



OREGON

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

MARCH 2020

THE ROCKVILLE INSTITUTE, FOR
STATE FISH AND WILDLIFE AGENCIES

Suggested Citation:

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 Overview: Oregon.*



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 Oregon 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	
	#	%	#	%	#	%
ALL FISHING	466	100	5,619	100	4,117	100
All freshwater	412	88	4,752	85	3,540	86
Freshwater, except Great Lakes	412	88	4,752	85	3,540	86
Great Lakes	—	—	—	—	—	—
Saltwater	139	30	867	15	577	14
ALL HUNTING	104	100	2,031	100	1,729	100
Big game	92	89	1,360	67	703	41
Small game	44	42	808	40	689	40
Migratory birds	11	10	30	1	30	2
Other animals	11	11	331	16	307	18

— No sample data

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

Table 15 Oregon 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.	%
TOTAL	3,133	100	495	16	100	466	15	100	104	3	100
RESIDENCE DENSITY											
Urban	2,599	83	346	13	70	328	13	70	78	3	75
Rural	534	17	148	28	30	137	26	30	26	5	25
RESIDENCE SIZE											
Metropolitan Statistical Area (MSA)	2,922	93	436	15	88	411	14	88	90	3	86
1,000,000 or more	1,503	48	172	11	35	165	11	35	37	2	35
250,000 to 999,999	660	21	118	18	24	108	16	23	28	4	27
50,000 to 249,999	759	24	146	19	30	138	18	30	25	3	24
Outside MSA	211	7	58	27	12	55	26	12	14	7	14
SEX											
Male	1,584	51	332	21	67	313	20	67	79	5	76
Female	1,549	49	162	10	33	153	10	33	25	2	24
AGE											
16 to 17 years	102	3	16	16	3	16	16	3	—	—	—
18 to 24 years	120	4	8	6	2	7	6	2	3	3	3
25 to 34 years	555	18	97	18	20	90	16	19	29	5	28
35 to 44 years	814	26	116	14	23	114	14	25	10	1	9
45 to 54 years	444	14	100	23	20	99	22	21	8	2	8
55 to 64 years	514	16	96	19	19	81	16	17	38	7	37
65 years and older	584	19	62	11	12	58	10	12	16	3	15
65 to 74 years	360	12	37	10	7	34	9	7	9	3	9
75 and older	224	7	25	11	5	24	11	5	6	3	6
ETHNICITY											
Hispanic	289	9	59	21	12	59	20	13	9	3	9
Non-Hispanic	2,844	91	435	15	88	407	14	87	95	3	91
RACE											
White	2,637	84	425	16	86	398	15	85	92	3	88
African American	6	0	—	—	—	—	—	—	—	—	—
All Others	489	16	69	14	14	68	14	15	12	2	12

(continued on next page)

Table 15 Oregon 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.	%
ANNUAL HOUSEHOLD INCOME											
Less than \$20,000	142	5	5	3	1	5	3	1	—	—	—
\$20,000 to \$29,999	183	6	13	7	3	13	7	3	1	0	1
\$30,000 to \$39,999	210	7	62	30	13	60	29	13	11	5	11
\$40,000 to \$49,999	166	5	15	9	3	12	7	3	5	3	5
\$50,000 to \$74,999	553	18	50	9	10	45	8	10	22	4	21
\$75,000 to \$99,999	491	16	76	15	15	68	14	15	40	8	38
\$100,000 to \$149,999	247	8	26	10	5	25	10	5	10	4	9
\$150,000 or more	445	14	70	16	14	62	14	13	13	3	12
Not reported	697	22	179	26	36	176	25	38	3	0	3
EDUCATION											
8 years or less	143	5	8	5	2	7	5	2	—	—	—
9 to 12 years	709	23	101	14	20	94	13	20	23	3	23
1 to 3 years of college	906	29	205	23	42	195	21	42	31	3	30
4 years or more of college	1,375	44	180	13	36	169	12	36	50	4	48

— 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 Oregon Residents for Fishing and Hunting Both In and Out of Oregon: 2016
(State population 16 years and older. Numbers in thousands)

