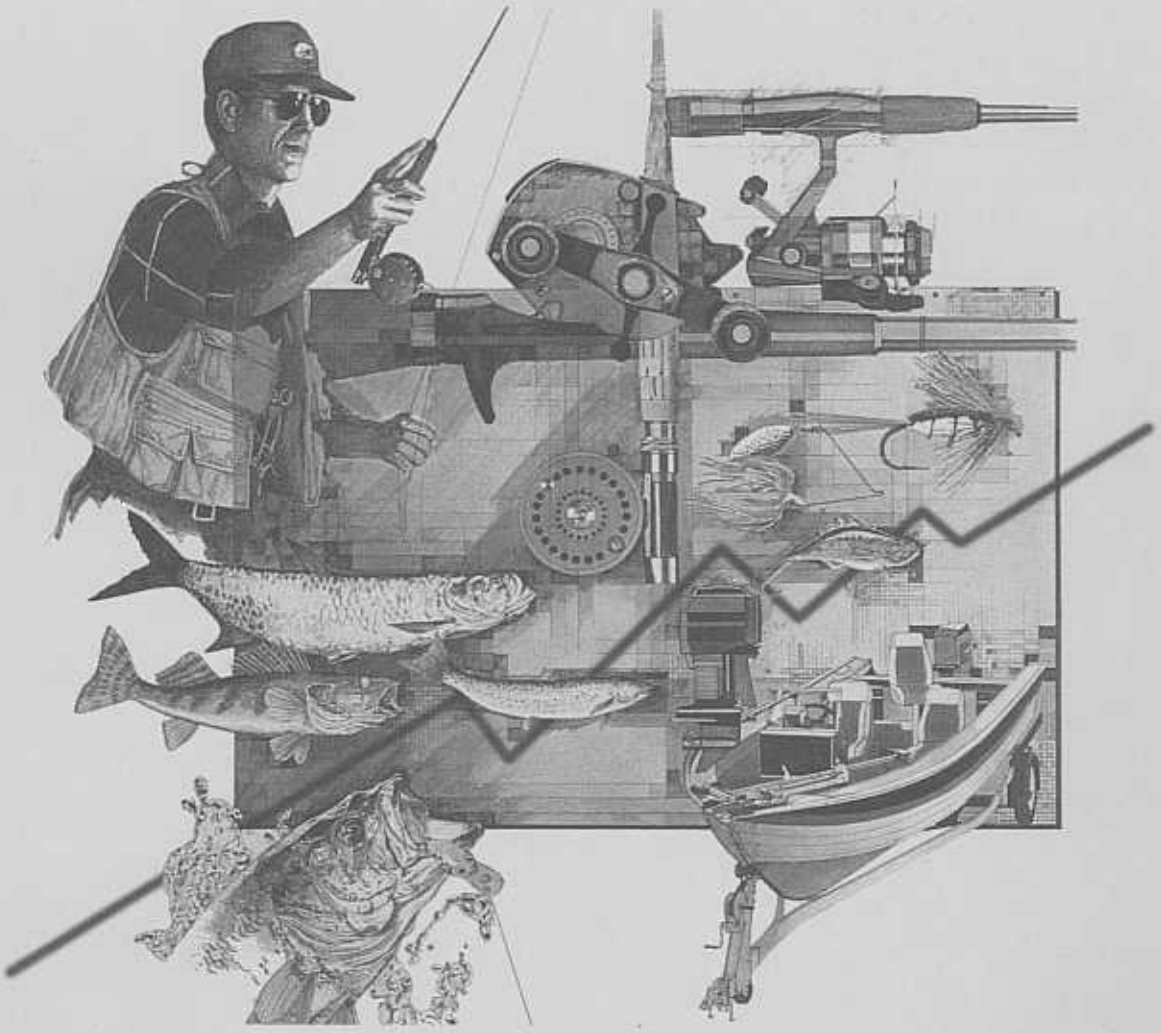
THE 1996 ECONOMIC IMPACT OF SPORT FISHING IN HAWAII



AMERICAN SPORTFISHING ASSOCIATION™

The 1996 Economic Impact of Sport Fishing in

HAWAII

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SUMMARY

Sport fishing in Hawaii plays a significant role in the lives of many U.S. Anglers. In 1996, anglers spent over 3,054,000 days fishing Hawaii's waters for a variety of game fish. A substantial industry has evolved to provide goods and services to meet the diverse needs of over 260,000 anglers.

