## A Socio-Economic Survey of the Seventh Annual Arthur Smith King Mackerel Tournament

## Charles J. Moore



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# A SOCIO-ECONOMIC SURVEY <br> OF THE <br> SEVENTH ANNUAL <br> ARTHUR SMITH KING MACKEREL TOURNAMENT 

## by

Charles J. Moore

Recreational Fisheries
Office of Conservation, Management and Marketing

Marine Resources Division
Gouth Carolina Wildilfe and Marime Resuurces Department Charleston, South Carolina 29412

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## I. INTRODUCTION

The Arthur Smith King Mackerel Tournament is based on the fall run of king mackerel (Scomberomorus cavalla) along the South Carolina coast and has been an annual event since 1977. During the first six years (1977-1982) this tournament was held in the Little River - North Myrtle Beach area. During 1983 it was expanded to include a second point of departure from Murrells Inlet, approximately 30 miles to the south of Little River. This tournament has gained considerable notariety over the past seven years with $407,522,598,640,846,888$, and 872 boats participating, respectively, each year. Prize money has been increased from $\$ 30,000$ in 1977 to $\$ 250,000$ in 1983. It has been sanctioned by the International Game Fish Association and promoted for the past five years as the worlds largest saltwater fishing tournament.

A socio-economic survey of the 1979 tournament (Smith and Moore, 1980) estimated that 1,844 anglers participated in the two day event. These anglers spent an estimated $\$ 650,000$ and brought an additional 4,740 individuals to the area. These individuals spent $\$ 229,000$ for a combined direct economic impact of approximatiey $\$ 880,000$ to the Little River, S.C. area during 1979.

During 1983, a socio-economic study of this tournament was repeated. Methods were similar to those used four years earlier, although several additional questions were asked and other questions were combined or omitted. This technical report presents the results obtained from the 1983 survey and provides comparisions with results obtained during 1979.

## III. METHODOLOGY

The Seventh Annual Arthur Smith King Mackerel Tournament was held on September 29-30, 1983. The methods utilized in this survey were similar to those reported by Smith and Moore (1980) for the same tournament held in 1979. During 1979, interviews were conducted during the weigh-in period ( $1530-1800$ EDT) at the end of each day's competition. Interviewers intercepted anglers at the weigh-in station or as the boats returned to their docks. During 1983, all interviews were conducted on the day following the second fishing day as anglers arrived at the awards party. Potential interviewees were aksed if they had fished in either day's competition. A "no" response terminated the interview. If the answer was positive, the fishermen were asked to complete the interview form (Appendix Figure 1) and return it to the interviewer.

Boats entering the competition were restricted both years to 18 ft . in length or greater. Number, length and state of registration of boats entered in each tournament were obtained from official registration forms. Numbers and weights of King mackerel entered in the tournament were obtained from official weigh-in forms. Estimations of participation levels and expenditures were expanded based on the mean numbers of anglers and mean expenditures of interviewees multiplied by the number of boats officially registered.

## III. RESULTS

## A. NUMBER OF PARTICIPNTIS

Nearly all anglers interviewed during both years ( $1979 \mathrm{~m} 80.9 \pi, 1983-92 \pi$ ) indicated that they fished both days of the tournament. During 1979, the questionnaire did not ask for the number of anglers fishing from the intervieweels vessel. To rectify this oversite a random number of interviewees from different boats ( $\mathrm{N}=59$ ) were asked this question orally. A mean value of 4.0 anglers/boat (.95\% confidence value of 2.6 and 5.4) was obtained. The official registration forms indicated that 461 boats registered for the competition. Therefore, we estimated that a total of 1844 anglers participated during the 1977 tournament.

During 1983, intervieween ( $\mathrm{N}=387$ ) indicated that a mean of 4.37 anglers fishing per vessel (number of anglers fishing from boat frequency of response; $1-2 ; 2-22 ; 3-63 ; 4-137$; 5-70; 6-63). As 872 boats registered during the 1983 tournament a total of 3,811 anglers ( $4.37 \times 872$ ) were estimated to have participated. A total of 417 interviews were obtained during 1979, or $23 \%$ of the projected number of anglers who participated. During 1983, a total of 408 anglers were interviewed or 10.7 percent of those who fished during the tournament.

## B. VESSEL INFORMATION

The make of boats registered during the 1979 and 1983 tournaments is given in Table 1. A total of 61 boat manufacturers in 1979 and 69 boat manufacturers during 1983 were represented. During both years, over $50 \%$ of the interviewees fished from one of eleven makes of boats, with eight of these manufacturers being the most frequently fished both years. There is a good correlation between the number of boats by manufacturers officially registered in the tournament during 1983 and the numbers reported utilized by intervievees that year.