	AMOUNT (thousands of \$)	AVERAGE PER SPORTSPERSON (\$) ¹	AVERAGE PER SPENDER (\$) ¹	NUMBER OF SPENDERS (thousands)
FISHING AND HUNTING	1,668,221	3,373	3,390	492
Food and lodging	168,433	341	372	453
Transportation	162,400	328	350	464
Other trip costs ²	202,265	409	536	378
Equipment (fishing, hunting)	217,832	440	592	368
Auxiliary equipment ³	122,699	248	510	241
Special equipment ⁴	613,214	1,240	8,855	69
Magazines, books, and DVDs	1,316	3	45	29
Membership dues/contributions	9,628	19	220	44
Other ⁵	170,433	345	536	318
FISHING	999,418	2,145	2,182	458
Food and lodging	124,709	268	302	413
Transportation	111,419	239	259	430
Other trip costs ²	126,142	271	344	367
Fishing equipment	92,199	198	279	330
Auxiliary equipment ³	82,363	177	502	164
Special equipment ⁴	385,551	827	10,025	38
Magazines, books, and DVDs	660	1	32	20
Membership dues/contributions	6,357	14	221	29
Other ⁵	70,018	150	258	272
HUNTING	446,218	4,290	4,290	104
Food and lodging	39,043	375	408	96
Transportation	44,389	427	442	100
Other trip costs ²	64,938	624	1,085	60
Hunting equipment	103,303	993	1,385	75
Auxiliary equipment ³	31,069	299	442	70
Special equipment ⁴	79,743	767	7,237	11
Magazines, books, and DVDs	510	5	44	11
Membership dues/contributions	1,507	14	153	10
Other ⁵	81,715	786	803	102
UNSPECIFIED ⁶	150,361	304	2,737	55

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

	PARTICIPANTS			DAYS OF PARTICIPATION		TRIPS	
	#	%	% Pop.	#	%	#	%
WILDLIFE WATCHERS	883	100	34	94,384	100	9,695	100
Away from home	388	44	15	20,152	21	9,695	100
Observe wildlife	374	42	14	16,757	18	x	x
Photograph wildlife	259	29	10	4,980	5	x	x
Feed wildlife	113	13	4	9,874	10	x	x
Around the home	860	97	33	74,232	79	x	x
Observe wildlife	526	60	20	57,057	60	x	x
Photograph wildlife	433	49	17	10,171	11	x	x
Feed wildlife	625	71	24	x	x	x	x
Visit parks or natural areas ¹	234	27	9	7,005	7	x	x
Maintain plantings or natural areas	167	19	6	x	x	x	x

x Not applicable

¹ 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

Oregon 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.	%
TOTAL	2,613	100	883	34	100	388	15	100	860	33	100
RESIDENCE DENSITY											
Urban	2,146	82	746	35	84	355	17	91	723	34	84
Rural	468	18	137	29	16	33	7	9	137	29	16
RESIDENCE SIZE											
Metropolitan Statistical Area (MSA)	2,509	96	846	34	96	374	15	96	823	33	96
1,000,000 or more	1,321	51	439	33	50	178	14	46	425	32	49
250,000 to 999,999	609	23	229	38	26	121	20	31	220	36	26
50,000 to 249,999	579	22	178	31	20	74	13	19	178	31	21
Outside MSA	104	4	38	36	4	15	14	4	38	36	4
SEX											
Male	1,252	48	439	35	50	174	14	45	439	35	51
Female	1,361	52	444	33	50	214	16	55	421	31	49
AGE											
16 to 17 years	25	1	10	40	1	10	40	3	10	40	1
18 to 24 years	259	10	70	27	8	50	19	13	65	25	8
25 to 34 years	398	15	159	40	18	60	15	15	159	40	19
35 to 44 years	546	21	144	26	16	34	6	9	144	26	17
45 to 54 years	301	12	106	35	12	56	19	14	102	34	12
55 to 64 years	474	18	180	38	20	89	19	23	166	35	19
65 years and older	610	23	214	35	24	90	15	23	214	35	25
65 to 74 years	351	13	127	36	14	72	21	19	127	36	15
75 and older	259	10	87	34	10	17	7	4	87	34	10
ETHNICITY											
Hispanic	151	6	60	40	7	38	25	10	60	40	7
Non-Hispanic	2,462	94	823	33	93	351	14	90	800	32	93
RACE											
White	2,316	89	780	34	88	332	14	85	757	33	88
African American	13	1	5	40	1	—	—	—	5	40	1
All Others	284	11	98	34	11	57	20	15	98	34	11

(continued on next page)

Table 30 Oregon 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.	%
ANNUAL HOUSEHOLD INCOME											
Less than \$20,000	146	6	56	39	6	37	25	9	56	39	7
\$20,000 to \$29,999	215	8	67	31	8	24	11	6	67	31	8
\$30,000 to \$39,999	140	5	56	40	6	32	23	8	42	30	5
\$40,000 to \$49,999	183	7	63	34	7	24	13	6	57	31	7
\$50,000 to \$74,999	552	21	176	32	20	81	15	21	176	32	20
\$75,000 to \$99,999	331	13	130	39	15	50	15	13	130	39	15
\$100,000 to \$149,999	247	9	93	38	11	62	25	16	89	36	10
\$150,000 or more	515	20	129	25	15	25	5	6	129	25	15
Not reported	285	11	114	40	13	55	19	14	114	40	13
EDUCATION											
8 years or less	100	4	40	40	5	8	8	2	40	40	5
9 to 12 years	518	20	191	37	22	111	21	28	186	36	22
1 to 3 years of college	657	25	242	37	27	123	19	32	228	35	26
4 years or more of college	1,338	51	410	31	46	147	11	38	407	30	47

