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**1999 Texas International Fishing Tournament:
Participants' Characteristics, Participation in Fishing,
Attitudes, Expenditures, and Economic Impacts**



Prepared for the Texas International Fishing Tournament, Inc.
through a research contract with the Texas Agricultural
Experiment Station, Texas A&M University- College Station

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Attitudes, Expenditures, and Economic Impacts**

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Prepared for the Texas International Fishing Tournament, Inc. through a research contract with the Texas Agricultural Experiment Station, Texas A&M University- College Station

Executive Summary

There were 1,068 anglers registered at the 1999 Texas International Fishing Tournament (TIFT); when 167 social (non-fishing) and boatmen division participants were included, there were 1,235 participants overall. This has been an increase of 55% and 67% in registered anglers and overall participants, respectively, since the 1983 TIFT when a previous angler study was completed (Ditton and Loomis 1985). A seven-page mail survey was mailed to all registered adult anglers in the bay division (301), offshore division (453) and fly division (8) shortly after the tournament was held in August 1999. The purpose of the survey was to learn more about participants' demographic characteristics, overall level of fishing participation and involvement, TIFT fishing experience preferences, tournament expenditures, and satisfaction with the 1999 event. Overall, 463 surveys were returned with 25 reported as undeliverable for an effective response rate of 63%. A telephone check indicated there were no differences between respondents and non-respondents in either division insofar as their levels of overall expenditure for the 1999 TIFT.

- Less than a majority of bay and offshore division anglers resided in Cameron County, Texas. About 58% and 76% of these angler groups, respectively, resided elsewhere in Texas or out-of-state.
- Most bay (68%) and offshore (62%) anglers reported fishing was their most important outdoor recreation activity.
- On average, bay division anglers fished significantly more (51 days) over the previous 12 months than did offshore anglers (36 days). On average, both groups of anglers were more avid than the statewide population of saltwater anglers (18 days) (Bohnsack and Ditton 1999).
- Most bay (76%) and offshore (80%) anglers reported they (or someone in their households) owned a powerboat. The average length of their longest boat was 20 feet and 30 feet for bay and offshore anglers, respectively.
- Both groups of anglers participated in an average of six previous TIFT events (excluding the 1999 TIFT).
- Overall, 74% and 83% of bay and offshore anglers reported they were very or extremely satisfied with the 1999 TIFT.
- Average tournament-related expenditures (not including tournament registration fees) by bay and offshore division respondents were extrapolated to all bay division anglers (\$296,425) and offshore division anglers (\$980,664) in the 1999 TIFT. Overall TIFT-related expenditures by locals and non-locals totaled \$1,277,089.
- Overall 1999 tournament fees (\$67,975) were not included in the economic impact assessment because a detailed analysis of where these monies were spent by tournament officials would have been required. Thus, estimates of total economic output are

conservative. To the extent that more of the registration monies are spent locally, additional economic output will occur in Cameron County.

- Texas residents (not from Cameron County) and non-residents of the state participating in the TIFT bay division spent \$181,541 in the South Padre Island –Port Isabel area. Offshore division anglers from the same two areas spent an additional \$646,090 for an overall expenditure (direct economic impact) on the South Padre Island- Port Isabel area of \$827,631. This constitutes new monies to Cameron County.
- Major expenditures by bay division anglers in the South Padre Island –Port Isabel area were for lodging (23%), restaurant meals (16%), boat repairs/ upgrades (10%), and groceries, snack foods, and drinks (9%).
- Major expenditures by offshore division anglers in the South Padre Island –Port Isabel area were for gas and oil for boat (16%), “other” (14%), lodging (14%), and restaurant meals (10%).
- Purchases made by 1999 TIFT anglers provide the basis for estimating total economic impacts of the event. These initial economic effects ripple through the economy leading to a total impact that exceeds that of the original purchases by anglers. When IMPLAN multipliers that averaged 1.75 were applied to expenditures, additional output was generated in the local economy
- The estimated \$181,541 in direct expenditures by non-Cameron County bay division anglers for local goods and services generated an additional \$138,956 in economic output. This resulted in a total economic output of \$320,497 with 8 full-time equivalent jobs in the recreational fishing sector.
- The estimated \$646,090 in direct expenditures by offshore division anglers (non-Cameron County residents) for local goods and services generated an additional \$490,557 in economic output. This resulted in a total economic output of \$1,136,647 and 29 full-time equivalent jobs.
- Overall, TIFT anglers in the bay and offshore divisions (non-Cameron County residents) spent \$827,631 in the local area. This resulted in an overall total economic output of \$1,457,144 and 37 full-time jobs.
- Due to the small number of non-residents (n=14) who come to Texas to fish in the Texas International Fishing Tournament, their expenditures in Cameron County and elsewhere in Texas were of little economic consequence.

Acknowledgements

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Several individuals helped conduct the mail survey and make follow-up calls to non-respondents and deserve special mention. They were: Carol Thailing, Christa Fields, Brooke Hodges, Ryan Reitz and Katie Rollo. We appreciate all of their hard work in support of this study. Also, we are appreciative of the cooperation by George Vasquez and his associates who handled the computerized registration for TIFT and provided us with the names and addresses of tournament participants in a timely manner.

We are appreciative of the constant support and assistance of Betty Wells, the TIFT Tournament Director. Betty answered each and every one of our questions about the tournament and was a source of inspiration particularly when the tournament was underway. Finally, we want to acknowledge the TIFT anglers who took the time to respond to our mail survey and provide feedback to the planners of future TIFT events. This study could not have been completed without their assistance. Hopefully, as a result of their efforts, the TIFT Board of Directors will have a better understanding of the angler segments they are targeting with each year's tournament event and associated tournament angler expenditures and total economic impacts on Cameron County.

