# **Women's Spending for Sportfishing**

January 9, 2023

for:



By:



PO Box 6435 ■ Fernandina Beach, FL 32035 ■ Office (904) 277-9765

Funded by Cooperative Agreement #F18AC00145 awarded to the Recreational Boating and Fishing Foundation by the U.S. Fish and Wildlife Service under the Sport Fish Restoration Program per the Sportfishing and Boating Safety Act of 1998

# **Executive Summary**

The following report was produced for the Recreational Boating and Fishing Foundation (RBFF) to provide statistically reliable information regarding women's annual spending on fishing tackle and services, and the additional sales that women could generate at varying levels of participation growth. The goals of this project include:

- 1) Fostering industry support for RBFF's initiatives to recruit more women to sportfishing,
- 2) Encouraging industry members to increase their own efforts to recruit and support female anglers, and
- 3) Quantifying the importance of women to the sportfishing industry and showing the potential revenue benefits of growing this segment of the sportfishing market.

#### Top-level results include:

- Female anglers are an important and growing segment of the angler population:
  - Between 2016 and 2021, the popularity of sportfishing grew faster among women (16.9% growth) than among men (7.8% growth).
  - Every additional female angler generated an average of \$962 in new revenue annually.
- In 2021, women anglers:
  - Contributed 22.5%, or \$2.0 billion, of total spending in the U.S. for fishing tackle (rods, reels, lines, lures, and other items solely for the purpose of fishing).
  - Contributed 18.5%, or \$10.4 billion, of the total spent on ALL fishing gear and fishingrelated equipment and services in the U.S.
- Women in the South and Midwest regions both spent around \$3.5 billion on fishing in total.
  - Female anglers in the Midwest spent an average of \$1,106 each annually.
  - Female anglers in the South spent an average of \$796 per angler annually.
- Though most fish in freshwater, women have a greater rate of fishing in saltwater than men. One-quarter of women's 2021 fishing days were in saltwater compared to 13% for men.
  - Women spent \$3.7 billion for saltwater fishing and \$6.6 billion for freshwater fishing in 2021.
  - Women spent relatively more on special equipment (vehicles, boats, real estate, and similar) for saltwater fishing compared to freshwater fishing (35% versus 22%, respectively).
- A 10% increase in women's participation in fishing could provide an additional \$1.0 billion of revenue to the sportfishing industry; a 30% increase could provide up to \$3.1 billion of revenue.

The rest of this report provides information regarding the steps taken plus the results in full detail.



## Methods

Data for this work draws from the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, which is produced by the U.S. Fish and Wildlife Service (USFWS) and conducted roughly every five years. The 2016 USFWS survey was conducted in two parts. The first part, using techniques employed in previous USFWS national surveys, was conducted by the U.S. Census Bureau. The second part, conducted by a different organization, collected data at the state level and is not regarded as reliable. This study used the highly reliable national and regional level data generated by the U.S. Census Bureau. Basic steps taken to reflect 2021 conditions include:

- Adjustment for participation: The USFWS numbers of regional and national female anglers were adjusted using national growth rates for women's participation from 2016 to 2021 as reported in the 2022 Special Report on Fishing (RBFF).
- Adjustment for inflation: The 2016 USFWS expenditure estimates were inflated to 2021 dollars based on change in the annual average CPI as reported by the U.S. Department of Labor.
- Estimated 2021 total expenditures: The 2021 spending estimates are the result of applying the calculated spending per angler in 2016 to the estimated number of anglers in 2021 and adjusting the resulting spending to represent 2021 dollars. This approach assumes that the spending per angler has not changed substantially since 2016.

Generally, the results of the 2016 USFWS survey were statistically robust at the national and regional levels for most major expenditure categories. For some spending items, especially at the regional level or for fishing in specific types of water (i.e., freshwater versus saltwater), there were too few respondents to provide statistically reliable results. In those cases, results are noted with an asterisk. In some tables, we omit spending segments (e.g., trip spending, auxiliary spending, special equipment) because the data were too limited in the 2016 USFWS survey to provide statistically reliable results.