— 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 Oregon Residents for All Wildlife Watching Both In and Out of Oregon: 2016
(State population 16 years and older. Numbers in thousands)

	AMOUNT (thousands of \$)	AVERAGE PER WILDLIFE WATCHER (\$) ¹	AVERAGE PER SPENDER (\$) ¹	NUMBER OF SPENDERS (thousands)	PERCENT OF WILDLIFE WATCHERS
ALL EXPENDITURES	1,987,164	2,250	2,752	722	82
TRIP-RELATED EXPENDITURES	483,761	548	1,326	365	41
Food and lodging	270,595	306	769	352	40
Food	156,087	177	455	343	39
Lodging	114,509	130	656	175	20
Transportation	166,292	188	485	343	39
Other trip costs ²	46,872	53	195	240	27
EQUIPMENT AND OTHER EXPENDITURES	1,503,403	1,702	2,330	645	73
Wildlife-watching equipment	219,303	248	374	587	66
Binoculars, spotting scopes	19,948	23	235	85	10
Film and photo processing	3,236	4	47	69	8
Cameras, special lenses, video cameras, and other photographic equipment, including memory cards	53,316	60	378	141	16
Day packs, carrying cases, and special clothing	37,148	42	200	185	21
Bird food	66,249	75	159	417	47
Food for other wildlife	10,011	11	111	91	10
Nest boxes, bird houses, bird feeders, and bird baths	23,474	27	87	271	31
Other equipment (including field guides)	5,921	7	54	110	12
Auxiliary equipment ³	31,399	36	263	119	14
Special equipment ⁴	1,108,970	1,255	22,519	49	6
Magazines, books, and DVDs	8,242	9	69	120	14
Membership dues and contributions	19,769	22	130	153	17
Land leasing and ownership	71,487	81	2,861	25	3
Plantings	44,234	50	361	122	14

¹ Average expenditures are annual estimates.

² 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.

³ Includes tents, tarps, frame packs and other backpacking equipment, other camping equipment, and other auxiliary equipment.

⁴ 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 Oregon Residents for Away-from-home Wildlife Watching Both In and Out of Oregon: 2016

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

	AMOUNT (thousands of \$)	AVERAGE PER WILDLIFE WATCHER (\$) ¹	AVERAGE PER SPENDER (\$) ¹	NUMBER OF SPENDERS (thousands)	PERCENT OF WILDLIFE WATCHERS
ALL EXPENDITURES	374,068	963	1,079	347	89
TRIP-RELATED EXPENDITURES	347,543	895	1,003	347	89
Food and lodging	211,728	545	611	347	89
Food	104,441	269	306	341	88
Lodging	107,287	276	573	187	48
Transportation	117,768	303	387	305	78
Other trip costs ²	18,048	46	91	199	51
EQUIPMENT AND OTHER EXPENDITURES	26,524	68	573	46	12
Wildlife-watching equipment	6,165	16	172	36	9
Binoculars, spotting scopes	70	0	20	4	1
Film and photo processing	88	0	25	4	1
Cameras, special lenses, video cameras, and other photographic equipment, including memory cards	2,709	7	770	4	1
Day packs, carrying cases, and special clothing	1,409	4	154	9	2
Bird food	914	2	260	4	1
Food for other wildlife	475	1	135	4	1
Nest boxes, bird houses, bird feeders, and bird baths	—	—	—	—	—
Other equipment (including field guides)	500	1	19	27	7
Auxiliary equipment ³	2,228	6	188	12	3
Special equipment ⁴	17,589	45	5,000	4	1
Magazines, books, and DVDs	134	0	50	3	1
Membership dues and contributions	407	1	36	11	3
Land leasing and ownership	—	—	—	—	—
Plantings	—	—	—	—	—

— No sample data

¹ Average expenditures are annual estimates.² 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.³ Includes tents, tarps, frame packs and other backpacking equipment, other camping equipment, and other auxiliary equipment.⁴ 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 Oregon Residents for Around-the-home Wildlife Watching Both In and Out of Oregon: 2016
(State population 16 years and older. Numbers in thousands)

	AMOUNT (thousands of \$)	AVERAGE PER WILDLIFE WATCHER (\$) ¹	AVERAGE PER SPENDER (\$) ¹	NUMBER OF SPENDERS (thousands)	PERCENT OF WILDLIFE WATCHERS
ALL EXPENDITURES	889,144	1,034	1,508	590	69
TRIP-RELATED EXPENDITURES	x	x	x	x	x
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 ²	x	x	x	x	x
EQUIPMENT AND OTHER EXPENDITURES	889,144	1,034	1,508	590	69
Wildlife-watching equipment	110,278	128	205	537	62
Binoculars, spotting scopes	5,312	6	254	21	2
Film and photo processing	157	0	18	9	1
Cameras, special lenses, video cameras, and other photographic equipment, including memory cards	28,003	33	640	44	5
Day packs, carrying cases, and special clothing	15,069	18	118	127	15
Bird food	46,543	54	111	418	49
Food for other wildlife	3,282	4	84	39	5
Nest boxes, bird houses, bird feeders, and bird baths	10,523	12	63	168	20
Other equipment (including field guides)	1,389	2	33	42	5
Auxiliary equipment ³	9,007	10	229	39	5
Special equipment ⁴	747,491	869	19,560	38	4
Magazines, books, and DVDs	664	1	15	45	5
Membership dues and contributions	14,808	17	150	98	11
Land leasing and ownership	—	—	—	—	—
Plantings	6,897	8	130	53	6

