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Economic Impact of Hunting, Fishing, Trapping, Boating and Wildlife Viewing in South Dakota

South Dakota Game, Fish and Parks
Pierre, South Dakota

Executive Summary

With hundreds of thousands of participants, South Dakota hosts 7.9 million days of fish, wildlife and boating-related activity annually (Table ES 1). Significant dollars are spent in support of these activities, including \$531.7 million by anglers, \$681.1 million by hunters, \$116.3 million by wildlife viewers and \$2.6 million and \$91.5 million by trappers and boaters, respectively. Altogether, the State's fish, wildlife and boating resources generate over \$1.4 billion in spending annually.

Table ES 1. Annual participation and spending by resident and nonresident anglers, hunters, wildlife viewers, boaters and trappers in South Dakota

Activity	Participants	Days	Spending
Fishing ^a	224,970	3,155,550	\$530,743,523
Hunting ^a	213,535	2,405,914	\$681,104,532
Trapping ^a	3,911	84,712	\$2,691,958
Wildlife viewing ^b	196,250	1,737,393	\$116,347,601
Boating ^b	60,556	536,535	\$91,520,381
Total	N/A	7,920,104	\$1,422,407,994

^aParticipation counts reflect hunters, anglers, and trappers over the age of 18 who held a license conveying one or more of those privileges in 2021.

^bWildlife viewer and boater target participation reflect estimates based on data from the US Fish and Wildlife Service's National Survey of Fishing, Hunting, and wildlife-associated recreation as well as South Dakota's boat registration database.

The expenditures stimulate significant economic effects for the South Dakota economy, supporting 14,534 full- and part-time jobs that provide \$569.4 million in salaries, wages and small business earnings (Table E2). These effects collectively contribute \$945.8 million to the State's economic growth (gross domestic product) and add \$123.1 million in state and local tax revenue. With effective management and adequate support, the State's fish, wildlife and boating resources will continue to provide valuable economic benefits to South Dakota.

Table ES 2. Annual contributions from fish, wildlife and boating recreation in South Dakota by residents and nonresidents combined

	Jobs	Labor Income	State GDP (Value Added)	Tax Revenues	
				Federal	State & Local
Fishing	5,551	\$217,521,756	\$362,110,471	\$45,607,684	\$48,146,409
Hunting	6,673	\$262,204,046	\$435,270,891	\$54,886,927	\$53,625,765
<i>Deer</i>	1,493	\$60,538,554	\$101,282,031	\$12,703,906	\$12,869,501
<i>Other big game</i>	485	\$19,306,165	\$32,191,549	\$4,047,238	\$4,044,224
<i>Small game</i>	727	\$29,488,398	\$49,403,789	\$6,189,379	\$6,257,074
<i>Migratory birds</i>	974	\$39,073,803	\$65,153,927	\$8,189,663	\$8,046,719
<i>Pheasants</i>	2,993	\$113,797,125	\$187,239,594	\$23,756,741	\$22,408,248
Wildlife Viewing	1,397	\$51,528,393	\$85,181,020	\$10,797,316	\$12,101,298
Trapping	28	\$1,033,816	\$1,749,547	\$217,799	\$243,598
Boating	885	\$37,085,088	\$61,456,604	\$7,774,592	\$9,041,510
Total, all activities combined	14,534	\$569,373,100	\$945,768,532	\$119,284,319	\$123,158,581

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Introduction

The South Dakota Department of Game, Fish and Parks (Department) engaged Southwick Associates to update the estimated economic returns from public participation in outdoor activities within the State. Outdoor activities of interest include hunting, fishing, trapping, pleasure boating and wildlife viewing. The research reported herein was designed to produce statewide and regional estimates for each activity, using data collected from surveys of South Dakota residents and nonresidents. Individuals surveyed were identified from the Department's database of licensed sportsmen and women, and results were then applied to the broader population of participants.

The next section of this report describes data collection and analysis methods used for this effort. Research results then follow. The study findings are organized by activity, and within each activity, the estimated days of effort, equipment and trip expenses are reported, followed by economic contribution estimates. One of the main motivations behind this research was to compare the economic contributions of hunting, fishing, trapping, wildlife viewing and boating within the state during 2016 and 2021. The report concludes with a discussion of the key takeaways from both efforts.

Methodology

This section presents the data collection methods, data preparation and analytical steps. The details include a description of the survey design, sampling frame and survey implementation. Data preparation provides an understanding of data cleaning and weighting procedures used to help ensure the results are representative of the population of interest. Lastly, this section provides a description of the procedures used for developing estimates of effort and economic returns for each activity investigated.

Survey Design and Implementation

The data needed for estimating economic returns of leisure activities such as hunting, fishing, trapping, boating and wildlife viewing are not available in any database. This research required collecting information directly from participants. Data were collected using an online questionnaire, a copy of which is provided in Appendix B.

The surveys collected information on people's participation in five activities within South Dakota for a one-year period:

- Hunting
- Fishing
- Trapping
- Pleasure Boating
- Wildlife Watching

Hunters were directed to provide additional information for species or wildlife groups targeted during their trips. These included deer, other big game, pheasant, other small game, and migratory birds.

For each activity, the survey contained questions asking for the number of days a respondent participated, estimated equipment costs and estimated trip costs. Because one goal of this research was to develop estimates of economic returns by region, survey questions asked respondents to provide regional estimates of the number of days spent pursuing each activity by region. Respondents were permitted to report participation in more than one activity and could report participation in more than one region.

Regions were defined by Game, Fish and Parks. Table 1 identifies the regions for each activity and Figures 1 and 2 depict the regions graphically. The questionnaires concluded with demographic questions, such as year of birth, education and household income. Residents and nonresidents received the same survey. The online survey was implemented between March 3 and March 21, 2022 using Qualtrics, an online survey platform.

Table 1. Regions identified for outdoor activities in South Dakota

Activity	Region				
	Black Hills	West River	East River	Missouri River	Elsewhere
Hunting					
Deer	✓	✓	✓		
Other Big Game	✓	✓	✓		
Pheasant		✓	✓		
Other Small Game	✓	✓	✓		
Migratory Birds	✓	✓	✓		
Trapping	✓	✓	✓		
Fishing	✓			✓	✓
Boating	✓			✓	✓
Viewing Wildlife	✓	✓	✓	✓	

Figure 1. Regions of interest for hunting, trapping and wildlife viewing

(Black Hills, West River, East River and, for wildlife-viewing only, Missouri River)

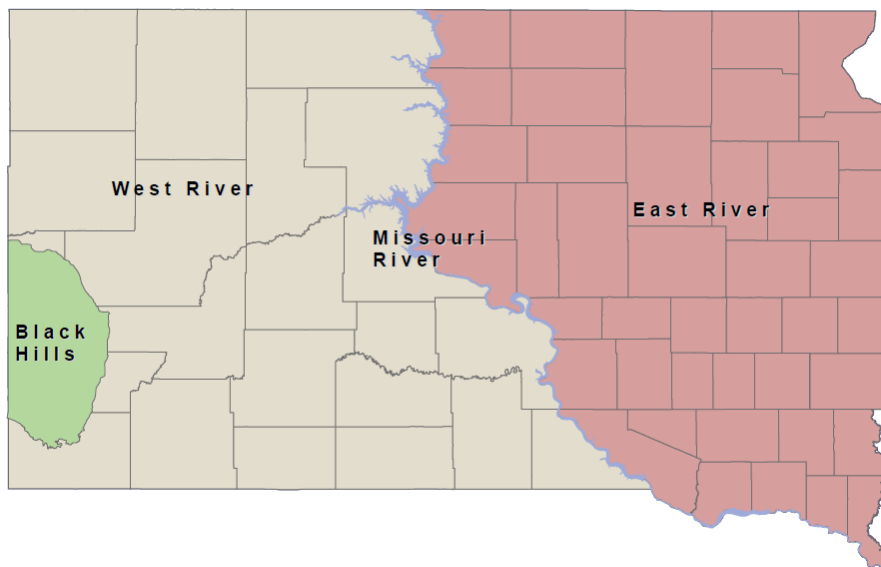
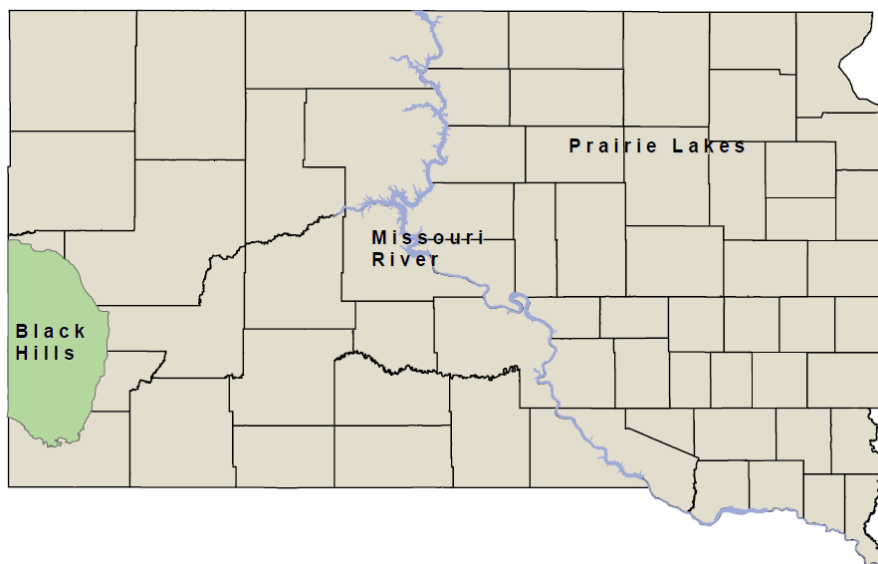


Figure 2. Regions of interest for boating and fishing



Sampling

A random sample of resident and nonresident hunters, anglers and trappers was drawn from South Dakota's license database. License records from the sample were profiled by gender, age and privileges purchased, then compared to the population of licenses. This procedure was repeated until comparison of the general profile of the sample was representative of the general profile of all sportsmen and women.

It was not possible to sample the population of wildlife viewers or boaters in a similar way. Various alternatives are available today which were not as prevalent at the time of the previous study, such as engaging a panel survey of the State's general population. However, one of the main motivations behind this research was to compare the economic contributions of hunting, fishing, trapping, wildlife viewing and boating within the state during 2016 and 2021. As a result, the methodology implemented in 2016 was replicated in 2021 to provide comparisons to the greatest extent possible. The average expenditure for these users was determined by asking hunters and anglers about their boating and wildlife viewing expenditures and activity.

The population of boaters was determined using the U.S. Coast Guard estimate of registered boats, assuming one boat equals one boater, which results in a conservative and defensible estimate. For wildlife viewers, participants were estimated using a ratio of viewers to hunters as reported by the 2011 National Survey of Fishing, Hunting and Wildlife-Associated Recreation (USFWS), and applying this ratio to the number of licensed hunters reported by the Department.

Data Cleaning, Response Rate, Weighting

Surveys were distributed in three rounds of email invitations to participate. In total, 12,283 completed surveys were collected from a total of 80,951 sent for a 15.2% response rate. Data were analyzed using SPSS Statistics 22, Release 22.0. Data cleaning steps helped identify and remove outliers (values outside of reasonable ranges). The final dataset of hunters, anglers and trappers includes 12,273 records aged 18 years or older. Of those, 47% are South Dakota residents and 53% are nonresidents.

Statistical tests were conducted on the samples to ensure representativeness. We conducted limited tests for nonresponse bias by comparing the 3,360 responses received on the first two days of the survey to the 517 responses received over the final days and found no statistically significant differences on the key questions.

Because not all license holders reported an email address, the survey data were weighted such that results represent the distribution of all licensed hunters, anglers and trappers based on the demographics of the full population of fishing, hunting and trapping licenses. For boaters and wildlife viewers, the data were weighted based on the population of all license holders regardless of privilege type held. All results detailed within this report are based on weighted data.

Analysis and Economic Modeling

This section describes the procedures used to develop statewide and regional estimates of effort (in days); per person equipment and trip costs; total equipment and trip costs for the State; and economic contributions to the State.

Effort

For this project, effort is measured in days and was reported by survey respondents for each region in which the respondent participated in an activity.

Within each activity — hunting, trapping, fishing, boating and wildlife viewing — the average effort per person is computed as the average number of days reported for that activity across all respondents. Per person effort is computed for residents and nonresidents statewide and within each region of interest.

The total effort reflects the estimated number of days all participants contributed to an activity throughout the whole state. It is calculated as the product of the per-person average and the number of people engaged in an activity. For example, suppose the average number of days spent fishing over the course of a year is five days per person. If there are 10,000 licensed anglers during that year, we would estimate the total effort to be 10,000 x 5 days, or 50,000 days of effort for the year. Effort is reported statewide and by region for each activity.

Equipment Expenses

Equipment expenses reflect purchases that occurred in South Dakota during the past year for equipment that is used primarily for hunting, fishing, trapping, boating or wildlife viewing. Reported costs include amounts spent for children in the home who are under 18 years of age. Equipment expenses are reported first as estimated average expense per person and second as an estimated total for the population of participants (e.g. for resident hunters, nonresident hunters, resident anglers, nonresident anglers, etc.). Per person and total estimates are computed in the same manner described above for effort.

Equipment expenses are reported by region (Black Hills, West River and East River Regions) for each activity. Equipment purchases by residents are assumed to have occurred within the region of residence (Black Hills, West River or East River) as determined by the survey respondent's ZIP code. Nonresident equipment purchases reported to occur within South Dakota were distributed between the three based upon the distribution of general merchandise sales as reported by the South Dakota Department of Revenue. As a result, regardless of where nonresidents participated in activities within South Dakota, most equipment expenses are assumed to occur within the East River Region. For hunters, equipment expenditures were allocated to specific species based on the reported days of hunting for each species or species group.

Trip Expenses

Trip expenses include purchases that occurred within South Dakota and are consumable: that is, the items purchased are not lasting and are used up during a trip. Typical trip-related expenses are food and drink, lodging, fuel and transportation costs, guide fees, etc. The questionnaire solicited typical trip-related costs for hunting, fishing, trapping, boating and wildlife viewing trips that occurred within the State during the past 12 months. Respondents were asked to report typical trip-related costs associated with a particular activity (fishing, hunting, trapping, wildlife

viewing or boating). Hunters were asked to report typical expenses associated with trips for a specific species or species group.

Trip expenses are reported as estimated average expenses per person, as well as an estimated total for the population of participants (e.g. for resident hunters, nonresident hunters, resident anglers, nonresident anglers, etc.). Trip expenses are computed in the same manner that per person and total effort and equipment expenses are calculated, as described earlier. It was assumed that the trip-related spending took place in the region where the activity occurred.

The regions used for trip costs are the same as those regions used for effort. Trip costs reported by hunters are further divided by the type of wildlife targeted (deer, other big game, pheasant, other small game, or migratory birds). For fishing and boating, trip costs are also reported statewide, but the regions used for these activities include Black Hills, Missouri River and elsewhere (anywhere in the state other than the Missouri River). Costs for wildlife viewing trips are reported statewide and by four separate regions — Black Hills, West River, East River, Missouri River.

Economic Modeling

Participants' direct spending cycles through the state and regional economies, generating additional rounds of spending by businesses that provide supporting services and goods. This is known as the multiplier effect, and includes indirect contributions arising from additional spending within businesses supporting those businesses frequented by participants, as well as induced contributions which result from household spending by employees of affected businesses. The total economic contributions reflect the collective effect of the direct spending as well as the indirect and the induced effect. It is important to mention that findings explored within the body of the report focus on the total economic contribution, or the collective effect of both direct spending and multiplier contributions.

All economic contributions in this study were estimated with the latest statewide model data available from Implan© (2021). The results, therefore, reflect statewide impacts and economic contributions regardless of where the direct spending occurred.

Four types of economic activity are measured and reported for each activity and target species:

Employment: The number of full- and part-time jobs created or supported as a result of the economic activity.

Labor income: Total payroll, including salaries, wages and benefits paid to employees and business proprietors.

State GDP: This represents the total (Value Added) contribution of economic output made by the industries impacted by state park visitation.

Tax Revenue: All local, state and federal taxes paid by individuals and businesses.

The economic contributions from outdoor recreation, both direct effects and total effects, were estimated with an IMPLAN input-output model built to simulate the South Dakota economy. IMPLAN was developed by MIG, Inc. originally for use by the U.S. Forest Service. Inherent in

each IMPLAN model is the relationship between the economic output of each industry (i.e. sales) and the jobs, income and taxes associated with a given level of output. Through those models, it is possible to determine the jobs, income and taxes supported directly by wildlife-based recreationists with and without the multiplier effects.

Input-output models describe how sales in one industry affect other industries. For example, once a consumer makes a purchase, the retailer buys more merchandise from wholesalers, who buy more from manufacturers who, in turn, purchase new inputs and supplies. In addition, the salaries and wages paid by these businesses stimulate more benefits. Simply, the first purchase creates numerous rounds of purchasing. Input-output analysis tracks the flow of dollars from the consumer through all of the businesses that are affected, either directly or indirectly.