For selected categories of fishing equipment, we were able to estimate spending with greater detail than is reported in the 2016 USFWS survey. This was possible with information provided by Southwick Associates' proprietary AnglerSurvey. For example, the 2016 USFWS survey reported spending for "Rods, reels, & components" as a single number. AnglerSurvey collects data on spending separately for "Rods," "Reels," "Rod/reel combos," and "Rod & reel accessories." The relative distribution of spending by women on these four detailed items was applied to the broader 2016 USFWS spending category to provide the more detailed estimates. This approach was used to provide more detailed breakdowns of the 2016 USFWS categories of "Rods, reels & components," "Lines and leaders," "Lures, flies and artificial bait," and "Hooks, sinkers and other terminal tackle."



#### Results

Over the past five years, the number of female anglers grew 16.9%, which is more than twice as fast as male anglers, whose numbers increased 7.8% (RBFF 2022). Women generated more than 18% of all the dollars spent for all sportfishing equipment, support gear, and services in 2021, making them a significant market for angler-dependent businesses (Table 1). The greatest share of spending for women is within the fishing equipment category, compared to other categories of spending. Women account for 22.5% of all spending on rods, reels, lines, lures, and other tackle, and under 20% for the other categories of fishing-related spending. Table 2 shows the spending estimates for detailed product categories.

Table 1. Spending by anglers: women and men, summary 2021 (\$000s)

				Women		
All Anglers		Men	\$000s	% of all angler spending		
Spending (\$000s)						
Trip Spending <sup>1</sup>	\$26,248,572	\$21,380,347	\$4,868,225	18.5%		
Fishing Equipment <sup>2</sup>	\$8,560,994	\$6,636,486	\$1,924,508	22.5%		
Auxiliary Equipment <sup>3</sup>	\$1,639,123	\$1,325,956	\$313,166	19.1%		
Special Equipment <sup>4</sup>	\$15,254,896	\$12,456,901	\$2,797,996	18.3%		
Other Expenditures <sup>5</sup>	\$4,217,420	\$3,769,318	\$448,103	10.6%		
TOTAL SPENDING	\$55,921,005	\$45,569,007	\$10,351,997	18.5%		

<sup>&</sup>lt;sup>1</sup> Trip spending includes food, lodging, transportation, and other trip costs associated with a trip when the primary purpose of the trip was fishing.

<sup>&</sup>lt;sup>2</sup> Fishing equipment includes rods, reels, line, lures, and other items used solely for the purpose of fishing.

<sup>&</sup>lt;sup>3</sup> Auxiliary equipment includes special fishing clothing, rubber boots, waders, foul weather gear, processing and taxidermy, as well as camping equipment and optics used primarily for the purpose of fishing.

<sup>&</sup>lt;sup>4</sup> Special equipment includes high priced items such as vehicles, boats, and cabins purchased primarily for fishing purposes.

<sup>&</sup>lt;sup>5</sup> Other items include licenses, stamps, tags, land ownership or leasing, membership, magazines, and books used primarily for the purpose of fishing.



Table 2. Detailed spending by anglers: women and men, 2021 (\$000s)