— No sample data x Not applicable

¹ Average expenditures are annual estimates.

² 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.

³ Includes tents, tarps, frame packs and other backpacking equipment, other camping equipment, and other auxiliary equipment.

⁴ 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 Oregon 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	
	#	%	#	%	#	%
ALL WILDLIFE WATCHERS	883	100	388	100	860	100
Did not fish or hunt	690	78	305	78	666	77
Fished or hunted	194	22	83	22	194	23
Fished	174	20	83	22	174	20
Hunted	72	8	42	11	72	8

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

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

	SPORTSPERSONS		ANGLERS		HUNTERS	
	#	%	#	%	#	%
ALL SPORTSPERSONS	495	100	466	100	104	100
Did not watch wildlife	173	35	170	36	26	25
Watched wildlife	321	65	296	64	78	75
Away from home	196	40	189	41	52	50
Around the home	294	59	270	58	69	67

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 Oregon 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	
	#	%	#	%	#	%
ALL FISHING	106.62	0.00	1,965.69	0.00	1,525.44	0.00
All freshwater	97.33	5.33	1,765.35	7.05	1,429.28	7.26
Freshwater, except Great Lakes	97.33	5.33	1,765.35	7.05	1,429.28	7.26
Great Lakes	—	—	—	—	—	—
Saltwater	52.92	9.33	441.98	7.05	268.77	7.26
ALL HUNTING	27.00	0.00	873.33	0.00	945.20	0.00
Big game	24.60	5.60	458.86	19.01	252.48	24.15
Small game	16.40	11.78	503.50	12.92	534.19	16.02
Migratory birds	6.62	5.96	19.06	1.07	19.06	1.76
Other animals	5.93	5.14	251.62	9.70	250.02	10.06

— No sample data

Table 15 SE Standard Errors of Oregon 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.	%
TOTAL	178.08	0.00	113.60	3.74	0.00	106.62	3.30	0.00	27.00	0.84	0.00
RESIDENCE DENSITY											
Urban	180.92	3.27	89.31	3.56	8.44	85.08	3.39	8.79	21.89	0.87	8.34
Rural	106.15	3.27	53.04	11.36	8.44	50.79	10.80	8.79	10.77	2.24	8.34
RESIDENCE SIZE											
Metropolitan Statistical Area (MSA)	170.87	2.09	104.97	3.70	6.46	98.94	3.48	6.81	24.14	0.85	6.35
1,000,000 or more	142.01	4.49	55.63	3.86	8.12	53.99	3.74	8.53	15.74	1.07	12.49
250,000 to 999,999	117.40	3.59	46.13	7.68	7.76	44.42	7.34	8.12	11.90	1.96	9.30
50,000 to 249,999	157.84	4.58	53.51	8.11	8.66	51.91	7.81	9.10	10.70	1.56	8.54
Outside MSA	67.58	2.09	33.81	18.26	6.46	33.39	17.88	6.81	7.38	4.11	6.35
SEX											
Male	137.56	3.02	84.38	5.63	7.46	80.05	5.34	7.87	21.96	1.45	7.63
Female	122.28	3.02	51.75	3.44	7.46	49.97	3.32	7.87	10.00	0.66	7.63
AGE											
16 to 17 years	51.19	1.62	10.81	13.33	2.10	10.69	13.17	2.21	—	—	—
18 to 24 years	49.45	1.59	5.42	5.20	1.07	5.37	5.15	1.12	3.70	3.30	3.58
25 to 34 years	111.83	3.68	41.80	8.32	7.34	40.27	7.96	7.63	16.02	3.07	14.10
35 to 44 years	162.71	4.58	43.54	6.06	7.16	43.01	5.98	7.52	7.65	0.97	7.18
45 to 54 years	93.36	2.64	51.82	12.60	9.64	51.00	12.41	10.07	4.39	1.06	3.82
55 to 64 years	86.46	2.62	35.81	7.63	5.88	32.80	6.91	5.96	14.71	3.12	10.81
65 years and older	60.44	2.27	21.12	3.78	3.26	20.15	3.60	3.36	6.71	1.18	5.34
65 to 74 years	50.65	1.77	12.76	3.82	1.99	11.96	3.57	2.01	4.11	1.20	3.32
75 and older	46.91	1.57	12.74	6.16	2.37	12.47	6.01	2.47	3.80	1.80	3.42
ETHNICITY											
Hispanic	90.78	2.82	35.50	13.88	6.81	34.95	13.67	7.11	7.83	2.88	7.43
Non-Hispanic	178.64	2.82	105.18	3.82	6.81	98.62	3.58	7.11	25.74	0.93	7.43
RACE											
White	151.48	4.83	106.01	4.13	8.55	99.64	3.88	8.96	25.03	0.97	7.55
African American	4.85	0.16	—	—	—	—	—	—	—	—	—
All Others	164.33	4.84	44.10	10.19	8.55	43.54	10.06	8.96	8.21	1.87	7.55