The official registration forms indicated that boats utilized in the tournament ranged from 18 to 54 feet during 1979 and from 18 to 85 feet during 1983. During 1979 the length frequency distribution of boats

Table 1. Distribution of makes of boats on official 1983 entry forms ( $N=872$ ) and number of boats used by interviewees during $1983(\mathrm{~N}=345)$ and 1979 ( $\mathrm{N}=378$ ).

| BOAT NAME | Number <br> Entered <br> 1983 | Number <br> Interviewed |  | BOAT NAME | Number Entered 1983 | $\begin{aligned} & \text { Interviewed } \\ & 1983 \quad 1979 \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1983 |  |  |  |  |  |
| Wellcraft | 47 | 39 | 28 | Aristocrat | 1 | 5 | 2 |
| Bertram | 44 | 21 | 32 | Arrowglass | 1 | 0 | 0 |
| Grady-White | 37 | 23 | 20 | BaJa | 1 | 0 | 0 |
| Mako | 28 | 22 | 28 | Bonanza | 1 | 0 | 0 |
| Sea Ox | 24 | 8 | 2 | Calypso | 1 | 4 | 0 |
| Sea Star | 24 | 6 | 16 | Caravelle | 1 | 0 | 0 |
| Chris Craft | 23 | 10 | 9 | Chapparel | 1 | 1 | 11 |
| Sea Ray | 22 | 15 | 5 | Catline | 1 | 0 | 0 |
| Hydro-Sport | 22 | 7 | 14 | Concorde | 1 | 0 | 0 |
| Hatteras | 14 | 12 | 7 | Crestliner | 1 | 0 | 0 |
| Boston Whaler | 20 | 8 | 0 | Egg Harbor | 1 | 1 | 0 |
| Aquasport | 19 | 10 | 5 | Fibra | 1 | 1 | 3 |
| T Bird | 18 | 3 | 4 | Flare | 1 | 0 | 0 |
| Bayliner | 16 | 4 | 4 | Fleetwing | 1 | 0 | 0 |
| Cobia | 16 | 3 | 10 | Fountain Exec. | 1 | 0 | 0 |
| Dixie | 16 | 8 | 0 | Glastex | 1 | 1 | 0 |
| Glassmaster | 16 | 10 | 3 | Glaspar | 1 | 3 | 1 |
| Glastron | 15 | 6 | 0 | Harkers Island | 1 | 0 | 2 |
| Robalo | 15 | 1 | 11 | Harris Craft | 1 | 0 | 0 |
| Sportscraft | 15 | 3 | 8 | Hurricane | 1 | 0 | 0 |
| Star Craft | 15 | 9 | 0 | Lindsey | 1 | 0 | 0 |
| Tiara | 15 | 3 | 0 | Lone Star | 1 | 0 | 0 |
| Winner | 15 | 4 | 2 | Maxim | 1 | 0 | 0 |
| Reinell | 14 | 2 | 3 | Monarch | 1 | 0 | 0 |
| Sea Craft | 14 | 6 | 7 | Ocean Master | 1 | 0 | 0 |
| Trojan | 14 | 0 | 9 | Omega | 1 | 1 | 0 |
| Custom | 13 | 0 | 4 | Pola Craft | 1 | 2 | 0 |
| Formula | 13 | 4 | 5 | Penn Yan | 1 | 0 | 3 |
| John Allmand | 13 | 5 | 0 | Post | 1 | 2 | 0 |
| Pacemaker | 13 | 1 | 6 | Renken | 1 | 6 | 2 |
| Galaxy | 12 | 6 | 10 | Sabre | 1 | 0 | 0 |
| Proline | 12 | 1 | 9 | Sea Sport | 1 | 2 | 4 |
| Apollo | 11 | 2 | 2 | Silverline | 1 | 0 | 0 |
| Cruiser | 11 | 0 | 9 | Simmone | 1 | 0 | 0 |
| Larson | 11 | 4 | 0 | Stamas | 1 | 0 | 0 |
| Luhrs | 11 | 2 | 0 | Star Chief | 1 | 0 | 0 |
| Marquis | 11 | 2 | 2 | Torro | 1 | 0 | 0 |
| North American | 11 | 2 | 6 | West Wind | 1 | 0 | 0 |
| Scottie Craft | 11 | 0 | 6 | Topaz | 0 | 0 | 5 |
| Silverton | 11 | 0 | 11 | Marlin | 0 | 0 | 2 |
| Thompson | 11 | 1 | 2 | Starfire | 0 | 0 | 2 |
| Carver | 10 | 1 | 3 | Uni-Jack | 0 | 0 | 2 |
| Correct Craft | 10 | 0 | 0 | Atlantic | 0 | 1 | 1 |
| MFG | 10 | 1 | 0 | Double Eagle | 0 | 0 | 1 |
| Phoenix | 10 | 0 | 0 | Evanrude | 0 | 3 | 1 |
| Slickeraft | 10 | 5 | 6 | Glasscraft | 0 | 0 | 1 |
| T. Craft | 10 | 1 | 0 | Handel | 0 | 0 | 1 |
| Uniflite | 10 | 2 | 4 | King Craft | 0 | 0 | 1 |
| Drummond | 9 | 1 | 0 | Mitchell | 0 | 0 | 1 |
| Fiberfoam | 9 | 1 | 0 | Woods | 0 | 0 | 1 |
| Homemade | 5 | 0 | 4 | AMC | 0 | 1 | 0 |
| Manatee | 2 | 1 | 3 | Catch 22 | 0 | 1 | 0 |
| McKee | 2 | 2 | 0 | Super Craft | 0 | 1 | 0 |
| No. 1 | 2 | 1 | 0 | Pipestone | 0 |  | 0 |
| Owens | 2 | 1 | 0 | Continental | 0 | 2 | 0 |
| Regal | 2 | 0 | 0 | Richfield | 0 | 1 | 0 |
| Seabird | 2 | 4 | 3 | Privateer | 0 | 1 | 0 |
| Sea Sake | 2 | 0 | 0 | Safety Craft | 0 | 1 | 0 |
| State Craft | 2 | 0 | 0 | Nitagade | 0 | 1 | 0 |
| Sting Ray | 2 | 1 | 0 | Swinger | 0 | 1 | 0 |
| Altra | 1 | 2 | 0 | Sea Start | 0 | 1 | 0 |
| AMF | 1 | 1 | 0 |  |  |  |  |
| Angler | 1 | 2 | 1 |  |  |  |  |