	All Anglers	Men	Women	% of Spending by Women
TRIP SPENDING	\$26,248,572	\$21,380,347	\$4,868,225	18.5%
Food	\$5,874,216	\$4,666,390	\$1,207,826	
Lodging	\$3,403,705	\$2,667,166	\$736,538	
Airfare	\$445,927	\$349,077	\$96,850	
Public transportation	\$226,294	\$178,140	\$48,155	
Private transportation	\$5,470,487	\$4,550,377	\$920,111	
Guides	\$1,140,127	\$959,702	\$180,425	
Public land use fees	\$381,211	\$259,205	\$122,005	
Private land use fees	\$609,889	\$500,048	\$109,840	
Bait (live, cut, prepared)	\$1,846,441	\$1,330,940	\$515,501	
Ice	\$714,342	\$603,919	\$110,423	
Heating & cooking fuel	\$197,106	\$164,033	\$33,073	
Equipment rental	\$378,833	\$331,793	\$47,040	
Boat fuel	\$2,132,428	\$1,800,316	\$332,113	
Boat launching	\$1,032,413	\$862,745	\$169,668	
Boat mooring	\$2,395,152	\$2,156,497	\$238,656	
FISHING EQUIPMENT	\$8,560,994	\$6,636,486	\$1,924,508	22.5%
Rods, reels & components	\$2,986,771	\$2,255,477	\$731,294	24.5%
Rods	\$936,922	<i>\$707,522</i>	\$229,400	
Reels	\$1,048,752	\$791,971	\$256,781	
Combos	\$665,251	\$502,368	\$162,883	
Accessories	\$335,846	\$253,616	\$82,230	
Lines & leaders	\$951,392	\$704,792	\$246,601	25.9%
Fishing line (exc fly fishing)	\$770,017	\$570,429	\$199,588	
Leaders	\$181,375	\$134,362	\$47,012	
Lures, flies & artificial bait	\$1,259,556	\$1,064,568	\$194,988	15.5%
Hard baits	\$98,302	\$83,084	\$15,218	
Soft baits	\$156,895	\$132,607	\$24,289	
Spinner baits	\$137,537	\$116,245	\$21,292	
Dough baits	\$28,410	\$24,012	\$4,398	
Jig baits	\$195,802	\$165,490	\$30,312	
Flies	\$642,611	\$543,130	\$99,481	
Hooks, sinkers, other terminal tackle	\$689,859	\$520,918	\$168,941	24.5%
Bobbers	\$108,559	\$81,974	\$26,585	
Hooks	\$94,675	\$71,490	\$23,185	
Rigs	\$255,600	\$193,005	\$62,594	
Sinkers	\$168,430	\$127,183	\$41,247	
Swivels	\$62,595	\$47,266	\$15,329	
All other fishing equipment	\$2,673,416	\$2,090,732	\$582,684	21.8%



AUXILIARY EQUIPMENT	<u>\$1,639,123</u>	<u>\$1,325,956</u>	<u>\$313,166</u>	<u>19.1%</u>
Camping gear	\$819,604	\$654,575	\$165,029	
Binoculars	*	*	*	
Special fishing clothing, foul weather gear	\$557,842	\$455,627	\$102,215	
Taxidermy & processing	*	*	*	
Other misc. fishing expenditures	*	*	*	
SPECIAL EQUIPMENT	<u>\$15,254,896</u>	<b>\$12,456,901</b>	<u>\$2,797,996</u>	<u>18.3%</u>
OTHER EXPENDITURES	<u>\$4,217,420</u>	<u>\$3,769,318</u>	<u>\$448,103</u>	<u>10.6%</u>
Books & magazines	\$179,916	\$160,351	\$19,565	
Dues and contributions	\$335,571	\$320,901	\$14,670	
Fishing licenses	\$755,312	\$583,013	\$172,299	
Tags, permits and other special licenses	\$56,477	\$50,477	\$6,000	
Land purchased for fishing	*	*	*	
Land leased for fishing	*	*	*	

<sup>\*</sup>There are too few survey respondents to provide a reliable estimate.

The average female angler in the US spends \$962 annually on sport fishing gear and services, generating \$10.4 billion in sales (Table 3). Female anglers in the South and Midwest regions (Figure 1) account for the majority (two-thirds) of women's spending in the U.S. The amount of spending in the South is driven largely by the number of female anglers, as spending per female angler is the lowest of all regions (\$796). Women anglers in the South do account for the biggest shares of spending for auxiliary equipment (clothing, waders, camping gear, etc.) and special equipment (vehicles, boats, cabins, etc.) at 42% and 47% of national spending, respectively. The highest spending per female angler is found in the Northeast (\$1,181).

