total population, wildlife watchers, away from home, around the home participation, and percent demographic-specific participation in total participation (columns denoted by %).
- Percent demographic-specific population, wildlife watchers, away from home, around the home participation in total participation (columns denoted by %): composite statistics constructed using full adjusted 50-State Survey of FHWAR final weights, using data from the wildlife watching survey.
- Percent demographic-specific wildlife watchers, participation in the total demographic-specific population (column denoted by % Pop.): ratio-type statistics, derived using total demographic-specific wildlife watchers participation and total demographic-specific population.
- Percent total and demographic-specific away from home and around the home participation in the total and demographic-specific population (columns denoted by % Pop.): ratio-type statistics, derived using total population and away from home and around the home participation, respectively.

### Table 33

*Wildlife watching, spenders and expenditures — three versions for all wildlife watchers, away from home wildlife watchers, and around the home wildlife watchers*

- Total wildlife watching expenditure (all and subcategories) amount: product-type statistics derived using total number of wildlife watching (all and subcategories)

participants and expenditure amount per participant (columns denoted by Average Per Wildlife Watcher).

- Expenditure amount per participant (columns denoted by Average Per Wildlife Watcher) and expenditure amount per spender (columns denoted by Average Per Spender): statistics constructed using full adjusted 50-State Survey of FHWAR final weights, using data from the wildlife watching survey only.
- Total wildlife watching (all and subcategories) number of spenders: product-type statistics derived using total number of wildlife watching (all and subcategories) participants and the percent spenders in total participation (columns denoted by Percent of Wildlife Watchers).
- Percent spenders in total participation (columns denoted by Percent of Wildlife Watchers): statistics constructed using full adjusted 50-State Survey of FHWAR final weights, using data from the wildlife watching survey only.

### Table 35

*Wildlife watchers participating in fishing and hunting*

- Total number of wildlife watchers: product-type statistics derived using model predictions for percent participation in the population (columns denoted by % Pop. in Table 30), and total population based on adjusted 50-State Survey of FHWAR final weights (displayed in Table 30).
- Total number of away from home or around the home wildlife watchers: product-type statistics derived using total number of wildlife watchers, and percent away from home or around the home wildlife watchers in all wildlife watchers (columns not displayed).
- Total number of wildlife watchers, away from home, around the home who did not fish or hunt, fished or hunted, fished, hunted: product-type statistics, derived using total number of wildlife watchers, and percent sportsperson-specific category in the corresponding total participation (columns denoted by %).
- Percent sportsperson-specific category in the corresponding total participation (columns denoted by %): statistics constructed using full adjusted 50-State Survey of FHWAR final weights, using data from the wildlife watching survey.

## Table 36

### *Sportspersons participating in wildlife watching*

- Total number of sportspersons: ratio-type statistics derived using total number of anglers, percent anglers in sportspersons (not displayed).
- Total number of anglers or total number of hunters: product-type statistics derived using model predictions for percent participation in the population (columns denoted by % Pop. in Table 15), and total population based on adjusted 50-State Survey of FHWAR final weights (displayed in Table 15).
- Total number of sportspersons, anglers, or hunters who did not wildlife watch, wildlife watch, wildlife watch away from home, wildlife watch around the home: product-type statistics, derived using total number of sportspersons, anglers, or hunters, and percent wildlife watcher-specific category in the corresponding total participation (columns denoted by %).
- Percent wildlife watcher-specific category in the corresponding total participation (columns denoted by %): composite statistics constructed using 3-way composite factors to adjusted 50-State Survey of FHWAR final weights, using data from the fishing, hunting, and wildlife watching surveys.



Table 5      Wisconsin Resident Anglers and Hunters, Days of Participation and Trips in the United States,  
by Type of Fishing and Hunting: 2016  
(Population 16 years and older. Numbers in thousands)

	PARTICIPANTS		DAYS OF PARTICIPATION		TRIPS	
	#	%	#	%	#	%
<b>ALL FISHING</b>	<b>762</b>	<b>100</b>	<b>11,479</b>	<b>100</b>	<b>7,249</b>	<b>100</b>
All freshwater	762	100	11,471	100	7,241	100
Freshwater, except Great Lakes	759	100	11,114	97	7,038	97
Great Lakes	72	9	357	3	202	3
Saltwater	8	1	8	0	8	0
<b>ALL HUNTING</b>	<b>322</b>	<b>100</b>	<b>5,342</b>	<b>100</b>	<b>2,727</b>	<b>100</b>
Big game	298	93	3,890	73	1,825	67
Small game	93	29	1,130	21	699	26
Migratory birds	28	9	722	14	58	2
Other animals	20	6	275	5	145	5

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

Table 15 Wisconsin Resident Anglers and Hunters, by Selected Characteristics: 2016  
(State population 16 years and older. Numbers in thousands)

	POPULATION		SPORTSPERSONS			ANGLERS			HUNTERS		
	Total	%	Total	% Pop.	%	Total	% Pop.	%	Total	% Pop.	%
<b>TOTAL</b>	<b>4,409</b>	<b>100</b>	<b>1,033</b>	<b>23</b>	<b>100</b>	<b>762</b>	<b>17</b>	<b>100</b>	<b>322</b>	<b>7</b>	<b>100</b>
<b>RESIDENCE DENSITY</b>											
Urban	3,021	69	519	17	50	483	16	63	109	4	34
Rural	1,388	31	513	37	50	278	20	37	213	15	66
<b>RESIDENCE SIZE</b>											
Metropolitan Statistical Area (MSA)	3,958	90	910	23	88	672	17	88	274	7	85
1,000,000 or more	1,224	28	383	31	37	247	20	32	118	10	37
250,000 to 999,999	659	15	166	25	16	151	23	20	56	8	17
50,000 to 249,999	2,075	47	362	17	35	274	13	36	100	5	31
Outside MSA	451	10	122	27	12	89	20	12	47	10	15
<b>SEX</b>											
Male	1,943	44	651	34	63	460	24	60	253	13	79
Female	2,466	56	381	15	37	301	12	40	69	3	21
<b>AGE</b>											
16 to 17 years	383	9	10	3	1	—	—	—	6	1	2
18 to 24 years	743	17	95	13	9	96	13	13	14	2	4
25 to 34 years	574	13	236	41	23	70	12	9	105	18	33
35 to 44 years	488	11	131	27	13	111	23	15	38	8	12
45 to 54 years	926	21	288	31	28	220	24	29	81	9	25
55 to 64 years	686	16	173	25	17	172	25	23	46	7	14
65 years and older	609	14	99	16	10	93	15	12	32	5	10
65 to 74 years	376	9	80	21	8	73	19	10	26	7	8
75 and older	233	5	18	8	2	20	9	3	6	3	2
<b>ETHNICITY</b>											
Hispanic	322	7	37	11	4	40	12	5	4	1	1
Non-Hispanic	4,087	93	996	24	96	722	18	95	317	8	99
<b>RACE</b>											
White	4,115	93	983	24	95	710	17	93	316	8	98
African American	53	1	18	35	2	20	37	3	—	—	—
All Others	241	5	31	13	3	32	13	4	5	2	2

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Table 15 Wisconsin Resident Anglers and Hunters, by Selected Characteristics: 2016 (continued)  
(State population 16 years and older. Numbers in thousands)

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	POPULATION		SPORTSPERSONS			ANGLERS			HUNTERS		
	Total	%	Total	% Pop.	%	Total	% Pop.	%	Total	% Pop.	%
<b>ANNUAL HOUSEHOLD INCOME</b>											
Less than \$20,000	310	7	116	37	11	111	36	15	14	5	4
\$20,000 to \$29,999	200	5	38	19	4	40	20	5	1	0	0
\$30,000 to \$39,999	185	4	49	27	5	34	18	4	21	12	7
\$40,000 to \$49,999	448	10	37	8	4	34	8	4	9	2	3
\$50,000 to \$74,999	492	11	135	27	13	131	27	17	35	7	11
\$75,000 to \$99,999	403	9	123	31	12	82	20	11	49	12	15
\$100,000 to \$149,999	815	18	140	17	14	137	17	18	44	5	14
\$150,000 or more	311	7	99	32	10	42	13	6	34	11	10
Not reported	1,245	28	295	24	29	151	12	20	115	9	36
<b>EDUCATION</b>											
8 years or less	121	3	36	30	4	36	30	5	2	1	1
9 to 12 years	1,936	44	334	17	32	247	13	32	110	6	34
1 to 3 years of college	1,013	23	315	31	30	234	23	31	94	9	29
4 years or more of college	1,340	30	348	26	34	244	18	32	116	9	36

— No sample data

NOTE: Detail does not add to total because of multiple responses. Percent population (% Pop.) columns show the percentage of each row's population who participated in the activity named by the column (the percentage of the population living in urban areas who fished, etc.). Columns labeled "% under Sportspeople, Anglers, and Hunters show the percentage of each column's participants who are described by the row heading (the percentage of anglers who lived in urban areas, etc.).