**RBD
DKA
BLB
SGS**

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Introduction

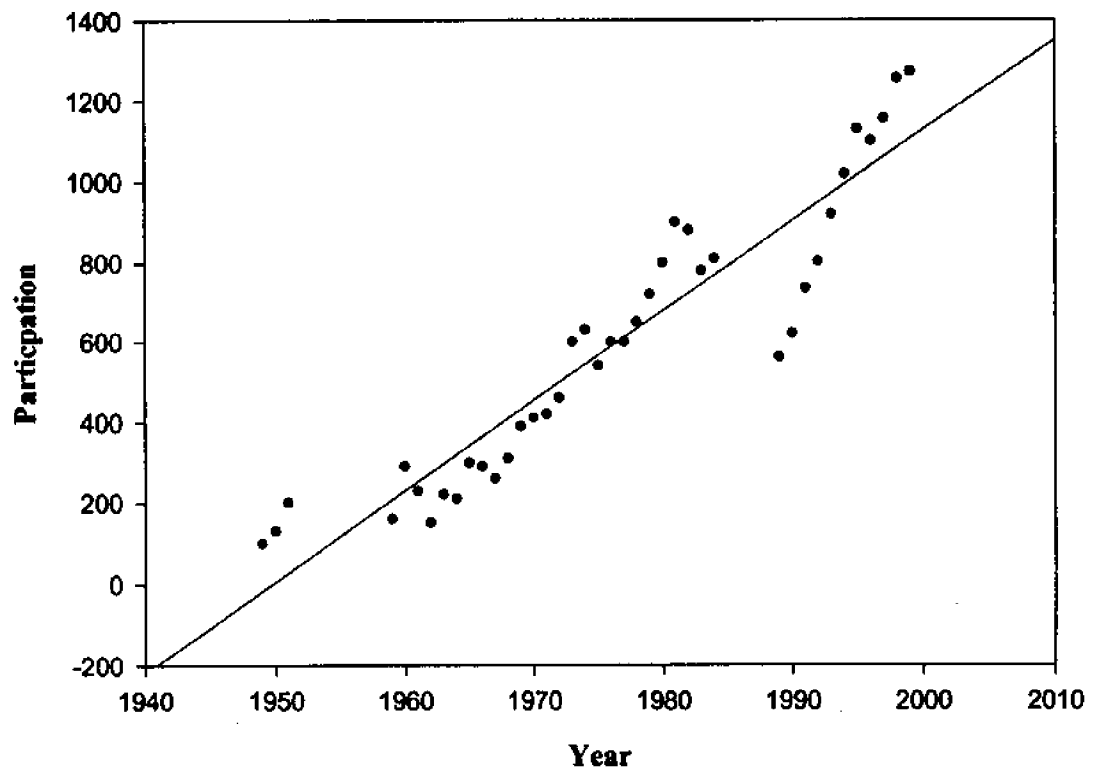
In the most recent statewide survey of Texas anglers, an estimated 749,440 (51%) Texas fishing license holders indicated they fished in saltwater one or more days in the previous twelve months (Bohnsack and Ditton 1999). On average, these anglers fished 18 days in the previous twelve months with 40% of these days spent fishing in saltwater bays from a boat. Most (88%) saltwater anglers did not participate in a saltwater fishing tournament in the previous twelve months. For those who did, they averaged one saltwater tournament (Bohnsack and Ditton 1999). This report focuses on the participants in just one of the many saltwater fishing tournaments held on the Texas coast each year.

Whereas many other studies focus on the fish that are caught at saltwater tournaments, their life histories and feeding habits, this research focused instead on the participants in the 61st Texas International Fishing Tournament (TIFT) held in South Padre Island and Port Isabel, Texas. In particular, our task was to help tournament organizers better understand the angler clientele they are currently serving, most notably, their demographics, involvement with recreational fishing, experience preferences or reasons for participating in the TIFT, satisfaction with the event, and tournament-related expenditures in the local county and elsewhere in Texas. Results could be compared with those from the statewide saltwater angler population (Bohnsack and Ditton 1999), thus yielding additional insights to current tournament clientele. Additionally, results of this study can be compared to those in a previous study of participants in the 45th TIFT in 1983 (Ditton and Loomis 1985) to achieve a trend perspective in participation and participants.

The 61st Texas International Fishing Tournament was held between July 28 and August 1, 1999, with registration from 3-8 p.m. on Wednesday, a playday featuring family activities and continued registration on Thursday, and fishing on Friday and Saturday. Awards were presented at mid-day on Sunday. There were 1,068 anglers registered at this year's event; when 167 social (non-fishing) and boatmen division participants were included, there were 1,235 participants in the 1999 TIFT. This is in sharp contrast to the 1983 event where there were 587 registrations and an overall 826 participants including social and boatmen division participants. Figure 1 provides a trend perspective on the TIFT since 1949 where data have been available.

The impetus for this study grew from a need for the TIFT Executive Board to better understand the overall extent of current expenditures associated with the TIFT and their indirect economic impact effects on the local area. For the 1983 TIFT, Ditton and Loomis (1985) reported that 11 out-of-state participants and 261 out-of-county participants spent just over \$274,000 (excluding tournament fees) in Cameron County resulting in a total economic output of \$561,000. The TIFT Executive Board could have updated 1983 TIFT expenditures using the consumer price index to arrive at a projection of expenditures and total economic output in 1999 dollars. They chose instead to commission a new study because much has changed since 1983. For example, the bay recreational fishery in 1983 had just followed a period of intense overfishing by commercial netters, and the effects of a legislative re-allocation of red drum and spotted sea trout to recreational fishing in 1981 probably hadn't had much of an effect on available fish populations. Also, the South Padre Island area has emerged since then as a major coastal recreation and tourism destination in response to efforts to promote this destination

Figure 1
TIFT Participation by Year



statewide and nationally. Consequently, it can be reasoned the TIFT would draw even more anglers than previously from areas outside Cameron County with increased total economic output. And finally, there is considerably more infrastructure available today in the South Padre Island- Port Isabel area to attract tournament anglers to the area.

Saltwater fishing is big business today in Texas and elsewhere and decision makers need to fully comprehend the economic realities and potentials involved in recreational fishing and related tourism. Nationwide, data collection efforts by the U.S. Fish and Wildlife Service and the U.S. Bureau of the Census (1997) reveal that saltwater anglers spent \$8.7 billion dollars in 1996 for durable goods and non-durable goods and services (American Sportfishing Association 1996). Saltwater anglers in Texas in 1996 (residents, non-residents, licensed, and exempt) spent \$887.6 million. Taking into account their effects on other industrial sectors in Texas, these expenditures accounted for a total economic output of about \$2 billion, wages and salaries of just over \$500 million, and 24,802 jobs. These data are collected and presented at the state-level basis every five years in an effort to demonstrate the size and importance of the recreational fishing industry and its inter-relationships with other industrial sectors in the U.S. Tanyeri-Abur et al. (1998) estimated total leisure expenditures (total direct impact) at \$221.5 million for water-related activities in the Laguna Madre estuary region (including Brooks, Cameron, Hidalgo, Jim Wells, Kenedy, Kleberg, Nueces, and Willacy counties) or an increase of 87% since 1987 accounting for annual inflation (Fesenmaier et al. 1987). In contrast, the total direct impact of commercial fishing (including inshore and offshore commercial fishing for finfish and shrimp) in the Laguna Madre Estuary region was estimated at \$2.4 million (Tanyeri et al. 1999), a decrease of 30% in current dollars from 1987 (Fesenmaier et al. 1987). The total direct impact of commercial landings in Cameron County (regardless of where the fish were caught in the Gulf of Mexico) was estimated at \$63.1 million (Tanyeri-Abur et al. 1999). No comparable figure was available on the direct expenditures associated with marine recreational fishing activity in Cameron County.

