# Economic Impacts of the South Carolina Governor's Cup Billfishing Series in 1997

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#### ABSTRACT

The South Carolina (SC) Governor's Cup Billfishing Series is comprised of competitive fishing tournaments targeting various billfish species (e.g. blue marlin, sailfish, etc.) caught off of the SC coast. Using self-administered questionnaires distributed at the seven Series tournaments and follow-up mail questionnaires, expenditure data associated with tournament boats and marina visitors were collected during the 1997 Series. Using the questionnaire data, total expenditures associated with nonresident (i.e. out-of-state and SC boat owners not residing in the coastal region) tournament boats and visitors were estimated. Based upon total expenditures of nonresident tournament boats and visitors, the economic impacts of the Series in the eight coastal counties (i.e. Beaufort, Berkeley, Charleston, Colleton, Dorchester, Georgetown, Horry, and Jasper County) of the tournament sites were estimated using an economic impact analysis software, IMPLAN, and coastal county economic data. In an eight-county coastal region of South Carolina, total expenditures related to these nonresident tournament boats and marina visitors during the 1997 Series generated \$728,000 in total sales (output) impact, nearly \$245,000 in total income impact, and 13 short-term jobs. This report clearly documents that the 1997 SC Governor's Cup Billfishing Series as a sequence of short-term special events (i.e. billfish fishing tournaments) generated sales and related income in a coastal, eight-county regional economy due to tournament related expenditures by nonresidents.

KEY WORDS: Economic impacts, tournament, billfish

## INTRODUCTION

The South Carolina Governor's Billfishing Cup Series is an annual, umbrella event encompassing many of South Carolina's billfish tournaments. Anglers and boats participating in the member events are entered into the Series and accumulate points for billfish either landed or tagged and released. Spanning the period April 30 through July 26, 1997, the regular tournaments were based at six private marinas with the Carolinas Shootout held September 11-13, 1997.

## Proceedings of the 51st Gulf and Caribbean Fisheries Institute

A total of seven tournaments were based in the following four counties: Charleston, Colleton, Georgetown and Horry. The number of different boats, 106, competing in the 1997 regular Series declined 5% compared to 1996. During the 1997 Series, no tournament had to cancel fishing days due to weather except for the Marlin Quay tournament (Hammond 1998). In general, the 1997 Series appeared to be typical in terms of participating boats compared to the 1996 regular Series.

Since one of the primary objectives of the Series is to stimulate coastal tourism (Hammond 1998), the SC Governor's Cup Board of Directors approved funding for MRD to study aggregate economic impacts of the Series during the 1997 tournament season. In the case of special events like fishing tournaments, the economic effects of these events are best measured by estimating the economic impacts (e.g. sales, income, jobs, etc.) of visitor (i.e. nonresidents) expenditures associated with the event on the local economy (Crompton and McKay 1994).

#### **METHODS**

## **Primary Data Collection**

Tournament expenditures by crew, family and friends, lodging arrangements, boat characteristics (i.e. length, horsepower, and manufacturer), and the number of persons traveling with the respondent were collected using an expenditure questionnaire mailed to all persons registering a boat in a given Series tournament. The expenditure questionnaires were usually mailed within ten working days of the tournament. If a questionnaire had not been received from a respondent within 10 to 14 days of the mailing date, a reminder letter and second questionnaire was mailed to the respondent.

During the 1997 Series, two different self-administered questionnaires were distributed at each tournament: a crew profile form and visitor card. The crew profile form was usually given to the boat owner or captain during the tournament registration process on Wednesday of the tournament. The respondent was asked to provide the following information on this form: the boat's name, owner's name, the names of each individual and their role (e.g. captain, crew, angler, etc.) on the boat, the hometown and state of these individuals, lodging arrangements (e.g. staying on boat, etc.) and the number of friends and family, if any, accompanying each person listed on the form. During at least two of the tournament fishing days of each regular tournament, visitor cards were randomly distributed to people congregating around weigh-in areas.