Table 22 Expenditures by Wisconsin Residents for Fishing and Hunting Both In and Out of Wisconsin: 2016  
(State population 16 years and older. Numbers in thousands)

	AMOUNT (thousands of \$)	AVERAGE PER SPORTSPERSON (\$) <sup>1</sup>	AVERAGE PER SPENDER (\$) <sup>1</sup>	NUMBER OF SPENDERS (thousands)
<b>FISHING AND HUNTING</b>	<b>2,494,696</b>	<b>2,416</b>	<b>2,519</b>	<b>990</b>
Food and lodging	313,997	304	428	734
Transportation	173,514	168	248	699
Other trip costs <sup>2</sup>	202,216	196	289	701
Equipment (fishing, hunting)	353,318	342	637	555
Auxiliary equipment <sup>3</sup>	128,734	125	316	407
Special equipment <sup>4</sup>	996,361	965	7,610	131
Magazines, books, and DVDs	5,912	6	67	88
Membership dues/contributions	18,089	18	133	136
Other <sup>5</sup>	302,556	293	321	943
<b>FISHING</b>	<b>1,268,883</b>	<b>1,666</b>	<b>1,733</b>	<b>732</b>
Food and lodging	261,722	344	504	519
Transportation	113,616	149	192	591
Other trip costs <sup>2</sup>	146,460	192	219	670
Fishing equipment	137,084	180	256	536
Auxiliary equipment <sup>3</sup>	26,714	35	259	103
Special equipment <sup>4</sup>	406,938	534	13,384	30
Magazines, books, and DVDs	2,662	3	48	56
Membership dues/contributions	5,534	7	69	80
Other <sup>5</sup>	168,153	221	252	668
<b>HUNTING</b>	<b>405,177</b>	<b>1,260</b>	<b>1,260</b>	<b>322</b>
Food and lodging	46,916	146	193	243
Transportation	40,450	126	192	211
Other trip costs <sup>2</sup>	40,560	126	293	139
Hunting equipment	126,515	393	926	137
Auxiliary equipment <sup>3</sup>	46,408	144	249	186
Special equipment <sup>4</sup>	12,669	39	458	28
Magazines, books, and DVDs	1,722	5	59	29
Membership dues/contributions	5,979	19	130	46
Other <sup>5</sup>	83,958	261	261	322
<b>UNSPECIFIED<sup>6</sup></b>	<b>642,013</b>	<b>622</b>	<b>4,990</b>	<b>129</b>

1 Average expenditures are annual estimates.

2 Includes boating costs, equipment rental, guide fees, access fees, heating and cooking fuel, and ice and bait (for fishing only).

3 Includes sleeping bags, packs, duffel bags, tents, binoculars and field glasses, special fishing and hunting clothing, foul weather gear, boots and waders, maintenance and repair of equipment, processing and taxidermy costs, and electronic equipment such as a GPS device.

4 Includes big-ticket items bought primarily for hunting and fishing, including boats, campers, cabins, trail bikes, dune buggies, 4 x 4 vehicles, ATVs, 4-wheelers, snowmobiles, pickups, vans, travel and tent trailers, motor homes, house trailers, recreational vehicles (RVs) and other special equipment.

5 Includes land leasing and ownership, licenses, stamps, tags, permits, and plantings (for hunting only).

6 Respondent could not specify whether expenditure was primarily for either fishing or hunting.

NOTE: Individual estimates do not add to total because of multiple responses, nonresponse, the independent bridging of fishing and hunting participation, and the bridging of sportspersons participation relative to fishing participation.

Table 28 Wisconsin Resident Wildlife Watchers Both In and Out of Wisconsin: 2016  
(State population 16 years and older. Numbers in thousands)

	PARTICIPANTS			DAYS OF PARTICIPATION		TRIPS	
	#	%	% Pop.	#	%	#	%
<b>WILDLIFE WATCHERS</b>	<b>1,426</b>	<b>100</b>	<b>34</b>	<b>97,687</b>	<b>100</b>	<b>8,777</b>	<b>100</b>
Away from home	504	35	12	15,936	16	8,777	100
Observe wildlife	488	34	12	11,089	11	x	x
Photograph wildlife	214	15	5	2,421	2	x	x
Feed wildlife	314	22	8	8,117	8	x	x
Around the home	1,426	100	34	81,751	84	x	x
Observe wildlife	843	59	20	72,163	74	x	x
Photograph wildlife	495	35	12	6,194	6	x	x
Feed wildlife	1,042	73	25	x	x	x	x
Visit parks or natural areas <sup>1</sup>	246	17	6	3,393	3	x	x
Maintain plantings or natural areas	365	26	9	x	x	x	x

x Not applicable

<sup>1</sup> Includes visits only to parks or natural areas within one mile of home.

NOTE: Detail does not add to total because of multiple responses. Percent population (% Pop.) columns show the percentage of each row's population who participated in the activity named by the column (the percentage of the population who observed wildlife away from home, etc.). Columns labeled "%" show the percentage of each column's participants who are described by the row heading (the percentage of wildlife watchers who observed wildlife away from home, etc.).



Table 30 Wisconsin Resident Wildlife Watchers, by Selected Characteristics: 2016  
(State population 16 years and older. Numbers in thousands)

	POPULATION		TOTAL			AWAY FROM HOME			AROUND THE HOME		
	Total	%	Total	% Pop.	%	Total	% Pop.	%	Total	% Pop.	%
<b>TOTAL</b>	<b>4,169</b>	<b>100</b>	<b>1,426</b>	<b>34</b>	<b>100</b>	<b>504</b>	<b>12</b>	<b>100</b>	<b>1,426</b>	<b>34</b>	<b>100</b>
<b>RESIDENCE DENSITY</b>											
Urban	3,172	76	1,101	35	77	347	11	69	1,101	35	77
Rural	997	24	325	33	23	157	16	31	325	33	23
<b>RESIDENCE SIZE</b>											
Metropolitan Statistical Area (MSA)	3,708	89	1,272	34	89	423	11	84	1,272	34	89
1,000,000 or more	888	21	316	36	22	165	19	33	316	36	22
250,000 to 999,999	1,165	28	389	33	27	58	5	11	389	33	27
50,000 to 249,999	1,655	40	567	34	40	200	12	40	567	34	40
Outside MSA	461	11	154	33	11	81	18	16	154	33	11
<b>SEX</b>											
Male	2,363	57	821	35	58	305	13	61	821	35	58
Female	1,807	43	605	33	42	199	11	39	605	33	42
<b>AGE</b>											
16 to 17 years	182	4	61	33	4	27	15	5	61	33	4
18 to 24 years	503	12	143	28	10	15	3	3	143	28	10
25 to 34 years	564	14	208	37	15	120	21	24	208	37	15
35 to 44 years	399	10	140	35	10	53	13	11	140	35	10
45 to 54 years	963	23	342	36	24	176	18	35	342	36	24
55 to 64 years	528	13	176	33	12	58	11	12	176	33	12
65 years and older	1,030	25	356	35	25	55	5	11	356	35	25
65 to 74 years	674	16	269	40	19	36	5	7	269	40	19
75 and older	356	9	87	25	6	19	5	4	87	25	6
<b>ETHNICITY</b>											
Hispanic	352	8	87	25	6	5	2	1	87	25	6
Non-Hispanic	3,818	92	1,339	35	94	499	13	99	1,339	35	94
<b>RACE</b>											
White	4,072	98	1,413	35	99	499	12	99	1,413	35	99
African American	15	0	6	42	0	—	—	—	6	42	0
All Others	83	2	7	8	0	5	6	1	7	8	0

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Table 30 Wisconsin Resident Wildlife Watchers, by Selected Characteristics: 2016 (continued)  
(State population 16 years and older. Numbers in thousands)

(continued from previous page)

	POPULATION		TOTAL			AWAY FROM HOME			AROUND THE HOME		
	Total	%	Total	% Pop.	%	Total	% Pop.	%	Total	% Pop.	%
<b>ANNUAL HOUSEHOLD INCOME</b>											
Less than \$20,000	558	13	131	23	9	88	16	18	131	23	9
\$20,000 to \$29,999	266	6	106	40	7	25	9	5	106	40	7
\$30,000 to \$39,999	237	6	93	39	7	33	14	6	93	39	7
\$40,000 to \$49,999	271	7	66	24	5	30	11	6	66	24	5
\$50,000 to \$74,999	660	16	231	35	16	43	7	9	231	35	16
\$75,000 to \$99,999	297	7	118	40	8	43	14	9	118	40	8
\$100,000 to \$149,999	778	19	288	37	20	195	25	39	288	37	20
\$150,000 or more	435	10	168	39	12	11	3	2	168	39	12
Not reported	666	16	224	34	16	36	5	7	224	34	16
<b>EDUCATION</b>											
8 years or less	443	11	154	35	11	57	13	11	154	35	11
9 to 12 years	1,465	35	491	33	34	128	9	25	491	33	34
1 to 3 years of college	1,369	33	474	35	33	213	16	42	474	35	33
4 years or more of college	892	21	308	34	22	106	12	21	308	34	22

— No sample data

NOTE: Detail does not add to total because of multiple responses and nonresponse. Percent population (% Pop.) columns show the percentage of each row's population who participated in the activity named by the column (the percentage of the population living in urban areas who participated, etc.). Columns labeled "%" under TOTAL, Away From Home, and Around the Home show the percentage of each column's participants who are described by the row heading (the percentage of those who lived in urban areas, etc.).