This report summarizes the economic impacts of angler expenditures on the state's economy. U.S. anglers who went fishing in Hawaii during 1996 spent over $130,038,000 for goods and services in many businesses throughout the state. The economic impact of these expenditures totaled nearly $238,089,000 and rippled throughout the economy with effects felt throughout the state. These impacts sustained old jobs and created new ones. They generated sales and income taxes which benefited government agency programs at all levels. In many small communities, angler expenditures were central to economic health and growth.

This report provides a summary of an in-depth analysis of the economic impacts of sport fishing on Hawaii's economy by anglers 16 years of age and older. Information is provided for the entire state with additional detail for freshwater and saltwater angling. Individual economic impact reports have also been prepared for each of the other states, as well as for the country as a whole.

1996 HAWAII SUMMARY

Total Anglers 16 and Older	260,005
Expenditures	$130,038,758
Economic Output	$238,088,176
Earnings	$70,046,235
Jobs	3,080
State Sales Tax	$5,201,550
State Income Taxes	$3,961,275
Federal Income Taxes	$7,472,825
Sport Fish Restoration Excise Tax Apportionment	$1,971,369

ACKNOWLEDGMENTS

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INTRODUCTION

The myriad of ponds, lakes, streams and rivers, throughout the U.S., in addition to vast coastline and marine resources, provide a multitude of diverse and rewarding fishing experiences for the nation's recreational anglers. The popularity of sport fishing has grown steadily over the past several decades to the point that 35.2 million American adults now go fishing each year. Pursuit of the social, psychological and physical benefits of sport fishing has given rise to an industry focused on supplying the goods and services necessary to meet angler demand and ensure satisfying recreational experiences.

This report summarizes the economic activity associated with the sport fishing industry in Hawaii. It documents angler expenditures on a wide variety of goods and services. These include expenditures at sporting goods stores, bait shops, specialty fishing stores, hotels and motels, fishing lodges and camps, guide services, retail food stores, and restaurants. In many small communities, these businesses are central to economic health and growth.

The economic effects of angler expenditures ripple throughout local, state and national economies sustaining old jobs and creating new ones. They reach down to support manufacturers and their suppliers, and into service industries. The total economic output of the sport fishing industry is substantial and supports an extensive number of full and part-time jobs.

Employment effects of the sport fishing industry give rise not only to worker salaries and wages (earnings) but to state and federal income taxes as well. Further tax revenues are generated by sales taxes on angler retail purchases of fishing equipment and services.

Each of these impacts of angler expenditures (output, earnings, jobs, and taxes) are presented in this report. The following economic analysis is based on angler expenditure data collected in the *1996 National Survey of Fishing, Hunting, and Wildlife Associated Recreation* (National Survey) conducted by the U.S. Fish and Wildlife Service. Information contained in the National Survey is based on a sample size of 28,000 U.S. sportsmen 16 years of age and older to questions concerning their angling and purchasing behavior.

Angler expenditure information was combined with an input-out model, called RIMS II, developed by the U.S. Department of Commerce, Bureau of Economic Analysis, which generates multipliers for estimating the direct, indirect and induced impacts of economic activity upon output, earnings, and employment.

Tax benefits derived from retail expenditures and earnings were calculated by applying state sales tax rates and state and federal income tax rates for 1996.

METHODOLOGY

The following section provides a summary of the methods used for collecting data in the *1996 National Survey of Fishing, Hunting, and Wildlife Associated Recreation* and for estimating the economic effects of angler expenditures. More detailed information on data collection procedures for the National Survey can be obtained from the national report issued by the U.S. Fish and Wildlife Service or from the American Sportfishing Association. Full documentation of the economic impact analysis can be obtained from the American Sportfishing Association.

National Survey Background

The National Survey of Fishing, Hunting and Wildlife Associated Recreation reports results of interviews with U.S. residents about their fishing, hunting and wildlife-related recreation. Information collected in the National Survey focused on the participation, characteristics and expenditures of U.S. residents 16 years of age and older. The 1996 survey was the ninth in a series of similar surveys conducted since 1955. Interviews were held in three waves, beginning in May and September of 1996 and January 1997, and ending in March 1997.

Anglers interviewed for the National Survey included not only hook and line anglers but those who had no license and those who used special fishing methods such as spearfishing. Angling information was collected for three types of fishing: 1) freshwater, excluding Great Lakes; 2) Great Lakes; and 3) saltwater. Economic impacts of each of these types of fishing and for all three types combined, where appropriate, are provided throughout this series of reports.