Economic impact related data collected included the respondent's daily expenditures, lodging arrangements (if visiting the area), and residency location (i.e. zip code, city, state), and purpose of their visit to the marina site. In addition to the random sampling with visitor cards, the number of persons

congregating during the weigh-in periods was also counted during a 10 to 15 minute time period. These counts were used to estimate the number of persons visiting each tournament during the Series.

## Other Data Sources Other Data Sources

Marinas organizing and sponsoring tournaments at various sites provided a mailing list (i.e. boat name and the owner's mailing address) of boats registering for each tournament. The number of boats officially participating in each tournament (see Hammond 1998) was documented through the tournament rules of awarding 25 points to each boat participating in an individual tournament in the Series. This registration data was used in estimating total expenditures related to the number of boats in the Series. In this report, a boat receiving 25 points represents a "tournament boat registrant". Tournament boat (TB) registrants are defined as the number of different boats officially registered for a given tournament. Consequently, tournament expenditures are reported for the overall participation in a given tournament and not adjusted for the number of days fished. Anecdotal information was also collected from some of the sponsoring marinas. Information collected included observations regarding marina expenditures (e.g. food catering, rental equipment, etc.).

## **Estimating Total Expenditures**

Estimated total expenditures related to tournament boats in the Series were calculated by multiplying appropriate averages of tournament related expenditures by the total number of tournament boat (TB) registrants in the following groups: out-of-state boats, boats owned by SC residents <u>not</u> residing in one of the coastal regional counties (i.e. Beaufort, Berkeley, Charleston, Colleton, Dorchester, Georgetown, Horry, and Jasper county), and boats owned by coastal SC residents residing in one of the coastal counties. In this report, boats owned by SC residents not residing in one of the coastal counties will be described as "visiting SC boats" or "visiting SC TB registrants". Estimated total expenditures of persons visiting the tournament marinas were calculated from visitor average expenditures multiplied by the number of estimated visitors from out-of-state and SC residents <u>not</u> residing in the coastal region.

# **Economic Impact Analysis**

Economic impacts of the 1997 Series were generated by using estimated total expenditures associated with nonresident tournament boats and nonresident marina visitors. In addition to those not residing in South Carolina, "nonresidents" in this report includes marina (tournament) visitors and tournament boats owned by South Carolinians not residing in one of the counties of the coastal region. Moreover, only nonresident marina visitors

## Proceedings of the 51st Gulf and Carlbbean Fisheries Institute

whose primary motivation for traveling was to visit the tournament were included. The economic impacts of the various total expenditures by nonresidents were estimated by the Impact Analysis for Planning (IMPLAN) software system. IMPLAN is a microcomputer based input-output modeling system using county level economic data (Cordell and Bergstrom 1989, MIG 1997). The IMPLAN data base employed in this study was derived from 1995 county level data sets and was used to construct an eight county coastal region input-output (I-O) model. In this report, the "coastal region" was defined as the following eight South Carolina counties: Beaufort, Berkeley, Charleston, Colleton, Dorchester, Georgetown, Horry, and Jasper.

Estimated total tournament related expenditures of nonresident boats (i.e. boat owners, crews, and guests) and nonresident tournament visitors were allocated to the appropriate IMPLAN I-O sectors in South Carolina. The allocation of spending to I-O sectors related to vehicles, retail food, and miscellaneous shopping expenditures was determined using modified Personal Consumption Expenditures data developed by the Bureau of Economic Analysis, U.S. Department of Commerce (see Watson and Bratcher 1987).

Using the South Carolina I-O model derived from IMPLAN and estimated 1997 total expenditures, direct (final demand), indirect, and induced effects of expenditures in the tournament region were estimated for sales (output), income, and jobs. An IMPLAN Type II multiplier was used to estimate induced effects (i.e. spending of income by local households).