To apply the IMPLAN model, each specific expenditure for outdoor recreation activities was matched to the appropriate industry sector affected by the initial purchase. The spending was estimated with models of the South Dakota economy, therefore all of the resulting contributions represent salaries and wages, total economic effects, jobs and tax revenues that occur *within* the State. Likewise, models based on specific regions represent the economic effects within the selected region or county. The results do not include any economic activity or indirect contributions that leak out of the state or region of interest.

The IMPLAN model estimates detailed tax revenues at the local, state and federal levels. The summary estimates provided in this report represent the total taxes estimated by the IMPLAN model including all income, sales, property and other taxes and fees that accrue to the various local, state and federal taxing authorities.

Findings

Results are organized by activity: hunting, fishing, trapping, boating and wildlife viewing. Within each activity, effort (expressed as days of activity) and spending are estimated for residents and nonresidents, at statewide and regional levels, using regions defined by South Dakota Game, Fish and Parks. Economic contributions for each activity are measured and reported for each activity, as well as for all activities combined using economic models specific to South Dakota. Findings represent a one-year time period, as respondents reported participation and expenses for the 12 months prior to March 2022.

Hunting

Effort

Resident hunters primarily targeted pheasant and deer in South Dakota during the past 12 months (60% and 50%, respectively) (Table 1). Comparatively fewer hunters sought other species: small game, migratory birds and other large game animals were each targeted by roughly one fifth of hunters. Not surprisingly, for nonresidents, pheasant were the primary target species with 65% of hunters seeking this game bird, but only 15% targeted deer.

Table 1. Species targeted by hunters

	Residents		Nonresidents	
	Hunters	%	Hunters	%
Deer	60,394	60%	16,956	15%
Other Big Game	19,972	20%	7,339	7%
Pheasant	50,954	50%	72,693	65%
Other small game	21,929	22%	11,968	11%
Migratory Bird	22,770	22%	26,070	23%
Total Hunters	101,317	N/A	112,218	N/A

Resident hunters dedicated an average 17 days of hunting in South Dakota during the past 12 months, compared to six days reported by nonresident hunters.

Table 2. Hunting days by species, region, and residency

Region	Residency	Average Number of Days				
		Deer	Other Big Game	Pheasant	Other Small Game	Migratory Birds
Statewide	Residents	11	8	9	12	9
	Nonresidents	6	5	5	5	5
Black Hills Region	Residents	1	2	N/A	1	0
	Nonresidents	1	2	N/A	0	0
West River Region	Residents	3	3	2	3	1
	Nonresidents	4	2	1	2	0
East River Region	Residents	7	3	7	8	8
	Nonresidents	2	2	4	2	5

Examining days of hunting effort for each species or wildlife group across regions and statewide reveals that most hunting effort was expended in the East River Region for residents and nonresidents alike, although residents expended a greater level of effort within the region and statewide compared to nonresident hunters.

Table 3. Total days hunting by species and residency

Species	Residents	Nonresidents	Total Days
Deer	643,804	105,129	748,933
Other Big Game	154,785	39,483	194,268
Pheasant	450,945	346,748	797,693
Other Small Game	265,116	55,889	321,005
Migratory Birds	204,021	139,995	344,016
Total Days	1,718,670	687,244	2,405,914

Fully 78% of resident hunters reported fishing in South Dakota and more than a third (34%) reported viewing wildlife. During the same time period, 36% of hunters boated for pleasure, and 16% trapped. Similarly, few non-resident hunters reported trapping, boating for pleasure or viewing wildlife in South Dakota.

Table 4. Hunter participation in other outdoor activities in South Dakota during the past year

	Percent	
	Residents	Nonresidents
Fished	78%	15%
Trapped	16%	0.3%
Boated	36%	3%
Viewed Wildlife	34%	6%

Trip and Equipment Expenses

South Dakota resident and nonresident hunters spend a large proportion of their annual equipment purchases on tools used to support their time outdoors such as vehicles (29% for residents and 9% for nonresidents), firearms and ammunition (18% for residents and 13% for nonresidents) and hunting privileges (9% for residents and 19% for nonresidents).

Table 5. Hunting: Equipment related spending profiles by residency

Spending category	Residents	Nonresidents
Firearms	12%	7%
Bows, Arrows, Archery Equipment	3%	2%
Ammunition	6%	6%
Telescopic Sights	3%	1%
Decoys or Game Calls	1%	1%
Hunting Dogs and Expenses	4%	4%
Other Hunting Equipment	4%	6%
Camping Equipment	1%	1%
Binoculars, Field Glasses, Telescopes	3%	1%
Clothing and Footwear for Hunting	5%	5%
Animal Processing and Taxidermy	4%	3%
Cabins	1%	17%
Motorized Vehicles	29%	9%
Magazines, Books, DVDs	10%	3%
Membership Dues and Contributions	0%	0%
Land Leasing and Ownership	1%	1%
Licenses, Stamps, Tags, and Permits	9%	19%
Total	100%	100%

Trip-related spending revolves around three major categories: food, lodging and fuel. Forty-five percent of resident spending is allocated to fuel for private transportation, 37% is allocated to food and 13% is allocated to lodging. Among nonresidents, the largest proportion is allocated to lodging (30% in total), 28% is allocated to food and 19% to fuel.

Table 6. Hunting: Trip-related spending profiles by residency

Spending category	Residents	Nonresidents
Groceries, Food, Liquor	23%	14%
Restaurants, Bars, Take-Out	14%	14%
Lodging	13%	30%
Transportation (fuel, oil and services)	45%	19%
Guide Fees, Pack Trip, or Package Fees	0%	1%
Equipment Rental	3%	19%
Heating and Cooking Fuel	0%	0%
Souvenirs, Gifts, Other Miscellaneous	1%	0%
Total	100%	100%

Economic Effect

Resident hunters spent an average of \$4,429 annually on trip-related and hunting-related equipment purchases, which is greater than the amount spent by nonresident hunters, who spent an average of \$2,070. The economic contributions generated by hunters was determined by applying their expenditures to IMPLAN economic models, as described earlier. The following three tables present hunters' spending regionally and by select species, plus the resulting economic impacts statewide and by region, for residents and nonresidents.

Table 7. Hunter's direct spending in South Dakota by region and residency

Region	Residents	Nonresidents	TOTAL
Statewide			
Trip-related	\$149,663,543	\$101,786,663	\$251,450,207
Equipment & gear	\$299,090,585	\$130,563,741	\$429,654,326
Total	\$448,754,128	\$232,350,404	\$681,104,532
Black Hills Region			
Trip-related	\$11,849,174	\$3,207,015	\$15,056,189
Equipment & gear	\$50,845,399	\$22,326,400	\$73,171,799
Total	\$62,694,573	\$25,533,414	\$88,227,988
West River Region			
Trip-related	\$32,974,561	\$27,268,650	\$60,243,210
Equipment & gear	\$32,899,964	\$7,703,261	\$40,603,225
Total	\$65,874,525	\$34,971,911	\$100,846,436
East River Region			
Trip-related	\$104,839,809	\$71,310,999	\$176,150,808
Equipment & gear	\$212,354,315	\$100,534,080	\$312,888,396
Total	\$317,194,124	\$171,845,080	\$489,039,203

Table 8. Hunter direct spending in South Dakota by region, species, and residency

Region	Residents	Nonresidents	TOTAL
Statewide			
Deer	\$159,340,627	\$30,594,785	\$189,935,412
Other Big Game	\$41,222,113	\$12,567,277	\$53,789,391
Pheasant	\$123,415,529	\$128,929,184	\$252,344,713
Other Small Game	\$70,147,745	\$16,541,313	\$86,689,058
Migratory Birds	\$54,628,114	\$43,717,846	\$98,345,959
Total	\$448,754,128	\$232,350,404	\$681,104,532
Black Hills Region			
Deer	\$24,859,431	\$4,421,260	\$29,280,690
Other Big Game	\$8,874,127	\$3,128,359	\$12,002,486
Pheasant	\$13,340,819	\$11,264,749	\$24,605,569
Other Small Game	\$9,392,329	\$2,107,392	\$11,499,720
Migratory Birds	\$6,227,868	\$4,611,654	\$10,839,522
Total	\$62,694,573	\$25,533,414	\$88,227,988
West River Region			
Deer	\$24,571,440	\$7,163,009	\$31,734,449
Other Big Game	\$7,737,212	\$2,231,736	\$9,968,948
Pheasant	\$16,240,668	\$19,484,798	\$35,725,465
Other Small Game	\$11,370,752	\$3,759,397	\$15,130,149
Migratory Birds	\$5,954,454	\$2,332,971	\$8,287,425
Total	\$65,874,525	\$34,971,911	\$100,846,436
East River Region			
Deer	\$108,789,379	\$19,010,517	\$127,799,896
Other Big Game	\$24,341,411	\$7,207,182	\$31,548,593
Pheasant	\$93,049,288	\$98,179,637	\$191,228,925
Other Small Game	\$48,923,299	\$10,674,524	\$59,597,823
Migratory Birds	\$42,090,746	\$36,773,220	\$78,863,966
Total	\$317,194,124	\$171,845,080	\$489,039,203

Table 9. Economic effects of hunting in South Dakota by residency

Region	Residents	Nonresidents	TOTAL
Statewide			
Jobs	4,262	2,411	6,673
Labor Income	\$175,278,565	\$86,925,481	\$262,204,046
State GDP (Value Added)	\$293,969,095	\$141,301,796	\$435,270,891
Federal Taxes	\$36,814,058	\$18,072,869	\$54,886,927
State & Local Taxes	\$37,211,742	\$16,414,023	\$53,625,765
Black Hills Region			
Jobs	595	265	860
Labor Income	\$24,487,830	\$9,552,401	\$34,040,231
State GDP (Value Added)	\$41,069,855	\$15,527,915	\$56,597,770
Federal Taxes	\$5,143,221	\$1,986,061	\$7,129,282
State & Local Taxes	\$5,198,781	\$1,803,767	\$7,002,548
West River Region			
Jobs	626	363	989
Labor Income	\$25,729,885	\$13,083,473	\$38,813,358
State GDP (Value Added)	\$43,152,972	\$21,267,851	\$64,420,823
Federal Taxes	\$5,404,092	\$2,720,214	\$8,124,306
State & Local Taxes	\$5,462,470	\$2,470,535	\$7,933,004
East River Region			
Jobs	3,013	1,783	4,796
Labor Income	\$123,892,634	\$64,289,607	\$188,182,241
State GDP (Value Added)	\$207,786,990	\$104,506,030	\$312,293,020
Federal Taxes	\$26,021,383	\$13,366,594	\$39,387,977
State & Local Taxes	\$26,302,479	\$12,139,721	\$38,442,200

Note: Economic effects per hunter are included in Appendix A.

Trapping

This section reports information for resident trappers. Only 21 nonresident trappers responded to this questionnaire; a result that represents too few respondents for representation.

Effort

Resident trappers averaged 22 days of trapping in South Dakota during the past 12 months. By far, most trapping effort was reported to occur in the East River Region, with the 16 days of effort reported as the average number of days spent per person.

Table 10. Trapping days by region

Residents	
Trappers	3,911
Total Days	84,712
Average Number of Days	
Statewide	22
Black Hills Region	1
West River Region	5
East River Region	16

Almost all resident respondents who trapped (98%) stated they hunted in South Dakota during the past 12 months (Table 11). Most trappers who hunted targeted pheasant and deer (40% and 50%, respectively), while fewer than one third of trappers who hunted sought other big game, other small game, and migratory bird species. South Dakota trappers also reported fishing (87%), viewing wildlife (47%) and boating for pleasure (36%) during the same time period.

Table 11. Participation in other outdoor activities in South Dakota by resident trappers during the past year

	Percent
Hunted	98%
Wildlife Hunted:	
Deer	50%
Other Big Game	22%
Pheasant	40%
Other Small Game	27%
Migratory Birds	25%
Fished	87%
Boated	36%
Viewed Wildlife	47%

Trip and Equipment Expenses

Statewide, the top per-person equipment expenditures for trappers were animal processing, followed by traps and snare tied with firearms and knives. Considering travel-related expenses, too, fuel is by far the largest expense for trappers.

Table 12. Trapping: Equipment related spending profiles

Spending Category	Proportion
Traps, Snares	13%
Trap or Snare Parts, Accessories, Tools	3%
Lures and Bait	5%
Bedding, Sifters, Covers	1%
Firearms and Knives	13%
Ammunition	9%
Animal and Fur Handling Equipment	2%
Other Trapping Expenses	1%
Camping Equipment	0%
Binoculars, Field Glasses, Telescopes	7%
Clothing for Trapping	5%
Packbaskets, Packs and Pouches	1%
Animal Processing and Taxidermy	14%
Cabins	0%
Motorized Vehicles	5%
Magazines, Books, DVDs	1%
Membership Dues and Contributions	1%
Land Leasing and Ownership	2%
Licenses, Stamps, Tags, and Permits	10%
Total	100%

These results show that for most types of equipment and trip-related items presented in the survey, a majority of trappers reported spending \$0 in South Dakota.

Table 13. Trapping: Trip-related spending profiles

Spending category	Proportion
Groceries, Food, Liquor	3%
Restaurants, Bars, Take-Out	4%
Lodging	3%
Transportation (fuel, oil services)	90%
Guide Fees, Pack Trip, or Package Fees	0%
Equipment Rental	0%
Heating and Cooking Fuel	0%
Souvenirs, Gifts, Other Miscellaneous	0%
Total	100%

Economic Effect

Resident trappers spent an average of \$688 annually on trip-related and trapping-related equipment purchases. The economic contributions generated by trappers was determined by applying their expenditures to IMPLAN economic models, as described earlier. The following two tables present trappers' spending regionally plus the resulting economic impacts statewide and by region. Due to a very low number of returned surveys from the small group of nonresidents who bought South Dakota trapper licenses, results are not available for nonresidents.

Table 14. Trapper direct spending in South Dakota by region

Region	Residents
Statewide	
Trip-related	\$946,990
Equipment & gear	\$1,744,967
Total	\$2,691,958
Black Hills Region	
Trip-related	\$38,037
Equipment & gear	\$261,745
Total	\$299,782
West River Region	
Trip-related	\$197,180
Equipment & gear	\$331,544
Total	\$528,724
East River Region	
Trip-related	\$711,773
Equipment & gear	\$1,151,678
Total	\$1,863,451

Table 15. Economic effects of trapping in South Dakota

Region	Residents
Statewide	
Jobs	28
Labor Income	\$1,033,816
State GDP (Value Added)	\$1,749,547
Federal Taxes	\$217,799
State Taxes	\$243,598
Black Hills Region	
Jobs	3
Labor Income	\$115,128
State GDP (Value Added)	\$194,833
Federal Taxes	\$24,255
State Taxes	\$27,128
West River Region	
Jobs	6
Labor Income	\$203,051
State GDP (Value Added)	\$343,626
Federal Taxes	\$42,778
State Taxes	\$7,845
East River Region	
Jobs	20
Labor Income	\$715,638
State GDP (Value Added)	\$1,211,087
Federal Taxes	\$150,767
State Taxes	\$168,626

Note: Economic effects per trapper are included in Appendix A.

Fishing

Effort

Resident anglers averaged 18 days of fishing in South Dakota during the past 12 months (Table 16). Nonresident anglers averaged 8 days of fishing. Both groups expended greater fishing effort in locations throughout the state (referred to as “Elsewhere”) than in the Missouri River or Black Hills regions. On average, resident anglers fished 6 days per angler and nonresident anglers fished 3 days per angler in the Missouri river region. Elsewhere in the state, compared to the Missouri River, residents fished 9 days and nonresidents fished an average of 4 days.

Table 16. Angler days by region and residency

	Residents	Nonresident	Total
Anglers	139,925	85,045	224,970
Total Days	2,459,882	695,668	3,155,550
Average Number of Days			
Statewide	18	8	
Black Hills	3	1	
Missouri River	6	3	
Everywhere Else	9	4	

Almost three quarters of resident respondents who reported fishing in South Dakota during the past 12 months also hunted in the state (Table 17). The largest proportion of this group hunted deer (57%) and pheasant (50%), while fewer than one quarter sought other small game, other large game or migratory birds. Resident anglers reported boating for pleasure (40%) and viewing wildlife (34%), but few participated in trapping (12%).

Approximately one third (29%) of nonresident anglers reported hunting in South Dakota. Fifteen percent of nonresident anglers also boated and 13% viewed wildlife in South Dakota during the past 12 months. One percent of nonresident anglers reported trapping.

Table 17. Participation in other outdoor activities in South Dakota by anglers during the past year

	Percent	
	Residents	Nonresidents
Hunted	72%	29%
Wildlife Hunted		
Deer	57%	20%
Other Big Game	20%	9%
Pheasant	50%	47%
Other Small Game	22%	12%
Migratory Birds	24%	27%
Trapped	12%	1%
Boated	40%	15%
Viewed Wildlife	34%	13%

Trip and Equipment Expenses

South Dakota resident and nonresident anglers spend a large proportion of their annual equipment purchases on tools used to support their time outdoors such as boats (27% for residents and 37% for nonresidents), fishing equipment (20% for residents and 17% for nonresidents), vehicles (14% for residents) and cabins (13% for nonresidents), and fishing privileges (3% for residents and 7% for nonresidents).