Figure 1. Regional definitions





Table 3. Regional spending by women anglers, 2021 (\$000s)

	US TOTAL	Northeast	Midwest	South	West
Trip Spending	\$4,868,225	\$633,495	\$1,583,971	\$1,616,072	\$1,034,687
Fishing Equipment	\$1,924,508	\$557,565	\$571,445	\$372,767	\$422,731
Auxiliary Equipment	\$313,166	*	*	*	*
Special Equipment	\$2,797,996	*	*	*	*
Other Expenditures	\$448,103	<u>\$19,891</u>	<u>\$285,330</u>	<u>\$85,622</u>	\$57,25 <u>9</u>
TOTAL	\$10,351,997	\$1,371,153	\$3,585,935	\$3,530,802	\$1,864,107
% of U.S. Spending by	100.0%	13.2%	34.6%	34.1%	18.0%
Women	4		4		
Average Spend per Angler:	\$1,510	\$1,244	\$1,736	\$1,186	\$1,788
Men	\$1,721	\$1,261	\$2,022	\$1,328	\$2,132
Women	\$962	\$ 1,181	\$ 1,106	\$796	\$967
FISHING EQUIPMENT	\$1,924,508	<u>\$557,566</u>	\$571,444	\$372 <u>,768</u>	\$422,730
Rods, reels & components	\$731,294	\$199,442	\$134,926	\$163,335	\$233,591
Rods	\$229,400	\$62,563	\$42,325	\$51,237	\$73,275
Reels	\$256,781	\$70,031	\$47,377	\$57,352	\$82,021
Combos	\$162,883	\$44,422	\$30,052	\$36,380	\$52,028
Accessories	\$82,230	\$22,426	\$15,172	\$18,366	\$26,266
Lines & leaders	\$246,601	\$105,379	\$56,480	\$40,965	\$43,776
Fishing line (exc fly fishing)	\$199,588	\$85,289	\$45,713	\$33,155	\$35,431
Leaders	\$47,012	\$20,090	\$10,768	\$7,810	\$8,346
Lures, flies & artificial bait	\$194,988	\$46,631	\$35,055	\$47,892	\$65,410
Hard baits	\$15,218	\$3,639	\$2,736	\$3,738	\$5,105
Soft baits	\$24,289	\$5,809	\$4,367	\$5,966	\$8,148
Spinner baits	\$21,292	\$5,092	\$3,828	\$5,230	\$7,142
Dough baits	\$4,398	\$1,052	\$791	\$1,080	\$1,475
Jig baits	\$30,312	\$7,249	\$5,449	\$7,445	\$10,168
Flies	\$99,481	\$23,790	\$17,885	\$24,434	\$33,372
Hooks, sinkers, other tackle	\$168,941	\$85,782	\$24,012	\$28,529	\$30,619
Bobbers	<i>\$26,585</i>	\$13,499	\$3,779	\$4,489	\$4,818
Hooks	\$23,185	\$11,773	\$3,295	\$3,915	\$4,202
Rigs	\$62,594	\$31,783	\$8,897	\$10,570	\$11,345
Sinkers	\$41,247	\$20,944	\$5,863	\$6,965	\$7,476
Swivels	\$15,329	\$7,783	\$2,179	<i>\$2,589</i>	\$2,778
All other fishing equipment	\$582,684	\$120,332	\$320,971	\$92,047	\$49,334

<sup>\*</sup> There are too few survey respondents to provide a reliable estimate.





A female angler is more likely than a male angler to engage in saltwater fishing (USFWS 2016). In 2021, 25% of days fished by women were in saltwater compared to 13% of men's fishing days. Although saltwater fishing comprises 25% of women's fishing days, saltwater fishing accounts for almost 36% of their total fishing-related expenditures (Table 4). In other words, it appears that women spend relatively more for saltwater fishing than they do for freshwater fishing.