(continued on next page)

Table 15 SE Standard Errors of Oregon 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.	%
ANNUAL HOUSEHOLD INCOME											
Less than \$20,000	56.12	1.79	2.76	2.33	0.53	2.74	2.31	0.56	—	—	—
\$20,000 to \$29,999	43.40	1.43	7.89	4.63	1.52	7.81	4.58	1.60	0.70	0.39	0.68
\$30,000 to \$39,999	60.69	1.95	28.42	16.03	5.10	27.87	15.63	5.35	6.92	3.64	6.23
\$40,000 to \$49,999	41.62	1.36	6.65	4.57	1.19	5.99	4.03	1.17	3.20	2.08	2.90
\$50,000 to \$74,999	110.45	3.61	19.41	3.94	3.26	17.98	3.64	3.25	10.59	2.07	8.90
\$75,000 to \$99,999	126.60	4.21	30.68	7.41	5.25	29.23	6.96	5.44	17.09	4.07	13.51
\$100,000 to \$149,999	67.29	2.19	11.02	5.29	1.93	10.78	5.14	2.03	4.48	2.10	3.72
\$150,000 or more	98.95	3.22	30.29	7.66	5.32	28.58	7.14	5.46	7.16	1.73	6.33
Not reported	207.10	5.69	63.30	11.86	10.02	61.89	11.65	10.34	2.85	0.43	2.75
EDUCATION											
8 years or less	66.39	2.06	8.13	6.17	1.65	8.04	6.10	1.73	—	—	—
9 to 12 years	100.23	3.11	38.12	5.74	6.27	36.94	5.54	6.61	9.69	1.44	7.50
1 to 3 years of college	137.22	3.97	62.99	7.76	8.67	60.58	7.44	9.05	11.61	1.38	8.37
4 years or more of college	166.94	4.92	58.40	4.54	8.56	56.30	4.36	9.01	17.51	1.35	11.78

— 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 Oregon Residents for Fishing and Hunting Both In and Out of Oregon: 2016
(State population 16 years and older. Numbers in thousands)

	AMOUNT (thousands of \$)	AVERAGE PER SPORTSPERSON (\$) ¹	AVERAGE PER SPENDER (\$) ¹	NUMBER OF SPENDERS (thousands)
FISHING AND HUNTING	652,053.82	1,096.12	1,075.26	131.83
Food and lodging	54,032.60	78.36	83.35	125.12
Transportation	58,239.55	92.92	93.89	126.22
Other trip costs ²	107,570.08	201.58	263.21	108.87
Equipment (fishing, hunting)	74,443.82	114.52	137.23	109.49
Auxiliary equipment ³	61,171.97	112.80	233.90	82.79
Special equipment ⁴	348,157.81	661.53	3,842.70	27.25
Magazines, books, and DVDs	582.33	1.03	11.75	13.73
Membership dues/contributions	5,086.36	9.52	69.03	18.62
Other ⁵	98,580.93	187.98	289.30	97.31
FISHING	502,672.17	986.87	1,005.80	105.12
Food and lodging	44,043.29	73.96	85.98	98.27
Transportation	45,458.80	82.97	90.00	100.58
Other trip costs ²	64,550.69	127.29	159.14	98.48
Fishing equipment	35,986.47	64.27	96.56	85.72
Auxiliary equipment ³	56,199.82	116.72	337.41	67.58
Special equipment ⁴	314,758.83	666.10	7,835.90	19.20
Magazines, books, and DVDs	382.88	0.78	10.51	12.38
Membership dues/contributions	4,729.62	9.92	119.28	15.93
Other ⁵	61,154.90	130.11	230.11	83.30
HUNTING	198,766.13	1,608.05	1,608.05	27.00
Food and lodging	15,372.75	115.07	126.24	25.09
Transportation	19,580.61	157.60	164.15	26.16
Other trip costs ²	63,148.42	605.87	1,067.60	19.87
Hunting equipment	44,843.90	357.82	421.70	23.93
Auxiliary equipment ³	16,213.41	140.03	215.58	20.65
Special equipment ⁴	83,721.02	807.62	7,501.55	9.53
Magazines, books, and DVDs	294.57	2.62	14.62	5.76
Membership dues/contributions	759.62	6.48	45.21	4.93
Other ⁵	58,657.52	544.45	557.63	26.52
UNSPECIFIED⁶	97,859.51	190.24	1,755.37	22.44