#### **RESULTS**

#### Response Rates

Tournament expense questionnaires were mailed to boat owners registering for each tournament. Response rates by boat owners for each tournament ranged from 58% to 76% excluding the Carolinas Shootout. The overall response rate was 65% for all tournaments (i.e. including the Carolina Shootout) (Table 1). Response rates for the crew profile form administered at each regular tournament ranged from 76% to 87% excluding the Carolina Shootout. The overall response rate for the profile form was 83% (Table 1). The sample size of tournament visitors represented 21% of estimated tournament visitors (Table 1).

# Tournament Boats and Participants

During the 1997 Series, 240 tournament boat (TB) registrants participated in regular tournaments and 12 different boats qualified for the Carolinas Shootout, for a total of 252 TB registrants (Table 2). The average length of tournament boats was 13.4 meters (length overall). Boats from the coastal region counties, 159 TB registrants, comprised 63% of all participants. Visiting SC boats constituted 21% (54 TB registrants) of the participating boats. Out-of-state

state boats, 39 TB registrants, represented 15% of the TB registrants and all "nonresident" boats, 93, comprised 37% of all participating boats in 1997 (Table 2). The average number of persons associated with a boat in the Series was 8.4 persons (2,117/252), and overall about 32% of these people did not reside in South Carolina coastal counties. The average crew size during the Series was 6.0 persons (1,503/252) (Table 2).

**Table 1.** Response rates by tournament participants and marina visitors in the 1997 SC Governor's Cup Bilifishing Series.

Expense Questionnaires Mailed to B Owners	oat	
Number Mailed to Boat Owners:	252	
Number of Usable Responses:	164	
Overall Response Rate:	65.1 %	
Crew Profile Forms Distributed at Tournaments		
Total Crew Profile Forms Distributed:	252	
Number of Responses:	208	
Overall Response Rate:	82.5 %	
Visitor Cards Distributed at Regular Tournaments		
Estimated Total Number of Visitors:	1,730	
Visitor Card Sample Size:	358	
Visitor Card Sample Percent of Total:	20.7 %	

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**Table 2.** Total number of registered boats and persons participating in the 1997 SC Governor's Cup Billfishing Series.

Tournament Boat Registrants				
Out of State Registered Boats:	54	21.4 %		
SC Visiting Registered Boats:	39	15.5 %		
Coastal SC Registered Boats:	159	63.1 %		
Total Registered Boats:	252	100.0 %		

#### **Estimated Number of Participants** Categories Number Percent of Total Total Crew\* Members: 1.503 71.0 % Total of Crew Guests: 614 29.0 % Total of Above: 2.117 100.0 % Total Outside Region: 667 31.5 %

## Tournament Expenses by Boat Groups

Average expenditures associated with coastal SC resident boats were about \$3,222 without fees and \$6,241 with fees (Table 3). This included expenditures by boat guests, not just the crew and owner. The registration and estimated average prize fee (i.e." Tournament Within A Tournament") represented about 51% of the total average expenditures. Fuel, crew tips, restaurant, lodging, fishing tackle and groceries expenditures during a tournament represented 76% of all non-fee expenditures. Estimated total tournament trip expenditures associated with coastal resident tournament boats during the overall Series were \$512,000 excluding fees and \$1,016,000 with fees.

Although the estimated total expenditures associated with the coastal resident boats are interesting, this total does <u>not</u> approximate the new money flowing into the coastal region due to the 1997 Series. Only the expenditures associated with out-of-state boats (Table 3) and visiting SC boats (Table 3) injected a round of new money into the tournament region. The average expenditure associated with out-of-state boats was \$6,067 (Table 3), while visiting SC boats spent about \$7,879 per TB registrant (Table 3). The registration and estimated average prize fee represented 53% of the total average for out-of-state boats. In contrast, these fees comprised about 40% of the

<sup>\*</sup>Crew" includes the captain, boat owner(s), and tournament anglers.

visiting SC boat expenditures. Due to the higher average non-fee expenditures and the greater number of visiting SC registrants, the total estimated expenditures associated with visiting SC boats (Table 3), \$423,066, was 85% higher than the total estimated expenditures, \$229,479, (Table 3) of the out-of-state boats. The total estimated expenditures associated with these two nonresident groups was \$652,000.