Economic Impact Procedures

The following is a brief summary of the methodology used to derive the economic impacts presented in this report. The impacts were calculated through a five-step process:

1. Calculate expenditures made to purchase products and services related to sport fishing and disaggregate by type of fishing (freshwater, saltwater, Great Lakes), as appropriate.

2. Disaggregate estimated expenditures into retail, wholesale, and manufacturing portions, as needed.

3. Derive economic multipliers from the RIMS II input-output model.

4. Estimate total economic impacts by combining the multipliers with the corresponding expenditure estimates.

5. Estimate tax revenues using expenditure data and sales tax rates for state sales tax revenue, and earnings and jobs data with income tax rates for state and federal income tax revenue.

Each step is discussed in greater detail below.

(1) Calculate and Disaggregate Direct Expenditures

National Survey respondents were asked to provide information on their fishing-related expenditures which were divided into the following categories: 1) trip-related; 2) fishing equipment; 3) auxiliary equipment; 4) special equipment; and 5) other expenditures. A detailed listing of the components of each of these categories can be found in Appendix A.

Anglers reported, for each state they fished in, their share of trip-related expenditures for freshwater, Great Lakes and saltwater trips. In the remaining expenditure categories, anglers were asked for the total amount spent for a particular good or service and then asked to specify whether it was used predominantly for freshwater, saltwater or Great Lakes fishing. If the respondent was unable to specify the type of fishing associated with a given expenditure because it was used for more than one type of fishing, the expenditure was assigned to an "unable to specify" category for inclusion in state totals only.

Anglers were also asked to report their state of residence in order to determine what part of expenditures was made by in-state and out-of-state anglers. In addition, anglers who traveled from their home state to another state to fish were asked where their non-trip related expenditures took place so that each expenditure could be included in the appropriate state expenditure calculations.

(2) Disaggregate Expenditures by Market Component

The next step was to calculate trade margins and market portions. Retail purchases were disaggregated into three components: retail, wholesale, and manufacturing portions. This procedure allowed for representing the percent of total sales accruing to retailers, wholesalers, and manufacturers. For example, fishing reels have a manufacturing portion of 43%, meaning that 43% of all money spent on fishing reels accrues to manufacturing. The sum of the portions for a product totals 100%. Expenditures are multiplied by portions to estimate the amount of money flowing into each component of the industry as a result of sport fishing expenditures.

For some products no portions were used, as all money was assumed to accrue to the retail level. This is true of all services considered in the survey, since there is no wholesale or manufacturing level for services.

Retail and wholesale margins (the percentage markup made over costs by retailers or wholesalers) were calculated using gross margin and sales data from the U.S. Census Bureau publications "The Annual Retail Trade Survey: 1986 to 1996" and "The Annual Benchmark Report for Wholesale Trade: January 1987 to February 1997" 1995 retail and wholesale sectors. Gross margins were divided by the corresponding sales figures to calculate the margins for the retailers and wholesalers in question. These margins were then used to calculate the percentage of an expenditure which can be attributed to retailers and wholesalers for a given product. The formulae used were:

Retailer portion = R / (1+R)
Wholesaler portion = W / [(1+R) * (1+W)]

where W = wholesale margin and R = retail margin.

Manufacturing portions were then calculated by subtracting retail and wholesale portions from 100 percent.

Market portions were calculated for industry sectors as classified by Standard Industrial Classification codes. Market portions were determined for the economy at the national level only, due to the unavailability of state-specific data.

(3) Multipliers

The multipliers used in this analysis are derived from the Regional Input-Output Modeling System II (RIMS II) model developed by the Bureau of Economic Analysis of the Department of Commerce. RIMS II multipliers yield estimates of economic impacts including direct, indirect, and induced effects. Direct effects of expenditures on a product produced by industry Y capture the initial

expenditure on a good and the cost of inputs (goods and services) used by industry Y in producing that good. Indirect effects account for the additional production across all industries needed to meet industry Y's direct requirements. Induced effects capture the additional production required to meet consumer demand generated by payments from industry Y to households for their labor inputs.

RIMS II provides multipliers to estimate the output, earnings and jobs generated in a region for every dollar spent by consumers on the products of a particular industry. Separate multipliers are used for each of the retail, wholesale and manufacturing portions of an industry, reflecting differences in the nature of these distinct operations. For example a RIMS II state-level output multiplier of 1.8896 for motor vehicle retailers would mean that for every dollar earned by a motor vehicle retailer in the state, the output generated across all related industries in the state would be $1.89.