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

	PARTICIPANTS			DAYS OF PARTICIPATION		TRIPS	
	#	%	% Pop.	#	%	#	%
WILDLIFE WATCHERS	136.63	0.00	4.84	23,588.80	0.00	3,793.76	0.00
Away from home	79.83	6.03	3.18	6,511.85	4.67	3,615.60	0.00
Observe wildlife	77.12	5.84	3.07	5,864.21	4.48	x	x
Photograph wildlife	60.35	5.17	2.38	1,548.29	0.97	x	x
Feed wildlife	36.58	3.69	1.42	5,286.51	4.80	x	x
Around the home	134.01	1.84	5.49	18,911.64	4.67	x	x
Observe wildlife	103.42	7.32	4.13	13,789.02	5.07	x	x
Photograph wildlife	83.43	5.70	3.34	3,885.83	2.94	x	x
Feed wildlife	107.24	5.32	4.34	x	x	x	x
Visit parks or natural areas ¹	56.13	4.91	2.21	2,254.54	1.63	x	x
Maintain plantings or natural areas	45.22	4.26	1.77	x	x	x	x

x Not applicable

¹ 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 Oregon 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.	%
TOTAL	154.80	0.00	136.63	4.84	0.00	79.84	3.18	0.00	134.01	5.49	0.00
RESIDENCE DENSITY											
Urban	162.30	4.99	120.70	6.21	4.04	73.93	3.67	3.02	117.98	6.06	4.12
Rural	137.84	4.99	41.14	12.32	4.04	13.35	3.53	3.02	41.01	12.30	4.12
RESIDENCE SIZE											
Metropolitan Statistical Area (MSA)	152.16	1.27	131.45	5.62	1.48	77.21	3.21	1.94	128.80	5.50	1.51
1,000,000 or more	170.28	6.11	92.55	8.21	7.21	47.44	3.99	7.91	90.88	8.03	7.33
250,000 to 999,999	125.82	4.86	61.53	12.74	5.76	41.82	8.00	8.84	60.20	12.38	5.83
50,000 to 249,999	167.23	6.06	66.01	14.44	6.88	34.13	6.96	8.04	65.87	14.42	7.03
Outside MSA	33.79	1.27	14.12	17.93	1.48	7.95	8.88	1.94	14.13	17.94	1.51
SEX											
Male	189.87	5.92	86.92	8.74	6.21	46.05	4.24	7.61	86.03	8.69	6.14
Female	149.73	5.92	87.52	7.36	6.21	52.64	4.24	7.61	83.79	7.03	6.14
AGE											
16 to 17 years	26.28	1.00	10.50	59.60	1.19	10.47	59.52	2.70	10.51	59.66	1.22
18 to 24 years	116.21	4.53	37.23	18.84	4.08	30.71	14.64	7.62	36.47	17.99	4.12
25 to 34 years	107.10	4.04	48.74	16.29	4.82	31.84	8.97	7.72	49.00	16.34	4.97
35 to 44 years	164.56	6.01	63.14	14.05	6.77	16.68	3.59	3.98	62.99	14.03	6.93
45 to 54 years	61.60	2.35	26.82	11.46	2.43	20.94	7.92	4.61	26.25	11.15	2.45
55 to 64 years	77.95	2.96	41.44	10.74	3.52	30.02	7.05	6.26	38.73	9.99	3.40
65 years and older	101.09	3.35	49.01	9.91	4.14	29.71	5.44	6.14	48.79	9.88	4.19
65 to 74 years	64.40	2.48	32.97	11.49	3.03	26.74	8.50	5.84	33.16	11.54	3.13
75 and older	98.60	3.59	37.76	19.37	4.04	9.22	4.35	2.24	37.58	19.31	4.12
ETHNICITY											
Hispanic	71.50	2.71	29.54	27.23	3.21	24.29	19.97	6.06	29.51	27.22	3.29
Non-Hispanic	158.44	2.71	130.34	5.71	3.21	75.68	3.21	6.06	127.71	5.59	3.29
RACE											
White	181.76	3.61	125.29	6.02	3.87	73.83	3.38	7.46	122.72	5.89	3.99
African American	13.81	0.53	5.53	58.46	0.63	—	—	—	5.53	58.45	0.64
All Others	90.86	3.56	36.51	16.90	3.81	30.64	12.52	7.46	36.73	16.96	3.93

(continued on next page)