registered in the tournament and those used by interviewees were comparable (Figure 1), however, during 1983, this comparison was not als good. There was a significant increase in the number of boats 18 to 20 feet in length registered during the 1983 tournament, $43.4 \%$ in 1983 compared to 11.1 percent during 1979. However, this was not reflected by those fishermen interviewed, as only $8.6 \%$ indicated they fished from such a boat during 1983 compared to $7.6 \%$ during 1979.

Sisilarly, vessels larger than 35 feet in length, officially registered during 1983, increased over 1979 but this was not reflected by those anglers interviewed.

The age of vessels utilized by interviewed anglers during 1979 and 1983 are compared in Figure 2. During the 1979 tournament, the frequency of older boats decreased each year with the greatest number of vessels being built during 19781979. However, during 1983, the highest frequency of boats continued to be 1978 and 1979 models. Nearly $60 \%$ of those anglers interviewed during 1979 fished from vessels less than six years old where as only $31 \%$ of those anglers during 1983 fished from such vessels.
C. ANGLER INFORMATION

1. Age, Occupation and Income Range

During 1983, interviewees were asked their age, (Figure 3) occupation and income range (Table 2). The mode age of interviewees was 40 years with approximately $60 \%$ of the interviewed being between 30 and 45 years of age. Most interviewees classified themself as either professional (31.5\%) or business owners (20.5\%). Less than $12 \%$ of the interviewees indicated a total household income of less than $\$ 20,000$ annually. More than $20 \%$ indicated a household income in excess of $\$ 50,000$.

## 2. Catagorization of Interviewees

When asked to catagorize thenselves, a majority (83.9\%-1979 and 82.8\%-1983) of the interviewees indicated they were either an owner/captain of the boat, a member of the crew or an invited guest (Table 3). Interviewees reporting to be either an owner, captain or charter guest comprized only $16 \%$ during 1979 and $15 \%$ during 1983.



Figure 1. Length frequency distribtuion of boats registered and boats used by interviewees during 1979 (above) and 1983 (below).


Figure 2. Frequency distribution of boat ages used by interviewe's during 1979 (left) and 1983 (right).
Table 2. Occupation and household income range of interviewees during 1983 tournament.


Figure 3. Age frequency distribution of anglers interviewed during 1983 tournament.

Table 3. Distribution of interviewees by categorization during 1979 and 1983.

| Catagorization | Number |  | \% Frequency |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1983 | 1979 | 1983 | 1979 |
| Owner/Captain | 120 | 122 | 30.4 | 29.9 |
| Crew | 116 | 121 | 29.4 | 29.7 |
| Invited Guest | 91 | 99 | 23.0 | 24.3 |
| Owner | 34 | 36 | 8.6 | 8.8 |
| Captain | 9 | 15 | 2.3 | 3.7 |
| Charter Guest | 17 | 15 | 4.3 | 3.7 |
| No Response | 8 |  | 2.0 |  |
|  | 395 | 408 | 100.0 | 100.1 |

## 3. Residence by State and County

Nearly equal numbers of South Carolina and North Carolina boats registered both years. During 1983, boats from 23 different states officially registered compared to 10 during 1979. (Table 4) The frequency of interviewed anglers by state of residence along with the estimated number of anglers coming from that state is presented in Table 5. During both 1979 and 1983, South Carolina and North Carolina anglers were interviewed in nearly equal numbers and together made up over $85 \%$ of all anglers interviewed. During 1983, more North Carolina anglers $(1,776)$ were estimated to have participated than South Carolina anglers ( 1,616 ).

Distribution of interviewees during 1979 and 1983 by South Carolina and North Carolina counties are listed in Table 6 and 7, respective1y. During 1979, 61\% of South Carolina interviewees were from three counties (Horry, Charleston and Richland) compared to 1983 when only $40 \%$ were residents of these three counties. Twenty-one additional counties were represented during 1979 compared to 27 during 1983.

Interviewees during 1979 from North Carolina resided in one of 31 counties compared to 38 counties in 1983. A total of $52.0 \%$ of North Carolina interviewees during 1979 resided in one of five counties (Mecklenburg, Guilford, New Hanover, Cumberland and Gaston) but only $33.7 \%$ indicated these counties as their residence during 1983.