There is little or nothing known about the extent of recreational fishing and angler expenditures in Cameron County. The same can be said for birding, hunting, and other popular forms of outdoor recreation there. Visitors to the Brownsville- Harlingen- San Benito area reportedly spent about \$79 per person per day in 1995 (Tanyeri-Abur et al. 1998). This is substantially below the \$257 per trip or \$108 per day fishing the population of saltwater anglers spent on a "typical saltwater fishing trip" of 2.4 days in 1996 (Bohnsack and Ditton 1999). Anglers made expenditures for automobile transportation, food, lodging, bait, and other trip costs. Furthermore, the statewide population of saltwater anglers fishes mainly from shore with only around 12% fishing in tournament events. These findings, taken with the fact that most tournament anglers participating in the TIFT use boats, would suggest much higher angler expenditure levels per day. Ditton and Loomis (1985) reported previously that TIFT anglers spent \$201 per day (the equivalent of \$337 1999 dollars).

Studies of fishing tournaments and their participants are conducted for various reasons. First, they are a useful means for understanding present clientele in order to attract additional participants through focused marketing efforts. Second, they provide tournament organizers with participant feedback on events as planned; an important aspect of event evaluation. Third, they provide the basic ingredients for posing various "what if" scenarios with future tournament

events in mind. For example, if additional family-oriented activities were planned in an effort to attract more family members to the tournament area, what effect would this have in stimulating additional expenditures by participating in each division? Likewise, if additional participation were encouraged through additional target marketing, what would the economic effects be on Cameron County? And finally, because some tournaments are conceived as an economic development tool as well as a tourism and recreation attraction, there is the opportunity to demonstrate whether a fishing tournament has a positive economic stimulus on the local area and to what extent. There is a story here at the extent of new money attracted to the local area as a result of the Texas International Fishing Tournament. This should be of interest to local sponsors and government officials making investments in the fishing-related tourism industry. This report will provide the basis for assessing county-level benefits associated with TIFT expenditures in light of county-level costs.

Objectives

The objectives of this study are:

1. To profile the population of anglers 18 years of age and above that participated in the 1999 Texas International Fishing Tournament by division; this profile includes their demographic characteristics, level of overall recreational fishing participation and involvement, tournament fishing experience preferences, expenditure levels, and satisfaction with the TIFT.
2. To use expenditure data provided by respondents to estimate the total economic impact of the 1999 Texas International Fishing Tournament on Cameron County and the State of Texas.
3. To discuss survey results in light of the 1983 TIFT angler survey (Ditton and Loomis 1985) and other studies to produce understandings useful to future tournament planning efforts.

Methods

Data collection was accomplished with a mail survey of bay and offshore division participants of the 1999 Texas International Fishing Tournament. Support for the survey began at the tournament site prior to the event. In cooperation with TIFT officials, project personnel from Texas A&M University handed out flyers at tournament registration that informed participants that the survey was being done for the TIFT and that they should be receiving questionnaires in a TIFT envelope within the next fifteen days. The purpose of the intercepts was to recruit support for the survey and enhance the overall response rate.

Sampling Design

Using a list provided by tournament officials, names and addresses of TIFT participants were entered into a computer database for ease of access and editing of information once the survey was underway. Participants in TIFT could register in one of four divisions; tarpon, bay, fly, and offshore. Furthermore, each participant had to register in one of six classifications; adult, junior through 7, junior 8-12, junior 13-16, social only, or captain/crew. Those

participants registered in the junior category were not included in the sample as it was assumed that their expenditures were included among the responses of participants surveyed. In addition, those participants classified as social only or captain/crew were not sampled. Previous studies have shown that most non-fishing registrants are family/friends of fishing participants, so it is assumed that their expenditures are included in those anglers that were sampled (Ditton and Loomis 1985). Altogether, 762 participants were included in the sampling frame; they were all registered as adults and were distributed as follows by division: tarpon (0), bay (301), fly (8), and offshore (453). Fly division anglers were merged into the bay division for analysis purposes.

Questionnaire Design

A seven-page questionnaire was developed to assess participants' demographics, overall fishing participation and involvement, tournament fishing activity, tournament experience preferences, 1999 TIFT expenditure levels, and satisfaction with the TIFT. Most questions in the survey instrument have been used previously and proven effective in collecting information from anglers (Loomis and Ditton 1987; Stoll et al. 1989; Fisher and Ditton 1990; Ditton and Clark 1994). Furthermore, an attempt was made to parallel many of the questions used in a previous study of 1983 TIFT participants (Ditton and Loomis 1985).

Mailing Procedures

Data were collected by mail questionnaire using a modified version of the Total Design Method (TDM) first advocated by Dillman (1978), and subsequently modified by Salant and Dillman (1994).

All mailings were sent using TIFT letterhead and envelopes. To personalize mailings, participants' names were used where appropriate in the salutation; so instead of the letter reading "Dear Angler:", the letter read "Dear John:." This is consistent with Salant and Dillman (1994) and generally increases response rates. The first letter, which informed participants that their surveys would be arriving in the next week, was sent on August 10, 1999. The second mailing, which included the survey, was sent one week later. A reminder/thank you postcard was sent approximately three weeks from the date of the first mailing. A fourth mailing was sent as necessary to those persons who had not yet responded as of September 8, 1999, and included another copy of the questionnaire. All surveys were coded and data entered once arriving at Texas A&M University. Typically, the reminder/ thank you post card goes out one week after the questionnaire is sent but this was delayed by one week to accommodate Hurricane Bret which made landfall north of Cameron County on August 22, 1999.

Response Rates and a Non-response Bias Check

Surveys were mailed to 762 TIFT participants. Of these, 463 surveys were returned and 25 were reported as non-deliverable by the U.S. Postal Service, providing an effective response rate of 62.8% (See Table 1). This response rate is consistent with what Dillman (1978) recommends should be achieved with his "Total Design Method" and consistent with the range (61.5% - 71.8%) achieved previously by the Human Dimensions of fisheries Lab in their angler surveys for the Texas Parks and Wildlife Department (Hunt and Ditton 1996).