Table 18. Fishing: Equipment related spending profiles by residency

Spending Category	Resident	Nonresident
Fishing		
Rods, Reels, Poles, and Rod-making Components	4.9%	3.5%
Lines and Leaders	1.0%	0.8%
Lures, Bait and Bait Containers	3.1%	3.9%
Hooks, Sinkers, Other Items Attached to Lines	0.9%	0.8%
Fish Finders and Other Electronic Fish Devices	5.7%	4.4%
Tackle Boxes and Other Fishing Item Storage	0.5%	0.3%
Creels, Fish Bags, Hooks, Landing Nets	0.3%	0.1%
Ice fishing	3.0%	2.1%
Other Fishing Equipment	1.1%	1.0%
<i>Subtotal (Fishing only)</i>	20.5%	17.1%
Camping Equipment	1.8%	1.1%
Binoculars, Field Glasses, Telescopes	1.3%	0.5%
Clothing for Fishing	2.8%	2.6%
Animal Processing and Taxidermy	2.1%	1.2%
Cabins	1.6%	13.2%
Motorized Vehicles	14.1%	3.7%
Ice houses	1.8%	1.5%
Sleds	0.2%	0.3%
Fishing Magazines, Books, DVDs	0.1%	0.1%
Membership Dues and Contributions for Fishing	0.2%	0.1%
Fishing Land Leasing and Ownership	0.7%	1.5%
Licenses, Stamps, Tags, and Permits	2.7%	7.1%
<i>Subtotal (Fishing only)</i>	29.5%	32.9%
Boating (Used for Fishing)		
Boats (Motorboats, Sailboats, Canoes, Kayaks, Etc.)	26.6%	37.3%
Boat Trailers	3.6%	2.6%
Outboard, Inboard, Trolling Motors	2.9%	2.1%
Electronics (Depth Finders, GPS, Radios, Etc.)	5.6%	2.6%
Boat and Trailer Accessories (Anchors, Ropes, Buoys, Bumpers, Etc.)	1.5%	0.6%
Other Boating Equipment	2.1%	1.0%
Coolers	3.0%	1.2%
Life Jackets, Life Preservers, PFDs	0.8%	0.3%
Clothing for Boating	1.1%	0.1%
Boating Magazines, Books, DVDs	1.4%	0.6%
Boating Membership Dues and Contributions	0.1%	0.0%
Boating Land Leasing and Ownership	0.2%	0.1%
Boat Storage Fees, Mooring Fees, Launch Fees	1.3%	1.5%
<i>Subtotal (Boating only)</i>	50.0%	50.0%
Total	100%	100%

Trip-related spending revolves around three major categories, food, lodging and fuel. Forty-one percent of resident spending is allocated to fuel for private transportation, 38% is allocated to food, and 17% is allocated to lodging. Among nonresidents, the largest proportion is allocated to food (36% in total), 31% is allocated to lodging and 26% to fuel.

Table 19. Fishing: Trip-related spending profiles by residency

Spending Category	Resident	Nonresident
Groceries, Food, Liquor	25%	19%
Restaurants, Bars, and Take-Out	13%	17%
Lodging	17%	31%
Transportation (fuel, oil, services)	41%	26%
Guide Fees, Pack Trip, or Package Fees	0%	0%
Equipment Rental	2%	5%
Heating and Cooking Fuel	0%	0%
Souvenirs, Gifts, Other Miscellaneous	2%	0%
Total	100%	100%

Economic Effect

Resident anglers spent an average of \$2,795 annually on trip-related and fishing-related equipment purchases, which is greater than the average of \$1,641 spent by nonresident anglers. The economic contributions generated by anglers was determined by applying their expenditures to IMPLAN economic models, as described earlier. The following three tables present anglers' spending regionally, plus the resulting economic impacts statewide and by region, for residents and nonresidents.

Table 20. Angler direct spending in South Dakota by region and residency

	Residents	Nonresidents	TOTAL
Trip-related			
Statewide	\$240,112,896	\$90,995,398	\$331,108,294
Black Hills	\$48,563,347	\$15,560,213	\$64,123,560
Missouri River	\$22,390,969	\$5,368,728	\$27,759,697
Elsewhere in the state	\$169,158,580	\$70,066,456	\$239,225,037
Equipment related			
Statewide	\$151,043,976	\$48,591,253	\$199,635,228
Black Hills	\$22,424,618	\$4,752,201	\$27,176,818
West River	\$50,605,746	\$20,731,476	\$71,337,222
East River	\$78,013,612	\$23,107,576	\$101,121,188
TOTAL	\$391,156,872	\$139,586,651	\$530,743,523

Table 21. Economic effects of angling in South Dakota by residency

	Residents	Nonresidents	TOTAL
Statewide (all spending)			
Jobs	3,983	1,568	5,551
Labor Income	158,535,721	58,986,035	\$217,521,756
State GDP (Value Added)	265,379,323	96,731,148	\$362,110,471
Federal Taxes	33,304,656	12,303,029	\$45,607,684
State & Local Taxes	36,377,852	11,768,557	\$48,146,409
Black Hills (trip related spending)			
Jobs	516	199	715
Labor Income	\$19,227,672	\$7,018,149	\$26,245,821
State GDP (Value Added)	\$32,743,290	\$11,762,982	\$44,506,272
Federal Taxes	\$4,059,725	\$1,473,346	\$5,533,071
State & Local Taxes	\$5,200,272	\$1,579,312	\$6,779,585
Missouri River (trip related spending)			
Jobs	238	69	307
Labor Income	\$8,865,250	\$2,421,467	\$11,286,716
State GDP (Value Added)	\$15,096,858	\$4,058,573	\$19,155,431
Federal Taxes	\$1,871,806	\$508,347	\$2,380,153
State & Local Taxes	\$2,397,675	\$544,909	\$2,942,584
Rest of the State (trip related spending)			
Jobs	1,799	896	2,695
Labor Income	\$66,974,908	\$31,602,190	\$98,577,099
State GDP (Value Added)	\$114,053,266	\$52,967,815	\$167,021,081
Federal Taxes	\$14,141,061	\$6,634,365	\$20,775,426
State & Local Taxes	\$18,113,880	\$7,111,524	\$25,225,404
Equipment related			
Black Hills (equipment spending)			
Jobs	212	39	252
Labor Income	\$9,422,707	\$1,754,937	\$11,177,644
State GDP (Value Added)	\$15,363,949	\$2,732,692	\$18,096,641
Federal Taxes	\$1,964,487	\$360,584	\$2,325,071
State & Local Taxes	\$1,583,522	\$247,708	\$1,831,230

Table 21 cont. Economic effects of angling in South Dakota by residency

	Residents	Nonresidents	TOTAL
West River (equipment related spending)			
Jobs	479	172	651
Labor Income	\$21,264,271	\$7,655,912	\$28,920,182
State GDP (Value Added)	\$34,671,900	\$11,921,370	\$46,593,270
Federal Taxes	\$4,433,268	\$1,573,047	\$6,006,316
State & Local Taxes	\$3,573,543	\$1,080,625	\$4,654,168
East River (equipment related spending)			
Jobs	739	192	931
Labor Income	\$32,780,913	\$8,533,380	\$41,314,293
State GDP (Value Added)	\$53,450,060	\$13,287,716	\$66,737,776
Federal Taxes	\$6,834,309	\$1,753,339	\$8,587,648
State & Local Taxes	\$5,508,959	\$1,204,479	\$6,713,438

Note: Economic effects per angler are included in Appendix A.

Boaters

Effort

Resident boaters spent an average of 9 days per boater on South Dakota waters during the past 12 months, compared to an average of 6 days per boater spent by nonresidents.

Table 22. Total boaters and days by residency and activity

	Residents	Nonresidents	Total
Total Boaters	57,521	3,026	60,547
Boaters only	24,795	1,181	25,976
Boaters and anglers	32,726	1,845	34,571
Total Days	517,668	18,768	536,436
Boating only	223,155	7,320	230,475
Boating and fishing	294,513	11,448	305,961

Table 23. Average number of days boating by residency

	Resident	Nonresident
Statewide	9	6
Black Hills	0.4	1
Missouri River	2	3
Elsewhere	3	5

Most people who reported boating in South Dakota during the past year also reported that they hunted in the state during the same time period (75%) (Table 24). Wildlife species most

commonly sought by this group were deer (48%) and pheasant (46%). Other small or large game species and migratory birds were sought by fewer than one fifth of boaters who hunted. Resident boater also reported fishing (90%) and viewing wildlife (46%) in South Dakota. Eleven percent of boaters stated that they trapped in the state during the past 12 months.

Approximately 39% of nonresident boaters stated that they also hunted in South Dakota during the past 12 months. Of those, 34% reported hunting pheasant and 18% stated they hunted deer. Migratory birds, other big game, and small game were less popular with nonresident boaters. Fishing, however, was popular with this group, with 90% of boaters reporting that they also fished in South Dakota, and nearly one third of boaters (31%) viewed wildlife. Two percent of nonresident boaters reported trapping in South Dakota.

Table 24. Participation in other outdoor activities in South Dakota by boaters during the past year

	Percent	
	Residents	Nonresidents
Hunted	75%	39%
Wildlife Hunted		
Deer	48%	18%
Other Big Game	18%	6%
Pheasant	46%	34%
Other Small Game	19%	14%
Migratory Birds	21%	27%
Trapped	11%	2%
Fished	90%	90%
Viewed Wildlife	46%	31%

Trip and Equipment Expenses

South Dakota resident and nonresident boaters spend the largest proportions of their annual equipment purchases on tools used to support their time outdoors such as boats (53% for residents and 75% for nonresidents), trailers and motors (13% for residents and 9% for nonresidents), and items to improve navigation such as GPS and depth finders, etc. (11% for residents and 5% for nonresidents).

Table 25. Boating: Equipment related spending profiles by residency

Spending Category	Resident	Nonresident
Boats (Motorboats, Sailboats, Canoes, Kayaks, Etc.)	53%	75%
Boat Trailers	7%	5%
Outboard, Inboard, Trolling Motors	6%	4%
Electronics (Depth Finders, GPS, Radios, Etc.)	11%	5%
Boat and Trailer Accessories (Anchors, Ropes, Buoys, Bumpers, Etc.)	3%	1%
Other Boating Equipment	4%	2%
Coolers	2%	1%
Life Jackets, Life Preservers, PFDs	2%	0%
Clothing for Boating	3%	1%
Boating Magazines, Books, DVDs	0%	0%
Boating Membership Dues and Contributions	0%	0%
Boating Land Leasing and Ownership	3%	3%
Boat Storage Fees, Mooring Fees, Launch Fees	6%	2%
Total	100%	100%

Trip-related spending revolves around three major categories: food, lodging and fuel. Forty-three percent of resident spending is allocated to fuel for private transportation, 45% is allocated to food, and 11% is allocated to lodging. Among nonresidents, the largest proportion is allocated to food (50% in total), 31% is allocated to fuel, and 16% to lodging.

Table 26. Boating: Trip-related spending profiles by residency

Spending Category	Resident	Nonresident
Groceries, Food, Liquor	31%	31%
Restaurants, Bars, and Take-Out	14%	19%
Lodging	11%	16%
Transportation (fuel, oil, services)	43%	31%
Guide Fees, Pack Trip, or Package Fees	0%	0%
Equipment Rental	0%	0%
Heating and Cooking Fuel	0%	0%
Souvenirs, Gifts, Other Miscellaneous	1%	1%
Total	100%	100%

Economic Effect

Resident boaters spent an average of \$3,543 annually on trip-related and boating-related equipment purchases, which is similar to the amount spent by nonresident boaters, who spent an average of \$3,092. These expenditures were then assessed using the IMPLAN economic models to estimate boating's economic contributions (Tables 27 and 28).

Table 27. Boater direct spending in South Dakota by residency

	Residents	Nonresidents	TOTAL
Statewide			
Trip-related	\$51,635,142	\$1,753,340	\$53,388,482
Equipment & gear	\$36,217,837	\$1,897,437	\$38,115,274
Total	\$87,852,979	\$3,650,777	\$91,503,756

Table 28. Economic effects of boating in South Dakota by residency

	Residents	Nonresidents	TOTAL
Statewide			
Jobs	850	35	885
Labor Income	\$35,545,201	\$1,539,887	\$37,085,088
State GDP (Value Added)	\$58,924,541	\$2,532,062	\$61,456,604
Federal Taxes	\$7,452,832	\$321,760	\$7,774,592
State & Local Taxes	\$8,699,698	\$341,812	\$9,041,510

Note: Economic effects per boater are included in Appendix A.

Wildlife Viewers

Effort

Resident wildlife viewers averaged 12 days of away from home wildlife viewing in South Dakota during the past 12 months. Nonresident wildlife viewers averaged 7 days of away from home wildlife viewing. Both groups expended greater wildlife viewing effort in the East River and Black Hills locations.

Table 29. Total away from home wildlife viewer and days by region and residency

	Residents	Nonresidents	Total
Total Wildlife Viewers	92,353	103,897	196,250
Total Days Away from Home	1,062,061	675,332	1,737,393
Average Number of Days			
Statewide	12	7	
Black Hills Region	3	2	
West River	2	1	
East River	1	1	
Missouri River	5	2	

More than three quarters of resident respondents who reported wildlife viewing in South Dakota during the past 12 months also hunted in the state (Table 30). A majority of this group hunted deer (41%) and pheasant (33%), while fewer than one fifth sought other small game,

other large game or migratory birds. Resident wildlife viewers reported boating for pleasure (51%) and fishing (83%), but few participated in trapping (17%).

Two thirds (62%) of nonresident wildlife viewers reported hunting in South Dakota. Twenty-eight percent of wildlife viewers who reported hunting targeted pheasant. Fewer than 25% of this group sought any other species or wildlife grouping. More than half (55%) of nonresident wildlife viewers also fished and 23% boated for recreation in state during the past 12 months.

Table 30. Participation in other outdoor activities in South Dakota by wildlife viewers during the past year

	Percent	
	Residents	Nonresidents
Hunted	80%	62%
Wildlife Hunted		
Deer	41%	14%
Other Big Game	16%	6%
Pheasant	33%	28%
Other Small Game	18%	10%
Migratory Birds	17%	10%
Fished	83%	55%
Trapped	17%	2%
Boated	51%	23%

Trip and Equipment Expenses

South Dakota resident and nonresident wildlife viewers spend the largest proportions of their annual equipment purchases on tools used to support their time outdoors such as camping equipment (24% for residents and 31% for nonresidents), tools to improve visualization such as binoculars, field glasses, etc. (12% for residents and 13% for nonresidents) and plantings for improving and maintaining habitat (14% for residents and 23% for nonresidents).

Table 31. Away from Home Wildlife Viewing: Equipment related spending profiles by residency

	Residents	Nonresidents
Binoculars, Field Glasses, Spotting Scopes, Etc.	12%	13%
Cameras and Accessories	3%	2%
Pack-baskets, Packs and Pouches	4%	5%
Animal Feed	6%	2%
Camping Equipment (Tents, Backpacks, Etc.)	24%	31%
Magazines, Books, Field Guides, DVDs	6%	9%
Membership Dues and Contributions	4%	5%
Plantings	14%	23%
Total	100%	100%

Trip-related spending revolves around three major categories: food, lodging and fuel. Forty percent of resident spending is allocated to fuel for private transportation, 34% is allocated to food, and 20% is allocated to lodging. Among nonresidents, the largest proportion is allocated to food (35% in total), 32% is allocated to fuel, and 27% to lodging.

Table 32. Away from home Wildlife Viewing: Trip-related spending profiles by residency

	Residents	Nonresidents
Groceries, Food, Liquor	19%	18%
Restaurants, Bars, and Take-Out	15%	17%
Lodging	20%	27%
Transportation (fuel, oil services)	43%	32%
Guide Fees, Pack Trip, or Package Fees	0%	0%
Equipment Rental	0%	0%
Heating and Cooking Fuel	0%	0%
Souvenirs, Gifts, Other Miscellaneous	1%	1%
Total	100%	100%

Economic Effect

Resident wildlife viewers spent an average of \$639 annually on trip-related and viewing-related equipment purchases, which is similar to the amount spent by nonresident wildlife viewers, who spent an average of \$551. The economic contributions generated by wildlife viewers was determined by applying their expenditures to IMPLAN economic models, as described earlier. The following two tables present their spending regionally, plus the resulting economic impacts statewide and by region, for residents and nonresidents.