Table 4. A comparison of vessel registration by state during the 1979 ( $\mathrm{N}=459$ ) and 1983 ( $\mathrm{N}=872$ ) tournament.

| STATE | Number |  | \% Frequency |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1979 | $\underline{1983}$ | 1979 | $\underline{1983}$ |
| South Carolina | 220 | 370 | 47.9 | 44.6 |
| North Carolina | 203 | 342 | 44.2 | 41.2 |
| Florida | 3 | 30 | 1 | 3.6 |
| Virginia | 16 | 19 | 3.5 | 2.3 |
| Georgia | 10 | 16 | 2.2 | 1.9 |
| Maryland | 1 | 10 | 1 | 1.2 |
| Tennessee | 3 | 7 | 1 | 1 |
| Pennsylvania |  | 7 |  | 1 |
| Ohio |  | 6 |  | 1 |
| New Jersey |  | 6 |  | 1 |
| Texas |  | 5 |  | 1 |
| West Virginia |  | 5 |  | 1 |
| Michigan |  | 5 |  | 1 |
| Oklahoma |  | 5 |  | 1 |
| Wisconsin |  | 4 |  | 1 |
| New York | 1 | 3 |  | 1 |
| Delaware | 1 | 3 |  | 1 |
| Louisiana |  | 3 |  | 1 |
| Mississippi |  | 3 |  | 1 |
| Arkansas |  | 3 |  | 1 |
| Illinois |  | 2 |  | 1 |
| Maine |  | 1 |  | 1 |
| California |  | 1 |  | 1 |
| Connecticut | 1 |  | 1 |  |

Table 5. Number of interviewed anglers by state of residence during 1979 ( $\mathrm{N}=416$ ) and 1983 ( $\mathrm{N}=401$ ) and the estimated total number of anglers participating from each state.

| STATE | Number |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1979 | 1983 | 1979 | $\underline{1983}$ | 1979 | $\underline{1983}$ |
| South Carolina | 207 | 170 | 49.8 | 42.4 | 918 | 1616 |
| North Carolina | 164 | 187 | 39.4 | 46.6 | 727 | 1776 |
| Virginia | 23 | 11 | 5.5 | 2.7 | 101 | 103 |
| Florida | 3 | 8 | 1 | 2.0 | 13 | 76 |
| Maryland | 1 | 6 | 1 | 1.5 | 4 | 57 |
| Georgia | 5 | 4 | 1.2 | 1 | 22 | 38 |
| New Jersey | 4 | 4 | 1.0 | 1 | 18 | 38 |
| Tennessee | 2 | 3 | 1 | 1 | 9 | 29 |
| Texas |  | 3 | 1 | 1 |  | 29 |
| New York | 2 | 2 | 1 | 1 | 9 | 19 |
| Delaware | 2 |  | 1 |  | 9 |  |
| Massachussetts | 1 |  | 1 |  | 4 |  |
| Pennsylvania | 1 |  | 1 |  | 4 |  |
| West Virginia | 1 |  | 1 |  | 4 |  |
| Connecticut |  | 1 |  | 1 |  | 10 |
| Colorado |  | 1 |  | 1 |  | 10 |
| Canada | - | 1 |  | 1 | - | 10 |
| Total | 416 | 401 | 100 | 100 | 1844 | 3811 |

Table 6. Distribution of interviewees from South Carolina by county during 1979 ( $\mathrm{N}=181$ ) and 1983 ( $\mathrm{N}=170$ ).

| COUNTY | Number |  | \% Frequency |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1979 | 1983 | 1979 | $\underline{1983}$ |
| Horry | 55 | 42 | 30.4 | 24.7 |
| Charleston | 42 | 22 | 23.2 | 12.9 |
| Richland | 14 | 8 | 7.7 | 4.7 |
| Beaufort | 9 | 5 | 5.0 | 2.9 |
| Marion | 9 | 2 | 5.0 | 1.2 |
| Georgetown | 8 | 7 | 4.4 | 4.1 |
| Berkely | 7 | 3 | 3.9 | 1.8 |
| Darlington | 6 | 7 | 3.3 | 4.1 |
| Florence | 6 | 9 | 3.3 | 5.3 |
| Greenville | 4 | 2 | 2.2 | 1.2 |
| Lexington | 4 | 7 | 2.2 | 4.1 |
| York | 4 | 3 | 2.2 | 1.8 |
| Orangeburg | 3 | 2 | 1.7 | 1.2 |
| Dorchester | 2 | 2 | 1.1 | 1.2 |
| Lancaster | 2 | 2 | 1.1 | 1.2 |
| Clarendon | 1 |  | 1 |  |
| Dillon . | 1 | 4 | 1 | 2.4 |
| Greenwood | 1 |  | 1 |  |
| Lee | 1 |  | 1 |  |
| Newberry | 1 |  | 1 |  |
| Spartanburg | 1 | 5 | 1 | 2.9 |
| Marlboro |  | 4 |  | 2.4 |
| Aiken |  | 7 |  | 4.1 |
| Sumter |  | 7 |  | 4.1 |
| Anderson |  | 4 |  | 2.4 |
| Hampton |  | 1 |  | 1 |
| Fairfield |  | , |  | 1 |
| Chesterfield |  | 1 |  | 1 |
| Kershaw |  | 1 |  | 1 |
| Laurens |  | 1 |  | 1 |
| Williamsburg |  | 1 |  | 1 |
| No County |  | 11 |  | 6.5 |