Table 4. Spending by women anglers, by type of water, 2021 (\$000s)

	All Water	All	All	% of Women's Spending
	Types	Freshwater**	Saltwater**	Directed at
				Saltwater Fishing
Trip Spending	\$4,868,225	\$3,488,403	\$1,379,821	
Fishing Equipment	\$1,924,508	\$1,101,330	\$823,178	
Auxiliary Equipment	\$313,166	\$147,144	\$166,022	
Special Equipment	\$2,797,996	*	*	
Other Expenditures	\$448,103	*	*	
TOTAL	\$10,351,997	\$6,633,050	\$3,718,947	35.9%
CELECTED FIGURES FOLUDATAIT	ć4 034 F00	ć1 101 220	ć022 4 <b>7</b> 0	
SELECTED FISHING EQUIPMENT	\$1,924,508	\$1,101,32 <u>9</u>	\$823,178	44.70/
Rods, reels & components	\$731,294	\$426,216	\$305,078	41.7%
Rods	\$229,400	\$133,700	\$95,700	
Reels	\$256,781	\$149,658	\$107,123	
Combos	\$162,883	\$94,932	\$67,951	
Accessories	\$82,230	\$47,926	\$34,304	
Lines & leaders	\$246,601	\$110,345	\$136,256	55.3%
Fishing line (exc fly fishing)	\$199,588	\$89,308	\$110,280	
Leaders	\$47,012	\$21,036	\$25,976	
Lures, flies & artificial bait	\$194,988	\$116,224	\$78,764	40.4%
Hard baits	\$15,218	\$9,071	\$6,147	
Soft baits	\$24,289	\$14,477	\$9,811	
Spinner baits	\$21,292	\$12,691	\$8,601	
Dough baits	\$4,398	<i>\$2,622</i>	\$1,777	
Jig baits	\$30,312	\$18,067	\$12,244	
Flies	\$99,481	\$59,296	\$40,184	
Hooks, sinkers, other terminal tackle	\$168,941	\$71,121	\$97,820	57.9%
Bobbers	\$26,585	\$11,192	\$15,393	
Hooks	\$23,185	\$9,761	\$13,425	
Rigs	\$62,594	\$26,351	\$36,243	
Sinkers	\$41,247	\$17,364	\$23,883	
Swivels	\$15,329	\$6,453	\$8,876	
All other fishing equipment	\$582,684	\$377,423	\$205,260	35.2%

<sup>\*</sup>There are too few survey respondents to provide a reliable estimate.

<sup>\*\*</sup>Assumes that the distribution of women's spending across individual items is the same for all water types.



Boosting women's fishing participation rates represents a significant growth opportunity for the sportfishing industry. Table 5 shows a 10% increase in the number of women fishing would generate an additional \$1 billion in sales annually. A 30% increase would generate \$3.1 billion in new sales annually. Table 6 shows the annual spend by female anglers for specific categories and the additional sales revenue that could be earned for every 1,000 new female anglers.

Table 5. Potential added revenue from increases in women's participation, 2021 (\$000s)

	Current	Increase in Women's Participation			
	Revenue	10%	20%	30%	
		Potential Ma	rginal Increase	in Annual	
			Spending:		
Trip Spending	\$4,868,225	\$486,822	\$973,645	\$1,460,467	
Fishing Equipment	\$1,924,508	\$192,451	\$384,902	\$577,352	
Auxiliary Equipment	\$313,166	\$31,317	\$62,633	\$93,950	
Special Equipment	\$2,797,996	\$279,800	\$559,599	\$839,399	
Other Expenditures	<u>\$448,103</u>	<u>\$44,810</u>	<u>\$89,621</u>	<u>\$134,431</u>	
TOTAL	\$10,351,997	\$1,035,200	\$2,070,399	\$3,105,599	
SELECTED FISHING EQUIPMENT	<u>\$1,924,508</u>	<u>\$192,451</u>	<u>\$384,902</u>	<u>\$577,352</u>	
Rods, reels & components	\$731,294	\$73,129	\$146,259	\$219,388	
Rods	\$229,400	\$22,940	\$45,880	\$68,820	
Reels	\$256,781	\$25,678	\$51,356	\$77,034	
Combos	\$162,883	\$16,288	\$32,577	\$48,865	
Accessories	\$82,230	\$8,223	<i>\$16,446</i>	\$24,669	
Lines & leaders	\$246,601	\$24,660	\$49,320	\$73,980	
Fishing line (exc fly fishing)	\$199,588	\$19,959	\$39,918	\$59,87	
Leaders	\$47,012	\$4,701	<i>\$9,402</i>	\$14,104	
Lures, flies & artificial bait	\$194,988	\$19,499	\$38,998	\$58,497	
Hard baits	\$15,218	\$1,522	\$3,044	\$4,56	
Soft baits	<i>\$24,289</i>	<i>\$2,429</i>	<i>\$4,858</i>	<i>\$7,28</i> 2	
Spinner baits	\$21,292	\$2,129	<i>\$4,258</i>	\$6,388	
Dough baits	<i>\$4,398</i>	\$440	\$880	\$1,319	
Jig baits	\$30,312	\$3,031	<i>\$6,062</i>	\$9,093	
Flies	\$99,481	\$9,948	\$19,896	\$29,844	
Hooks, sinkers, other terminal tackle	\$168,941	\$16,894	\$33,788	\$50,682	
Bobbers	<i>\$26,585</i>	\$2,659	\$5,317	\$7,976	
Hooks	\$23,185	\$2,319	<i>\$4,637</i>	\$6,956	
Rigs	\$62,594	<i>\$6,259</i>	\$12,519	\$18,778	
Sinkers	\$41,247	\$4,125	\$8,249	\$12,374	
Swivels	\$15,329	\$1,533	\$3,066	\$4,599	
All other fishing equipment	\$582,684	\$58,272	\$116,537	\$174,809	