Table 33. Away from Home Wildlife Viewing: Direct spending in South Dakota by region and residency

Region	Residents	Nonresidents	TOTAL
Statewide			
Trip-related	\$49,744,664	\$50,845,824	\$100,590,488
Equipment & gear	\$9,269,025	\$6,488,088	\$15,757,113
Total	\$59,013,689	\$57,333,912	\$116,347,601
Black Hills Region			
Trip-related	\$13,680,865	\$18,638,270	\$32,319,135
Equipment & gear	\$1,853,805	\$1,109,463	\$2,963,268
Total	\$15,534,670	\$19,747,733	\$35,282,403
West River Region			
Trip-related	\$7,663,016	\$11,151,768	\$18,814,784
Equipment & gear	\$834,212	\$382,797	\$1,217,009
Total	\$8,497,228	\$11,534,565	\$20,031,794
East River Region			
Trip-related	\$23,638,456	\$16,142,769	\$39,781,226
Equipment & gear	\$6,488,317	\$4,995,828	\$11,484,145
Total	\$30,126,774	\$21,138,597	\$51,265,371
Missouri River Region			
Trip-related	\$4,762,326	\$4,913,017	\$9,675,343
Equipment & gear	\$0	\$0	\$0
Total	\$4,762,326	\$4,913,017	\$9,675,343

Table 34. Economic Effects of Away from Home Wildlife Viewing in South Dakota by residency

	Residents	Nonresidents	TOTAL
Statewide			
Jobs	703	694	1,397
Labor Income	\$26,152,239	\$25,376,155	\$51,528,393
State GDP (Value Added)	\$42,681,630	\$42,499,390	\$85,181,020
Federal Taxes	\$5,466,400	\$5,330,916	\$10,797,316
State & Local Taxes	\$6,306,365	\$5,794,933	\$12,101,298
Black Hills			
Jobs	185	239	424
Labor Income	\$6,884,274	\$8,740,404	\$15,624,677
State GDP (Value Added)	\$11,235,445	\$14,638,223	\$25,873,668
Federal Taxes	\$1,438,967	\$1,836,147	\$3,275,114
State & Local Taxes	\$1,660,078	\$1,995,971	\$3,656,048
West River*			
Jobs	158	199	357
Labor Income	\$5,876,044	\$7,279,747	\$13,155,791
State GDP (Value Added)	\$9,589,968	\$12,191,950	\$21,781,919
Federal Taxes	\$1,228,224	\$1,529,299	\$2,757,523
State & Local Taxes	\$1,416,952	\$1,662,413	\$3,079,366
East River			
Jobs	359	354	713
Labor Income	\$13,350,844	\$12,954,650	\$26,305,494
State GDP (Value Added)	\$21,789,179	\$21,696,144	\$43,485,323
Federal Taxes	\$2,790,624	\$2,721,458	\$5,512,082
State & Local Taxes	\$3,219,430	\$2,958,342	\$6,177,771

*Includes Missouri River trip-related spending

Note: Economic effects per wildlife viewer are included in Appendix A.

Comparing 2016 to 2021 Participation and Contributions

One of the secondary objectives for this research was to compare the economic contributions of hunting, fishing, trapping, wildlife viewing and boating within the state during 2016 to the 2021 estimates. In this section we present the economic contributions from both efforts and discuss a few key highlights. Methodology implemented in 2016 was replicated in 2021 to provide comparisons to the greatest extent possible.

Participation remained strong and experienced minor growth among most activities (Tables 35 and 36). Total days of participation declined, largely attributable to fewer days associated with in wildlife watching. It's important to note that wildlife viewing is more strictly defined as a purposeful activity for the 2021 effort and explains the downward shift seen here, in part if not completely.

Table 35. Annual participation and spending by resident and nonresident anglers, hunters, trappers, wildlife viewers, and boaters in South Dakota (2016 report)

Activity	Participants	Days	Spending ^c
Fishing ^a	215,173	3,258,635	\$306,314,761
Hunting ^a	215,793	2,471,499	\$770,848,251
<i>Deer</i>	59,130	547,663	\$180,993,887
<i>Other big game</i>	17,869	117,287	\$68,436,425
<i>Pheasant</i>	169,113	1,087,507	\$324,434,025
<i>Other small game</i>	53,059	423,545	\$101,301,489
<i>Migratory bird</i>	35,244	295,496	\$95,682,426
Trapping ^a	3,233	61,427	\$1,849,732
Wildlife watching ^b	173,825	2,596,817	\$58,400,375
Boating ^b	58,972	476,154	\$97,050,940
Total	N/A	8,864,532	\$1,234,464,059

^aParticipation counts reflect hunters, anglers, and trappers over the age of 18 and holding a license that conveyed one or more of those privileges in 2016.

^bWildlife viewer and boater target participation reflect estimates based on data from the US Fish and Wildlife Service's National Survey of Fishing, Hunting, and wildlife-associated recreation as well as South Dakota's boat registration database.

^cSpending is updated to reflect 2021 dollar values.

Table 36. Annual participation and spending in 2021 by resident and nonresident anglers, hunters, trappers, wildlife viewers, and boaters in South Dakota

Activity	Participants	Days	Spending ^c
Fishing ^a	224,970	3,155,550	\$530,743,523
Hunting ^a	213,535	2,405,914	\$681,104,532
<i>Deer</i>	77,351	748,933	\$189,935,412
<i>Other big game</i>	27,311	194,268	\$53,789,391
<i>Pheasant</i>	123,648	797,693	\$252,344,713
<i>Other small game</i>	33,896	321,005	\$86,689,058
<i>Migratory bird</i>	48,840	344,016	\$98,345,959
Trapping ^a	3,911	84,712	\$2,691,958
Wildlife watching ^b	196,250	1,737,393	\$116,347,601
Boating ^b	60,556	536,535	\$91,520,381
Total	N/A	7,920,104	\$1,422,407,994

^aParticipation counts reflect hunters, anglers, and trappers over the age of 18 and holding a license that conveyed one or more of those privileges in 2021.

^bWildlife viewer and boater target participation reflect estimates based on data from the US Fish and Wildlife Service's National Survey of Fishing, Hunting, and wildlife-associated recreation as well as South Dakota's boat registration database.

^cSpending is updated to reflect 2021 dollar values.

Overall direct spending grew, despite declines for hunting and boating. The decline of spending associated with hunting is attributable to decreased spending by nonresident hunters. The decline of spending associated with boating is partly attributable to boaters devoting a larger proportion of boating time to angling. The overall increase in direct spending resulted in greater economic contributions experienced by the state in 2021.

Table 37. Annual contributions from fish, wildlife, and boating recreation in South Dakota by residents and nonresidents (2016 report)

	Jobs	Labor Income*	State GDP* (Value Added)	Tax Revenues*	
				Federal	State & Local
Fishing	3,032	\$110,465,760	\$178,891,668	\$25,966,109	\$19,208,877
Hunting	9,012	\$319,946,038	\$523,375,485	\$75,385,048	\$49,372,382
<i>Big game</i>	2,659	\$98,146,478	\$163,008,211	\$23,347,073	\$14,972,663
<i>Small game</i>	1,164	\$41,616,522	\$68,227,461	\$9,812,881	\$6,415,055
<i>Migratory birds</i>	1,059	\$38,497,256	\$63,639,552	\$9,110,596	\$5,821,589
<i>Pheasants</i>	4,130	\$141,685,781	\$228,500,260	\$33,114,498	\$22,163,075
Wildlife Viewing	636	\$23,113,319	\$35,833,572	\$5,212,018	\$3,629,121
Trapping	15	\$609,824	\$1,038,609	\$146,900	\$91,531
Boating	685	\$29,830,339	\$48,598,957	\$7,093,601	\$6,116,447
Total, all activities combined	13,380	\$483,965,279	\$787,738,291	\$113,803,677	\$78,418,357

*Monetary values are updated to reflect 2021 dollar values.

Table 38. Annual contributions in 2021 from fish, wildlife, and boating recreation in South Dakota by residents and nonresidents

	Jobs	Labor Income	State GDP (Value Added)	Tax Revenues	
				Federal	State & Local
Fishing	5,551	\$217,521,756	\$362,110,471	\$45,607,684	\$48,146,409
Hunting	6,673	\$262,204,046	\$435,270,891	\$54,886,927	\$53,625,765
<i>Deer</i>	1,493	\$60,538,554	\$101,282,031	\$12,703,906	\$12,869,501
<i>Other big game</i>	485	\$19,306,165	\$32,191,549	\$4,047,238	\$4,044,224
<i>Pheasants</i>	2,993	\$113,797,125	\$187,239,594	\$23,756,741	\$22,408,248
<i>Small game</i>	727	\$29,488,398	\$49,403,789	\$6,189,379	\$6,257,074
<i>Migratory birds</i>	974	\$39,073,803	\$65,153,927	\$8,189,663	\$8,046,719
Wildlife Viewing	1,397	\$51,528,393	\$85,181,020	\$10,797,316	\$12,101,298
Trapping	28	\$1,033,816	\$1,749,547	\$217,799	\$243,598
Boating	885	\$37,085,088	\$61,456,604	\$7,774,592	\$9,041,510
Total, all activities combined	14,534	\$569,373,100	\$945,768,532	\$119,284,319	\$123,158,581

Used and Online Item Purchasing

A portion of all equipment items purchased to support our outdoor recreational activities are attributable to online purchases or items in used condition. Through the 2021 study, we explored the rate at which those items are purchased within each activity and across targeted equipment types (Table 39). Activity specific items, such as firearms for hunters and rods & reels for anglers, are more likely to be purchase online or in used condition, relative to auxiliary or special equipment. Trappers are proportionally more apt to purchase items online, relative to all other groups, yet total online spending is greatest among hunters. Boaters are more apt to purchase used items and generate the greatest amount of spending on those items. In total, spending on these items ranges between 1% of wildlife viewer spending and 10% of boater spending.

The influence of each on economic contributions attributable to a particular activity and retained within the state is varied. When used items are bought and sold, the initial retail purchase generates the economic contributions associated with an activity. The further cycling of those funds received from the sale of the used item could flow toward the purchase of new activity specific items. Without detailed exploration, cycling of that spending is generally unknown. The economic contributions of online purchases are also generated at the initial sale however the location of where those contributions cycle can be unknown, particularly to the purchaser. Those detailed explorations were beyond the scope of this study.

A simplifying assumption, that dollars spent on used or online items continued to flow within the South Dakota economy, is applied for two reasons. First, no adjustment was applied in the 2016 methodology, beyond the leakage identified through the IMPLAN modeling, so also not directly applied in 2021. Second, the degree to which this assumption does not hold and what portion of the economic activity is lost from the state's economy is unknown at current.

Table 39. Online and Used Item Purchase Behavior

	Hunters		Trappers	Anglers		Boaters		Wildlife viewers	
	Residents	Non residents	Residents	Residents	Non residents	Residents	Non residents	Residents	Non residents
Online purchases*									
Activity specific equipment									
Proportion purchasing online items	14%	13%	16%	14%	14%	8%	8%	10%	13%
Proportion of spending on online items	46%	51%	64%	42%	48%	52%	59%	63%	60%
Total direct spending toward online items	\$6.16	\$2.23	\$0.09	\$3.21	\$1.08	\$1.86	\$0.12	\$0.30	\$0.26
Auxiliary equipment									
Proportion purchasing online items	10%	12%	2%	5%	4%	na	na	5%	8%
Proportion of spending on online items	46%	52%	46%	45%	49%	na	na	51%	47%
Total direct spending toward online items	\$1.88	\$0.79	\$0.00	\$0.50	\$0.30	na	na	\$0.12	\$0.11
Special equipment									
Proportion purchasing online items	1%	1%	0%	2%	2%	10%	9%	na	na
Proportion of spending on online items	50%	4810%	0%	50%	33%	50%	50%	na	na
Total direct spending toward online items	\$0.78	\$0.16	\$0.00	\$0.40	\$0.20	\$0.44	\$0.00	na	na
Used items purchases*									
Activity specific equipment									
Proportion purchasing used items	11%	6%	12%	11%	7%	21%	6%	7%	4%
Proportion of spending on used items	40%	36%	49%	38%	43%	61%	72%	41%	25%
Total direct spending toward used items	\$4.37	\$0.74	\$0.05	\$2.68	\$0.50	\$5.93	\$0.12	\$0.12	\$0.03
Auxiliary equipment									
Proportion purchasing used items	4%	3%	2%	4%	1%	na	na	5%	2%
Proportion of spending on used items	37%	34%	23%	42%	46%	na	na	33%	35%
Total direct spending toward used items	\$0.64	\$0.12	\$0.00	\$0.40	\$0.02	na	na	\$0.07	\$0.03
Special equipment									
Proportion purchasing used items	3%	1%	2%	3%	1%	12%	7%	na	na
Proportion of spending on used items	58%	47%	43%	52%	48%	44%	44%	na	na
Total direct spending toward used items	\$2.06	\$0.15	\$0.00	\$0.70	\$0.10	\$0.44	\$0.00	na	na

* Dollar values in Millions

Appendices

Appendix A: Economic Contributions per Hunter, Angler, Trapper, Boater, and Wildlife Viewer

Appendix B: Sample size by activity, species, and residency

Appendix C: Detailed spending results by activity, species, and residency

Appendix D: Online survey questionnaire

Appendix A: Economic Contributions per Hunter, Angler, Trapper, Boater, and Wildlife Viewer

Tables A1 and A2 present estimated annual spending and impacts per participant in fishing, hunting, wildlife viewing, trapping and boating. These estimates can be used to estimate economic contributions attributable to wildlife management plans when it is known how the plans will change participation in these particular activities. Table A1 reports average spending based on both resident and nonresident participants. Table A2 reports average spending based on nonresident participants only.

Table A 1. Economic contributions per hunter, angler, trapper, boater, and wildlife viewer (both residents and nonresidents)

Economic contributions	Fishing	Hunting	Wildlife Viewing	Trapping	Boating
Direct spending	\$2,359	\$3,190	\$688	\$593	\$1,511
Jobs (per 100 participants)	2.5	3.1	0.7	0.7	1.5
Labor Income	\$967	\$1,228	\$264	\$263	\$612
State GDP "Value Added"	\$1,610	\$2,038	\$447	\$434	\$1,015
Tax Revenues					
Federal	\$203	\$257	\$56	\$55	\$128
State & local	\$214	\$251	\$62	\$62	\$149

Table A 2. Economic contributions per nonresident hunter, angler, boater, and wildlife viewer

	Fishing	Hunting	Trapping	Wildlife Viewing	Boating
Direct spending	\$1,641	\$2,071	N/A	\$552	\$1,206
Jobs (per 100 participants)	1.8	2.1	N/A	0.7	1.2
Labor Income	\$694	\$775	N/A	\$244	\$509
State GDP "Value Added"	\$1,137	\$1,259	N/A	\$409	\$836
Tax Revenues					
Federal	\$145	\$161	N/A	\$51	\$106
State & local	\$138	\$146	N/A	\$56	\$113

Appendix B: Sample size by activity, species, and residency

Table A 3. Target population and survey respondent sample size

	Residents		Nonresidents	
	Target population	Count of respondents	Target population	Count of respondents
All license holders^a	168,722	5,721	192,953	6,476
Hunters	101,317	4,250	112,218	4,647
<i>Big game</i>	59,518	2,600	21,910	805
<i>Small game</i>	16,401	2,348	75,537	3,383
<i>Migratory bird</i>	21,730	862	5,510	1,014
Anglers	139,925	4,434	85,045	2,062
Trappers	3,911	673	63	na
Wildlife viewers^b	92,353	1,844	103,897	396
Boaters^b	56,023	1,799	2,949	257

^aTarget population counts reflect hunters, anglers, and trappers over the age of 18 and holding a license that conveyed one or more of those privileges in 2021.

^bWildlife viewer and boater target populations reflect estimates based on data from the US Fish and Wildlife Service's National Survey of Fishing, Hunting, and wildlife-associated recreation as well as South Dakota's boat registration database.

Appendix C: Detailed spending results by activity, species, and residency

Table A 4. Average licensed hunter equipment spending by residency: Spending hunters only

	Residents		Nonresidents	
	Mean	Std. error	Mean	Std. error
Hunting equipment				
Firearms	\$561.20	\$20.29	\$153.58	\$12.25
Bows, etc.	\$159.34	\$7.81	\$32.97	\$4.06
Ammunition	\$267.26	\$7.42	\$123.55	\$4.46
Sights	\$161.55	\$9.45	\$18.05	\$3.75
Decoys	\$44.00	\$2.83	\$14.12	\$1.61
Hunting dogs	\$196.01	\$11.63	\$86.90	\$7.76
Other	\$189.91	\$9.36	\$121.05	\$6.62
Total count of spenders	2,769		2,507	
Auxiliary equipment				
Camping equipment	\$88.87	\$6.54	\$17.38	\$2.48
Binoculars	\$195.20	\$10.21	\$42.33	\$6.01
Clothing and footwear	\$288.62	\$9.28	\$164.45	\$8.34
Animal processing and taxidermy	\$265.08	\$12.57	\$106.43	\$8.15
Total count of spenders	2,064		1,670	
Special Equipment				
Cabins	\$183.75	\$19.20	\$728.46	\$2.83
Motorized vehicle	\$5,703.95	\$451.65	\$374.15	\$77.24
Boats	\$1,975.09	\$288.39	\$109.26	\$36.30
Total count of spenders	679		1,305	
Other Expenditures				
Licenses	\$140.69	\$2.45	\$206.09	\$2.59
Magazines	\$12.35	\$0.78	\$3.58	\$0.32
Memberships	\$33.98	\$2.81	\$12.35	\$1.98
Land leasing	\$380.58	\$57.44	\$260.72	\$32.95
Total count of spenders	3,008		4,000	

Table A 5. Average licensed hunter trip spending by species and residency: Spending hunters only

	Residents		Nonresidents	
	Mean	Std. error	Mean	Std. error
Deer hunters				
Groceries	\$100.73	\$3.25	\$178.21	\$7.21
Restaurants	\$54.51	\$2.34	\$119.27	\$5.02
Overnight accommodations	\$59.19	\$3.77	\$178.94	\$11.91
Fuel	\$191.29	\$4.98	\$245.97	\$8.28
Transportation	\$0.93	\$0.41	\$11.38	\$3.00
Guides	\$4.55	\$1.89	\$170.53	\$26.87
Heating/cooking fuel	\$4.05	\$0.37	\$4.25	\$0.71
Souvenirs	\$1.96	\$0.29	\$10.12	\$1.27
Total count of spenders	1,557		493	
Other big game hunters				
Groceries	\$120.88	\$5.71	\$140.78	\$9.19
Restaurants	\$67.96	\$4.51	\$101.80	\$6.85
Overnight accommodations	\$88.10	\$7.07	\$227.35	\$19.02
Fuel	\$224.83	\$8.85	\$202.40	\$11.75
Transportation	\$1.96	\$1.09	\$9.31	\$4.18
Guides	\$11.26	\$3.65	\$188.32	\$31.97
Heating/cooking fuel	\$5.26	\$0.73	\$2.16	\$0.58
Souvenirs	\$2.83	\$0.61	\$14.01	\$2.07
Total count of spenders	567		218	
Pheasant hunters				
Groceries	\$87.25	\$3.71	\$151.33	\$3.21
Restaurants	\$61.92	\$3.45	\$171.73	\$3.73
Overnight accommodations	\$48.32	\$4.30	\$374.52	\$9.41
Fuel	\$154.01	\$4.69	\$189.56	\$3.42
Transportation	\$1.23	\$0.60	\$14.94	\$1.61
Guides	\$25.83	\$4.67	\$284.92	\$12.66
Heating/cooking fuel	\$2.31	\$0.34	\$1.32	\$0.19
Souvenirs	\$3.37	\$0.50	\$19.44	\$0.09
Total count of spenders	1,313		2,227	

Average licensed hunter trip spending by species and residency (cont.)