For most expenditure categories, there are nine multipliers, to calculate output, earnings and jobs generated from each dollar earned by retailers, wholesalers and manufacturers. The exceptions are service industries where there are no wholesale or manufacturing components and other sectors that do not encompass all three market components.

(4) Combining Expenditures with Multipliers

To calculate economic impacts, expenditures are first multiplied by the market portions accruing to retailers, wholesalers, and manufacturers. Output, earnings and job multipliers are then multiplied by these disaggregated expenditures to arrive at the economic impacts attributable to the separate market components. The retail, wholesale and manufacturing impacts are then summed to arrive at the total output, earnings and jobs generated from each expenditure category.

(5) Tax Revenues

State sales tax revenues were calculated by multiplying expenditures on goods and services by the respective state sales tax rates and fuel expenditures by fuel tax rates from 1996. Tables providing sales and fuel tax information were obtained from the Commerce Clearing House's State Tax Guide. Prevailing gasoline prices were obtained from the Census Bureau.

Income tax figures could not be calculated simply from earnings because of the progressive nature of most state income tax systems. Instead, income tax revenues were estimated by calculating earnings per job for each state. The taxes paid on this average level of earnings were determined using income tax tables from the Commerce Clearing House. The average earnings per job were reduced by the applicable standard deductions and exemptions to approximate the taxable portion of earnings subject to income taxes. The taxes per job were then multiplied by the total number of jobs to provide an estimated total income tax figure. Federal income tax revenues were estimated in the same fashion, using 1996 Internal Revenue Service tax tables.

RESULTS

Results of this study are presented in five sections. The first is a summary of state fishing participation for residents and nonresidents aged 16 and over. Both the number of anglers and days of fishing are presented by type of fishing. The second section provides details of angler expenditures in the state. The third section provides the results of the input-output analysis in terms of economic output, earnings and jobs by type of fishing and all fishing combined. Income and sales taxes generated by sport fishing are the focus of the fourth section. In the final section, a discussion of additional economic contributions anglers make to fisheries management and the economy, which are not covered in detail in this report, is presented.

Angler Participation

The National Survey estimated that 260,005 anglers from across the U.S. aged 16 and over fished in Hawaii during 1996. Table 1 shows a breakdown of the number of anglers and the number of trips and days of fishing by water type and combined. It should be noted that the summation of anglers by water type exceeds the total number of anglers because an angler could have participated in more than one type of fishing.

U.S. anglers spent over 3,054,000 days fishing in Hawaii during 1996. The vast majority of these days were spent saltwater fishing.

Angler Expenditures

Angler expenditures broken down into expenditure types are summarized in Table 2. A detailed listing of expenditure items and the total amount spent by resident and nonresident anglers is shown in Appendix A. As shown, these expenditures totaled over $130,038,000. Trip expenditures accounted for nearly three quarters (74 percent) of all angler expenditures. Within the trip expenditure category, food and drink, and transportation

Table 1: 1996 Hawaii Fishing Participation by Anglers 16 Years and Older

Angler Type	Resident	Nonresident	Total
Anglers			
Total	130,474	129,531	260,005
Freshwater	22,378		22,378
Saltwater	124,883	118,764	243,647
Angler Trips			
Total	2,325,952	163,398	2,489,349
Freshwater	187,606		187,606
Saltwater	2,138,346	163,398	2,301,744
Angler Days			
Total	2,595,264	459,651	3,054,915
Freshwater	188,688		188,688
Saltwater	2,463,282	438,132	2,901,414

Note: Freshwater excludes Great Lakes anglers. Sums of participation by water type will not equal the total due to participation by some anglers in more than one type of fishing.

were the major contributors.

Rods, reels and artificial lures were the top expenditure items in the fishing equipment category. The "other fishing equipment" item consisted of such things as scales, knives, downriggers, rod holders and other miscellaneous equipment. Fishing equipment accounted for 17 percent of all angler expenditures.

Camping and clothing dominated expenditure totals in the auxiliary equipment category. These expenditures comprised over 1 percent of all angler expenditures.

Special equipment such as boats and motors, and vehicles used for fishing comprised the second largest category of angler expenditures. These items accounted for slightly more than 6 percent of all expenditures.

The "other expenditure" category is dominated by angler expenditures on books and magazines purchased primarily for fishing. It should be noted that expenditures for fishing licenses, special fees and stamps were not those reported by anglers, but rather the collections made by states and reported annually to the U.S. Fish and Wildlife Service, Division of Federal Aid.