Table 30 SE Standard Errors of Oregon 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.	%
ANNUAL HOUSEHOLD INCOME											
Less than \$20,000	81.63	3.15	33.62	31.69	3.72	29.52	24.71	7.51	33.75	31.76	3.84
\$20,000 to \$29,999	78.69	3.02	26.48	16.86	2.79	11.93	6.88	2.86	26.56	16.89	2.87
\$30,000 to \$39,999	51.38	2.02	22.97	22.06	2.44	17.61	15.11	4.31	16.42	16.12	1.77
\$40,000 to \$49,999	63.72	2.53	24.81	18.04	2.62	15.49	9.60	3.87	22.73	16.48	2.46
\$50,000 to \$74,999	125.39	4.60	50.79	11.72	4.91	36.59	7.42	8.57	50.82	11.72	5.03
\$75,000 to \$99,999	91.55	3.54	41.64	16.57	4.18	28.80	9.64	7.08	41.91	16.64	4.32
\$100,000 to \$149,999	66.03	2.55	30.16	15.80	3.04	24.87	12.08	5.63	29.72	15.42	3.09
\$150,000 or more	174.55	6.46	70.65	16.12	7.77	13.20	3.04	3.20	70.46	16.09	7.95
Not reported	112.64	4.03	45.02	22.34	4.75	27.50	12.27	6.60	44.75	22.28	4.84
EDUCATION											
8 years or less	85.01	3.22	33.94	47.83	3.82	8.21	10.49	2.12	33.91	47.81	3.92
9 to 12 years	112.08	4.36	52.75	12.94	5.00	40.37	9.06	8.78	52.22	12.72	5.12
1 to 3 years of college	106.10	3.73	54.53	10.20	4.55	40.02	6.80	8.15	52.47	9.75	4.55
4 years or more of college	164.58	5.91	89.73	7.70	7.27	40.56	3.32	7.14	89.35	7.65	7.42

— 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 Oregon Residents for All Wildlife Watching Both In and Out of Oregon: 2016
(State population 16 years and older. Numbers in thousands)

	AMOUNT (thousands of \$)	AVERAGE PER WILDLIFE WATCHER (\$) ¹	AVERAGE PER SPENDER (\$) ¹	NUMBER OF SPENDERS (thousands)	PERCENT OF WILDLIFE WATCHERS
ALL EXPENDITURES	682,732.75	698.54	843.52	117.75	4.28
TRIP-RELATED EXPENDITURES	124,242.38	113.65	293.71	76.50	5.92
Food and lodging	75,218.53	71.61	195.15	74.80	5.88
Food	44,592.81	42.96	116.18	72.40	5.64
Lodging	35,488.07	35.24	167.26	42.37	3.74
Transportation	43,683.33	40.46	108.03	74.53	6.00
Other trip costs ²	15,808.11	16.10	55.60	57.92	5.10
EQUIPMENT AND OTHER EXPENDITURES	636,854.81	679.34	919.59	110.96	5.56
Wildlife-watching equipment	52,221.13	45.50	64.77	102.65	5.50
Binoculars, spotting scopes	7,703.70	8.09	74.13	25.39	2.49
Film and photo processing	1,441.29	1.55	21.62	30.26	3.25
Cameras, special lenses, video cameras, and other photographic equipment, including memory cards	18,723.72	19.26	111.27	36.30	3.32
Day packs, carrying cases, and special clothing	13,035.60	13.41	62.83	49.01	4.56
Bird food	17,103.99	15.69	34.32	91.74	7.48
Food for other wildlife	4,664.41	5.04	36.12	32.46	3.36
Nest boxes, bird houses, bird feeders, and bird baths	7,051.72	6.93	19.52	58.09	4.61
Other equipment (including field guides)	2,190.08	2.28	12.49	33.13	3.26
Auxiliary equipment ³	10,453.14	10.61	69.77	35.84	3.52
Special equipment ⁴	611,277.83	672.28	8,445.79	21.77	2.34
Magazines, books, and DVDs	3,250.15	3.43	20.73	36.21	3.56
Membership dues and contributions	6,297.56	6.31	27.20	39.95	3.70
Land leasing and ownership	50,838.28	56.86	1,097.62	18.47	2.07
Plantings	20,825.95	22.54	127.27	36.97	3.64

¹ Average expenditures are annual estimates.

² 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.

³ Includes tents, tarps, frame packs and other backpacking equipment, other camping equipment, and other auxiliary equipment.