Table 7. Distribution of interviewees from North. Carolina by county during $1979(\mathrm{~N}=152)$ and $1983(\mathrm{~N}=157)$.

| COUNTY | Number |  | $z$ Frequency |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1979 | 1983 | 1979 | $\underline{1983}$ |
| Mecklenburg | 26 | 42 | 17.1 | 22.5 |
| Guilford | 22 | 10 | 14.5 | 5.3 |
| New Hanover | 13 | 5 | 8.6 | 2.7 |
| Cumberland | 9 | 3 | 5.9 | 1.6 |
| Gaston | 9 | 3 | 5.9 | 1.6 |
| Columbus | 7 | 1 | 4.6 | 1 |
| Brunswick | 6 | 9 | 3.9 | 4.8 |
| Forsyth | 6 | 3 | 3.9 | 1.6 |
| Robeson | 6 | 3 | 3.9 | 1.6 |
| Catabawa | 5 | 5 | 3.3 | 2.7 |
| Union | 5 | 4 | 3.3 | 2.1 |
| Davidson | 4 | 8 | 2.6 | 4.3 |
| Johnston | 4 |  | 2.6 |  |
| Rowan | 4 | 4 | 2.6 | 2.1 |
| Moore | 3 | 6 | 2.0 | 3.2 |
| Onslow | 3 |  | 2.0 |  |
| Wake | 3 | 2 | 2.0 | 1.0 |
| Ashe | 2 |  | 1.3 |  |
| Carbarrus | 2 | 5 | 1.3 | 2.7 |
| Stanley | 2 | 6 | 1.3 | 3.2 |
| Bladon | 1 | 1 | 1 | 1 |
| Carteret | 1 | 6 | 1 | 3.2 |
| Cleveland | 1 | 1 | 1 | 1 |
| Craven | 1 |  | 1 |  |
| Durham | 1 | 1 | 1 | 1 |
| Iredell | 1 | 4 | 1 | 2.1 |
| Lee | 1 |  | 1 |  |
| Orange | 1 | 2 | 1 | 1.0 |
| Pamilco | 1 |  | 1 |  |
| Randolpt: | 1 | 5 | 1 | 2.7 |
| Scotland | 1 | 5 | 1 | 2.7 |
| Macon |  | 3 |  | 1.6 |
| Harnett |  | 2 |  | 1.0 |
| Richmond |  | 3 |  | 1.6 |
| Stokes |  | 2 |  | 1.0 |
| Wilson |  | 1 |  | 1 |
| Henderaon |  | 1 |  | 1 |
| Pitt |  | 1 |  | 1 |
| Anson |  | 1 |  | 1 |
| Wayne |  | 1 |  | 1 |
| Alexandre |  | 1 |  | 1 |
| Yadkin |  | 2 |  | 1.0 |
| Montgomery |  | 1 |  | 1 |
| Alamance |  | 1 |  | 1 |
| Unknown |  | 18 |  | 9.6 |

4. Number of Days Spent in Little River/ Murrells Inlet Area

During both years a majority of the interviewees ( $89.7 \%$ in 1979 and $85.1 \%$ in 1983) reported they traveled to the Little River/ Murrells Inlet area specifically to fish in the tournament. Percent frequency distributions of time spent in the area as a result of the tournament by angler catagorization are compared in Figure 4 for 1979 and 1983. The mode (number of days most frequently given) for each distribution both years was between 3-5 days; the mean number of days spent in the area for all interviewees was 3.8 days in 1979 and 4.1 in 1983.

## 5. Lodging

A comparison of the lodging used by interviewees during the 1979 and 1983 tournaments is made in Table 8 . The majority of anglers interviewed ( $69.2 \%$ in 1979 and $72.1 \%$ in 1983) lodged at home or in a motel/hotel. The number of anglers lodging at home increased from $29.6 \%$ in 1979 to $43.3 \%$ during 1983. The number of anglers lodging in a motel/hotel decreased from $39.5 \%$ in 1979 to $28.8 \%$ 9n 1983. The number of anglers lodging in a rental house/cottage, condominium, campground, motor home or who remained on their boat were similar both years.


Figure 4. Percent frequency distribution of numbers of days interviewees spent in Little River/Murrells Inlet area by interviewee categorization during 1979 (left) and 1983 (right).