State Economic Impacts

Results of the economic analysis are also summarized in Table 2 for each expenditure category. Total output generated by angler expenditures during 1996 exceeded $238,088,000. This economic activity reflects the total economic output stimulated by angler spending. This consists not only of impacts on retailers but on the suppliers of goods and services to retailers, wholesalers and manufacturers plus the indirect and induced impacts resulting from all these activities.

Over 75 percent of the total output in the recreational fishing industry revolves around the trips anglers make each year. These trip-related costs include many services integral to sustaining community viability and health as well as making fishing opportunities accessible.

Angler expenditures generated over $70,046,000 in worker earnings in 1996. These wages and salaries translate into 3,080 full-time equivalent jobs. Most jobs in the sport fishing industry were concentrated in the service sector supporting angler fishing trips.

Economic Impacts by Water Type

As seen in Table 3, saltwater fishing in Hawaii generates almost all of the economic impacts within the sport fishing industry. The goods and services purchased by anglers for saltwater fishing were over 30 times greater than for freshwater fishing. Output, earnings and jobs followed along these same proportions. It should be noted that summing freshwater and saltwater categories will not equal the state total due to anglers' inability to assign some expenditures to a water type.

Tax Impacts

Considerable tax revenues are derived by state and federal governments from the economic activity generated by sport fishing (Table 4). In 1996, over $5,201,000 in state sales taxes were collected from the sale of fishing-related goods and services. Hawaii further received a benefit of $3,961,280 in state income tax. Likewise, the federal treasury received over $7,472,000 in income taxes from wages and salaries attributable to sport fishing.

Table 2: Summary of Economic Impacts of Angler Expenditures on Hawaii for 1996				
Expenditure Type	Expenditure	Output	Earnings	Jobs
Trip Expenditures	$96,085,458	$180,696,250	$52,936,698	2,272
Fishing Equipment	22,046,400	38,244,501	11,936,716	572
Auxiliary Equipment	1,822,814	3,114,407	950,329	47
Special Equipment	8,440,021	12,972,338	3,358,155	153
Other Expenditures	1,644,065	3,060,680	864,337	36
STATE TOTAL	**$130,038,758**	**$238,088,176**	**$70,046,235**	**3,080**

Additional Angler Impacts

In 1996, anglers across the country contributed over $22 million to the conservation and management of Hawaii's aquatic and fisheries resources. These contributions came from two sources; license fees and federal excise taxes on the sale of fishing equipment and gasoline used in motorboats. Fees paid for Hawaii fishing licenses totaled $20,977 in 1996. Excise taxes flow into the Sport Fish Restoration Trust Fund. Apportionments from this fund are distributed to state fisheries agencies and the U.S. Fish and Wildlife Service to conserve, manage, and enhance sport fishing opportunities across the nation. During 1996, $1,971,369 of these funds went to Hawaii state programs for sport fisheries conservation and management.

Fisheries agency budgets contain general and special tax funds, in addition to license fees and Sport Fish Restoration Funds, which are spent on goods, services, and personnel in order to carry out sport fisheries programs. The amount of these funds spent in Hawaii is unknown, however annual fisheries budgets from the principal federal fisheries agencies alone totaled $530 million. While not all state and federal budget expenditures benefit recreational fisheries, a substantial portion does.

The expenditure of funds by state and federal fisheries agencies for habitat improvement, facilities development, stocking, research, and other programs benefiting the recreational angling public create additional economic impacts of their own. These direct expenditures spur indirect and induced impacts which further contribute to the employment and tax benefits attributable to sport fishing.

State Impacts

Each of the 50 states provide a diversity of sport fishing opportunities to resident and nonresident anglers. Economic impact information also has been prepared for each state. A summary of expenditure, output, earnings, jobs and tax revenues generated is provided in Appendix B. It should be noted that state impact totals, when summed, will not equal national totals. This occurs because economic activity generated in one state by angler expenditures carries into other states where products are manufactured. The state impact estimates represent only the effect of expenditures in that state's economy. Other

Table 3: Economic Impacts of Sport Fishing by Water Type				
Water Type	Expenditures	Output	Earnings	Jobs
Freshwater	$3,866,207	$6,820,377	$1,913,660	90
Saltwater	124,477,713	228,272,316	67,220,958	2,948
STATE TOTAL	**$130,038,758**	**$238,088,176**	**$70,046,235**	**3,080**

Note: Freshwater excludes Great Lakes. Sums will not equal totals due to angler inability to assign some expenditures to a water type.

reports, similar to this one, can be obtained by contacting the American Sportfishing Association.