There may be possible biases in study results if the effects of non-respondents are not accounted for in mail surveys. So we would not have to make the assumption that respondents and non-respondents were similar in all of the variables included in this study, non-respondents were contacted by telephone and asked to respond to nine questions from the questionnaire. Given they were non-respondents to the questionnaire, it is not likely they would have answered any more questions on the phone. Seventeen of the 103 (17%) non-respondents in the bay division and 27 of the 171 (16%) in the offshore division were interviewed. The non-respondent interview schedule included questions on their overall fishing participation and TIFT participation including their expenditures and satisfaction with the 1999 TIFT (See Appendix D). Data from non-respondents were entered in the same manner as the data from survey respondents for analysis purposes.

Overall, the only statistically significant differences between these two groups were in their satisfaction with the tournament and the comparison of fishing as their most important activity. Offshore division anglers who responded were slightly less satisfied (98% in the moderately to extremely satisfied category) than non-respondent offshore anglers (100%). Roughly the same pattern existed for bay division anglers. The greater satisfaction levels among non-respondents are perhaps attributed to respondents viewing the questionnaire as a means for improving the tournament whereas non-respondent data were collected through personal interviews. They may have been unwilling to express dissatisfaction to the interviewer. Fewer offshore division non-respondents (48%) viewed fishing as their most important outdoor recreation activity than respondents (62%); likewise, fewer bay division non-respondents (47%) considered fishing their most important activity than respondents (68%). This would be expected from non-respondents for whom recreational fishing is likely much less salient. There were no significant differences between respondents and non-respondents for the following variables: number of days fished in the previous year (Q2), number of times fished in the TIFT before (Q3), number of days fished in this years tournament (Q4), number of non-tournament family or friends brought to the TIFT (Q5), and age (Q9). Nevertheless, the reader is cautioned to remember the results presented in this report are based on respondent data since it was impossible to check for differences between respondents and non-respondents on every question.

Most importantly, there were no statistically significant differences between respondents and non-respondents in either division insofar as their levels of overall expenditure for the 1999 TIFT. Thus, respondent expenditure data were extrapolated to the entire population of each angler division. No weighting for non-response was necessary because there were no statistically significant differences between respondent and non-respondent expenditures by division. Therefore, extrapolations of overall TIFT angler expenditures and economic impacts are based on respondent data.

Precision Estimates

Precision estimates for this report are based on the number of usable returns (438). Therefore, estimates of proportions and percentages that approach .50 or 50% have a corresponding margin of error of +/- 3.1%; for estimates around .1 or .9 (10% or 90%) there is a

corresponding margin of error of +/-1.8%. The detailed methodology for these calculations is provided in Appendix D.

Participant Groups and Group Differences

Adult participants in the TIFT could register in four divisions; only two divisions were used in data analysis. Those respondents that were registered in the fly and tarpon divisions were grouped with bay division participants based upon species preference.

Although data were gathered from the entire population (with the exception of non-respondents), statistical tests were performed to highlight the substantive differences between the two divisions (bay and offshore). T-tests were used for interval data, the Mann-Whitney test for ordinal data, and Chi-square analysis to test for dependence on nominal variables. The level of significance for all tests was set at $p=0.05$. Non-significant differences between the two groups should be considered real differences, however it is left up to the reader to decide if these differences are meaningful.

Item Non-response and Open-ended Comments

Results in this report are based upon the responses to individual questions. The extent of item non-response for each question is presented in each table where data are described.

Open-ended comments are presented in Appendix E. Angler comments are provided in raw form (i.e. no editing was done to responses except to delete the names of the particular persons referred to) and are grouped according to the angler's respective satisfaction level with the tournament. The numbers appearing before comments are questionnaire identification numbers that allow the investigators to link each angler's comments with the remainder of their responses.

Economic Impacts

The Texas International Fishing Tournament has direct and indirect economic impacts at the local and state level. In order to understand tournament angler expenditures (direct economic impact) and their resultant indirect economic impacts on local and state level economies, it is necessary to know where TIFT participants reside and where they made their expenditures: in Cameron County and elsewhere in Texas.

Expenditures of TIFT participants from Cameron County were separated from those who reside elsewhere in Texas. Expenditures made by the former group of anglers were not included in the economic impact assessment because it was assumed they would have made other local expenditures if they had not been able to participate in the TIFT. Cameron County level impacts are determined by new monies coming into the county and being re-spent there and not by moving expenditures of Cameron County residents around the county. Therefore, the study focus is on new monies coming into Cameron County. The previous study of the 1983 Texas International Fishing Tournament by Ditton and Loomis (1985) provides some expectations as to the extent of out-of-county (59%) and out-of-state (3%) participation. In terms of out-of-county

participation rates, the TIFT rate was comparable with that of the 1984 Deep Sea Round-up in Port Aransas (68%) and in sharp contrast with the 1985 Hall of Fame Tournament in Galveston where nearly three quarters of the anglers participating resided in Galveston County (27%) (Ditton and Arneson 1986; Ditton and Loomis 1988). In all three previous studies, the out-of-state participation rates were less than one percent. Although we expected few out-of-state anglers to participate in the TIFT, their expenditures were separated from those made by Texas residents in order to calculate the state level impact of the TIFT. As was the case with county level impacts, state level impacts were determined by the extent of new monies coming into Texas and being re-spent there.

The economic impacts of the Texas International Fishing Tournament can best be described in terms of changes in total output. Total output is defined as the dollar value of goods and services produced to satisfy final demand for goods and services associated with the TIFT and the inter-industry transactions needed to produce them. Final demand is the dollar value of purchases from producing industries for final consumption. Economic impact multipliers from a study of the economic impacts of recreation activities on the Texas Gulf coast completed by Tanyeri-Abur et al. (1998) were used to estimate the economic impacts of the TIFT in Cameron County as well as at the state level. They used IMPLAN to calculate these multipliers, which show the impact of an increase in output in one sector on other sectors of the economy. From their understandings of the total impact of outdoor recreational activities in the Laguna Madre Estuary region, Tanyeri-Abur et al. (1998) concluded on average that each dollar of recreation-related expenditures resulted in about \$1.75 in total output and \$0.69 of personal income. The average output multiplier was 1.75 or in other words, every dollar spent in the Cameron County economy by TIFT anglers generated \$1.75 in total output. At the state level, the economic impact multiplier was 1.92 or in other words, each dollar of tourism and outdoor recreation expenditures resulted in about \$1.92 in total output.