Table 8. Distribution of accomodations used by interviewees during 1979 ( $\mathrm{N}=405$ ) and 1983 ( $\mathrm{N}=393$ ).

| Accomodation | Number |  | \% Frequency |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1979 | 1983 | 1979 | $\underline{1983}$ |
| Home | 122 | 170 | 29.6 | 43.3 |
| Motel/Hotel | 160 | 113 | 39.5 | 28.8 |
| Rental House/Cottage | 59 | 38 | 14.6 | 9.7 |
| Boat | 29 | 18 | 7.2 | 4.6 |
| Condominium | 17 | 27 | 4.2 | 6.9 |
| Camper/Campground | 13 | 12 | 3.2 | 3.1 |
| Motor Home | 6 | 2 | 1.5 | 1 |
| Trailer | 1 | 13 | 1 | 3.3 |

6. $\frac{\text { Distances Traveled to Tournament by Car }}{\text { Recreational Vehicle and by Boat }}$

Most interviewees during 1979 (85.3\%)
and 1983 (92.0\%) indicated they traveled to the tournament by car. Frequency distributions of distances traveled to the tournament by car, by boat, by a combination car and boat and by recreational vehicle is presented in Figure 5. of those anglers traveling by car, $38 \%$ in 1979 and $30.6 \%$ in 1983 had traveled less than 100 miles to the Little River area, while $77 \%$ in 1979 and $78 \%$ in 1983 came from within a 200 mile radius.


Figure 5. Frequency distribution of distance ( 25 mile intervals) traveled by interviewees to the tournament during 1979 and 1983 by car (A), by boat (B), and by a combination of car and boat (C).

## 7. Persons Accompanying Interviewees to the Tournament

The number and percentage of interviewees that brought immediate family members, other relatives, friends and business associates to the tournament during 1979 and 1983 were nearly identical (Table 9). Frequency percent distribution of family members, relatives, friends and business associates brought to the tournasent each year is presented and compared in Figure 6. During both years over onethird of the anglers interviewed brought approximately 3.5 friends each and another third brought approximately 2.5 family members. A total of 4,740 individuals during 1979 and 9,958 individuals during 1983 were estimated to have been brought to the tournament area each year.

## 8. Tournament Rating and Past Participation in Tournaments

Anglers were asked to rate the tournament on a scale of 1 (worst) to 10 (best). The mean rating given by interviewees was 8.4 in 1979 and 7.7 in 1983. The great majority ( $95.8 \%$ in 1977 and 92.32 in 1983) of interviewees reported they planned to fish in the Arthur Smith King Mackerel Tournament in the next year.

During both years, most anglers had not participated in other saltwater fishing tournaments. During 1977, only $27.1 \%$ and during 1983, only $20.0 \%$ of the interviewees indicated they had fished in one or more South Carolina fishing tournaments that year, while $19.9 \%$ during 1977 and $16.0 \%$ during 1983 had fished in tournaments elsewhere that year. Frequency distributions of the number of other tournaments fished by these anglers each year are compared in Figure 7.

Table 9. Number and percentages of interviewees that brought other persons (by categories) to the tournament with mean number and range of those persons brought to the tournament and an estimate of total number of others brought to the Little River area by interviewees during 1979 and 1983.

|  | Interviewees |  | Percentage a Interviewee |  | Mean No. of Others Brought |  | Estimated No. of Other Brought to Little River Area |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CATEGORY | $\underline{1979}$ | $\underline{1983}$ | 1979 | $\underline{1983}$ | 1979 | 1983 | 1979 | 1983 |
| Friends | 164 | 144 | 39.3 | 36.5 | 3.4 | 3.5 | 2464 | 4869 |
| Family Members | 134 | 135 | 32.1 | 34.2 | 2.5 | 2.3 | 1480 | 2998 |
| Business Associates | 29 | 23 | 7.0 | 5.8 | 4.1 | 6.1 | 529 | 1348 |
| Other Relatives | 21 | 31 | 5.0 | 7.8 | 2.9 | 2.5 | 267 | 743 |
| Total |  |  |  |  |  |  | 4740 | 9958 |

* Estimate obtained by multiplying mean number of others brought to tournament (column 3) by the percent of interviewees bringing guest (column 1) times the estimated total number of fishermen during 1979 ( $\mathrm{N}=1844$ ) and $1983(\mathrm{~N}=3811)$.


Figure 6. Percent frequency distributions of number of family members (A), relatives (B), friends (C), business associates (D) brought to the tournament during 1979 and 1983.

## D. ECONOMIC INFORMATION

During 1979 and 1983 interviewees were requested to estimate their personal tournament expenditures for 16 individual items (Table 10). The total expended by interviewees for all items was $\$ 149,413$ during 1979 and \$231,057 during 1983.

The total expenditures for all tournament participants both years was established by dividing the total expenditure of interviewees by the estimated percentage of anglers interviewed.



Figure 7. Frequency distributions of number of other tournaments fished by interviewees in South Carolina and elsewhere during 1979 and 1983.

In an effort to estimate additional expenditures made by other members of the interviewees party that were brought to the tournament area during the 1979 tournament, a dollar figure ( $\$ 202$ ) was used which has been suggested as the average vacation trip expenditure of South Carolina residents traveling in South Carolina (Woodside, Moore, and Etzel, 1980). By multiplying the percentage of interviewed anglers that had brought other individuals to the area ( $61.6 \%$ ) by the estimated number of anglers participating in that tournament ( $\mathrm{N}=1844$ ), an additional 1,136 "parties" were estimated to have also been attracted to the area. This estimate $(1,136)$ multiplied by the average expenditure ( $\$ 202$ ) during South Carolina vacation trips, predicted that an additional $\$ 229,000$ had been expended by those individuals coming with tournament participants.