	Residents		Nonresidents	
	Mean	Std. error	Mean	Std. error
Other small game hunters				
Groceries	\$92.01	\$6.94	\$158.49	\$11.78
Restaurants	\$55.90	\$4.59	\$147.21	\$8.20
Overnight accommodations	\$46.64	\$6.35	\$287.95	\$16.75
Fuel	\$167.77	\$8.06	\$223.71	\$10.48
Transportation	\$1.95	\$1.21	\$4.98	\$2.61
Guides	\$3.74	\$1.79	\$28.90	\$6.06
Heating/cooking fuel	\$1.35	\$0.31	\$1.05	\$0.38
Souvenirs	\$1.83	\$0.58	\$22.88	\$2.98
Total count of spenders	501		281	
Migratory bird spending				
Groceries	\$69.70	\$5.04	\$155.92	\$5.20
Restaurants	\$49.17	\$4.18	\$129.43	\$4.40
Overnight accommodations	\$35.49	\$5.97	\$303.84	\$14.06
Fuel	\$188.77	\$10.15	\$228.95	\$6.76
Transportation	\$0.48	\$0.38	\$8.60	\$2.20
Guides	\$10.64	\$3.55	\$66.61	\$7.34
Heating/cooking fuel	\$2.71	\$0.55	\$2.61	\$0.49
Souvenirs	\$1.84	\$0.59	\$19.60	\$1.32
Total count of spenders	557		726	

Table A 6. Average licensed trapper equipment and trip spending: Spending resident trappers only

	Residents	
	Mean	Std. error
Trapping equipment		
Traps, snares	\$114.66	\$6.91
Traps, snares parts	\$22.35	\$2.32
Lures	\$40.82	\$2.88
Bedding	\$5.69	\$0.95
Firearms	\$114.78	\$15.20
Ammunition	\$81.23	\$7.97
Handling equipment	\$17.15	\$2.17
Other	\$11.55	\$1.38
Total count of spenders	433	
Auxiliary equipment		
Camping equipment	\$9.92	\$2.68
Binoculars	\$139.54	\$26.00
Clothing and footwear	\$108.22	\$13.42
Pack-baskets	\$26.32	\$5.88
Animal processing and taxidermy	\$304.05	\$36.04
Total count of spenders	175	
Special Equipment		
Cabins	\$9.07	\$4.45
Motorized vehicle	\$450.47	\$71.74
Total count of spenders	39	
Other Expenditures		
Licenses	\$95.88	\$16.57
Magazines	\$7.94	\$1.09
Memberships	\$6.85	\$0.99
Land leasing	\$19.51	\$5.95
Total count of spenders	401	
Trip spending		
Groceries	\$22.25	\$2.84
Restaurants	\$20.83	\$3.98
Overnight accommodations	\$4.13	\$1.46
Fuel	\$198.70	\$12.91
Heating/cooking fuel	\$2.19	\$0.70
Souvenirs	\$1.08	\$0.46
Total count of spenders	306	

Table A 7. Average licensed angler equipment and trip spending by residency: Spending anglers only

	Residents		Nonresidents	
	Mean	Std. error	Mean	Std. error
Fishing equipment				
Rods, reels, poles	\$138.50	\$4.76	\$60.77	\$4.12
Lines	\$28.38	\$0.75	\$14.03	\$0.79
Lures	\$88.49	\$1.90	\$68.41	\$2.16
Hooks	\$25.30	\$0.71	\$13.62	\$0.73
Fish finders	\$163.71	\$9.37	\$77.19	\$9.90
Tackle boxes	\$14.71	\$0.65	\$5.66	\$0.63
Creels	\$7.63	\$0.48	\$2.53	\$0.37
Ice fishing	\$86.86	\$4.18	\$37.00	\$3.58
Other	\$31.07	\$2.08	\$18.07	\$1.68
Total count of spenders	2,954		1,505	
Auxiliary equipment				
Camping equipment	\$99.18	\$6.61	\$57.46	\$8.44
Binoculars	\$70.96	\$4.93	\$23.20	\$4.24
Clothing and footwear	\$159.25	\$5.07	\$129.39	\$6.64
Animal processing and taxidermy	\$119.91	\$8.03	\$61.01	\$8.81
Total count of spenders	1,497		523	
Special Equipment				
Cabins	\$185.54	\$14.58	\$550.50	\$23.44
Motorized vehicle	\$1,621.80	\$154.88	\$155.59	\$46.11
Ice houses	\$202.61	\$22.33	\$64.51	\$15.28
Sleds	\$24.80	\$3.36	\$12.51	\$3.99
Total count of spenders	735		626	
Other Expenditures				
Licenses	\$77.33	\$1.25	\$103.43	\$1.78
Magazines	\$4.05	\$0.28	\$1.45	\$0.21
Memberships	\$6.65	\$0.47	\$1.95	\$0.30
Land leasing	\$20.94	\$3.70	\$21.42	\$4.66
Total count of spenders	2,944		1,784	
Trip spending				
Groceries	\$121.63	\$3.34	\$149.00	\$4.22
Restaurants	\$60.65	\$2.01	\$127.75	\$3.10
Overnight accommodations	\$82.74	\$3.42	\$236.95	\$6.92
Fuel	\$193.65	\$4.33	\$203.32	\$4.75
Guides	\$7.95	\$1.07	\$41.67	\$3.22
Heating/cooking fuel	\$7.74	\$4.00	\$3.43	\$3.50
Souvenirs	\$3.56	\$0.31	\$9.57	\$0.62
Total count of spenders	2,669		1,668	

Table A 8. Average wildlife viewer equipment and trip spending by residency: Spending wildlife viewers only

	Residents		Nonresidents	
	Mean	Std. error	Mean	Std. error
Wildlife viewing equipment				
Binoculars	\$29.92	\$2.68	\$31.40	\$6.64
Cameras	\$6.10	\$0.86	\$4.23	\$1.72
Packbaskets	\$9.64	\$0.97	\$11.26	\$2.76
Animal feed	\$13.93	\$1.19	\$5.55	\$1.61
Clothing and footwear	\$57.63	\$3.04	\$73.16	\$6.95
Total count of spenders	757		121	
Other Expenditures				
Camping equipment	\$15.59	\$1.79	\$15.49	\$3.62
Magazines	\$11.55	\$0.99	\$8.65	\$1.79
Memberships	\$38.80	\$1.39	\$38.65	\$2.70
Plantings	\$71.71	\$5.72	\$16.49	\$5.78
Total count of spenders	678		173	
Trip spending				
Groceries	\$48.83	\$1.96	\$81.76	\$4.43
Restaurants	\$37.91	\$1.96	\$75.85	\$5.04
Overnight accommodations	\$51.20	\$3.72	\$121.02	\$10.98
Fuel	\$112.05	\$3.15	\$140.21	\$6.38
Guides	\$0.51	\$0.21	\$1.81	\$0.64
Heating/cooking fuel	\$2.81	\$0.32	\$2.34	\$0.54
Souvenirs	\$7.56	\$0.76	\$19.56	\$2.01
Total count of spenders	938		256	

Table A 9. Average boater equipment and trip spending by residency: Spending boaters only

	Residents		Nonresidents	
	Mean	Std. error	Mean	Std. error
Boating expenditures				
Boats	\$1,345.61	\$146.66	\$3,715.83	\$970.62
Boat trailers	\$179.37	\$24.98	\$257.69	\$94.52
Motors	\$145.96	\$16.87	\$208.15	\$76.14
Electronics	\$280.52	\$23.05	\$259.63	\$70.25
Accessories	\$75.81	\$4.76	\$55.28	\$14.07
Other	\$105.96	\$7.82	\$103.24	\$23.02
Total count of spenders	755		68	
Other Expenditures				
Storage	\$132.13	\$9.95	\$77.09	\$19.06
Coolers	\$37.63	\$2.59	\$18.67	\$4.00
Life jackets	\$48.55	\$2.25	\$7.36	\$2.50
Clothing	\$60.03	\$3.62	\$36.52	\$7.18
Magazines	\$3.26	\$0.48	\$2.25	\$1.19
Memberships	\$7.64	\$0.77	\$8.44	\$2.47
Land leasing	\$56.50	\$11.59	\$96.01	\$38.90
Total count of spenders	858		104	
Trip spending				
Groceries	\$125.04	\$5.52	\$153.38	\$16.01
Restaurants	\$57.57	\$3.27	\$96.41	\$9.82
Overnight accommodations	\$43.01	\$3.39	\$81.78	\$11.32
Fuel	\$173.05	\$6.56	\$157.20	\$13.44
Heating/cooking fuel	\$4.08	\$0.48	\$4.47	\$1.49
Souvenirs	\$3.95	\$0.52	\$6.21	\$1.57
Total count of spenders	1,096		162	

Appendix D: Online Survey Questionnaire



The South Dakota Game, Fish and Parks is conducting this survey to better understand the economic contributions of the sportsmen and women who hunt, fish, trap, boat, wildlife view and recreate in South Dakota's great outdoors. Your responses will be strictly confidential and will not be shared with anyone outside of the research team.

Thank you for your participation!

Q2 Please indicate which of the following activities you did in South Dakota **during the past 12 months**. (Please check all that apply.)

- Hunting (1)
- Fishing (2)
- Trapping (3)
- Wildlife viewing (intentionally observing wildlife or improving and maintaining wildlife habitat for the purposes of viewing.) (4)
- Boating for non-fishing recreation (including power boats, jet skis/personal watercraft, sail boats, rowboats, canoes, kayaks, etc.) (5)
- ☒ None of the above (6)

Skip To: End of Survey If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = None of the above

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 months. (Please check all that apply.) q://QID1/SelectedChoicesCount Is Greater Than 3

Q3 The next few questions will ask about your participation and spending during the last 12 months related to your selected activities. If you selected more than three, we will ask you about only three of those activities.

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 months. (Please check all that apply.) q://QID1/SelectedChoicesCount Is Less Than or Equal to 3

Q4 The next few questions will ask about your participation and spending during the last 12 months related to your selected activities.

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Hunting

Q5 Which of the following species did you HUNT in South Dakota during the past 12 months? (Please check all that apply.)

- Deer (1)
- Other Big Game (antelope, elk, bighorn sheep, mountain goat, mountain lion, or turkey) (2)
- Pheasant (3)
- Other Small Game (partridge, squirrel, rabbit, grouse, quail) (4)
- Migratory Birds (mourning dove, waterfowl, sandhill crane, common snipe) (5)

Display This Question:

If Which of the following species did you HUNT in South Dakota during the past 12 months? (Please ch... = Deer

Q6 Please tell us the number of **recreational days** you hunted **DEER** in each region of the state during the past 12 months. (A trip lasting less than one full day can be counted as one day. If you hunted in multiple regions on the same day, please record that day in the region where you spent the majority of time.)

	Days hunting DEER (1)
Black Hills (1)	
West River (2)	
East River (3)	

Display This Question:

If Which of the following species did you HUNT in South Dakota during the past 12 months? (Please ch... = Other Big Game (antelope, elk, bighorn sheep, mountain goat, mountain lion, or turkey)

Q7 Please tell us the number of **recreational days** you hunted **OTHER BIG GAME** in each region of the state during the past 12 months. (A trip lasting less than one full day can be counted as one day. If you hunted in multiple regions on the same day, please record that day in the region where you spent the majority of time.)

	Days hunting OTHER BIG GAME (1)
Black Hills (1)	
West River (2)	
East River (3)	

Display This Question:

If Which of the following species did you HUNT in South Dakota during the past 12 months? (Please ch... = Pheasant

Q8 Please tell us the number of **recreational days** you hunted **PHEASANT** in each region of the state during the past 12 months. (A trip lasting less than one full day can be counted as one day. If you hunted in multiple regions on the same day, please record that day in the region where you spent the majority of time.)

	Days hunting PHEASANT (1)
West River (2)	
East River (3)	

Display This Question:

If Which of the following species did you HUNT in South Dakota during the past 12 months? (Please ch... = Other Small Game (partridge, squirrel, rabbit, grouse, quail)

Q9 Please tell us the number of **recreational days** you hunted **OTHER SMALL GAME** in each region of the state during the past 12 months. (A trip lasting less than one full day can be counted as one day. If you hunted in multiple regions on the same day, please record that day in the region where you spent the majority of time.)

	Days hunting OTHER SMALL GAME (1)
Black Hills (1)	
West River (2)	
East River (3)	

Display This Question:

If Which of the following species did you HUNT in South Dakota during the past 12 months? (Please ch... = Migratory Birds (mourning dove, waterfowl, sandhill crane, common snipe)

Q10 Please tell us the number of **recreational days** you hunted **MIGRATORY BIRDS** in each region of the state during the past 12 months. (A trip lasting less than one full day can be counted as one day. If you hunted in multiple regions on the same day, please record that day in the region where you spent the majority of time.)

	Days hunting MIGRATORY BIRDS (1)
Black Hills (1)	
West River (2)	
East River (3)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Hunting

Q11 Please tell us how much you **spent in the past 12 months** on the following **equipment and accessories** for **ALL HUNTING** activities that you did in South Dakota. Only include items purchased in South Dakota and report amounts in US dollars. Some items can be used for multiple purposes. Please report spending only for items that were used **primarily** for **recreational hunting** activities in South Dakota within the past 12 months. Include any amount that you also spent for children under age 18 who live in your home.

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Hunting

Q12 Hunting equipment purchased in South Dakota primarily for all hunting

	Amount spent in the last 12 months (\$) (1)
Firearms (rifles, shotguns, handguns) (1)	
Bows, arrows, archery, equipment (2)	
Ammunition (3)	
Telescopic sights (4)	
Decoys or game calls (5)	
Hunting dogs and associated costs (6)	
Other hunting equipment (7)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Hunting

Q13 Auxiliary equipment purchased in South Dakota primarily for all hunting

	Amount spent in the last 12 months (\$) (1)
Camping equipment (1)	
Binoculars, field glasses, telescopes, etc. (2)	
Clothing and footwear for hunting (3)	
Animal processing and taxidermy (4)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Hunting

Q14 Special equipment purchased in South Dakota primarily for all hunting

	Amount spent in the last 12 months (\$) (1)
Cabins (1)	
Motorized vehicles (pickups, 4x4s, ATVs, snowmobiles, RVs, etc.) (2)	
Boats (motorized or non-motorized), boat trailers, boat motors (3)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Hunting

Q15 Other expenditures in South Dakota primarily for all hunting

	Amount spent in the last 12 months (\$) (1)
Licenses, stamps, tags, and permits (4)	
Magazines, books, DVDs, phone apps, other information technology (1)	
Membership dues and contributions (2)	
Land leasing and ownership (3)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Hunting

Q16 Did any proportion of your spending on hunting-related items in the following categories go toward the purchase of **used items**? If so, what types of items were purchased used?