**Table 3.** Estimated average expenditures by boat groups and total nonresident boat expenditures during the 1997 SC Governor's Cup Billfishing Series.

Average Expenses by Boat Groups					
	sc		Out		
CATEGORY	Coastal	Visiting	State		
Fuel & Oil for Boat	\$ 844	\$ 777	\$ 925		
Lodging	291	747	394		
Restaurants/Fast Food	355	496	255		
Fishing Tackle	275	367	348		
Groceries	280	321	197		
Captain & Crew Tips	414	568	122		
Entertainment	194	291	92		
Non-Food Shopping	141	336	122		
Fishing Bait	156	144	125		
Vehicle Expenses	92	218	50		
Repairs at Tournament	26	150	56		
Ice for Tournament	61	58	47		
Dockage or Slip Fees	79	139	74		
Auto Rental & Parking Fees	2	49	52		
Miscellaneous Expenses	12	18	8		

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 Total Without Fees:
 \$3,222 \$ 4,679 \$2,867

 Registration Fee:
 1,200 1,200 1,200

 Prize Fee:
 2,000 2,000 2,000

Total Average With Fees: \$6,241 \$7,897 \$6,067

special trip to visit a tournament marina, 123, represented 7% of all visitors, and SC visitors <u>not</u> residing in the coastal region counties ("SC Visitors" in Table 4) also comprised 7% of the total visitors (Table 4). There were 254 (123 + 132) nonresident visitors (Table 4) comprising 14% of all estimated tournament visitors. Average daily expenditures for the sample of out of state and SC visitors were \$236 and \$354 respectively, with lodging expenses being the highest average expenditure category (Table 4). Estimated total expenditures by nonresident tournament visitors were \$76,000 (Table 4).

### **Estimated Economic Impacts**

The total economic impacts of the Series on the coastal region by out-of-state tournament participants and visiting SC boats in 1997 were estimated using the I-O model IMPLAN. In 1997, tournament expenditures associated with out-of-state boats in the overall Series had an estimated total sales (output) impact of \$223,000 in the tournament region (Table 5). The estimated total income impact, which is the sum of proprietor income and employee compensation, was \$73,000 (Table 5). The total number of jobs due to direct, indirect, and induced effects was estimated to be 4 short-term jobs in 1997 (Table 5).

Tournament expenditures associated with visiting SC tournament boats in 1997 had an estimated total sales impact of \$409,000 in the coastal region from tournament expenditures (Table 5). The estimated total income impact was \$136,000 with a total of 7 jobs due to direct, indirect, and induced effects in 1997 (Table 5). The total sales impact generated by all nonresident tournament boat registrant expenditures was \$660,000, resulting in a total income impact of \$209,000 and 11 short term jobs (Table 5). The total economic impacts of the Series on the coastal region by nonresident visitors, 254 persons, were also estimated (Table 5). The total sales (output) impact associated with marina visitor expenditures was only \$96,000, which generated and \$36,000 in total income (Table 5).

The estimated 1997 total sales impact of the Series in the tournament region economy by all nonresident tournament boats and marina visitors was approximately \$728,000, which generated \$245,000 in total income (Table 5). The total number of jobs associated with these nonresident expenditures due to

direct, indirect, and induced effects was estimated to be 13 short-term jobs in 1997 (Table 5).

It should be noted that even as very short-term jobs, the number of jobs is probably overestimated because it is common for existing employees (e.g. marina employees) to either work overtime and/or be released from other normal tasks to accommodate increased demands of special events like fishing tournaments (Crompton and McKay 1994). In addition, volunteers may also reduce the number of part-time jobs related to fishing tournaments.