During 1983, a similar percentage of anglers ( $60.6 \%$ ) reported bringing others
family members, friends, business associates, etc.) with them to the tournament as had done so during $1979^{\circ}$ (61.6\%). An estimated total of 381 anglers participated during 1983, projecting that 2,309 ( $3811 \times 60.62$ ) additional parties were attached to the area. Because an up-todate estimate of the average per trip expenditure by South Carolina residents traveling in South Carolina was not available, the $\$ 202$ estimate was adjusted using a yearly increase of ten percent. This amount ( $\$ 296$ ) multiplied by the estimated number of additional "parties" (2309), indicates that approximately $\$ 683,464$ in additional monies was spent during the

## 1983 tournament.

The use of the $\$ 202$ value and inflating it ten percent a year from 1979 to 1983 has several obvious shortcomings. The Woodside et al. (1980) study was designed to evaluate vacation parties while this study dealt with fishing parties. The former study focused on South Carolina residents traveling in their home state while over $40 \%$ of the interviewees during this study both years were from North Carolina. For these reasons, it is felt that these estimates represent minimal figures but provide the best (only) estimate available.

Table 10. Interviewee's personal expenditure results for 1979 and 1983.

|  | Number |  |
| :--- | ---: | ---: |
| ITEM | $\underline{1979}$ | $\underline{1983}$ |
| Boat, oil and gas | 308 | 174 |
| Car, oil and gas | 310 | 318 |
| Lodging | 197 | 159 |
| Bait | 283 | 271 |
| Tackle | 231 | 212 |
| Restaurant | 319 | 316 |
| Entertainment | 174 | 172 |
| Groceries | 251 | 264 |
| Launching fees | 194 | 165 |
| Boat repairs | 71 | 53 |
| Public transportation | 23 | 9 |
| Rental car | 5 | 9 |
| Aircraft charter | 9 | 7 |
| Boat charter | 38 | 7 |
| Crew costs | 11 | 97 |
| Other costs |  | 14 |
| Non-itemized |  | 10 |

Total

| Mean Expenditure Sum of Expense/N |  | Total <br> Expenditure |  |
| :---: | :---: | :---: | :---: |
| 1979 | 1983 | 1979 | 1983 |
| 93 | 241 | 28,644 | 41,934 |
| 34 | 58 | 10,540 | 18,444 |
| 87 | 216 | 17,139 | 34,344 |
| 23 | 30 | 6,509 | 8,130 |
| 53 | 87 | 12,243 | 18,444 |
| 60 | 101 | 19,140 | 31,916 |
| 75 | 103 | 13.050 | 17,716 |
| 35 | 65 | 8,785 | 17,160 |
| 33 | 52 | 6,402 | 8,580 |
| 263 | 196 | 18,673 | 10,388 |
| 38 | 173 | 874 | 1,557 |
| 82 | 180 | 410 | 1.260 |
| 68 | 249 | 272 | 1,743 |
| 269 | 619 | 2,421 | 5,571 |
| 87 | 200 | 3,306 | 7,400 |
| 55 | 205 | 605 | 2,870 |
|  | 360 |  | 3,600 |
|  |  | 149,013 | 231,057 |



Figure 8. Weight frequency distribution (2 pound intervals) of king mackerel entered in the tournament during 1979 and 1983.

## E. CATCH INFORMATION

The number of fish, total poundage, mean weight and the number of boats weighing in fish each day during both year's competition are given in Table 11. The weight frequency distributions of king mackerel entered in both years (1979 and 1983) are compared in Figure 8. More fish, a greater total weight, a larger mean weight, and a great number of boats weighed in fish during 1983 than in 1979. However, nearly twice as many boats participated in $1983(\mathrm{~N}=872)$ as were entered in $1979(N=407)$. Both years, boats were permitted to register only five king mackerel per day. As prizes are based on largest fish and greatest aggregate fish weight, only the largest king mackerel from each boat are generally entered into the tournament. As information on total catch and actual fishing effort is not available, ifttle inference or comparisons may be made between years as to fishing success, or the abundance or size of available king mackerel.

Table 11. Tournament catch results.

|  | Day 1 |  |
| :--- | ---: | ---: |
|  | $\underline{1979}$ | $\underline{1983}$ |
|  |  | 192 |
|  | 191 |  |
| Number of fish weighed in <br> Total poundage weighed in | 1943 | 2579 |
| Mean weight | 10.1 | 13.5 |
| Nuber of boats that <br> weighed in fish | 78 | 80 |


| Day 2 |  |  | Total |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 1979 | $\underline{1983}$ |  | 1979 | $\underline{1983}$ |  |
| 148 |  | 192 |  | 340 | 383 |
| 1553 | 2394 |  | 3496 | 4973 |  |
| 10.5 | 12.5 |  | 10.3 | 13.0 |  |
| 46 | 55 |  | 106 | 135 |  |

## IV. SUMMARY AND CONCLUSIONS

An estimated 3,811 anglers participated in the Seventh Annual Arthur Smith King Mackerel Tournament held during 1983. These anglers spent an estimated $\$ 2,310,570$ to fish in this competition. These anglers brought an additional 9,958 individuals (friends, family members, business associates and other relatives) which made up 2,309 "parties" which had an estimated additional economic impact of $\$ 683,464$. Thus, the Seventh Annual Arthur Smith King Mackerel Tournament is estimated to have had a direct economic impact to the Little River/Murrells Inlet area of approximately 3 aillion dollars during this two-day event.