- ☒ I purchased only new hunting equipment (4)
- Hunting equipment (firearms, ammunition, sights, decoys, calls, bows, archery equipment, etc.) (1)
- Auxiliary equipment for hunting (camping equipment, binoculars, field glasses, clothing, footwear, etc.) (2)
- Special equipment for hunting (motorized vehicles, boats, trailers, etc.) (3)

Display This Question:

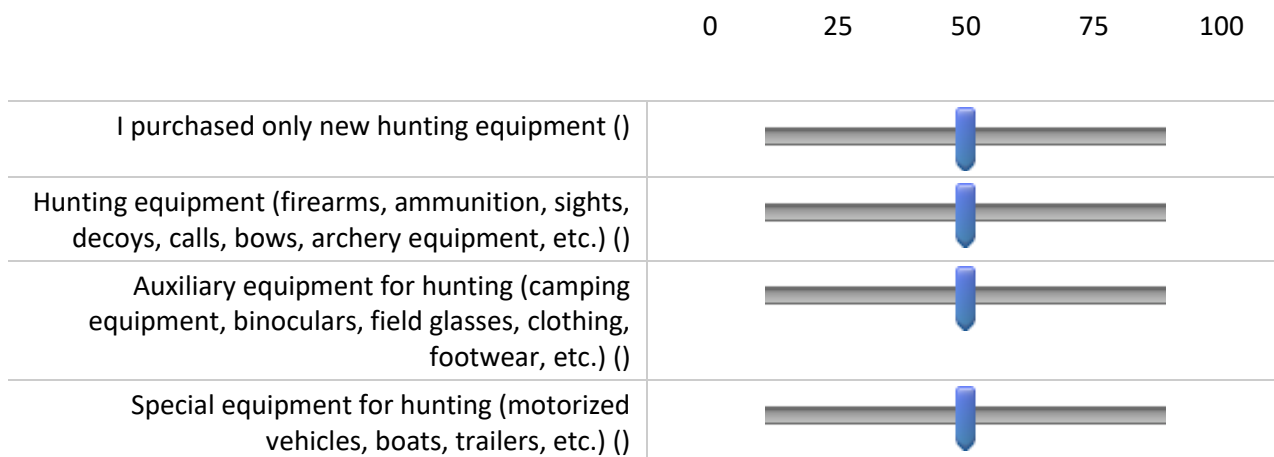
If Did any proportion of your spending on hunting-related items in the following categories go toward... != I purchased only new hunting equipment

Carry Forward Selected Choices from "Did any proportion of your spending on hunting-related items in the following categories go toward the purchase of used items? If so, what types of items were purchased used?"

X→

Q17 What proportion of your annual hunting-related spending in each category went toward the purchase of **used items**?

Percent of spending on USED items



Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Hunting

Q18 Were any of your hunting-related purchases in the following categories made through an **online-only retailer or an internet marketplace** (Amazon, eBay, etc.)? If so, for which categories were those purchases made?

- ☒ I didn't purchase any hunting items through an online-retailer (4)
- Hunting equipment (firearms, ammunition, sights, decoys, calls, bows, archery equipment, etc.) (1)
- Auxiliary equipment for hunting (camping equipment, binoculars, field glasses, clothing, footwear, etc.) (2)
- Special equipment for hunting (motorized vehicles, boats, trailers, etc.) (3)

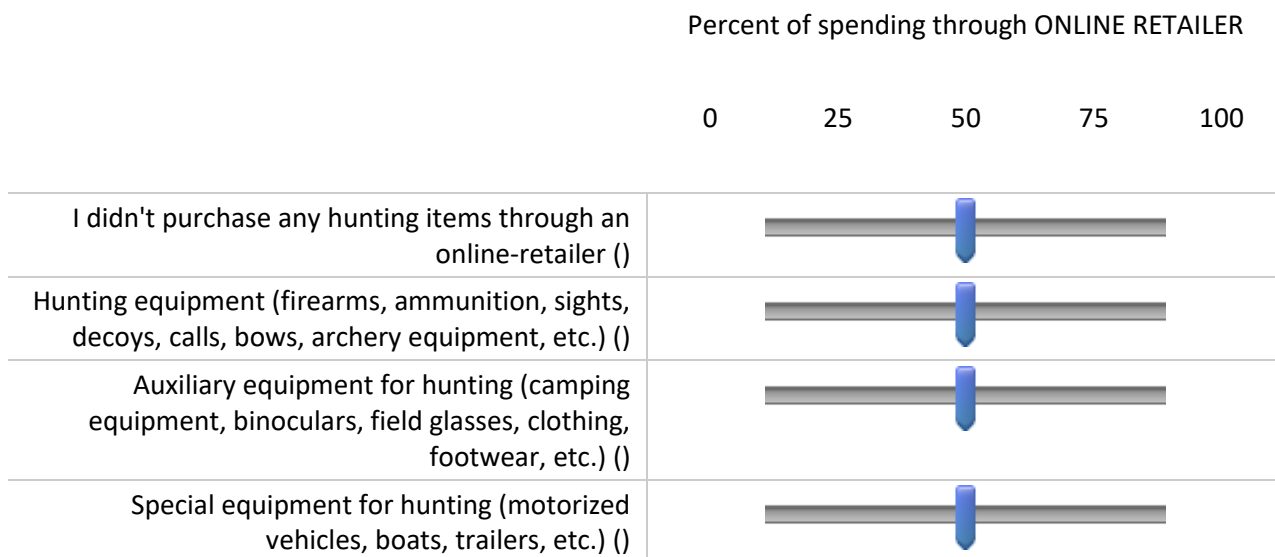
Display This Question:

If Were any of your hunting-related purchases in the following categories made through an online-onl... != I didn't purchase any hunting items through an online-retailer

Carry Forward Selected Choices from "Were any of your hunting-related purchases in the following categories made through an online-only retailer or an internet marketplace (Amazon, eBay, etc.)? If so, for which categories were those purchases made?"

X→

Q19 What proportion of your annual hunting-related spending in each category went toward the purchase of items through an **online-only retailer or an internet marketplace** (Amazon, eBay, etc.)?



Display This Question:

If If Which of the following species did you HUNT in South Dakota during the past 12 months? (Please ch... q://QID2/SelectedChoicesCount Is Greater Than 3

Q20 The next few questions will ask about your spending during a **typical recreational hunting trip** for the species you selected. If you pursued more than two, we will ask about a few of those chosen.

Display This Question:

If If Which of the following species did you HUNT in South Dakota during the past 12 months? (Please ch...
 q://QID2/SelectedChoicesCount Is Less Than or Equal to 3

Q21 The next few questions will ask about your spending during a **typical recreational hunting trip** for the species you selected.

Display This Question:

If Which of the following species did you HUNT in South Dakota during the past 12 months? (Please ch... = Deer

Q22 Thinking about a **typical recreational trip** you took **primarily** to go hunting for **DEER** in South Dakota during the past 12 months, please tell us how much you spent on each of the following items. Please include items purchased only in South Dakota and report amounts in US dollars.

	Amount spent during the trip (\$) (1)
Groceries, food, liquor bought in stores (not in restaurants and bars) (1)	
Restaurants, bars, and take-out food purchases (2)	
Overnight accommodations (hotels/motels, B&Bs, campgrounds, cabin rental, etc.) (3)	
Fuel for your car, truck, boat, airplane, ATV, and other transportation (4)	
Transportation services (air transport, taxi, boat ferries, shuttle vans, etc.) (5)	
Guide fees, pack trip, or package fees (6)	
Equipment rental (7)	
Heating and cooking fuel (8)	
Souvenirs, gifts, other miscellaneous (9)	

Display This Question:

If Which of the following species did you HUNT in South Dakota during the past 12 months? (Please ch... = Deer

Q23 How many days long is a **typical recreational trip** when hunting **DEER** is the **primary** purpose? (A trip lasting less than one full day can be counted as one day.)

Display This Question:

If Which of the following species did you HUNT in South Dakota during the past 12 months? (Please ch... = Other Big Game (antelope, elk, bighorn sheep, mountain goat, mountain lion, or turkey)

Q24 Thinking about a **typical recreational trip** you took **primarily** to go hunting for **OTHER BIG GAME** in South Dakota during the past 12 months, please tell us how much you spent on each of the following items. Please include items purchased only in South Dakota and report amounts in US dollars.

	Amount spent during the trip (\$) (1)
Groceries, food, liquor bought in stores (not in restaurants and bars) (1)	
Restaurants, bars, and take-out food purchases (2)	
Overnight accommodations (hotels/motels, B&Bs, campgrounds, cabin rental, etc.) (3)	
Fuel for your car, truck, boat, airplane, ATV, and other transportation (4)	
Transportation services (air transport, taxi, boat ferries, shuttle vans, etc.) (5)	
Guide fees, pack trip, or package fees (6)	
Equipment rental (7)	
Heating and cooking fuel (8)	
Souvenirs, gifts, other miscellaneous (9)	

Display This Question:

If Which of the following species did you HUNT in South Dakota during the past 12 months? (Please ch... = Other Big Game (antelope, elk, bighorn sheep, mountain goat, mountain lion, or turkey)

Q25 How many days long is a **typical recreational trip** when hunting **OTHER BIG GAME** is the **primary** purpose? (A trip lasting less than one full day can be counted as one day.)

Display This Question:

If Which of the following species did you HUNT in South Dakota during the past 12 months? (Please ch... = Pheasant

Q26 Thinking about a **typical recreational trip** you took **primarily** to go **PHEASANT** hunting in South Dakota during the past 12 months, please tell us how much you spent on each of the following items. Please include items purchased only in South Dakota and report amounts in US dollars.

	Amount spent during the trip (\$) (1)
Groceries, food, liquor bought in stores (not in restaurants and bars) (1)	
Restaurants, bars, and take-out food purchases (2)	
Overnight accommodations (hotels/motels, B&Bs, campgrounds, cabin rental, etc.) (3)	
Fuel for your car, truck, boat, airplane, ATV, and other transportation (4)	
Transportation services (air transport, taxi, boat ferries, shuttle vans, etc.) (5)	
Guide fees, pack trip, or package fees (6)	
Equipment rental (7)	
Heating and cooking fuel (8)	
Souvenirs, gifts, other miscellaneous (9)	

Display This Question:

If Which of the following species did you HUNT in South Dakota during the past 12 months? (Please ch... = Pheasant

Q27 How many days long is a **typical recreational trip** when hunting **PHEASANT** is the **primary** purpose? (A trip lasting less than one full day can be counted as one day.)

Display This Question:

If Which of the following species did you HUNT in South Dakota during the past 12 months? (Please ch... = Other Small Game (partridge, squirrel, rabbit, grouse, quail))

Q28 Thinking about a **typical recreational trip** that you took **primarily** to go hunting for **OTHER SMALL GAME** in South Dakota during the past 12 months, please tell us how much you spent on each of the following items. Please include items purchased only in South Dakota and report amounts in US dollars.

	Amount spent during the trip (\$) (1)
Groceries, food, liquor bought in stores (not in restaurants and bars) (1)	
Restaurants, bars, and take-out food purchases (2)	
Overnight accommodations (hotels/motels, B&Bs, campgrounds, cabin rental, etc.) (3)	
Fuel for your car, truck, boat, airplane, ATV, and other transportation (4)	
Transportation services (air transport, taxi, boat ferries, shuttle vans, etc.) (5)	
Guide fees, pack trip, or package fees (6)	
Equipment rental (7)	
Heating and cooking fuel (8)	
Souvenirs, gifts, other miscellaneous (9)	

Display This Question:

If Which of the following species did you HUNT in South Dakota during the past 12 months? (Please ch... = Other Small Game (partridge, squirrel, rabbit, grouse, quail))

Q29 How many days long is a **typical recreational trip** when hunting **OTHER SMALL GAME** is the **primary** purpose? (A trip lasting less than one full day can be counted as one day.)

Display This Question:

If Which of the following species did you HUNT in South Dakota during the past 12 months? (Please ch... = Migratory Birds (mourning dove, waterfowl, sandhill crane, common snipe))

Q30 Thinking about a **typical recreational trip** that you took **primarily** to go hunting for **MIGRATORY BIRDS** in South Dakota during the past 12 months, please tell us how much you spent on each of the following items. Please include items purchased only in South Dakota and report amounts in US dollars.

	Amount spent during the trip (\$) (1)
Groceries, food, liquor bought in stores (not in restaurants and bars) (1)	
Restaurants, bars, and take-out food purchases (2)	
Overnight accommodations (hotels/motels, B&Bs, campgrounds, cabin rental, etc.) (3)	
Fuel for your car, truck, boat, airplane, ATV, and other transportation (4)	
Transportation services (air transport, taxi, boat ferries, shuttle vans, etc.) (5)	
Guide fees, pack trip, or package fees (6)	
Equipment rental (7)	
Heating and cooking fuel (8)	
Souvenirs, gifts, other miscellaneous (9)	

Display This Question:

If Which of the following species did you HUNT in South Dakota during the past 12 months? (Please ch... = Migratory Birds (mourning dove, waterfowl, sandhill crane, common snipe)

Q31 How many days long is a **typical recreational trip** when hunting **MIGRATORY BIRDS** is the **primary** purpose? (A trip lasting less than one full day can be counted as one day.)

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Trapping

Q32 Please tell us the number of **recreational days** you spent TRAPPING in each region of the state during the past 12 months. (A trip lasting less than one full day can be counted as one day. If you spent time trapping in multiple regions on the same day, please record that day in the region where you spent the majority of time.)

	Days TRAPPING (1)
Black Hills (1)	
West River (2)	
East River (3)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Trapping

Q33 Please tell us how much you **spent in the past 12 months** on the following **equipment and accessories** for **ALL TRAPPING** activities that took place in South Dakota. Only include items that you purchased in South Dakota and report amounts in US dollars. Some items can be used for multiple purposes. Please report

spending only for items that were used **primarily** for **recreational trapping** activities in South Dakota within the past 12 months. Include any amount that you also spent for children under age 18 who live in your home.

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Trapping

Q34 Trapping equipment purchased in South Dakota primarily for trapping

	Amount spent in the last 12 months (\$) (1)
Traps, snares, etc (1)	
Trap or snare parts, accessories, and tools (2)	
Lures and bait (3)	
Bedding, sifters, covers (4)	
Firearms and knives (5)	
Ammunition (6)	
Animal and fur handling equipment (7)	
Other trapping equipment (8)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Trapping

Q35 Auxiliary equipment purchased in South Dakota primarily for trapping

	Amount spent in the last 12 months (\$) (1)
Camping equipment (1)	
Binoculars, field glasses, telescopes, etc. (2)	
Clothing and footwear for trapping (3)	
Pack-baskets, packs, and pouches (4)	
Animal processing and taxidermy (5)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Trapping

Q36 Special equipment purchased in South Dakota primarily for trapping

	Amount spent in the last 12 months (\$) (1)
Cabins (1)	
Motorized vehicles (pickups, 4x4s, ATVs, snowmobiles, RVs, etc.) (2)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Trapping

Q37 Other expenditures in South Dakota primarily for trapping

	Amount spent in the last 12 months (\$) (1)
Licenses, stamps, tags, and permits (4)	
Magazines, books, DVDs, phone apps, other information technology (1)	
Membership dues and contributions (2)	
Land leasing and ownership (3)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Trapping

Q38 Did any proportion of your trapping-related spending in the following categories go toward the purchase of **used items**? If so, what types of items were purchased used?

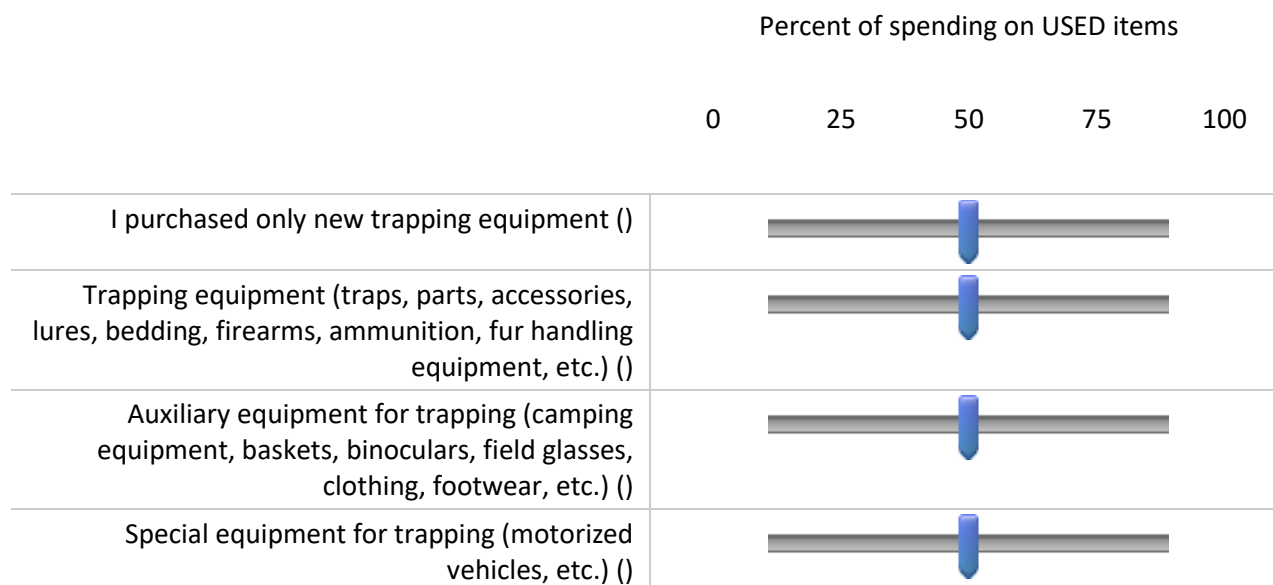
- ☒ I purchased only new trapping equipment (4)
- Trapping equipment (traps, parts, accessories, lures, bedding, firearms, ammunition, fur handling equipment, etc.) (1)
- Auxiliary equipment for trapping (camping equipment, baskets, binoculars, field glasses, clothing, footwear, etc.) (2)
- Special equipment for trapping (motorized vehicles, etc.) (3)

Display This Question:

If Did any proportion of your trapping-related spending in the following categories go toward the pu... != I purchased only new trapping equipment

Carry Forward Selected Choices from "Did any proportion of your trapping-related spending in the following categories go toward the purchase of used items? If so, what types of items were purchased used?"