Results

Demographic Characteristics

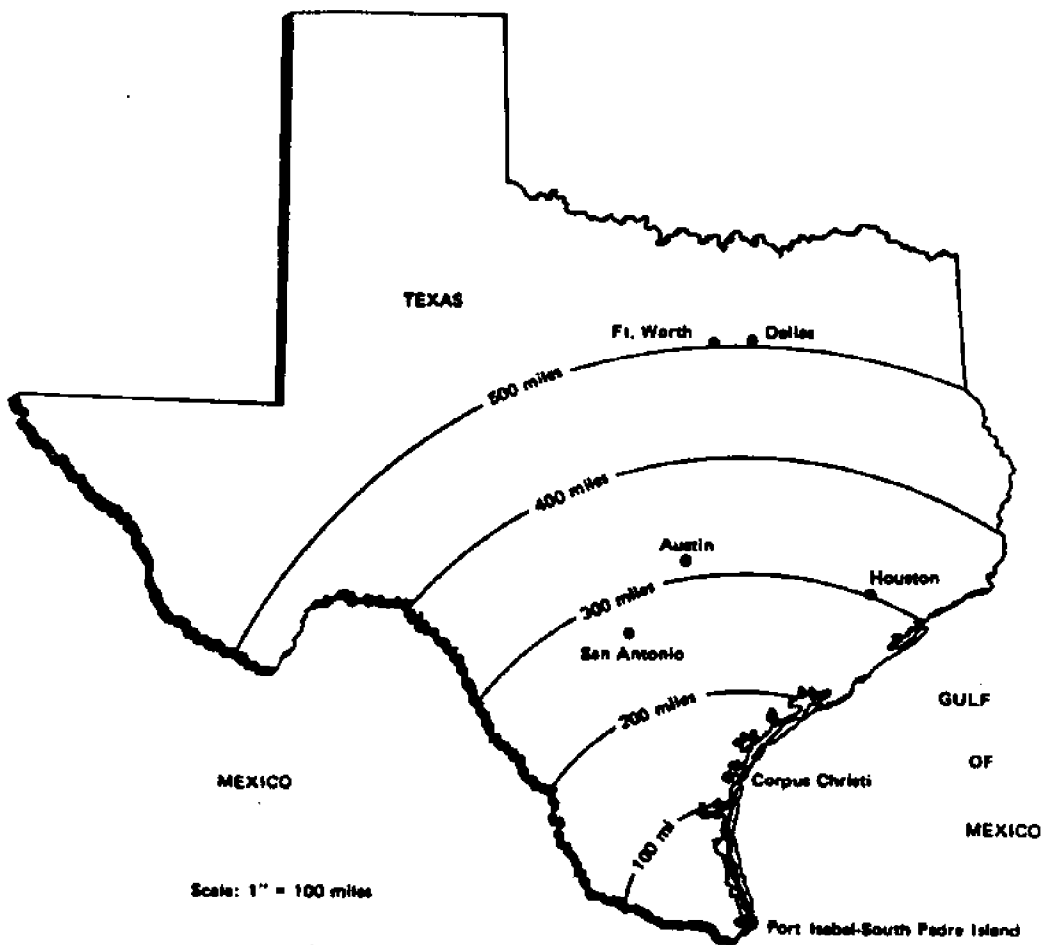
Most TIFT anglers were male and between the ages of 28-57. Anglers in both bay and offshore divisions were predominantly male. Ten and twelve percent of the bay and offshore anglers, respectively, were female (Table 2).

Anglers ranged in age from 17 to 72 years in the bay division and from 18 to 75 years in the offshore division (Table 3). There was no significant difference in age between bay and offshore angler participants in the TIFT; average ages were 43 and 42 years, respectively.

There was no significant difference in the distributions of income categories of bay and offshore angler groups (Table 4). The median annual household income of bay division anglers was between \$80,000-\$99,000 and between \$100,000- \$119,000 for offshore division anglers.

Less than a majority of both groups of tournament anglers resided in Cameron County (Table 5). About 58% and 76% of bay and offshore anglers, respectively, resided elsewhere in Texas or out-of-state. Most (65%) bay division anglers traveled 100 miles or less to compete in the TIFT; most (62%) offshore division anglers traveled up to 200 miles to participate reflecting

Figure 2
Concentric Travel Zone Map of Texas



the influence of Corpus Christi and McAllen (Table 6). The next largest percentages of bay (25%) and offshore (30%) anglers traveled from 201-400 miles and likely came from the Houston, San Antonio, and Austin areas (see Figure 2). Overall, most Texas (non-Cameron County) anglers (including both divisions) resided in the following zip code regions: McAllen (25.4%), Corpus Christi (20.3%), and Houston (15.6%) (Table 7).

General Fishing Participation

This section describes the fishing experience, avidity, preferences, and attitudes of TIFT anglers related to their overall fishing activity. On average, bay division anglers fished significantly more (51 days fished) over the previous 12 months than did offshore division anglers (36 days fished) (Table 8). Most (96%) bay division anglers had fished saltwater bays from a boat over this time whereas most offshore division anglers had fished saltwater gulf from a boat (98%) as well as saltwater bays from a boat (71%). A minority of TIFT anglers had participated in other types of saltwater and freshwater fishing over the past 12 months (Table 9).

When bay division anglers were asked to state their three most preferred species to catch, three inshore saltwater species (red drum (32%), seatrout (26%), and flounder (20%)) were listed most frequently. Few bay division anglers listed offshore saltwater species or freshwater species as their most preferred (Table 10). Similarly, offshore species were most preferred by TIFT anglers in the offshore category with billfish (41%), wahoo (12%), and tuna (10%) being listed most frequently. Two inshore saltwater species, red drum and seatrout, were listed as most preferred by 9.4% and 8.7% of offshore anglers, respectively (Table 11).

In terms of amount of effort directed at catching one particular species, bay division anglers appear to be somewhat more generalist than offshore anglers. Most (54%) bay division anglers reported not putting most of their effort into fishing for one particular species whereas most (60%) offshore division anglers did report putting most of their effort into fishing for one particular species (Table 12). For those bay division anglers who did report putting most of their effort into one particular species, red drum (51%) and seatrout (30%) were the most frequently cited species where effort was directed (Table 13). Most (75%) offshore division anglers who reported targeting one particular species cited billfish as the type of fish most often fished for (Table 13).