These estimates may be compared to those obtained during a similar survey conducted on this tournament four years earlier, in 1979. During 1979, a total of 1844 anglers spent $\$ 650,000$, and brought 4740 additional individuals who spent $\$ 229,000$. The coebined econoaic impact was approximately $\$ 880,000$.

During both 1979 and 1983, nearly equal numbers of interviewed anglers were from South Carolina and North Carolina and over $85 \%$ of all interviewees were residents of these two states both years. Residents from 23 states during 1983 competed in this tournament compared to ten states being represented during 1979.

The median age of interviewees was between 35 and 40 years. Most anglers classified themselves as professionals (31.5\%) or business owners (20.5 ) and over $20 \%$ indicated a total annual household income in excess of $\$ 50,000$. Most participants both years (89.7\%-1979 and 85.1\%1983) indicated they traveled to the tournament area specifically to participate in the tournament. Most anglers_both years spent three to five days ( $1979 \bar{x}=3.8,1983 \bar{x}=4.1$ ) in the area and most (1979-77\%; 1983-78\%) traveled by car from within a 200 mile radius with the majority, staying at home (1979-29.6\%; 1983-39.5\%) or in a motel/hotel (1979-39.5\%; 1983-28.8\%). During both years, the majority of interviewed anglers (95.8\% in 1977 and
92.37 in 1983) indicated they planned to fish in the following year's tournament. On a scale of one (worst) to ten (best), the tournament received a 8.4 rating in 1979 and a 7.7 in 1983.

More king mackerel (340-1979; 383-1983) with a greater combined total weight ( 3496 lbs.1979; 4973 lbs.-1983) were taken during 1983 than during 1979. The mean weight of fish weighed-in was also larger during 1983 ( 13.0 lbs) than during 1979 ( 10.3 lbs ).

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## AN ECONOMIC SURVEY OF THE SEVENTH ANNUAL ARTHUR SMITH KING MACKEREL TOURNAMENT

1. How many days did you actually fish in this tournament? $\qquad$ days.
2. The boat you fished from was (make) $\qquad$ boat length $\qquad$ year $\qquad$ ?
3. Are you the boat: owner/Capt. $\qquad$ owner $\qquad$ Captain $\qquad$ crew invited guest $\qquad$ charter guest $\qquad$ .
$\qquad$ -
4. How many anglers fished from this vessel? .
5. What is your county $\qquad$ and State $\qquad$ of residence?
6. What is your age? $\qquad$ .
7. Total annual household income - range $10-20,000$ $\qquad$ , 21-30,000 $\qquad$ , 31-40,000 $\qquad$ -41-50,000 $\qquad$ , more than 50,000 $\qquad$ .
8. Occupation: skilled laborer service tech. service tech. professional $\qquad$ clerical manager business owner student retired police, fire etc. farmer $\qquad$ teacher $\qquad$
$\qquad$ other $\qquad$
$\qquad$ South Carolina (if from out-of-state)
$\qquad$ yes $\qquad$ no.
9. How many miles did you travel to this tournament? by car $\qquad$ by R/V $\qquad$ and by boat $\qquad$ -.
10. How many days, in total, will you spend in this area as a result of your fishing this tournament? $\qquad$ days.
11. Where are you staying (sleeping) (boat, home, hotel, camping, etc.) $\qquad$ .
12. Not including other fishermen on your boat how many people came with you or because you are here at this tournament? Immediate family friends $\qquad$ business associates $\qquad$ -.
13. What do you estimate your personal expenditures were for the following items during this tournament?
A. 011 and gas for your boat.... \$
B. 011 and gas for your car..... \$ $\qquad$
C. Lodging . . . . . . . . . . . . . . . . . . . . . \$ $\qquad$
D. Bait................................... \$ $\qquad$
E. Tackle (replacement or new).. \$ $\qquad$
F. Restaurant/coffee shop meals. \$ $\qquad$
G. Entertainment................... \$ $\qquad$
H. Groceries
........................ \$ $\qquad$
J. Launching or marine fees... \$ $\qquad$
K. Boat repairs................. \$ $\qquad$
L. Travel (public transport).. \$ $\qquad$
M. Rental car....................... \$ $\qquad$
N. Aircraft charter............ \$ $\qquad$
14. Boat charter................. $\$$ $\qquad$
P. Crew costs (e.g., vages,
food)........... \$ $\qquad$
Q. Other $\qquad$
$\qquad$
15. Did you enjoy fishing this tournament? Please rate it from 1 (not at all) to 10 (very much) $\qquad$ -.
16. Do you plan to fish this tournament next year? $\qquad$ yes $\qquad$ no.
17. How many other saltwater tournaments have you fished in this year in South Carolina elsewhere $\qquad$ ?
PLEASE WRITE ANY COMMENTS FOR THE ARTHUR SMITH TOURNAMENT COMMITTEE ON THE OTHER SIDE.