It is apparent that the nonresident visitor expenditures are subject to less "leakage" (i.e. imports) in the region compared to the expenditures associated with the nonresident tournament boats. For example, about 8% of the out-of-state visitor expenditures were related to "vehicle expenses", mainly gasoline purchases, (Table 4) in the coastal region, while out-of-state tournament boats spent 15% of their purchases on fuel and oil. In South Carolina, gasoline and marine fuel are examples of commodities where a major portion (i.e. 75 % or more) of the retail purchase dollars are eventually spent on importing fuel from other states. Of course, this does not imply that the Series promoters should try to attract more nonresident marina visitors to the various tournaments. Stimulating coastal tourism is not the only objective of this tournament Series (Hammond 1998).

## CONCLUSIONS

The economic impacts of the Series in a coastal region were estimated using nonresident total expenditures, economic impact analysis software, and 1995 coastal county economic data. In the eight-county coastal region as defined in this study, total expenditures related to these nonresident tournament boats and marina visitors during the 1997 Series generated about \$728,000 in total sales (output) impact, \$245,000 in total income impact, and 13 short-term jobs, although the number of jobs is probably overestimated. This analysis clearly documents that the 1997 SC Governor's Cup Series as a sequence of short-term special events (i.e. billfish fishing tournaments) generated an ample level of sales and income in a coastal, eight-county regional economy due to tournament related expenditures by nonresidents. In addition to documenting the economic impact of the Series in 1997, expenditure and other data collected and analyzed should be useful in estimating the economic impacts of the Series in future years. Among other factors (Story and Allen 1993), estimating future impacts assumes that the 1997 expenditure patterns associated with the two nonresident boat groups will be similar in future years.

**Table 4.** Estimated total persons visiting tournament sites, average expenditures and total expenditures by nonresident marina visitors during the 1997 Governor's Cup Billfishing Series.

Nonresident Visitors\*

Tournament	Total	Out of	sc		Ali
Туре	Visitors	State	Visitors	Total	Others
Regular Series:	1,730	120	128	247	1,418
Carolina Shootout:	50	3	4	7	41
ALL:	1,780	123		254	1,459
Percent of Total:	100%	7%	7%	14%	82%

	Averages		<b>Estimated Total Expenditures</b>		
Category	Out of State	SC Visitor	Out of		onresident Totals
Restaurants	45	91	5,541	12,012	17,553
Lodging	64	97	7,881	12,804	20,685
Groceries	32	35	3,940	4,620	8,560
Shopping	37	47	4,556	6,204	10,760
Entertainment Gas	38 20	56 28	4,679 2,463	7,392 3,696	12,071 6,159
Totals	\$236	\$354	\$29,061	\$ 46,728	\$75,789

<sup>\*</sup>Nonresident visitors are marina visitors from out-of-state or SC residents not residing in one of the SC coastal county regions and making a special trip to visit a Series tournament.

Table 5. Estimated economic impacts of the 1997 SC Governor's Cup Billfishing Series on the economy of a eight county coastal region due to expenditures associated with nonresident tournament boats and marina visitors.

## **Dollars in Thousands**

**Economic Impacts** 

Expenditures/Impacts		Sales	income	Jobs			
Tournament Boat Registrant Expenditures:							
Out-of-State Boats:	\$ 229						
	Direct	143	46	2.6			
	Indirect	40	12	0.5			
	Induced	40	15	0.6			
	Total:	\$223	\$73	3.7			
Visiting SC Boats:	<b>\$423</b>						
	Direct	263	87	5.1			
	Indirect	72	22	0.9			
	Induced	74	27	1.2			
	Total:	\$409	\$136	7.2			
All Nonresident Boat:	\$625						
	Direct	406	133	7.7			
	Indirect	112	34	1.4			
	Induced	114	42	1.8			
	Total:	\$632	\$209	10.9			
Visitor Expenditures:	\$76						
	Direct	63	3 24	1.7			
	Indirect	14	. 5	0.2			
	Induced	19	7	0.3			
	Total:	\$96	\$36	2.2			
All Nonresident Expenditure \$ 728							
	Direct	469	157	9.4			
	Indirect	126	39	1.6			
	Induced	133	3 49	2.1			
	Grand Total:	\$728	\$245	13.1			

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