TIFT anglers were asked to rate the importance of fishing relative to the importance of other outdoor activities in which they participate. The majority of both bay division anglers (68%) and offshore division anglers (62%) reported that fishing was their most important outdoor activity (Table 14). About 12% of anglers in each division said that fishing was only one of many outdoor activities. When asked to rate their level of fishing ability compared to that of other saltwater anglers, less than 16% of both bay division and offshore division anglers believed that they were less skilled than other saltwater anglers (Table 15). Forty-two percent of bay division anglers and 35% of offshore division anglers believed they were more skilled than other saltwater anglers.

As an indication of level of financial investment in fishing, TIFT anglers were asked about ownership of powerboats and fishing gear. The majority of both bay division anglers (76%) and offshore division anglers (80%) reported that they (or someone in their household)

owned a powerboat (Table 16). The average length of powerboat owned by bay division anglers (20 feet) was significantly lower than the average length of powerboat owned by offshore division anglers (30 feet) (Table 17). Bay division anglers also reported owning significantly fewer rod and reel combinations (mean = 11 combinations) than did offshore division anglers (mean = 15 combinations) (Table 18).

The percentage of bay division anglers who agreed or disagreed with each of 16 statements about recreational fishing is presented in Table 19. The statements receiving the highest level of agreement were "I am happiest with the fishing trip if I catch a challenging game fish", "A fishing trip can be successful even if no fish are caught", and "I usually eat the fish I catch" which received agreement or strong agreement from 84%, 80%, and 79% of bay division anglers, respectively. The statements receiving the highest level of disagreement were "I want to keep all the fish I catch", "If I thought I wouldn't catch any fish, I wouldn't go fishing", and "It doesn't matter to me what type of fish I catch" which received disagreement or strong disagreement from 80%, 50%, and 46% of bay division anglers, respectively.

The percentage of offshore division anglers who agreed or disagreed with each of the 16 statements about recreational fishing is presented in Table 20. The statements receiving the highest level of agreement were "I am happiest with the fishing trip if I catch a challenging game fish", "I like to fish where there are several types of fish to catch", and "I'm just as happy if I release the fish I catch" which received agreement or strong agreement from 90%, 90%, and 85% of offshore division anglers, respectively. The statements receiving the highest level of disagreement were "I want to keep all the fish I catch", "It doesn't matter to me what type of fish I catch", and "If I thought I wouldn't catch any fish, I wouldn't go fishing" which received disagreement or strong disagreement from 78%, 50%, and 47% of offshore division anglers, respectively.

Significant differences between the responses of bay division and offshore division anglers were found on two of the 16 statements. Bay division anglers were more likely to disagree with the statement "A successful fishing trip is one in which many fish are caught", and offshore division anglers were more likely to agree with the statement "I'm just as happy if I release all the fish I catch".

Social Organization

In this section we describe the social organization of TIFT anglers. This information is necessary for understanding the extent to which TIFT anglers are active within the fishing social world, the types of fishing-related relationships they have developed, and their sources of information about the fishing social world.

When asked "What type of group do you fish with most often?", bay division anglers responded that they fish primarily with family and friends (34%), friends (33%), or family (22%) (Table 21). Responses of offshore division anglers to the same question were significantly different; most (51%) offshore division anglers responded that they usually fish with family and friends (Table 21). The majority of both bay and offshore division anglers reported that most of their friends fish (63% bay; 62% offshore) and that some of their co-workers fish (65% bay; 63%

offshore) (Table 22, Table 23). The majority of both bay division anglers (89%) and offshore division anglers (94%) reported that some or most of their vacations include fishing (Table 24).

The majority of both bay division anglers (55%) and offshore division anglers (62%) were members of a fishing club or organization (Table 25). For those anglers belonging to a club or organization, the majority (58%) of bay division anglers belonged to the Coastal Conservation Association and the majority of offshore division anglers belonged to either South Texas Big Game Fishing Club (STBGFC) (21%) or the Coastal Conservation Association (36%) (Table 26). Most anglers in each division who were a member of a club or an organization belonged to one (Table 27).

Bay division anglers appear to be less reliant on external sources of fishing information than offshore division anglers. A significantly lower proportion of bay division anglers reported using the Internet to obtain fishing information or having subscriptions to fishing/boating magazines than did offshore anglers. Forty-four percent of bay division anglers reported making use of the Internet to obtain fishing information compared to 58% of offshore division anglers (Table 28). Fifty-five percent of bay division anglers subscribed to fishing/boating magazines whereas 71% of offshore division anglers did so (Table 29). *Texas Fish and Game* (29%) and *Saltwater Sportsman* (15%) were the most popular magazines among bay division anglers; *Marlin* (48%) and *Saltwater Sportsman* (18%) were the most popular among those registered in the offshore division (Table 31).

Few TIFT anglers had ever become involved in fisheries issues by calling or writing an elected official or attending a public hearing on a fisheries matter (Table 32). Less than one-third of both bay division anglers and offshore division anglers had written an elected official or attended a public hearing, and less than one-fifth of anglers in each division had ever called an elected official on a fisheries matter.

TIFT Fishing Participation

There was no significant difference in the number of times participants in each division had fished in the TIFT previously. Whereas the largest percentage of anglers in each division fished in the TIFT from one to five times previously (Table 33), both groups of anglers participated in an average of six previous TIFT events (excluding the 1999 TIFT event).

A substantial percentage of bay division (94%) and offshore division (86%) anglers fished both days of the 1999 TIFT event (Table 34). Weather conditions offshore were probably the reason for the lower percentage for offshore division participants.

There was no significant difference in the number of nights bay and offshore division anglers spent in the Port Isabel- South Padre Island area (Table 35). Most anglers in each division stayed 3-4 nights; both groups averaged 4 nights in the local area. When we looked at only those who resided outside of Cameron County but in Texas (n=511), the majority of anglers (73.9%) spent three to five nights in the Port Isabel-South Padre Island area with most (27.4%) staying in a rental condominium/home, followed by private residence (26%), and hotel/motel (21.7%). For those participants that came from out-of-state (n=14), the majority (57.1%) spent four nights in the area, most (57.1%) staying in a hotel/motel.

Although there was no significant difference in the number of non-competing persons brought to the TIFT by bay and offshore division anglers, about 72% and 68% of each respective group brought at least one family member or friend with them to the event (Table 36). A plurality of bay (37%) and offshore (26%) anglers brought 1-2 persons with them to the TIFT event.