Table 33A Expenditures by Wisconsin Residents for All Wildlife Watching Both In and Out of Wisconsin: 2016  
(State population 16 years and older. Numbers in thousands)

	AMOUNT (thousands of \$)	AVERAGE PER WILDLIFE WATCHER (\$) <sup>1</sup>	AVERAGE PER SPENDER (\$) <sup>1</sup>	NUMBER OF SPENDERS (thousands)	PERCENT OF WILDLIFE WATCHERS
<b>ALL EXPENDITURES</b>	<b>1,977,173</b>	<b>1,386</b>	<b>1,603</b>	<b>1,234</b>	<b>86</b>
<b>TRIP-RELATED EXPENDITURES</b>	<b>556,409</b>	<b>390</b>	<b>1,165</b>	<b>478</b>	<b>33</b>
Food and lodging	266,211	187	668	398	28
Food	117,936	83	296	398	28
Lodging	148,276	104	917	162	11
Transportation	143,903	101	318	452	32
Other trip costs <sup>2</sup>	146,293	103	541	270	19
<b>EQUIPMENT AND OTHER EXPENDITURES</b>	<b>1,420,765</b>	<b>996</b>	<b>1,240</b>	<b>1,146</b>	<b>80</b>
Wildlife-watching equipment	371,163	260	338	1,099	77
Binoculars, spotting scopes	15,414	11	209	74	5
Film and photo processing	2,089	1	54	39	3
Cameras, special lenses, video cameras, and other photographic equipment, including memory cards	71,062	50	323	220	15
Day packs, carrying cases, and special clothing	73,021	51	275	266	19
Bird food	127,749	90	164	780	55
Food for other wildlife	25,596	18	77	334	23
Nest boxes, bird houses, bird feeders, and bird baths	45,963	32	77	597	42
Other equipment (including field guides)	10,267	7	51	200	14
Auxiliary equipment <sup>3</sup>	63,628	45	350	182	13
Special equipment <sup>4</sup>	734,882	515	6,151	119	8
Magazines, books, and DVDs	17,745	12	106	167	12
Membership dues and contributions	33,905	24	152	223	16
Land leasing and ownership	46,012	32	1,470	31	2
Plantings	153,432	108	473	324	23

<sup>1</sup> Average expenditures are annual estimates.

<sup>2</sup> Includes equipment rental and fees for guides, pack trips, public land use and private land use, boat fuel, other boating costs, and heating and cooking fuel.

<sup>3</sup> Includes tents, tarps, frame packs and other backpacking equipment, other camping equipment, and other auxiliary equipment.

<sup>4</sup> Includes boats, campers, cabins, trail bikes, dune buggies, 4 x 4 vehicles, ATVs, 4-wheelers, snowmobiles, pickups, vans, travel and tent trailers, motor homes, house trailers, recreational vehicles (RVs) and other special equipment.

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

Table 33B Expenditures by Wisconsin Residents for Away-from-home Wildlife Watching Both In and Out of Wisconsin: 2016  
(State population 16 years and older. Numbers in thousands)

	AMOUNT (thousands of \$)	AVERAGE PER WILDLIFE WATCHER (\$) <sup>1</sup>	AVERAGE PER SPENDER (\$) <sup>1</sup>	NUMBER OF SPENDERS (thousands)	PERCENT OF WILDLIFE WATCHERS
<b>ALL EXPENDITURES</b>	<b>736,127</b>	<b>1,461</b>	<b>1,500</b>	<b>491</b>	<b>97</b>
<b>TRIP-RELATED EXPENDITURES</b>	<b>722,362</b>	<b>1,434</b>	<b>1,472</b>	<b>491</b>	<b>97</b>
Food and lodging	278,944	554	568	491	97
Food	117,693	234	266	443	88
Lodging	161,251	320	647	249	49
Transportation	210,437	418	440	478	95
Other trip costs <sup>2</sup>	232,981	462	1,049	222	44
<b>EQUIPMENT AND OTHER EXPENDITURES</b>	<b>13,764</b>	<b>27</b>	<b>109</b>	<b>126</b>	<b>25</b>
Wildlife-watching equipment	9,395	19	86	110	22
Binoculars, spotting scopes	1,763	3	75	24	5
Film and photo processing	819	2	50	16	3
Cameras, special lenses, video cameras, and other photographic equipment, including memory cards	—	—	—	—	—
Day packs, carrying cases, and special clothing	4,095	8	250	16	3
Bird food	—	—	—	—	—
Food for other wildlife	—	—	—	—	—
Nest boxes, bird houses, bird feeders, and bird baths	159	0	12	13	3
Other equipment (including field guides)	2,559	5	45	57	11
Auxiliary equipment <sup>3</sup>	—	—	—	—	—
Special equipment <sup>4</sup>	—	—	—	—	—
Magazines, books, and DVDs	—	—	—	—	—
Membership dues and contributions	4,369	9	133	33	7
Land leasing and ownership	—	—	—	—	—
Plantings	—	—	—	—	—

— No sample data

<sup>1</sup> Average expenditures are annual estimates.

<sup>2</sup> Includes equipment rental and fees for guides, pack trips, public land use and private land use, boat fuel, other boating costs, and heating and cooking fuel.

<sup>3</sup> Includes tents, tarps, frame packs and other backpacking equipment, other camping equipment, and other auxiliary equipment.

<sup>4</sup> Includes boats, campers, cabins, trail bikes, dune buggies, 4 x 4 vehicles, ATVs, 4-wheelers, snowmobiles, pickups, vans, travel and tent trailers, motor homes, house trailers, recreational vehicles (RVs) and other special equipment.

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

Table 33C Expenditures by Wisconsin Residents for Around-the-home Wildlife Watching Both In and Out of Wisconsin: 2016  
(State population 16 years and older. Numbers in thousands)

	AMOUNT (thousands of \$)	AVERAGE PER WILDLIFE WATCHER (\$) <sup>1</sup>	AVERAGE PER SPENDER (\$) <sup>1</sup>	NUMBER OF SPENDERS (thousands)	PERCENT OF WILDLIFE WATCHERS
<b>ALL EXPENDITURES</b>	<b>624,543</b>	<b>438</b>	<b>587</b>	<b>1,063</b>	<b>75</b>
<b>TRIP-RELATED EXPENDITURES</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>
Food and lodging	x	x	x	x	x
Food	x	x	x	x	x
Lodging	x	x	x	x	x
Transportation	x	x	x	x	x
Other trip costs <sup>2</sup>	x	x	x	x	x
<b>EQUIPMENT AND OTHER EXPENDITURES</b>	<b>624,543</b>	<b>438</b>	<b>587</b>	<b>1,063</b>	<b>75</b>
Wildlife-watching equipment	239,685	168	232	1,034	72
Binoculars, spotting scopes	2,534	2	78	32	2
Film and photo processing	1,268	1	34	37	3
Cameras, special lenses, video cameras, and other photographic equipment, including memory cards	28,839	20	256	113	8
Day packs, carrying cases, and special clothing	41,933	29	331	127	9
Bird food	112,143	79	144	777	54
Food for other wildlife	14,529	10	80	181	13
Nest boxes, bird houses, bird feeders, and bird baths	30,023	21	65	459	32
Other equipment (including field guides)	8,416	6	62	135	9
Auxiliary equipment <sup>3</sup>	42,201	30	366	115	8
Special equipment <sup>4</sup>	140,750	99	1,245	113	8
Magazines, books, and DVDs	18,268	13	145	126	9
Membership dues and contributions	10,809	8	136	80	6
Land leasing and ownership	42,988	30	6,291	7	0
Plantings	129,839	91	628	207	15

— No sample data    x Not applicable

<sup>1</sup> Average expenditures are annual estimates.

<sup>2</sup> Includes equipment rental and fees for guides, pack trips, public land use and private land use, boat fuel, other boating costs, and heating and cooking fuel.

<sup>3</sup> Includes tents, tarps, frame packs and other backpacking equipment, other camping equipment, and other auxiliary equipment.