Table 4: State and Federal Taxes Generated from Sport Fishing

Type of Tax	Amount
State Sales Tax	$5,201,550
State Income Tax	$3,961,275
Federal Income Tax	$7,472,825

SUMMARY AND DISCUSSION

The purpose of this project was to estimate the economic benefits of sport fishing in Hawaii. This type of information has been useful in the policy and planning decision making process in fisheries management and other government agencies, conservation organizations, and businesses.

The information presented in this report clearly shows that sport fishing has an important impact on the state economy. Of particular importance is the fact that many angler expenditures occur in rural areas, thus providing a boost to numerous small communities.

The tax benefits of sport fishing estimated in this report are very conservative. Sales tax calculations, for example, reflect the state sales tax rate applied to all taxable items. However, many cities and counties have a piggy-back sales tax which is not accounted for in this study. Further, some state and local governments also levy special restaurant and lodging taxes which exceed the state sales tax rates.

Other local and state taxes are collected from anglers as part of their fishing-related expenditures. These include personal property taxes on items such as boats and vehicles, airport and ferry taxes, and alcoholic beverage and tobacco taxes.

Sport fishing businesses pay for business licenses and permits, corporate income taxes, and payroll taxes. Additionally earnings in some counties throughout the country carry an additional county income tax burden. None of these types of taxes were considered in this report but need to be recognized as benefits derived from recreational fishing.

Comparison with Previous Surveys

The *1996 National Survey of Fishing, Hunting and Wildlife Associated Recreation*, and the previous survey conducted in 1991, differed in one important respect from similar surveys conducted since 1955. For the 1991 and 1996 National Surveys, the sample frame used by the U.S. Census Bureau remained consistent with that used in previous years. However, rather than contacting anglers once at the end of the year, as was done in 1980 and 1985 for example, anglers in the 1991 and 1996 Surveys were contacted three times over the course of the survey period and asked to provide fishing participation and expenditure information.

The result of this methodological change was a significant downward shift in angling participation estimates. The 1991 and 1996 estimates are more precise than those from previous years because recall bias, a source of error in annual surveys, was considerably reduced. This greater precision also applies to expenditure and other data from the 1991 and 1996 National Survey. The benefit of this methodological improvement to this study is greater accuracy in the estimates of the economic impacts of sport fishing.

The data collected during the 1991 and 1996 National Surveys are similar, although there was a change in the treatment of non-trip expenditures in 1996. In 1991, it was assumed that expenditures of nonresidents on equipment and other non-trip related expenditures were made in the angler's home state. However, in 1996, anglers were asked to specify where these expenditures were made. The accuracy of comparisons between 1991 and 1996 expenditure data depends on the magnitude of nonresidents' non-trip expenditures that were actually made in the state where the fishing took place, as well as the extent to which these differences are canceled out by resident anglers' expenditures in other states. We present this comparison of expenditures with these issues in mind.

Table 5 compares the number of anglers, participation days, expenditures, and impact for 1991 and 1996 in Hawaii. Caution should be exercised when drawing conclusions from these comparisons however, as 1991 was a period of economic recession, increasing gas prices and the Gulf War, while in 1996 the United States experienced a strong economy with low inflation and low unemployment.

Table 5: The state of sport fishing in Hawaii: A comparison of 1991 and 1996

Item	1991	1996
Anglers	201,500	260,005
Days	2,355,000	3,054,915
Expenditures	$103,942,750	$130,038,758
Output	$188,153,800	$238,088,176
Wages	$55,749,700	$70,046,235
Jobs	2,460	3,080

Note: Angler expenditures, output and wages for 1991 were adjusted for inflation to 1996 dollars

Conclusion

The growth of recreational fishing over the past several decades has given this popular activity a clearly defined position in the social and economic fabric of each state and the country. Documenting the economic benefits of sport fishing will give fisheries advocates, conservationists, managers and the sport fishing industry useful information to use for conserving and enhancing sport fishing opportunities throughout the United States.