Private residences (their own or that of a friend) were used by a plurality of bay (39%) and offshore (29%) division anglers (Table 37). This roughly corresponds to the percent of anglers in each division (42% and 24%) who reside within Cameron County. A smaller proportion of bay anglers (41%) than offshore anglers (45%) stayed at a hotel, motel, condo, or home rental. Also, it should be noted that 12% of offshore division anglers stayed onboard their boats.

When anglers were questioned as to how they found out about this tournament, one's network of friends was the primary information source of bay anglers (45%) and offshore anglers (56%) (Table 38). The most important media information sources for bay anglers were newspaper (11%), television (10%), and tournament-related mail (9%). The most important source of information about the TIFT for offshore anglers was mail from TIFT (13%).

Bay division anglers differed significantly from offshore division participants on five of 18 fishing experience preferences or motives (Tables 39,40). Four of the five items where there were group differences were non-catch related (NC). Compared with bay division anglers, offshore division anglers placed greater importance on the following benefits of the TIFT: experiencing adventure and excitement, being close to the sea, and the prize money (Table 40). Alternatively, bay division anglers placed greater importance on the following benefits of the TIFT: the family recreation aspects of fishing, and getting away from the demands of other people (Table 39). Three-quarters of bay division anglers rated the following aspects as very or extremely important as a reason for fishing the TIFT: for the challenge or sport (79%), getting away from the regular routine (79%), and experiencing adventure and excitement (75%). Three-quarters of offshore division anglers rated the following aspects as very or extremely important as a reason for fishing the TIFT: experiencing adventure and excitement (88%), for the challenge or sport (82%), and to be with friends (75%).

There was a significant group difference as to whether or not anglers felt prize money should be offered in tournaments. Although a strong majority of both angler groups favored fishing events that featured prize money, offshore division anglers (84%) were more in favor of prize money fishing tournaments than bay division anglers (73%) (Table 41). This survey question was used previously by Ditton and Loomis (1985). It may be ambiguous as to whether it is referring to tournament prize monies or an associated calcutta.

Frequency distributions of overall angler satisfaction self-reports with the 1999 TIFT by division were not significantly different. Overall, 74% and 83% of bay and offshore anglers, respectively, reported they were very or extremely satisfied with the 1999 TIFT (Table 42).

A group of follow-up questions was used to probe for specific sources of angler satisfaction and dissatisfaction with the 1999 TIFT. There were significant group differences on

only one of 11 questions used: "My fishing skills were tested in this tournament". More bay anglers agreed with this statement than offshore anglers (Tables 43,44). Over 85% of the anglers in both divisions agreed or strongly agreed with the following two statements: "I thoroughly enjoyed the tournament" and "Tournament staff were always helpful". Most bay anglers agreed or strongly agreed with the following statements: "The tournament was well worth the money spent to take this trip", "I would like to fish other tournaments like this one", "The lodging facilities in the local area met my needs", and "My fishing skills were tested in this tournament"; most disagreed or strongly disagreed that that they caught what they considered a "trophy" fish (Table 43). Most offshore division anglers agreed or strongly agreed with these first three statements but did not agree that their fishing skills were tested in this tournament. Also, most offshore anglers disagreed or strongly disagreed that they caught more fish than they expected or that they caught what they consider a "trophy" fish (Table 44).

Tournament Expenditures

Survey participants were asked to report how much they spent while participating in the 1999 TIFT. Instead of soliciting a single overall level of expenditure, respondents were cued with thirteen expenditure categories including gas and oil for boat, charter fees, restaurant meals, lodging, ice, etc. Further, anglers were asked to indicate the amount of money they spent for each expenditure category in the Port Isabel- South Padre Island area and elsewhere in Texas. Taken with their residence location, this latter aspect of the question is essential for calculating local and state level economic impacts.

Bay Division Fishing Expenses

Most bay division anglers reported purchasing seven of the fourteen tournament-related expense items listed on the questionnaire (Table 45). A strong majority of bay anglers made expenditures for groceries, snack foods, and drinks (97%); restaurant meals (89%); automobile transportation (85%); and gas and oil for boat (82%). Whereas two expense items in column two of Table 45 exceeded \$500 (boat repairs/ upgrades, and charter fees), only 9% - 10% of the anglers reported expenses in these categories. Lodging was a major expense center for bay division anglers (\$415) but only 51% of the anglers in the tournament incurred this expense item. This roughly corresponds with the finding that 42% of bay division anglers resided in Cameron County and were able to return home after fishing.

Average tournament-related expenditures by bay division anglers were extrapolated to all bay division anglers in the 1999 TIFT. Major centers of expenditure for bay division anglers included lodging, restaurant meals, boat repairs/ upgrades, and the category of groceries, snack foods, and drinks. Lodging, restaurant meals, groceries, snack foods, and drinks accounted for 46% of total direct purchases by TIFT bay division anglers (Table 46). Overall expenditures by this group totaled \$296,425 (Table 47).

Offshore Division Fishing Expenses

Most offshore division anglers also reported purchasing seven of the fourteen tournament-related expense items listed on the questionnaire (Table 48). A strong majority of

bay anglers made expenditures for groceries, snack foods, and drinks (92%); restaurant meals (88%); and automobile transportation (84%). Whereas three tournament expense items in column two of Table 48 stand out as per angler expenditures of over \$1,000 ("Other", charter fees, and boat repairs/ upgrades), only 10% - 42% of the anglers reported expenses in these categories. "Other" included a variety of miscellaneous retail and service expenditures. Lodging was a major expense center for offshore division anglers (\$549) but only 50% of the anglers in the tournament incurred this expense item. The remainder stayed at their private residences or lived aboard their boats. "Other" transportation expenditures of \$528 were incurred by only 22% of offshore division anglers and likely covered airfare, boat transportation, or other means of accessing the tournament besides personal auto.

Average tournament-related expenditures by offshore division anglers were extrapolated to all offshore division anglers in the 1999 TIFT. Major centers of expenditure (10%) for offshore division anglers included lodging, gas and oil for the boat, and "other". Lodging, gas and oil for the boat, groceries, snack foods, and drinks accounted for 34% of total direct purchases by TIFT offshore division anglers (Table 49). Overall expenditures by this group totaled \$980,664 (Table 50) or three times the total expenditures by TIFT bay division anglers (Table 47).