Table 6. Spending per female angler and per 1,000 anglers, 2021 (\$000s)

	Total spending (\$000s)	Revenue per Angler	Revenue per 1,000 Women Anglers
Trip Spending	\$4,868,225	\$452.28	\$452,280
Fishing Equipment	\$1,924,508	\$178.80	\$178,795
Auxiliary Equipment	\$313,166	\$29.09	\$29,095
Special Equipment	\$2,797,996	\$259.95	\$259,946
Other Expenditures	<u>\$448,103</u>	<u>\$41.63</u>	\$41,631
TOTAL	\$10,351,997	\$961.75	\$961,746
SELECTED FISHING EQUIPMENT	<u>\$1,924,508</u>	<u>\$178.80</u>	<u>\$178,795</u>
Rods, reels & components	\$731,294	\$67.94	\$67,940
Rods	\$229,400	\$21.31	\$21,312
Reels	\$256,781	\$23.86	\$23,856
Combos	\$162,883	\$15.13	\$15,133
Accessories	\$82,230	\$7.64	\$7,640
Lines & leaders	\$246,601	\$22.91	\$22,910
Fishing line (exc fly fishing)	\$199,588	\$18.54	\$18,543
Leaders	\$47,012	\$4.37	\$4,368
Lures, flies & artificial bait	\$194,988	\$18.12	\$18,115
Hard baits	\$15,218	\$1.41	\$1,414
Soft baits	\$24,289	\$2.26	<i>\$2,257</i>
Spinner baits	\$21,292	\$1.98	\$1,978
Dough baits	\$4,398	\$0.41	\$409
Jig baits	\$30,312	\$2.82	\$2,816
Flies	\$99,481	\$9.24	\$9,242
Hooks, sinkers, other terminal tackle	\$168,941	\$15.70	\$15,695
Bobbers	\$26,585	\$2.47	\$2,470
Hooks	\$23,185	\$2.15	\$2,154
Rigs	\$62,594	\$5.82	\$5,815
Sinkers	\$41,247	\$3.83	\$3,832
Swivels	\$15,329	\$1.42	\$1,424
All other fishing equipment	\$582,684	\$54.13	\$54,134



#### **APPENDIX**

## Number of respondents who reported at least one purchase in each category.

	All Anglers	Men	Women
Trip Spending	1,116	869	247
Fishing Equipment	802	657	145
Auxiliary Equipment	232	191	41
Special Equipment	107	87	19
Other Expenditure	760	602	158
TOTAL SPENDING	1,177	915	262

#### Sources:

US Fish and Wildlife Service, 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, Washington, DC.

Recreational Boating & Fishing Foundation and The Outdoor Foundation, 2022 Special Report on Fishing, Alexandria, VA.

Southwick Associates, "AnglerSurvey.com" proprietary data. 2021.