⁴ 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 Oregon Residents for Away-from-home Wildlife Watching
Both In and Out of Oregon: 2016

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

	AMOUNT (thousands of \$)	AVERAGE PER WILDLIFE WATCHER (\$) ¹	AVERAGE PER SPENDER (\$) ¹	NUMBER OF SPENDERS (thousands)	PERCENT OF WILDLIFE WATCHERS
ALL EXPENDITURES	127,448.95	267.44	300.32	75.55	6.61
TRIP-RELATED EXPENDITURES	116,044.65	240.62	269.38	75.55	6.61
Food and lodging	76,750.20	166.34	186.84	75.55	6.61
Food	46,928.89	109.81	125.24	74.67	6.78
Lodging	42,231.97	94.77	160.70	55.72	10.59
Transportation	38,371.00	78.33	97.66	71.02	8.82
Other trip costs ²	11,294.14	28.07	55.26	58.40	10.97
EQUIPMENT AND OTHER EXPENDITURES	25,073.16	64.40	590.82	22.12	5.25
Wildlife-watching equipment	5,322.98	13.60	158.82	17.65	4.22
Binoculars, spotting scopes	73.34	0.19	0.00	3.67	0.95
Film and photo processing	91.66	0.24	0.00	3.67	0.95
Cameras, special lenses, video cameras, and other photographic equipment, including memory cards	2,823.37	7.28	0.00	3.67	0.95
Day packs, carrying cases, and special clothing	1,079.11	2.74	54.42	7.18	1.82
Bird food	953.35	2.46	0.00	3.67	0.95
Food for other wildlife	494.99	1.28	0.00	3.67	0.95
Nest boxes, bird houses, bird feeders, and bird baths	—	—	—	—	—
Other equipment (including field guides)	336.05	0.84	8.59	15.20	3.73
Auxiliary equipment ³	1,542.68	3.88	126.50	8.00	2.00
Special equipment ⁴	18,333.61	47.30	0.00	3.67	0.95
Magazines, books, and DVDs	141.50	0.37	0.00	2.83	0.73
Membership dues and contributions	310.83	0.79	15.08	9.01	2.29
Land leasing and ownership	—	—	—	—	—
Plantings	—	—	—	—	—

— No sample data

¹ Average expenditures are annual estimates.

² 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.

³ Includes tents, tarps, frame packs and other backpacking equipment, other camping equipment, and other auxiliary equipment.

⁴ 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 Oregon Residents for Around-the-home Wildlife Watching
Both In and Out of Oregon: 2016

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

	AMOUNT (thousands of \$)	AVERAGE PER WILDLIFE WATCHER (\$) ¹	AVERAGE PER SPENDER (\$) ¹	NUMBER OF SPENDERS (thousands)	PERCENT OF WILDLIFE WATCHERS
ALL EXPENDITURES	676,964.55	779.89	1,157.02	115.20	8.18
TRIP-RELATED EXPENDITURES	x	x	x	x	x
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 ²	x	x	x	x	x
EQUIPMENT AND OTHER EXPENDITURES	676,964.55	779.89	1,157.02	115.20	8.18
Wildlife-watching equipment	36,804.50	38.31	68.92	109.92	8.39
Binoculars, spotting scopes	3,466.40	3.96	106.60	9.88	1.10
Film and photo processing	161.76	0.19	0.00	9.24	1.08
Cameras, special lenses, video cameras, and other photographic equipment, including memory cards	23,635.25	27.34	497.16	22.16	2.48
Day packs, carrying cases, and special clothing	6,487.09	7.12	34.76	53.73	5.88
Bird food	16,265.99	17.14	39.88	107.06	10.00
Food for other wildlife	2,490.73	2.87	46.63	23.76	2.70
Nest boxes, bird houses, bird feeders, and bird baths	4,747.83	5.24	17.94	53.20	5.45
Other equipment (including field guides)	794.32	0.90	7.19	21.27	2.38
Auxiliary equipment ³	5,356.56	6.08	119.01	20.20	2.27
Special equipment ⁴	669,523.90	775.98	18,213.85	23.29	2.65
Magazines, books, and DVDs	299.26	0.33	4.28	21.76	2.42
Membership dues and contributions	6,243.73	6.83	44.65	36.71	3.92
Land leasing and ownership	—	—	—	—	—
Plantings	3,750.59	4.23	83.11	28.54	3.21

— No sample data x Not applicable

¹ Average expenditures are annual estimates.

² 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.

³ Includes tents, tarps, frame packs and other backpacking equipment, other camping equipment, and other auxiliary equipment.

⁴ 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 Oregon 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	
	#	%	#	%	#	%
ALL WILDLIFE WATCHERS	136.63	0.00	79.84	0.00	134.01	0.00
Did not fish or hunt	122.91	7.00	69.71	8.03	120.35	7.16
Fished or hunted	68.03	7.00	35.03	8.03	67.93	7.16
Fished	67.50	7.09	35.03	8.03	67.40	7.26
Hunted	31.96	3.43	30.07	7.58	31.95	3.52

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

	SPORTSPERSONS		ANGLERS		HUNTERS	
	#	%	#	%	#	%
ALL SPORTSPERSONS	113.60	0.00	106.62	0.00	27.00	0.00
Did not watch wildlife	55.09	7.92	54.53	8.43	12.00	9.96
Watched wildlife	83.08	7.92	77.80	8.43	22.69	9.96
Away from home	55.69	6.78	54.00	7.14	18.33	12.40
Around the home	77.17	7.78	72.45	8.31	20.65	10.02