<sup>4</sup> Includes boats, campers, cabins, trail bikes, dune buggies, 4 x 4 vehicles, ATVs, 4-wheelers, snowmobiles, pickups, vans, travel and tent trailers, motor homes, house trailers, recreational vehicles (RVs) and other special equipment.

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



Table 35      Wisconsin Resident Wildlife Watchers Participating in Fishing or Hunting: 2016  
(State population 16 years and older. Numbers in thousands)

	TOTAL		AWAY FROM HOME		AROUND THE HOME	
	#	%	#	%	#	%
<b>ALL WILDLIFE WATCHERS</b>	<b>1,426</b>	<b>100</b>	<b>504</b>	<b>100</b>	<b>1,426</b>	<b>100</b>
Did not fish or hunt	692	49	207	41	692	49
Fished or hunted	734	51	297	59	734	51
Fished	589	41	276	55	589	41
Hunted	413	29	132	26	413	29

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

Table 36      Wisconsin Resident Sportspersons Participating in Wildlife Watching: 2016  
(State population 16 years and older. Numbers in thousands)

	SPORTSPERSONS		ANGLERS		HUNTERS	
	#	%	#	%	#	%
<b>ALL SPORTSPERSONS</b>	<b>1,033</b>	<b>100</b>	<b>762</b>	<b>100</b>	<b>322</b>	<b>100</b>
Did not watch wildlife	180	17	132	17	48	15
Watched wildlife	853	83	630	83	273	85
Away from home	455	44	325	43	143	45
Around the home	786	76	562	74	263	82

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

## APPENDIX B: STANDARD ERRORS

The tables in Appendix B depict the standard errors, subject to rounding error, corresponding to the calibrated point estimates reported in the tables in Appendix A. Summary statistics reported in these calibrated tables are described below, by table.

**Table 5**

*Fishing and hunting, participation, days, and trips*

- Standard errors of total fishing participation and total hunting participation: product-type statistics derived using model point estimates and standard errors of percent participation in the population and survey point estimates and standard errors of total population based on adjusted 50-State Survey of FHWAR weights.
- Standard errors of total freshwater, freshwater except Great Lakes, Great Lakes, and saltwater fishing participation, total big game, small game, migratory birds, and other animals hunting participation: product-type statistics derived using point estimates and standard errors of total fishing participation, point estimates and standard errors of total hunting participation, point estimates and standard errors of percent participation of freshwater, freshwater except Great Lakes, Great Lakes, and saltwater fishing in all fishing, and point estimates and standard errors of percent participation of big game, small game, migratory birds, and other animals hunting in all hunting (columns denoted by %).
- Standard errors of total fishing (all and subcategories) days/trips of participation and total hunting (all and subcategories) days/trips of participation: product-type statistics derived using point estimates and standard errors of total number of fishing (all and subcategories) participants, point estimates and standard errors of total number of hunting (all and subcategories) participants, and point estimates and standard errors of days/trips per participant (not displayed).

- Standard errors of percent participation (columns denoted by %): statistics constructed using full adjusted 50-State Survey of FHWAR final and replicate weights, using data from the fishing or hunting survey for the fishing and hunting sections, respectively.

**Table 15**

*Fishing and hunting, demographics*

- Standard errors of total population (all and subcategories): composite statistics constructed using 2-way composite factors to adjusted 50-State Survey of FHWAR final and replicate weights, using data from both the fishing and the hunting surveys.
- Standard errors of total number of anglers and total number of hunters: product-type statistics derived using model point estimates and standard errors for percent participation in the population (columns denoted by % Pop.) and survey point estimates and standard errors of total population based on adjusted 50-State Survey of FHWAR final and replicate weights.
- Standard errors of total number of sportspersons: ratio-type statistics derived using point estimates and standard errors of total number of anglers and point estimates and standard errors of percent anglers in sportspersons (not displayed).
- Standard errors of total population, sportspersons, anglers, hunters, by demographics: product-type statistics, derived using point estimates and standard errors of total population, sportspersons, anglers, hunters participation, and point estimates and standard errors of percent demographic-specific participation in total participation (columns denoted by %).

- Standard errors of percent demographic-specific population, sportspersons, anglers, hunters participation in total participation (columns denoted by %): composite statistics constructed using 2-way composite factors to adjusted 50-State Survey of FHWAR final and replicate weights, using data from the fishing and hunting surveys.
- Standard errors of percent demographic-specific anglers and hunters participation in the total demographic-specific population (columns denoted by % Pop.): ratio-type statistics, derived using point estimates and standard errors of total demographic-specific anglers and hunters participation and total demographic-specific population.
- Standard errors of percent total and demographic-specific sportspersons participation in the total and demographic-specific population (column denoted by % Pop.): ratio-type statistics, derived using point estimates and standard errors of total population and sportspersons participation.

## Table 22

### *Fishing and hunting, spenders and expenses*

- Standard errors of total fishing and hunting expenditure (all and subcategories) amount, total fishing expenditure (all and subcategories) amount, total hunting expenditure (all and subcategories) amount, and total unspecified expenditure amount: product-type statistics derived using point estimates and standard errors of expenditure amount per participant (columns denoted by Average Per Sportsperson), and point estimates and standard errors of total sportspersons participation (all and subcategories), point estimates and standard errors of total anglers participation (all and subcategories), point estimates and standard errors of total hunters participation (all and subcategories) and point estimates and standard errors of total sportspersons participation, respectively.
- Standard errors of expenditure amount per participant (columns denoted by Average Per Sportsperson) and expenditure amount per spender (columns denoted by Average Per Spender):
  - > Fishing section: statistics constructed using full adjusted 50-State Survey of FHWAR final and replicate weights, using data from the fishing survey only.

- > Hunting section: statistics constructed using full adjusted 50-State Survey of FHWAR final and replicate weights, using data from the hunting survey only.
- > Fishing and hunting, and unspecified sections: except for some expenses and spenders noted in the table footnotes, these are composite statistics constructed using 2-way composite factors to adjusted 50-State Survey of FHWAR final and replicate weights, using data from the fishing and hunting surveys.
- Standard errors of total fishing and hunting (all and subcategories) number of spenders, total fishing (all and subcategories) number of spenders, total hunting (all and subcategories) number of spenders, and total unspecified number of spenders: product-type statistics derived using the point estimates and standard errors of percent spenders in total participation (not displayed), and point estimates and standard errors of total sportspersons participation (all and subcategories), point estimates and standard errors of total anglers participation (all and subcategories), point estimates and standard errors of total hunters participation (all and subcategories) and point estimates and standard errors of total sportspersons participation, respectively.

## Table 28

### *Wildlife watching, participation, days, and trips*

- Standard errors of total wildlife watching participation: product-type statistics derived using model point estimates and standard errors of percent participation in the population, and survey point estimates and standard errors of total population based on adjusted 50-State Survey of FHWAR final and replicate weights.
- Standard errors of total away from home (all and subcategories) and around the home (all and subcategories) wildlife watching participation: product-type statistics derived using point estimates and standard errors of total wildlife watching participation, point estimates and standard errors of percent participation of away from home (all and subcategories) and point estimates and standard errors of around the home (all and subcategories) wildlife watching in all wildlife watching (columns denoted by %).

- Standard errors of total wildlife watching (all and sub-categories) days/trips of participation: product-type statistics derived using point estimates and standard errors of total number of wildlife watching (all and subcategories) participants and point estimates and standard errors of days/trips per participant (not displayed).
- Standard errors of percent participation (columns denoted by %): statistics constructed using full adjusted 50-State Survey of FHWAR final and replicate weights, using data from the wildlife watching survey.
- Standard errors of percent participation in the total population (column denoted by % Pop.): ratio-type statistics, derived using point estimates and standard errors of total population from Table 30 and point estimates and standard errors of wildlife watching participation.

**Table 30**

*Wildlife watching, demographics*

- Standard errors of total population (all and subcategories): composite statistics constructed using full adjusted 50-State Survey of FHWAR final and replicate weights, using data from the wildlife watching survey. Note that the standard errors of total population estimates in Tables 15 and 30 differ due to demographic harmonization without state targets estimated from the National Survey of FHWAR (information not available); see Rockville Institute (2020) for more details about the demographic harmonization.
- Standard errors of total number of wildlife watchers: product-type statistics derived using model point estimates and standard errors of percent participation in the population (columns denoted by % Pop.) and survey standard error of total population based on adjusted 50-State Survey of FHWAR final and replicate weights.
- Standard errors of total number of away from home or around the home wildlife watchers: product-type statistics derived using point estimates and standard errors of total number of wildlife watchers and point estimates and standard errors of percent away from home or around the home wildlife watchers in all wildlife watchers (columns denoted by % Pop. in Table 35).