APPENDIX A: Angler Trip and Equipment Expenditures in Hawaii for 1996

Expenditure Item	Resident	Nonresident	Total
TRIP EXPENDITURES			
Food, Drink and Refreshments	$19,662,455	$5,764,108	$25,426,563
Lodging	$1,650,519	$9,559,032	$11,209,551
Public Transportation	$3,266,621	$21,234,036	$24,500,656
Private Transportation	$7,526,972	$810,448	$8,337,419
Boat Fuel	$4,504,786	$0	$4,504,786
Guide Fees, Pack Trip or Package Fees	$1,328,649	$9,116,986	$10,445,635
Public Land Use or Access Fees	$69,641	$0	$69,641
Private Land Use or Access Fees	$0	$0	$0
Boat Launching Fees	$131,470	$0	$131,470
Boat Mooring, Storage, Maintenance and Insurance	$2,740,803	$0	$2,740,803
Equipment Rental	$325,668	$0	$325,668
Bait (live, cut, prepared)	$5,254,436	$121,232	$5,375,668
Ice	$2,400,461	$47,234	$2,447,695
Heating and Cooking Fuel	$569,900	$0	$569,900
FISHING EQUIPMENT EXPENDITURES			
Rods, Reels, Poles and Rod Making Components	$9,113,690	$126,105	$9,239,794
Lines and Leaders	$2,197,402	$0	$2,197,402
Artificial Lures, Flies, Baits and Dressing	$2,449,185	$0	$2,449,185
Hooks, Sinkers, Swivels, etc.	$2,311,646	$0	$2,311,646
Tackle Boxes	$511,261	$0	$511,261
Creels, Stringers, Fish Bags, Landing Nets and Gaff Hooks	$666,569	$0	$666,569
Minnow Traps, Seines and Bait Containers	$86,284	$0	$86,284
Depth Finders, Fish Finders and Other Electronic Fishing Devices	$984,944	$0	$984,944
Ice Fishing Equipment	$0	$0	$0
Other Fishing Equipment	$2,999,711	$599,603	$3,599,314
AUXILIARY PURCHASES FOR FISHING			
Camping Equipment	$1,140,222	$0	$1,140,222
Binoculars, Field Glasses, Telescopes, etc.	$229,137	$0	$229,137
Special Fishing Clothing, Foul Weather Gear, Boots, Waders, etc.	$453,456	$0	$453,456
SPECIAL EQUIPMENT PURCHASED FOR FISHING			
Bass Boat	$0	$0	$0
Other Motor Boat	$5,658,153	$0	$5,658,153
Canoe or Other Non-Motor Boat	$0	$0	$0
Boat Motor, Boat Trailer/Hitch or Other Boat Accessories	$387,161	$0	$387,161
Pickup, Camper, Van, Travel or Tent Trailer, Motor Home, House Trailer	$1,809,852	$0	$1,809,852
Cabin	$0	$0	$0
Trail Bike, Dune Buggy, 4x4 Vehicle, 4-Wheeler, Snowmobile	$486,623	$0	$486,623
Other Special Equipment Including Ice Chest	$98,232	$0	$98,232
OTHER EXPENDITURES			
Fishing License Fees	$140,404	$29,019	$169,423
Other Fees	$2,913	$0	$2,913
Owned or Leased Property	$0	$0	$0
Processing and Taxidermy Costs	$0	$0	$0
Books and Magazines	$516,548	$0	$516,548
Dues or Contributions to Organizations	$260,560	$0	$260,560
Other Purchases	$290,516	$404,106	$694,622
STATE TOTALS	$82,226,850	$47,811,908	$130,038,758

APPENDIX B: Economic Impact of Sport Fishing in the United States by State for 1996