Q39 What proportion of your annual trapping-related spending in each category went toward the purchase of **used items**?



Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Trapping

Q40 Were any of your purchases in the following categories made through an **online-only retailer or an internet marketplace** (Amazon, eBay, etc.)? If so, for which categories were those purchases made?

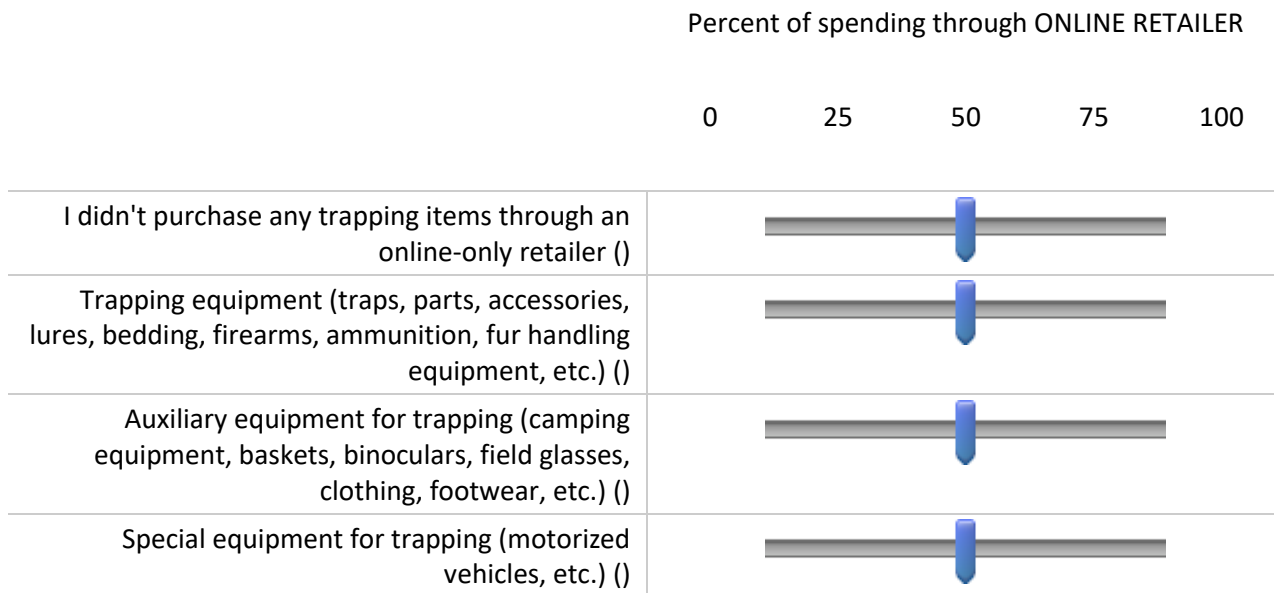
- ☒ I didn't purchase any trapping items through an online-only retailer (4)
- Trapping equipment (traps, parts, accessories, lures, bedding, firearms, ammunition, fur handling equipment, etc.) (1)
- Auxiliary equipment for trapping (camping equipment, baskets, binoculars, field glasses, clothing, footwear, etc.) (2)
- Special equipment for trapping (motorized vehicles, etc.) (3)

Display This Question:

If Were any of your purchases in the following categories made through an online-only retailer or an... != I didn't purchase any trapping items through an online-only retailer

Carry Forward Selected Choices from "Were any of your purchases in the following categories made through an online-only retailer or an internet marketplace (Amazon, eBay, etc.)? If so, for which categories were those purchases made?"

Q41 What proportion of your annual trapping-related spending in each category went toward the purchase of items through an **online-only retailer or an internet marketplace** (Amazon, eBay, etc.)?



Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Trapping

Q42 Thinking about a **typical recreational trip** that you took **primarily** to spend time **TRAPPING** in South Dakota during the past 12 months, please tell us how much you spent on each of the following items. Please include items purchased only in South Dakota and report amounts in US dollars.

	Amount spent during the trip (\$) (1)
Groceries, food, liquor bought in stores (not in restaurants and bars) (1)	
Restaurants, bars, and take-out food purchases (2)	
Overnight accommodations (hotels/motels, B&Bs, campgrounds, cabin rental, etc.) (3)	
Fuel for your car, truck, boat, airplane, ATV, and other transportation (4)	
Transportation services (air transport, taxi, boat ferries, shuttle vans, etc.) (5)	
Guide fees, pack trip, or package fees (6)	
Equipment rental (7)	
Heating and cooking fuel (8)	
Souvenirs, gifts, other miscellaneous (9)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Trapping

Q43 How many days long is a typical recreational trip when **TRAPPING** is the primary purpose? (A trip lasting less than one full day can be counted as one day.)

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Fishing

Q44 Please tell us the number of **recreational days** you went **FISHING** (ice and/or open water) in each region of the state during the past 12 months. (A trip lasting less than one full day can be counted as one day. If you fished in multiple regions on the same day, please record that day in the region where you spent the majority of time.)

	Days FISHING (1)
Black Hills (1)	
Missouri River (2)	
Elsewhere in South Dakota (3)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Fishing

Q45 Please tell us how much you **spent in the past 12 months** on the following **equipment and accessories** for **ALL FISHING** (ice and/or open water) activities that took place in South Dakota. Only include items that you purchased in South Dakota and report amounts in US dollars. Some items can be used for multiple purposes.

Please report spending only for items that were used **primarily** for **recreational fishing** activities in South Dakota within the past 12 months. Include any amount that you also spent for children under age 18 who live in your home.

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Fishing

Q46 Fishing equipment purchased in South Dakota primarily for fishing (ice and/or open water)

	Amount spent in the last 12 months (\$) (1)
Rods, reels, poles, and rod-making components (1)	
Lines and leaders (2)	
Lures, bait, and bait containers (3)	
Hooks, sinkers, other items attached to lines (4)	
Fish finders and other electronic fish devices (5)	
Tackle boxes and other fishing item storage (6)	
Creels, fish bags, hooks (e.g. gaff), landing nets (7)	
Ice fishing equipment (8)	
Other fishing equipment (9)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Fishing

Q47 Auxiliary equipment purchased in South Dakota primarily for fishing (ice and/or open water)

	Amount spent in the last 12 months (\$) (1)
Camping equipment (1)	
Binoculars, field glasses, telescopes, etc. (2)	
Clothing and footwear for fishing (3)	
Animal processing and taxidermy (4)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Fishing

Q48 Special equipment purchased in South Dakota primarily for fishing (ice and/or open water)

	Amount spent in the last 12 months (\$) (1)
Cabins (1)	
Motorized vehicles (pickups, 4x4s, ATVs, snowmobiles, RVs, etc.) (2)	
Ice houses (3)	
Sleds (4)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Fishing

Q49 Other expenditures in South Dakota primarily for fishing (ice and/or open water)

	Amount spent in the last 12 months (\$) (1)
Licenses, stamps, tags, and permits (4)	
Magazines, books, DVDs, phone apps, other information technology (1)	
Membership dues and contributions (2)	
Land leasing and ownership (3)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Fishing

Q50 Did any proportion of your fishing-related spending in the following categories go toward the purchase of used items? If so, what types of items were purchased used?

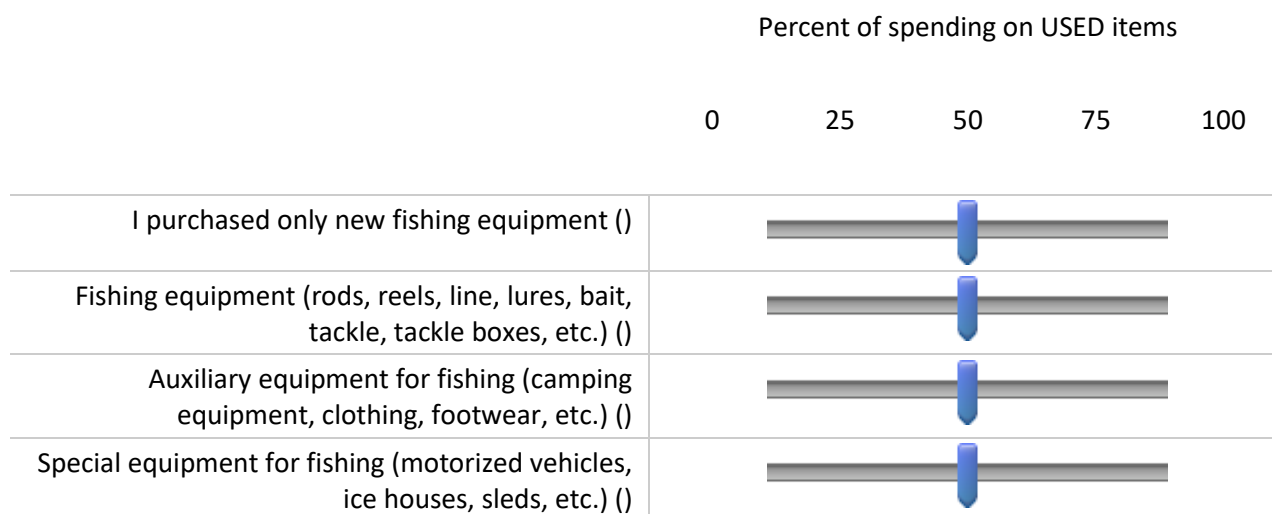
- ☒ I purchased only new fishing equipment (4)
- Fishing equipment (rods, reels, line, lures, bait, tackle, tackle boxes, etc.) (1)
- Auxiliary equipment for fishing (camping equipment, clothing, footwear, etc.) (2)
- Special equipment for fishing (motorized vehicles, ice houses, sleds, etc.) (3)

Display This Question:

If Did any proportion of your fishing-related spending in the following categories go toward the pur... != I purchased only new fishing equipment

Carry Forward Selected Choices from "Did any proportion of your fishing-related spending in the following categories go toward the purchase of used items? If so, what types of items were purchased used?"

Q51 What proportion of your annual fishing-related spending in each category went toward the purchase of used items?



Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Fishing

Q52 Were any of your fishing-related purchases in the following categories made through an **online-only retailer or an internet marketplace** (Amazon, eBay, etc.)? If so, for which categories were those purchases made?

- ☒ I didn't purchase any fishing items through an online-only retailer (4)
- Fishing equipment (rods, reels, line, lures, bait, tackle, tackle boxes, etc.) (1)
- Auxiliary equipment for fishing (camping equipment, clothing, footwear, etc.) (2)
- Special equipment for fishing (motorized vehicles, ice houses, sleds, etc.) (3)

Display This Question:

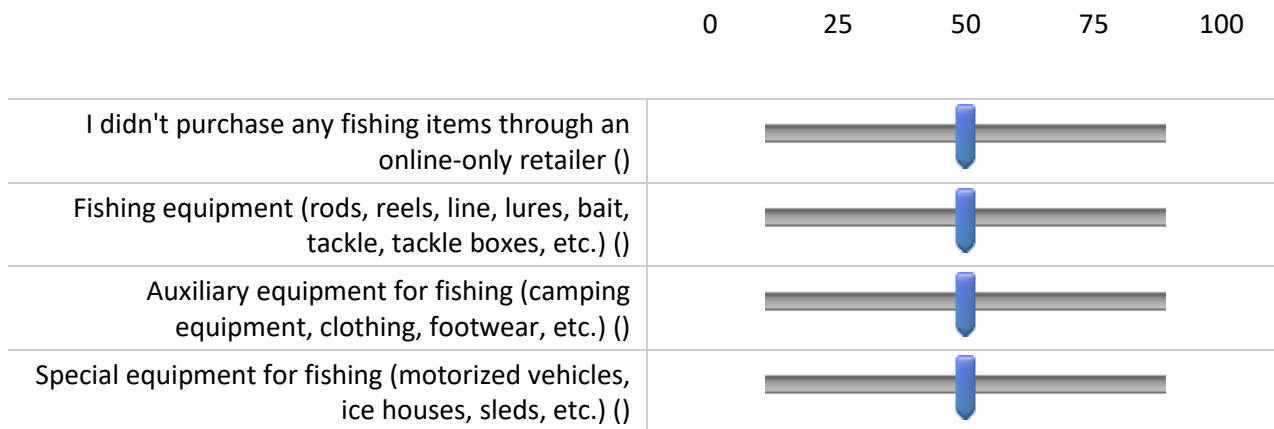
If Were any of your fishing-related purchases in the following categories made through an online-onl... != I didn't purchase any fishing items through an online-only retailer

Carry Forward Selected Choices from "Were any of your fishing-related purchases in the following categories made through an online-only retailer or an internet marketplace (Amazon, eBay, etc.)? If so, for which categories were those purchases made?"

X→

Q53 What proportion of your annual fishing-related spending in each category went toward the purchase of items through an **online-only retailer or an internet marketplace** (Amazon, eBay, etc.)?

Percent of spending through ONLINE RETAILER



Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Fishing

Q54 Thinking about a **typical recreational trip** you took **primarily** to go **FISHING** (ice and/or open water) in South Dakota during the past 12 months, please tell us how much you spent on each of the following items. Please include items purchased only in South Dakota and report amounts in US dollars.

	Amount spent during the trip (\$) (1)
Groceries, food, liquor bought in stores (not in restaurants and bars) (1)	
Restaurants, bars, and take-out food purchases (2)	
Overnight accommodations (hotels/motels, B&Bs, campgrounds, cabin rental, etc.) (3)	
Fuel for your car, truck, boat, airplane, ATV, and other transportation (4)	
Transportation services (air transport, taxi, boat ferries, shuttle vans, etc.) (5)	
Guide fees, pack trip, or package fees (6)	
Equipment rental (7)	
Heating and cooking fuel (8)	
Souvenirs, gifts, other miscellaneous (9)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Fishing

Q55 How many days long is a **typical recreational trip** when **FISHING** (ice and/or open water) is the **primary** purpose? (A trip lasting less than one full day can be counted as one day.)

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Boating for non-fishing recreation (including power boats, jet skis/personal watercraft, sail boats, rowboats, canoes, kayaks, etc.)

Q56 Please tell us the number of recreational days you went **BOATING** for *non-fishing recreation* in each region of the state during the past 12 months. **Please do not include days for which the primary event was fishing.** (A trip lasting less than one full day can be counted as one day. If you went boating in multiple regions on the same day, please record that day in the region where you spent the majority of time.)

	Days BOATING (non-fishing recreation) (1)
Black Hills (1)	
Missouri River (2)	
Elsewhere in South Dakota (3)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Boating for non-fishing recreation (including power boats, jet skis/personal watercraft, sail boats, rowboats, canoes, kayaks, etc.)

Q57 Do you own any boats (including power boats, jet skis, personal watercraft, sail boats, row boats, canoes, kayaks, etc.)?

- No (1)
- Yes (2)

Display This Question:

If Do you own any boats (including power boats, jet skis, personal watercraft, sail boats, row boats... = Yes

Q58 How many watercraft of each size do you own? Please include all power boats, jet skis, personal watercraft, sail boats, rowboats, canoes, kayaks, etc..

- Personal watercraft of any size (jet ski, etc.): (1) _____
- Under 12 feet: (2) _____
- 12 to 16 feet: (3) _____
- 17 to 26 feet: (4) _____
- Larger than 26 feet: (5) _____

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Boating for non-fishing recreation (including power boats, jet skis/personal watercraft, sail boats, rowboats, canoes, kayaks, etc.)

Q59 Please tell us how much you **spent in the past 12 months** on the following **equipment and accessories** for **ALL BOATING** activities (**both fishing and non-fishing**) that took place in South Dakota. Only include items you purchased in South Dakota and report amounts in US dollars. Some items can be used for multiple purposes. Please report spending only for items that were used **primarily** for **recreational boating** activities in South Dakota within the past 12 months. Include any amount that you also spent for children under age 18 who live in your home.

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Boating for non-fishing recreation (including power boats, jet skis/personal watercraft, sail boats, rowboats, canoes, kayaks, etc.)

Q60 Boating equipment purchased in South Dakota primarily for boating (fishing or pleasure boating)

	Amount spent in the last 12 months (\$) (1)
Boats (motorboats, sailboats, canoes, kayaks, etc.) (1)	
Boat trailers (2)	
Motors (outboard, inboard, trolling) (3)	
Electronics (depth finders, GPS, radios, etc.) (4)	
Boat and trailer accessories (anchors, ropes, buoys, bumpers, etc.) (5)	
Other boating equipment (6)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Boating for non-fishing recreation (including power boats, jet skis/personal watercraft, sail boats, rowboats, canoes, kayaks, etc.)

Q61 Other equipment purchased in South Dakota used primarily for boating (fishing or pleasure boating)

	Amount spent in the last 12 months (\$) (1)
Boat storage fees, launch ramp fees, mooring fees, etc. (7)	
Coolers (1)	
Life jackets, life preservers, personal flotation devices (2)	
Clothing for boating (3)	
Magazines, books, DVDs, phone apps, other information technology, etc. (4)	
Membership dues and contributions (5)	
Land leasing and ownership (6)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Boating for non-fishing recreation (including power boats, jet skis/personal watercraft, sail boats, rowboats, canoes, kayaks, etc.)