- Standard errors of total population, wildlife watchers, away from home, around the home, by demographics: product-type statistics, derived using point estimates and standard errors of total population, wildlife watchers, away from home, around the home participation and point estimates and standard errors of percent demographic-specific participation in total participation (columns denoted by %).
- Standard errors of percent demographic-specific population, wildlife watchers, away from home, around the home participation in total participation (columns denoted by %): composite statistics constructed using full adjusted 50-State Survey of FHWAR final and replicate weights, using data from the wildlife watching survey.
- Standard errors of percent demographic-specific wildlife watchers in the total demographic-specific population (column denoted by % Pop.): ratio-type statistics, derived using point estimates and standard errors of total demographic-specific wildlife watchers participation and point estimates and standard errors of total demographic-specific population.
- Standard errors of percent total and demographic-specific away from home and around the home participation in the total and demographic-specific population (columns denoted by % Pop.): ratio-type statistics, derived using point estimates and standard errors of total population and away from home and around the home participation, respectively.

**Table 33**

*Wildlife watching, spenders and expenditures — three versions for all wildlife watchers, away from home wildlife watchers, and around the home wildlife watchers*

- Standard errors of total wildlife watching expenditure (all and subcategories) amount: product-type statistics derived using point estimates and standard errors of total number of wildlife watching (all and subcategories) participants and point estimates and standard errors of expenditure amount per participant (columns denoted by Average Per Wildlife Watcher).



- Standard errors or expenditure amount per participant (columns denoted by Average Per Wildlife Watcher) and expenditure amount per spender (columns denoted by Average Per Spender): statistics constructed using full adjusted 50-State Survey of FHWAR final and replicate weights, using data from the wildlife watching survey only.
- Standard errors of total wildlife watching (all and subcategories) number of spenders: product-type statistics derived using point estimates and standard errors of total number of wildlife watching (all and subcategories) participants and point estimates and standard errors of the percent spenders in total participation (columns denoted by Percent of Wildlife Watchers).
- Standard errors of percent spenders in total participation (columns denoted by Percent of Wildlife Watchers): statistics constructed using full adjusted 50-State Survey of FHWAR final and replicate weights, using data from the wildlife watching survey only.

**Table 35**

*Wildlife watchers participating in fishing and hunting*

- Standard errors of total number of wildlife watchers: product-type statistics derived using model point estimates and standard errors of percent participation in the population (columns denoted by % Pop. in Table 30) and survey point estimates and standard errors of total population based on adjusted 50-State Survey of FHWAR final and replicate weights (displayed in Table 30).
- Standard errors of total number of away from home or around the home wildlife watchers: product-type statistics derived using point estimates and standard errors of total number of wildlife watchers and point estimates and standard errors of percent away from home or around the home wildlife watchers in all wildlife watchers (columns not displayed).
- Standard errors of total number of wildlife watchers, away from home, around the home who did not fish

or hunt, fished or hunted, fished, hunted: product-type statistics, derived using point estimates and standard errors of total number of wildlife watchers and point estimates and standard errors of percent sportsperson-specific category in the corresponding total participation (columns denoted by %).

- Standard errors or percent sportsperson-specific category in the corresponding total participation (columns denoted by %): statistics constructed using full adjusted 50-State Survey of FHWAR final and replicate weights, using data from the wildlife watching survey.

**Table 36**

*Sportspersons participating in wildlife watching*

- Standard errors of total number of sportspersons: ratio-type statistics derived using point estimates and standard errors of total number of anglers and point estimates and standard errors of percent anglers in sportspersons (not displayed).
- Standard errors of total number of anglers or total number of hunters: product-type statistics derived using model point estimates and standard errors of percent participation in the population (columns denoted by % Pop. in Table 15) and survey point estimates and standard errors of total population based on adjusted 50-State Survey of FHWAR weights (displayed in Table 15).
- Standard errors of total number of sportspersons, anglers, or hunters who did not wildlife watch, wildlife watch, wildlife watch away from home, wildlife watch around the home: product-type statistics, derived using point estimates and standard errors of total number of sportspersons, anglers, or hunters and point estimates and standard errors of percent wildlife watcher-specific category in the corresponding total participation (columns denoted by %).
- Standard errors of percent wildlife watcher-specific category in the corresponding total participation (columns denoted by %): composite statistics constructed using 3-way composite factors to adjusted 50-State Survey of FHWAR final and replicate weights, using data from the fishing, hunting, and wildlife watching surveys.

Table 5 SE      Standard Errors of Wisconsin Resident Anglers and Hunters, Days of Participation and Trips in the United States,  
by Type of Fishing and Hunting: 2016  
(Population 16 years and older. Numbers in thousands)

	PARTICIPANTS		DAYS OF PARTICIPATION		TRIPS	
	#	%	#	%	#	%
<b>ALL FISHING</b>	<b>156.78</b>	<b>0.00</b>	<b>3,153.02</b>	<b>0.00</b>	<b>2,152.31</b>	<b>0.00</b>
All freshwater	156.78	0.00	3,152.34	0.07	2,151.22	0.11
Freshwater, except Great Lakes	156.32	0.32	3,089.57	1.79	2,122.95	1.60
Great Lakes	40.70	5.08	250.19	1.78	137.30	1.59
Saltwater	7.89	1.04	7.89	0.07	7.89	0.11
<b>ALL HUNTING</b>	<b>130.73</b>	<b>0.00</b>	<b>2,376.75</b>	<b>0.00</b>	<b>1,245.18</b>	<b>0.00</b>
Big game	121.74	4.67	1,707.93	9.29	857.92	13.45
Small game	46.65	9.22	618.97	5.76	414.59	9.71
Migratory birds	18.68	5.00	502.79	8.68	56.51	1.39
Other animals	13.75	3.81	213.69	2.61	112.85	3.95

Table 15 SE      Standard Errors of Wisconsin Resident Anglers and Hunters, by Selected Characteristics: 2016  
(State population 16 years and older. Numbers in thousands)

	POPULATION		SPORTSPERSONS			ANGLERS			HUNTERS		
	Total	%	Total	% Pop.	%	Total	% Pop.	%	Total	% Pop.	%
<b>TOTAL</b>	<b>387.05</b>	<b>0.00</b>	<b>245.33</b>	<b>5.93</b>	<b>0.00</b>	<b>156.78</b>	<b>3.23</b>	<b>0.00</b>	<b>130.73</b>	<b>2.91</b>	<b>0.00</b>
<b>RESIDENCE DENSITY</b>											
Urban	516.84	8.16	162.14	6.12	10.49	115.78	4.71	7.94	58.79	2.04	13.14
Rural	313.59	8.16	161.04	14.30	10.49	82.41	7.47	7.94	94.64	7.64	13.14
<b>RESIDENCE SIZE</b>											
Metropolitan Statistical Area (MSA)	427.48	2.61	219.03	6.07	3.46	140.87	4.00	3.54	112.97	2.95	6.14
1,000,000 or more	303.97	7.75	159.38	15.16	13.05	82.72	8.41	8.76	83.17	7.20	23.14
250,000 to 999,999	138.13	3.62	67.89	11.58	5.50	58.38	10.08	6.62	33.57	5.39	8.40
50,000 to 249,999	556.39	10.06	129.38	7.79	9.64	92.72	5.70	9.86	56.73	3.03	13.40
Outside MSA	91.54	2.61	45.31	11.45	3.46	32.14	8.18	3.54	26.34	6.21	6.14
<b>SEX</b>											
Male	215.99	7.08	168.00	9.41	6.53	114.85	6.47	8.70	104.50	5.57	6.23
Female	474.84	7.08	111.81	5.42	6.53	89.77	4.33	8.70	33.32	1.45	6.23
<b>AGE</b>											
16 to 17 years	208.92	4.91	9.28	2.83	0.89	—	—	—	5.53	1.66	1.71
18 to 24 years	517.25	11.27	49.70	11.16	4.41	46.39	10.93	5.63	10.65	1.93	3.07
25 to 34 years	254.79	6.07	142.95	30.88	13.11	35.75	8.27	4.38	79.29	16.03	22.73
35 to 44 years	144.31	3.72	60.24	14.66	5.14	53.02	12.78	6.41	24.77	5.56	6.61
45 to 54 years	160.88	4.19	115.71	13.61	9.30	92.17	10.77	10.77	47.92	5.39	11.88
55 to 64 years	104.81	2.67	60.49	9.62	4.42	58.26	9.31	6.22	23.33	3.55	4.72
65 years and older	96.45	2.55	37.43	6.66	2.90	32.74	5.89	3.57	18.97	3.23	4.68
65 to 74 years	71.55	1.84	32.81	9.63	2.66	28.55	8.44	3.26	16.40	4.56	4.23
75 and older	68.10	1.60	10.42	5.04	0.94	11.04	5.36	1.38	5.08	2.31	1.53
<b>ETHNICITY</b>											
Hispanic	212.00	4.76	31.69	12.40	3.04	33.96	13.31	4.42	4.73	1.72	1.49
Non-Hispanic	397.66	4.76	238.50	6.30	3.04	152.21	4.10	4.42	129.02	3.25	1.49
<b>RACE</b>											
White	421.45	2.91	234.95	6.21	2.56	148.69	4.02	3.62	128.60	3.22	1.53
African American	29.65	0.71	15.08	34.42	1.44	15.81	36.40	2.05	—	—	—
All Others	118.74	2.77	21.77	11.06	2.04	22.98	11.51	2.96	5.02	2.36	1.53