State	Angler Expenditures	Economic Output	Earnings	Jobs	State Sales Tax	State Income Tax	Federal Income Tax
Alabama	835,615,325	1,640,836,023	440,249,304	22,917	33,424,613	16,168,180	43,565,854
Alaska	548,364,219	956,793,847	261,571,620	12,626	no tax	no tax	26,843,763
Arizona	358,143,614	662,936,279	185,661,304	9,325	17,907,181	3,975,239	18,705,908
Arkansas	301,828,952	584,559,776	154,045,789	9,080	13,582,303	4,744,633	14,201,710
California	3,324,359,199	7,127,585,206	1,912,882,755	74,420	199,461,552	27,151,336	214,031,472
Colorado	634,446,791	1,315,893,039	358,525,912	17,835	19,033,404	1,815,652	36,313,033
Connecticut	284,277,505	522,234,595	145,548,006	5,562	17,056,650	6,174,109	16,374,409
Delaware	276,732,808	438,751,045	104,030,839	5,220	no tax	4,117,074	10,470,569
Florida	3,288,844,296	6,057,317,747	1,711,404,281	81,815	197,330,658	no tax	176,392,657
Georgia	1,121,277,910	2,290,557,133	615,582,528	27,808	44,851,116	27,201,134	64,543,462
Hawaii	130,038,758	238,088,176	70,046,235	3,080	5,201,550	3,961,275	7,472,825
Idaho	279,949,546	461,681,805	116,552,240	6,884	13,997,477	4,627,777	10,711,682
Illinois	1,568,471,459	3,618,451,181	975,473,066	40,005	98,029,466	28,063,454	106,974,691
Indiana	799,252,121	1,677,490,348	437,402,937	21,042	39,962,606	14,156,081	44,903,333
Iowa	338,969,069	654,502,272	171,570,996	9,118	16,948,453	7,936,862	16,785,965
Kansas	180,018,571	356,981,567	85,216,003	4,922	8,820,910	2,108,149	7,954,256
Kentucky	517,028,663	1,046,748,929	267,612,640	14,082	31,021,720	12,673,532	26,347,451
Louisiana	824,339,739	1,546,264,215	406,206,498	21,507	32,973,590	8,074,688	39,766,936
Maine	348,548,103	568,029,246	145,587,916	8,641	20,912,886	3,550,541	13,316,094
Maryland	475,266,219	896,205,153	246,766,760	11,361	23,763,311	9,270,742	25,858,098
Massachusetts	524,574,998	988,599,888	274,805,177	11,219	26,228,750	14,881,649	30,168,684
Michigan	1,506,227,841	2,854,443,939	772,711,715	35,579	90,373,670	30,241,540	80,976,932
Minnesota	1,874,835,053	3,678,165,611	948,349,442	47,293	121,864,278	38,312,872	95,957,163
Mississippi	703,691,648	1,305,817,664	299,881,501	16,971	49,258,415	5,511,595	28,325,079
Missouri	702,977,501	1,445,273,434	371,866,985	19,540	29,700,799	11,818,736	36,558,633
Montana	243,500,824	447,974,606	123,422,673	7,505	no tax	214,788	11,114,641
Nebraska	235,814,547	426,679,493	117,629,892	6,448	11,790,727	3,068,318	11,291,237
Nevada	211,092,356	335,701,417	92,246,647	4,240	13,721,003	no tax	9,684,969
New Hampshire	320,449,283	580,470,601	164,377,189	7,710	no tax	no tax	17,084,785
New Jersey	1,025,230,011	2,029,864,199	566,132,532	21,910	61,513,801	7,989,864	63,342,240
New Mexico	195,011,883	343,812,168	81,930,905	4,797	9,750,594	1,040,627	7,574,636
New York	1,785,947,624	3,123,990,172	720,283,674	28,351	71,437,905	21,102,990	80,260,311
North Carolina	1,571,726,554	2,997,403,521	776,525,926	40,319	62,869,062	30,744,670	76,968,519
North Dakota	83,415,107	148,467,067	37,944,621	2,252	4,170,755	485,951	3,471,081
Ohio	836,191,596	1,879,177,292	494,140,930	22,639	41,809,580	10,531,308	51,865,680
Oklahoma	490,767,292	1,012,537,832	258,906,659	14,797	22,084,528	5,472,069	24,252,897
Oregon	622,806,450	1,173,234,473	304,891,215	14,940	no tax	16,316,641	31,090,558
Pennsylvania	649,762,961	1,339,801,973	357,441,359	16,677	38,985,778	10,008,145	37,205,929
Rhode Island	136,792,521	231,350,837	63,860,775	3,034	9,575,476	1,817,753	6,610,011
South Carolina	707,100,241	1,332,272,691	351,107,282	18,932	35,355,012	9,720,845	34,001,282
South Dakota	206,431,791	351,939,997	91,476,747	5,401	8,257,272	no tax	8,403,444
Tennessee	474,724,071	989,463,949	265,237,749	12,812	28,483,444	no tax	27,238,685
Texas	2,869,558,423	6,366,580,439	1,647,197,166	80,282	179,347,401	no tax	168,271,354
Utah	231,291,509	468,403,271	124,003,524	6,773	11,275,461	5,193,480	11,894,190
Vermont	103,482,213	178,061,022	50,101,732	2,761	4,139,289	1,198,329	4,793,318
Virginia	821,317,778	1,625,627,755	441,752,462	20,880	28,746,122	15,461,130	45,811,064
Washington	704,396,393	1,358,381,838	373,822,490	16,713	45,785,766	no tax	39,676,035
West Virginia	204,922,711	308,804,127	71,238,378	4,450	12,295,363	2,048,445	6,323,516
Wisconsin	1,072,569,520	2,137,500,309	565,969,487	30,410	53,628,476	21,595,253	61,001,694
Wyoming	174,575,258	293,067,453	72,705,885	4,670	6,983,010	no tax	6,322,698

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