Q62 Did any proportion of your boating-related spending in the following categories go toward the purchase of used items? If so, what types of items were purchased used?

- ☒ I purchased only new boating equipment (4)
- Boating equipment (boats, trailers, motors, electronics, accessories, etc.) (1)
- Other equipment for boating (coolers, life jackets, clothing, etc.) (2)

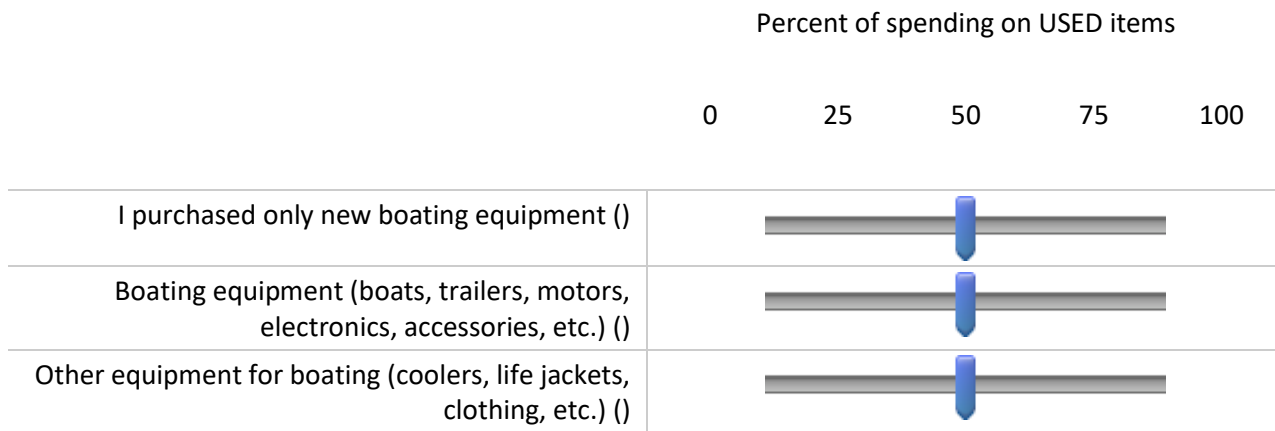
Display This Question:

If Did any proportion of your boating-related spending in the following categories go toward the pur... != I purchased only new boating equipment

Carry Forward Selected Choices from "Did any proportion of your boating-related spending in the following categories go toward the purchase of used items? If so, what types of items were purchased used?"

X→

Q63 What proportion of your annual boating-related spending in each category went toward the purchase of **used items**?



Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Boating for non-fishing recreation (including power boats, jet skis/personal watercraft, sail boats, rowboats, canoes, kayaks, etc.)

Q64 Were any of your boating-related purchases in the following categories made through an **online-only retailer or an internet marketplace** (Amazon, eBay, etc.)? If so, for which categories were those purchases made?

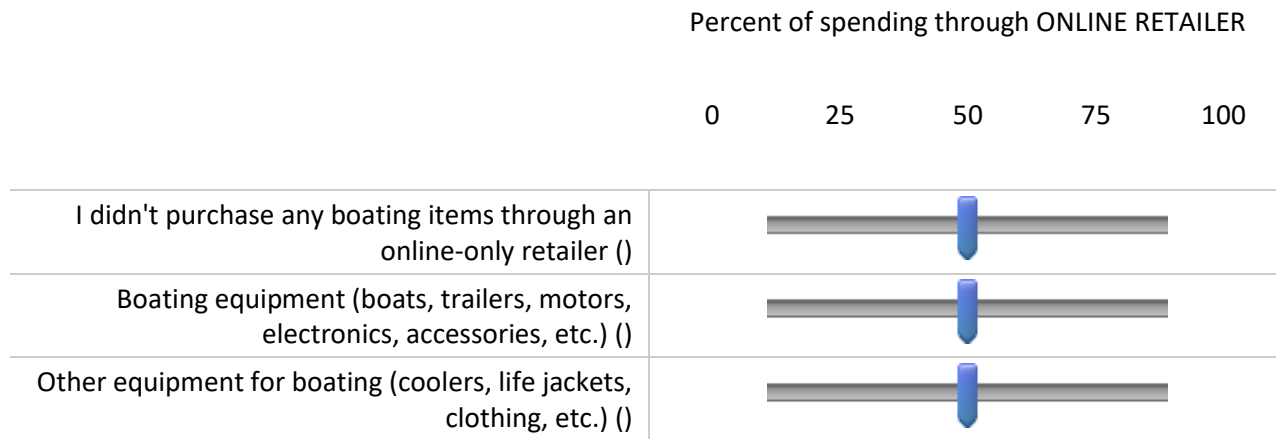
- ☒ I didn't purchase any boating items through an online-only retailer (4)
- ☐ Boating equipment (boats, trailers, motors, electronics, accessories, etc.) (1)
- ☐ Other equipment for boating (coolers, life jackets, clothing, etc.) (2)

Display This Question:

If Were any of your boating-related purchases in the following categories made through an online-onl... != I didn't purchase any boating items through an online-only retailer

Carry Forward Selected Choices from "Were any of your boating-related purchases in the following categories made through an online-only retailer or an internet marketplace (Amazon, eBay, etc.)? If so, for which categories were those purchases made?"

Q65 What proportion of your annual boating-related spending in each category went toward the purchase of items through an **online-only retailer or an internet marketplace** (Amazon, eBay, etc.)?



Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Boating for non-fishing recreation (including power boats, jet skis/personal watercraft, sail boats, rowboats, canoes, kayaks, etc.)

Q66 What percent of your boating time was **primarily** for **FISHING** (ice and/or open water)?

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Boating for non-fishing recreation (including power boats, jet skis/personal watercraft, sail boats, rowboats, canoes, kayaks, etc.)

Q67 Thinking about a **typical recreational trip** you took **primarily** to go **BOATING** for **non-fishing recreation** in South Dakota during the past 12 months, please tell us how much you spent on each of the following items. Please include items purchased only in South Dakota and report amounts in US dollars.

	Amount spent during the trip (\$) (1)
Groceries, food, liquor bought in stores (not in restaurants and bars) (1)	
Restaurants, bars, and take-out food purchases (2)	
Overnight accommodations (hotels/motels, B&Bs, campgrounds, cabin rental, etc.) (3)	
Fuel for your car, truck, boat, airplane, ATV & other transportation (4)	
Transportation services (air transport, taxi, boat ferries, shuttle vans, etc.) (5)	
Guide fees, pack trip, or package fees (6)	
Equipment rental (7)	
Heating and cooking fuel (8)	
Souvenirs, gifts, other miscellaneous (9)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Boating for non-fishing recreation (including power boats, jet skis/personal watercraft, sail boats, rowboats, canoes, kayaks, etc.)

Q68 How many days long is a **typical recreational trip** when **BOATING** is the **primary** purpose? (A trip lasting less than one full day can be counted as one day.)

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Wildlife viewing (intentionally observing wildlife or improving and maintaining wildlife habitat for the purposes of viewing.)

Q69 Please tell us the number of recreational days you went **WILDLIFE VIEWING** in each region of the state during the past 12 months. (A trip lasting less than one full day can be counted as one day. If you went wildlife viewing in multiple regions on the same day, please record that day in the region where you spent the majority of time.)

NOTE: Wildlife viewing refers to intentionally observing, photographing, or feeding wildlife; improving or maintaining wildlife habitat; or visiting parks and natural areas for the primary purpose of wildlife viewing. Wildlife viewing does not include simply noticing wildlife while doing something else, such as gardening, exercising, hunting, or fishing, or intentionally scouting for game.

	Days WILDLIFE VIEWING (1)
Black Hills (1)	
West River (2)	
Missouri River (3)	
East River (4)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Wildlife viewing (intentionally observing wildlife or improving and maintaining wildlife habitat for the purposes of viewing.)

Q70 Please tell us how much you **spent in the past 12 months** on the following **equipment and accessories** for **ALL WILDLIFE VIEWING** activities that took place in South Dakota. Only include items that you purchased in South Dakota and report amounts in US dollars. Some items can be used for multiple purposes. Please report spending only for items that were used **primarily** for **recreational wildlife viewing** activities in South Dakota

within the past 12 months. Include any amount that you also spent for children under age 18 who live in your home.

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Wildlife viewing (intentionally observing wildlife or improving and maintaining wildlife habitat for the purposes of viewing.)

Q71 Wildlife viewing equipment purchased in South Dakota primarily for wildlife viewing

	Amount spent in the last 12 months (\$) (1)
Binoculars, field glasses, spotting scopes, etc. (1)	
Cameras and accessories (2)	
Pack-baskets, packs, and pouches (3)	
Animal feed (4)	
Clothing and footwear (5)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Wildlife viewing (intentionally observing wildlife or improving and maintaining wildlife habitat for the purposes of viewing.)

Q72 Other purchases in South Dakota primarily for wildlife viewing

	Amount spent in the last 12 months(\$) (1)
Camping equipment (tents, backpacks, etc) (1)	
Magazines, books, field guides, DVDs, apps, other information technology, etc. (2)	
Membership dues, entrance fees, and contributions (3)	
Plantings for improving or maintaining habitat (4)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Wildlife viewing (intentionally observing wildlife or improving and maintaining wildlife habitat for the purposes of viewing.)

Q73 Did any proportion of your wildlife viewing-related spending in the following categories go toward the purchase of **used items**? If so, what types of items were purchased used?

- ☒ I purchased only new wildlife watching equipment (4)
- Wildlife watching equipment (binoculars, glasses, cameras, baskets, clothing, etc.) (1)
- Other equipment for wildlife viewing (camping equipment, books, etc.) (2)

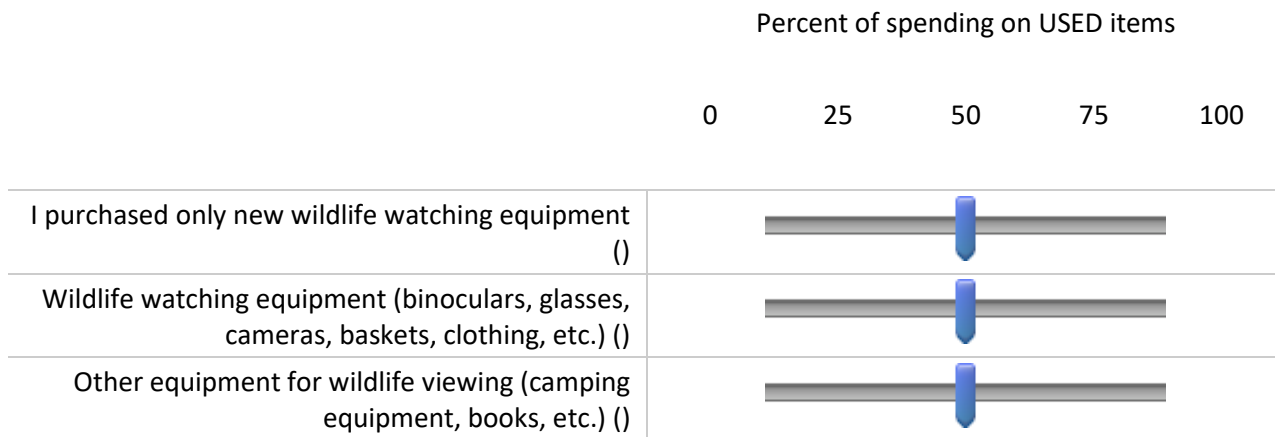
Display This Question:

If Did any proportion of your wildlife viewing-related spending in the following categories go toward... != I purchased only new wildlife watching equipment

Carry Forward Selected Choices from "Did any proportion of your wildlife viewing-related spending in the following categories go toward the purchase of used items? If so, what types of items were purchased used?"

X→

Q74 What proportion of your annual wildlife viewing-related spending in each category went toward the purchase of **used items**?



Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Wildlife viewing (intentionally observing wildlife or improving and maintaining wildlife habitat for the purposes of viewing.)

Q75 Were any of your wildlife viewing-related purchases in the following categories made through an **online-only retailer or an internet marketplace** (Amazon, eBay, etc.)? If so, for which categories were those purchases made?

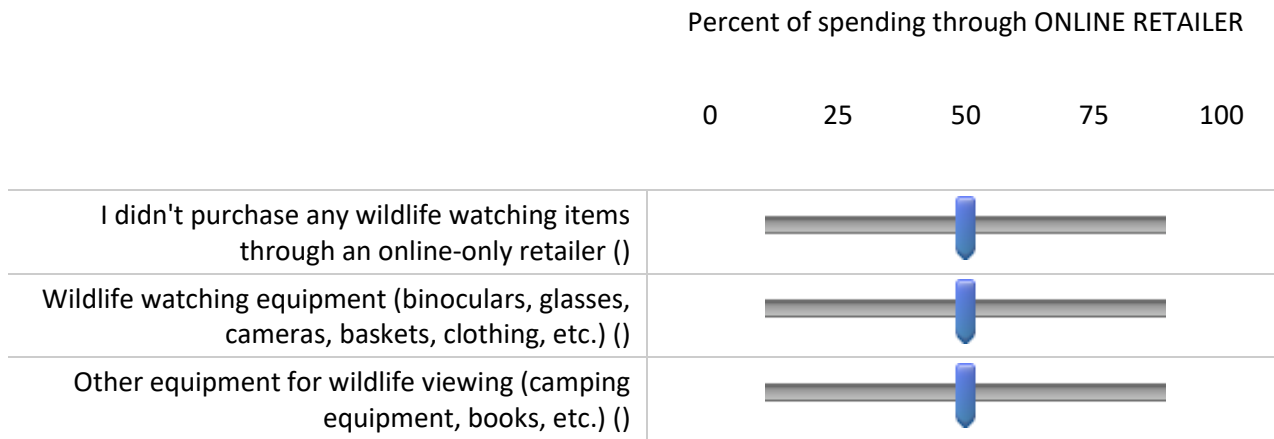
- ☒ I didn't purchase any wildlife watching items through an online-only retailer (4)
- Wildlife watching equipment (binoculars, glasses, cameras, baskets, clothing, etc.) (1)
- Other equipment for wildlife viewing (camping equipment, books, etc.) (2)

Display This Question:

If Were any of your wildlife viewing-related purchases in the following categories made through an o... != I didn't purchase any wildlife watching items through an online-only retailer

Carry Forward Selected Choices from "Were any of your wildlife viewing-related purchases in the following categories made through an online-only retailer or an internet marketplace (Amazon, eBay, etc.)? If so, for which categories were those purchases made?"

Q76 What proportion of your annual wildlife viewing-related spending in each category went toward the purchase of items through an **online-only retailer or an internet marketplace** (Amazon, eBay, etc.)?



Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Wildlife viewing (intentionally observing wildlife or improving and maintaining wildlife habitat for the purposes of viewing.)

Q77 Thinking about a **typical recreational trip** you took **primarily** to go **WILDLIFE VIEWING** in South Dakota during the past 12 months, please tell us how much you spent on each of the following items. Please include items purchased only in South Dakota and report amounts in US dollars.

	Amount spent during the trip (\$) (1)
Groceries, food, liquor bought in stores (not in restaurants and bars) (1)	
Restaurants, bars, and take-out food purchases (2)	
Overnight accommodations (hotels/motels, B&Bs, campgrounds, cabin rental, etc.) (3)	
Fuel for your car, truck, boat, airplane, ATV & other transportation (4)	
Transportation services (air transport, taxi, boat ferries, shuttle vans, etc.) (5)	
Guide fees, pack trip, or package fees (6)	
Equipment rental (7)	
Heating and cooking fuel (8)	
Souvenirs, gifts, other miscellaneous (9)	

Display This Question:

If Please indicate which of the following activities you did in South Dakota during the past 12 mont... = Wildlife viewing (intentionally observing wildlife or improving and maintaining wildlife habitat for the purposes of viewing.)

Q78 How many days long is a **typical recreational trip** when **WILDLIFE VIEWING** is the primary purpose? (A trip lasting less than one full day can be counted as one day.)

Q116 Thank you! Just a few more questions.

Q79 What is your gender?

Q80 In what year were you born? Please enter your response as a four digit number (for example, 1976).

Q81 What is your 5-digit ZIP postal code?

Q82 What is the highest level of education you have attained?

- High School diploma, equivalent, or less (1)
- Some college (2)
- Associate's or technical degree (3)
- Bachelor's degree (4)
- Professional, master's or doctoral degree (5)

Q83 What is your total household income?

- Less than \$20,000 (1)
- \$20,000 to \$29,999 (2)
- \$30,000 to \$39,999 (3)
- \$40,000 to \$49,999 (4)
- \$50,000 to \$74,999 (5)
- \$75,000 to \$99,999 (6)
- \$100,000 to \$149,999 (7)
- \$150,000 to \$199,999 (8)
- \$200,000 or more (9)

Q84 What is your race and/or ethnicity? (Please check all that apply.)

- American Indian or Alaska Native (1)
- Asian (2)
- Black or African American (3)
- Hispanic, Latino, or Spanish (4)
- Native Hawaiian or other Pacific Islander (5)
- White or Caucasian (6)
- Some other race and/or ethnicity (7)