(continued on next page)

Table 15 SE      Standard Errors of Wisconsin Resident Anglers and Hunters, by Selected Characteristics: 2016 (continued)  
(State population 16 years and older. Numbers in thousands)

(continued from previous page)

	POPULATION		SPORTSPERSONS			ANGLERS			HUNTERS		
	Total	%	Total	% Pop.	%	Total	% Pop.	%	Total	% Pop.	%
<b>ANNUAL HOUSEHOLD INCOME</b>											
Less than \$20,000	129.66	3.11	82.17	30.75	7.72	83.16	30.72	10.72	10.66	3.92	3.06
\$20,000 to \$29,999	62.70	1.51	24.25	13.57	2.24	24.89	13.97	3.15	0.77	0.40	0.24
\$30,000 to \$39,999	51.65	1.35	24.31	15.05	2.12	16.76	10.35	2.05	14.57	8.49	3.98
\$40,000 to \$49,999	205.83	4.72	19.90	5.87	1.78	18.80	5.46	2.34	5.90	1.59	1.62
\$50,000 to \$74,999	122.26	3.08	58.10	13.62	4.83	54.59	12.91	6.36	22.23	4.85	5.80
\$75,000 to \$99,999	108.44	2.89	53.95	15.73	4.52	32.42	9.76	3.71	30.08	8.17	7.64
\$100,000 to \$149,999	200.22	5.58	58.99	8.38	4.85	54.10	7.81	6.20	25.84	3.44	6.32
\$150,000 or more	110.33	2.62	56.59	21.39	5.13	31.42	11.17	4.05	27.10	9.51	7.97
Not reported	582.24	11.57	151.27	16.45	13.36	61.04	7.48	7.05	79.99	7.73	22.12
<b>EDUCATION</b>											
8 years or less	60.75	1.40	31.18	29.88	2.99	33.22	31.32	4.34	1.70	1.57	0.53
9 to 12 years	525.66	9.45	113.09	7.49	8.04	75.44	5.22	7.47	60.25	3.47	13.79
1 to 3 years of college	165.22	4.92	89.53	10.18	4.92	68.39	7.73	6.52	42.50	4.46	6.24
4 years or more of college	240.94	6.25	122.54	10.27	9.02	89.56	7.45	9.94	61.22	4.83	13.30

— No sample data

NOTE: Percent population (% Pop.) columns show the percentage of each row's population who participated in the activity named by the column (the percentage of the population living in urban areas who fished, etc.). Columns labeled "%" under Sportspeople, Anglers, and Hunters show the percentage of each column's participants who are described by the row heading (the percentage of anglers who lived in urban areas, etc.).

Table 22 SE Standard Errors of Expenditures by Wisconsin Residents for Fishing and Hunting Both In and Out of Wisconsin: 2016  
(State population 16 years and older. Numbers in thousands)

	AMOUNT (thousands of \$)	AVERAGE PER SPORTSPERSON (\$) <sup>1</sup>	AVERAGE PER SPENDER (\$) <sup>1</sup>	NUMBER OF SPENDERS (thousands)
<b>FISHING AND HUNTING</b>	<b>925,410.46</b>	<b>708.51</b>	<b>660.62</b>	<b>269.32</b>
Food and lodging	113,905.68	85.81	114.27	205.57
Transportation	60,459.59	44.09	42.07	224.69
Other trip costs <sup>2</sup>	79,419.13	63.04	78.30	230.91
Equipment (fishing, hunting)	130,111.46	99.11	152.76	188.14
Auxiliary equipment <sup>3</sup>	47,215.68	35.86	71.08	142.37
Special equipment <sup>4</sup>	592,543.17	541.49	3,334.78	57.80
Magazines, books, and DVDs	2,455.32	2.01	18.79	42.52
Membership dues/contributions	7,791.49	6.48	43.14	58.22
Other <sup>5</sup>	125,604.12	102.68	109.50	257.65
<b>FISHING</b>	<b>461,386.22</b>	<b>510.24</b>	<b>526.97</b>	<b>153.70</b>
Food and lodging	95,901.02	106.44	132.33	132.12
Transportation	37,003.91	38.47	48.46	139.45
Other trip costs <sup>2</sup>	50,709.93	54.70	61.84	147.67
Fishing equipment	51,850.74	58.36	77.24	130.88
Auxiliary equipment <sup>3</sup>	15,367.16	19.25	99.97	42.67
Special equipment <sup>4</sup>	288,997.70	371.04	6,199.63	17.09
Magazines, books, and DVDs	1,576.25	1.98	19.39	37.47
Membership dues/contributions	3,160.65	3.96	40.25	45.44
Other <sup>5</sup>	123,870.84	159.55	181.34	142.85
<b>HUNTING</b>	<b>184,690.53</b>	<b>284.26</b>	<b>284.26</b>	<b>130.73</b>
Food and lodging	21,446.70	33.37	52.51	102.15
Transportation	19,428.47	35.21	35.15	96.74
Other trip costs <sup>2</sup>	25,016.22	64.03	152.38	67.36
Hunting equipment	66,498.98	143.46	238.14	65.54
Auxiliary equipment <sup>3</sup>	23,880.41	49.83	74.54	84.13
Special equipment <sup>4</sup>	10,097.63	29.56	380.60	18.65
Magazines, books, and DVDs	1,011.28	2.48	6.88	16.96
Membership dues/contributions	3,555.85	8.83	58.97	25.29
Other <sup>5</sup>	43,320.13	90.79	90.79	130.73
<b>UNSPECIFIED <sup>6</sup></b>	<b>503,791.27</b>	<b>478.62</b>	<b>3,639.22</b>	<b>51.21</b>

1 Average expenditures are annual estimates.

2 Includes boating costs, equipment rental, guide fees, access fees, heating and cooking fuel, and ice and bait (for fishing only).

3 Includes sleeping bags, packs, duffel bags, tents, binoculars and field glasses, special fishing and hunting clothing, foul weather gear, boots and waders, maintenance and repair of equipment, processing and taxidermy costs, and electronic equipment such as a GPS device.

4 Includes big-ticket items bought primarily for hunting and fishing, including boats, campers, cabins, trail bikes, dune buggies, 4 x 4 vehicles, ATVs, 4-wheelers, snowmobiles, pickups, vans, travel and tent trailers, motor homes, house trailers, recreational vehicles (RVs) and other special equipment.

5 Includes land leasing and ownership, licenses, stamps, tags, permits, and plantings (for hunting only).

6 Respondent could not specify whether expenditure was primarily for either fishing or hunting.

Table 28 SE      Standard Errors of Wisconsin Resident Wildlife Watchers Both In and Out of Wisconsin: 2016  
(State population 16 years and older. Numbers in thousands)

	PARTICIPANTS			DAYS OF PARTICIPATION		TRIPS	
	#	%	% Pop.	#	%	#	%
<b>WILDLIFE WATCHERS</b>	<b>164.42</b>	<b>0.00</b>	<b>3.61</b>	<b>24,140.15</b>	<b>0.00</b>	<b>3,759.76</b>	<b>0.00</b>
Away from home	147.68	9.58	3.59	6,934.22	3.85	4,142.12	0.00
Observe wildlife	137.33	8.84	3.34	4,431.00	2.76	x	x
Photograph wildlife	106.20	7.29	2.56	1,664.15	1.10	x	x
Feed wildlife	124.61	8.42	3.01	5,369.56	2.89	x	x
Around the home	164.42	0.00	4.26	20,216.80	3.85	x	x
Observe wildlife	165.11	9.42	4.07	20,488.14	4.34	x	x
Photograph wildlife	121.35	7.56	2.96	2,057.43	1.42	x	x
Feed wildlife	169.24	8.42	4.23	x	x	x	x
Visit parks or natural areas <sup>1</sup>	87.82	5.87	2.12	1,821.23	1.72	x	x
Maintain plantings or natural areas	98.67	6.30	2.40	x	x	x	x

x Not applicable

<sup>1</sup> Includes visits only to parks or natural areas within one mile of home.

NOTE: Percent population (% Pop.) columns show the percentage of each row's population who participated in the activity named by the column (the percentage of the population who observed wildlife away from home, etc.). Columns labeled "%" show the percentage of each column's participants who are described by the row heading (the percentage of wildlife watchers who observed wildlife away from home, etc.).

Table 30 SE Standard Errors of Wisconsin Resident Wildlife Watchers, by Selected Characteristics: 2016  
(State population 16 years and older. Numbers in thousands)

	POPULATION		TOTAL			AWAY FROM HOME			AROUND THE HOME		
	Total	%	Total	% Pop.	%	Total	% Pop.	%	Total	% Pop.	%
<b>TOTAL</b>	<b>195.89</b>	<b>0.00</b>	<b>164.42</b>	<b>3.61</b>	<b>0.00</b>	<b>147.68</b>	<b>3.59</b>	<b>0.00</b>	<b>164.42</b>	<b>4.26</b>	<b>0.00</b>
<b>RESIDENCE DENSITY</b>											
Urban	333.06	6.27	152.48	6.03	5.96	122.37	4.03	14.11	152.48	6.03	5.96
Rural	252.35	6.27	92.36	12.40	5.96	82.02	9.14	14.11	92.36	12.40	5.96
<b>RESIDENCE SIZE</b>											
Metropolitan Statistical Area (MSA)	236.28	3.28	155.23	4.72	3.60	130.49	3.59	8.46	155.23	4.72	3.60
1,000,000 or more	302.44	7.34	128.93	18.90	8.73	112.63	14.17	21.11	128.93	18.90	8.73
250,000 to 999,999	320.08	7.57	137.44	14.94	9.17	45.76	4.16	8.82	137.44	14.94	9.17
50,000 to 249,999	292.39	6.46	124.20	9.64	7.46	90.29	5.86	14.26	124.20	9.64	7.46
Outside MSA	134.68	3.28	54.03	15.26	3.60	47.15	11.43	8.46	54.03	15.26	3.60
<b>SEX</b>											
Male	313.77	6.27	144.57	7.66	7.71	106.82	4.83	12.15	144.57	7.66	7.71
Female	246.53	6.27	129.62	8.51	7.71	82.63	4.81	12.15	129.62	8.51	7.71
<b>AGE</b>											
16 to 17 years	123.99	3.00	49.49	35.38	3.46	31.35	19.98	6.29	49.49	35.38	3.46
18 to 24 years	205.35	4.89	83.58	20.27	5.78	16.64	3.51	3.34	83.58	20.27	5.78
25 to 34 years	269.42	6.43	115.21	26.99	7.96	115.28	22.84	22.80	115.21	26.99	7.96
35 to 44 years	223.08	5.42	90.91	30.11	6.32	45.12	13.53	8.80	90.91	30.11	6.32
45 to 54 years	182.17	4.44	81.27	10.78	5.01	84.65	9.45	13.91	81.27	10.78	5.01
55 to 64 years	103.37	2.62	47.14	11.04	3.00	31.09	6.27	5.40	47.14	11.04	3.00
65 years and older	230.87	4.91	92.40	11.86	5.84	30.56	3.20	5.39	92.40	11.86	5.84
65 to 74 years	220.75	4.95	90.76	18.76	6.02	25.06	4.10	4.73	90.76	18.76	6.02
75 and older	105.09	2.50	29.95	11.11	1.99	11.77	3.68	2.14	29.95	11.11	1.99
<b>ETHNICITY</b>											
Hispanic	221.56	5.18	84.78	28.74	5.94	5.70	1.88	1.14	84.78	28.74	5.94
Non-Hispanic	186.93	5.18	175.82	4.92	5.94	146.23	3.88	1.14	175.82	4.92	5.94
<b>RACE</b>											
White	214.20	1.84	163.36	4.41	0.87	146.23	3.65	1.14	163.36	4.41	0.87
African American	15.76	0.38	6.68	63.36	0.47	—	—	—	6.68	63.36	0.47
All Others	71.92	1.73	5.90	10.17	0.41	5.70	8.85	1.14	5.90	10.17	0.41

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Table 30 SE      Standard Errors of Wisconsin Resident Wildlife Watchers, by Selected Characteristics: 2016 (continued)  
(State population 16 years and older. Numbers in thousands)

(continued from previous page)

	POPULATION		TOTAL			AWAY FROM HOME			AROUND THE HOME		
	Total	%	Total	% Pop.	%	Total	% Pop.	%	Total	% Pop.	%
<b>ANNUAL HOUSEHOLD INCOME</b>											
Less than \$20,000	246.58	6.03	78.79	17.48	5.46	70.78	14.47	13.67	78.79	17.48	5.46
\$20,000 to \$29,999	102.19	2.50	45.56	22.95	3.10	19.98	8.31	3.86	45.56	22.95	3.10
\$30,000 to \$39,999	80.39	1.95	35.75	20.16	2.41	19.49	9.47	3.52	35.75	20.16	2.41
\$40,000 to \$49,999	116.33	2.85	27.72	14.63	1.88	22.30	9.47	4.26	27.72	14.63	1.88
\$50,000 to \$74,999	221.05	5.37	94.19	18.49	6.38	23.79	4.22	4.18	94.19	18.49	6.38
\$75,000 to \$99,999	139.04	3.36	60.12	27.50	4.13	25.22	10.85	4.54	60.12	27.50	4.13
\$100,000 to \$149,999	278.79	6.71	116.92	20.04	7.91	101.00	15.79	17.28	116.92	20.04	7.91
\$150,000 or more	261.04	6.19	108.74	34.08	7.55	8.13	2.41	1.55	108.74	34.08	7.55
Not reported	237.22	5.28	93.05	18.40	6.31	28.18	4.64	5.43	93.05	18.40	6.31
<b>EDUCATION</b>											
8 years or less	248.75	5.77	100.34	29.87	6.97	61.94	15.71	12.38	100.34	29.87	6.97
9 to 12 years	281.70	7.11	132.73	11.12	8.48	64.75	4.73	10.97	132.73	11.12	8.48
1 to 3 years of college	291.50	6.95	131.10	12.09	8.41	102.59	8.20	16.89	131.10	12.09	8.41
4 years or more of college	196.16	4.67	80.73	11.80	5.12	48.72	6.05	7.78	80.73	11.80	5.12

— No sample data

NOTE: Percent population (% Pop.) columns show the percentage of each row's population who participated in the activity named by the column (the percentage of the population living in urban areas who participated, etc.). Columns labeled "% under TOTAL, Away From Home, and Around the Home show the percentage of each column's participants who are described by the row heading (the percentage of those who lived in urban areas, etc.).

Table 33A SE Standard Errors of Expenditures by Wisconsin Residents for All Wildlife Watching Both In and Out of Wisconsin: 2016  
(State population 16 years and older. Numbers in thousands)

	AMOUNT (thousands of \$)	AVERAGE PER WILDLIFE WATCHER (\$) <sup>1</sup>	AVERAGE PER SPENDER (\$) <sup>1</sup>	NUMBER OF SPENDERS (thousands)	PERCENT OF WILDLIFE WATCHERS
<b>ALL EXPENDITURES</b>	<b>613,296.98</b>	<b>401.90</b>	<b>457.15</b>	<b>160.79</b>	<b>5.30</b>
<b>TRIP-RELATED EXPENDITURES</b>	<b>182,105.24</b>	<b>120.30</b>	<b>406.96</b>	<b>136.92</b>	<b>8.85</b>
Food and lodging	111,682.33	75.80	324.66	125.82	8.27
Food	37,270.69	24.50	110.38	125.82	8.27
Lodging	80,605.82	55.60	495.00	59.63	4.00
Transportation	43,859.62	28.66	95.90	133.71	8.69
Other trip costs <sup>2</sup>	80,488.54	55.55	398.46	109.80	7.43
<b>EQUIPMENT AND OTHER EXPENDITURES</b>	<b>464,864.63</b>	<b>307.09</b>	<b>372.44</b>	<b>160.66</b>	<b>6.46</b>
Wildlife-watching equipment	91,404.70	57.01	71.78	157.07	6.55
Binoculars, spotting scopes	6,883.81	4.69	43.49	29.89	2.02
Film and photo processing	1,023.96	0.70	20.51	19.34	1.33
Cameras, special lenses, video cameras, and other photographic equipment, including memory cards	28,677.48	19.40	108.87	83.11	5.59
Day packs, carrying cases, and special clothing	27,864.21	18.75	72.46	86.93	5.74
Bird food	25,118.18	14.36	25.16	138.48	7.44
Food for other wildlife	9,970.61	6.72	37.00	121.48	8.13
Nest boxes, bird houses, bird feeders, and bird baths	14,565.50	9.58	22.43	142.59	8.81
Other equipment (including field guides)	5,025.41	3.45	13.37	78.80	5.32
Auxiliary equipment <sup>3</sup>	25,375.27	17.15	82.90	70.69	4.76
Special equipment <sup>4</sup>	362,439.80	248.75	3,991.21	55.28	3.78
Magazines, books, and DVDs	12,001.43	8.35	60.91	56.53	3.75
Membership dues and contributions	13,417.82	9.06	38.28	73.37	4.85
Land leasing and ownership	33,315.64	23.22	1,168.44	18.02	1.25
Plantings	86,089.77	59.47	243.16	95.33	6.19

<sup>1</sup> Average expenditures are annual estimates.

<sup>2</sup> Includes equipment rental and fees for guides, pack trips, public land use and private land use, boat fuel, other boating costs, and heating and cooking fuel.

<sup>3</sup> Includes tents, tarps, frame packs and other backpacking equipment, other camping equipment, and other auxiliary equipment.

<sup>4</sup> Includes boats, campers, cabins, trail bikes, dune buggies, 4 x 4 vehicles, ATVs, 4-wheelers, snowmobiles, pickups, vans, travel and tent trailers, motor homes, house trailers, recreational vehicles (RVs) and other special equipment.

Table 33B SE Standard Errors of Expenditures by Wisconsin Residents for Away-from-home Wildlife Watching  
Both In and Out of Wisconsin: 2016

(State population 16 years and older. Numbers in thousands)

	AMOUNT (thousands of \$)	AVERAGE PER WILDLIFE WATCHER (\$) <sup>1</sup>	AVERAGE PER SPENDER (\$) <sup>1</sup>	NUMBER OF SPENDERS (thousands)	PERCENT OF WILDLIFE WATCHERS
<b>ALL EXPENDITURES</b>	<b>435,937.60</b>	<b>786.33</b>	<b>762.07</b>	<b>144.49</b>	<b>2.76</b>
<b>TRIP-RELATED EXPENDITURES</b>	<b>426,508.88</b>	<b>768.58</b>	<b>745.22</b>	<b>144.49</b>	<b>2.76</b>
Food and lodging	194,891.86	367.24	357.87	144.49	2.76
Food	69,671.05	125.65	148.91	139.40	10.57
Lodging	127,782.12	246.44	236.76	183.47	34.93
Transportation	77,553.05	97.59	101.00	140.95	3.14
Other trip costs <sup>2</sup>	265,440.84	532.47	1,093.06	166.82	31.88
<b>EQUIPMENT AND OTHER EXPENDITURES</b>	<b>13,330.58</b>	<b>26.37</b>	<b>81.96</b>	<b>100.86</b>	<b>19.48</b>
Wildlife-watching equipment	8,420.97	16.52	52.51	90.20	17.50
Binoculars, spotting scopes	2,211.77	4.46	0.00	29.49	5.95
Film and photo processing	1,022.14	2.06	0.00	20.44	4.12
Cameras, special lenses, video cameras, and other photographic equipment, including memory cards	—	—	—	—	—
Day packs, carrying cases, and special clothing	5,110.70	10.31	0.00	20.44	4.12
Bird food	—	—	—	—	—
Food for other wildlife	—	—	—	—	—
Nest boxes, bird houses, bird feeders, and bird baths	192.46	0.39	0.00	15.40	3.10
Other equipment (including field guides)	2,740.03	5.47	0.00	60.89	12.16
Auxiliary equipment <sup>3</sup>	—	—	—	—	—
Special equipment <sup>4</sup>	—	—	—	—	—
Magazines, books, and DVDs	—	—	—	—	—
Membership dues and contributions	5,238.69	10.54	164.83	33.72	6.71
Land leasing and ownership	—	—	—	—	—
Plantings	—	—	—	—	—

— No sample data

<sup>1</sup> Average expenditures are annual estimates.

<sup>2</sup> Includes equipment rental and fees for guides, pack trips, public land use and private land use, boat fuel, other boating costs, and heating and cooking fuel.

<sup>3</sup> Includes tents, tarps, frame packs and other backpacking equipment, other camping equipment, and other auxiliary equipment.

<sup>4</sup> Includes boats, campers, cabins, trail bikes, dune buggies, 4 x 4 vehicles, ATVs, 4-wheelers, snowmobiles, pickups, vans, travel and tent trailers, motor homes, house trailers, recreational vehicles (RVs) and other special equipment.

Table 33C SE Standard Errors of Expenditures by Wisconsin Residents for Around-the-home Wildlife Watching  
Both In and Out of Wisconsin: 2016

(State population 16 years and older. Numbers in thousands)

	AMOUNT (thousands of \$)	AVERAGE PER WILDLIFE WATCHER (\$) <sup>1</sup>	AVERAGE PER SPENDER (\$) <sup>1</sup>	NUMBER OF SPENDERS (thousands)	PERCENT OF WILDLIFE WATCHERS
<b>ALL EXPENDITURES</b>	<b>234,077.27</b>	<b>157.22</b>	<b>210.14</b>	<b>172.84</b>	<b>8.60</b>
<b>TRIP-RELATED EXPENDITURES</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>
Food and lodging	x	x	x	x	x
Food	x	x	x	x	x
Lodging	x	x	x	x	x
Transportation	x	x	x	x	x
Other trip costs <sup>2</sup>	x	x	x	x	x
<b>EQUIPMENT AND OTHER EXPENDITURES</b>	<b>234,077.27</b>	<b>157.22</b>	<b>210.14</b>	<b>172.84</b>	<b>8.60</b>
Wildlife-watching equipment	70,763.18	45.98	61.41	169.41	8.50
Binoculars, spotting scopes	1,659.78	1.15	44.98	19.34	1.34
Film and photo processing	807.53	0.56	7.63	25.08	1.74
Cameras, special lenses, video cameras, and other photographic equipment, including memory cards	18,217.68	12.64	59.58	66.81	4.63
Day packs, carrying cases, and special clothing	29,407.99	20.48	140.52	64.79	4.46
Bird food	27,390.96	17.05	30.04	161.98	9.53
Food for other wildlife	6,504.61	4.44	28.77	82.55	5.64
Nest boxes, bird houses, bird feeders, and bird baths	9,715.81	6.41	16.21	158.15	10.52
Other equipment (including field guides)	5,942.56	4.14	32.03	81.73	5.66
Auxiliary equipment <sup>3</sup>	27,348.45	19.00	84.21	65.43	4.52
Special equipment <sup>4</sup>	127,621.39	89.35	1,645.20	71.49	4.96
Magazines, books, and DVDs	16,913.28	11.85	125.95	64.23	4.42
Membership dues and contributions	6,065.31	4.19	36.80	35.88	2.45
Land leasing and ownership	44,601.78	31.29	9,689.88	5.48	0.38
Plantings	110,120.69	77.01	552.78	79.33	5.34

— No sample data    x Not applicable

<sup>1</sup> Average expenditures are annual estimates.

<sup>2</sup> Includes equipment rental and fees for guides, pack trips, public land use and private land use, boat fuel, other boating costs, and heating and cooking fuel.

<sup>3</sup> Includes tents, tarps, frame packs and other backpacking equipment, other camping equipment, and other auxiliary equipment.

<sup>4</sup> Includes boats, campers, cabins, trail bikes, dune buggies, 4 x 4 vehicles, ATVs, 4-wheelers, snowmobiles, pickups, vans, travel and tent trailers, motor homes, house trailers, recreational vehicles (RVs) and other special equipment.

Table 35 SE      Standard Errors of Wisconsin Resident Wildlife Watchers Participating in Fishing or Hunting: 2016  
(State population 16 years and older. Numbers in thousands)

	TOTAL		AWAY FROM HOME		AROUND THE HOME	
	#	%	#	%	#	%
<b>ALL WILDLIFE WATCHERS</b>	<b>164.42</b>	<b>0.00</b>	<b>147.68</b>	<b>0.00</b>	<b>164.42</b>	<b>0.00</b>
Did not fish or hunt	149.82	8.95	103.17	17.31	149.82	8.95
Fished or hunted	152.48	8.95	120.46	17.31	152.48	8.95
Fished	142.22	8.82	119.23	18.17	142.22	8.82
Hunted	116.87	7.53	77.38	13.92	116.87	7.53

Table 36 SE      Standard Errors of Wisconsin Resident Sportspersons Participating in Wildlife Watching: 2016  
(State population 16 years and older. Numbers in thousands)

	SPORTSPERSONS		ANGLERS		HUNTERS	
	#	%	#	%	#	%
<b>ALL SPORTSPERSONS</b>	<b>245.33</b>	<b>0.00</b>	<b>156.78</b>	<b>0.00</b>	<b>130.73</b>	<b>0.00</b>
Did not watch wildlife	59.46	4.12	43.00	4.47	25.82	5.71
Watched wildlife	206.78	4.12	133.80	4.47	112.37	5.71
Away from home	136.76	8.36	92.10	8.49	69.10	12.64
Around the home	197.10	6.31	130.11	7.97	108.77	6.60