Total Expenditures by Where They Were Made and Residence Location

Total tournament-related expenditures in the South Padre Island – Port Isabel Area by expenditure category by bay and offshore anglers are shown in Table 51. In Tables 47 and 50, total tournament-related expenditures (direct economic impact) are distributed for various groups according to where their expenses were made and where they reside. Tournament expenses made by Cameron County residents who participated as bay division anglers totaled \$108,004 (36% of total expenditures by bay division anglers and 8% of overall tournament angler expenses [\$1,277,089]) (Table 47,50). Tournament expenses made by Cameron County residents who participated as offshore division anglers totaled \$162,524 (17% of total expenditures by offshore division anglers and 13% of overall tournament angler expenses [\$1,277,089]) (Table 47,50).

Total expenditures in Cameron County by non-residents ranged from \$181,541 for bay division anglers (Table 47) to \$646,090 for offshore division anglers (Table 50); their overall expenditures of \$827,631 were new monies to the local economy. Of this amount, \$110,897 was spent by residents of the adjacent county, Hidalgo County. Total expenditures in the State of Texas by non-residents bay division anglers were \$17,446 (Table 47); there were no data available for extrapolation to offshore anglers (For a detailed distribution of what out-of-state bay division anglers purchased, see Table 52). Therefore, overall expenditures of \$17,446 were new monies to the Texas economy.

Total Economic Impacts

Results heretofore have focused on angler expenditures or direct economic impacts. These direct economic impacts also have secondary or indirect impacts on local and state economies. The purchases of 1999 TIFT anglers provide the basis for estimating total economic impacts of the event; they constitute initial impacts that stimulate additional demands for goods

and services from other sectors of the economy through secondary and tertiary rounds of market exchanges. Thus, initial economic effects ripple through the economy leading to a total impact that exceeds that of the original purchases by anglers. The indirect economic impacts of the 1999 Texas International Fishing Tournament can best be described in terms of changes in total output, income, value-added, and total employment. Economic impact multipliers from a study of the economic impacts of outdoor recreation activities on the Texas Gulf coast (including the Laguna Madre Estuary Region) completed by Tanyeri-Abur et al. (1998) were used to estimate the total economic impacts of the 1999 TIFT on Cameron County as well as at the state level.

Of the \$1,088,330 spent in Cameron County by 1999 TIFT anglers, \$827,631 was spent by anglers who resided outside of Cameron County. From Tables 46 and 49, we would expect most of the secondary economic effects were generated in economic sectors associated with food and eating and drinking, miscellaneous retail, hotels and lodging, automotive services, and amusement and recreation (charter boats services). These expenditures in turn generated additional economic impacts. The estimated \$181,541 in direct expenditures by non-Cameron County bay division anglers for local goods and services generated an additional \$138,956 in economic output (Table 53). This resulted in a total economic output of \$320,497 with 8 fulltime equivalent jobs in the recreational fishing sector. The estimated \$646,090 in direct expenditures by offshore division anglers (non-Cameron County residents) for local goods and services generated an additional \$490,557 in economic output (Table 53). This resulted in a total economic output of \$1,136,647 with 29 fulltime equivalent jobs in the recreational fishing sector. The total value-added associated with this increase in offshore fishery-related output is estimated at \$697,029. This is smaller than the level of total output because it represents only the amount of income and taxes retained in the local area where the tournament is held. Many of the inter-industry inputs such as labor, capital, wholesale supplies, etc. must be purchased outside of the Cameron County economy. Each of these purchases represents a leakage from the local county-level economy. The more leaks in the economy, the smaller the overall economic impacts will be from changes in final demand. A component of the total value-added impact of the TIFT is the impact on total income; for offshore division anglers, this was \$438,095.

Economic impact results at the state level are quite different because such a small number of non-residents come to Texas to fish in the Texas International Fishing Tournament. Out-of-state anglers spent a total of \$17,446 due to their participation in TIFT (includes expenditures in Cameron County and elsewhere in Texas). The total output associated TIFT participation by this group of anglers was \$33,889. Output multipliers at the state level are generally higher than at the local level because economic leakage occurs at a slower rate. Total statewide effects from indirect spending are probably spread over a wider range of sectors including manufacturing, retail, and service sectors.

Conclusions and Discussion

Bay and offshore division anglers participating in the 1999 Texas International Fishing Tournament were more similar to each other than they were different. Whereas statistically significant group differences provided are useful for differentiating market segments, there were only a few significant group differences overall between anglers in the two divisions. Bay anglers fished more days in the previous twelve months whereas offshore angler were more

likely to own a boat, own more rod and reel combinations, and put more of their effort into catching one particular species than bay anglers. Offshore anglers were also more likely to use the Internet to get fishing information and subscribe to fishing and boating magazines than bay anglers. Three aspects of the TIFT were of greater importance to offshore anglers than bay anglers: experiencing adventure and excitement, the prize money, and being close to the sea. Fishing as family recreation, and getting away from the demands of other people were two aspects of the TIFT that were more important to bay anglers than offshore anglers. There were no statistically significant differences between groups in terms of age, household income, self-rated skill level, importance attributed to fishing compared to other outdoor recreation activities, rate of club membership, number of times they have participated in TIFT previously, number of nights they stay in the local area when fishing the TIFT, the number of people they bring with them to the event, and their satisfaction level with the 1999 TIFT. Overall, there were significant group differences on three of 16 attitude statements on fishing, 5 of 18 experience preferences for the TIFT, and one of 11 satisfaction statements.

The 1999 Texas International Fishing Tournament was a successful event by several measures. First, about three-quarters of the tournament anglers reported they were very or extremely satisfied with the 1999 TIFT. Second, there were substantial levels of tournament-related direct expenditures and indirect impacts on the local economy. Two-days of competitive fishing activity on the water were responsible for \$827,631 in expenditures in the local county economy by non-residents and \$1,457,144 of total economic output. Hopefully, these results help to promote the concept of recreational fishing as a local industry, just as much as commercial fishing and maybe more so, with notable impacts on various local business sectors. Average trip expenses by bay division (\$959) and offshore division (\$2,165) anglers greatly exceeded the average expenses for a "typical" saltwater fishing trip of 2.4 days by the population of licensed saltwater anglers in Texas (\$259)(Bohnsack and Ditton 1999). Third, the large number of tournament sponsors and partners is indicative of strong support within the local business community. They would appear to be aware of the extent and distribution of economic impacts reported here, know how their businesses and the community are affected, and want to ensure these benefits continue. And fourth, the extensive participation of volunteers in all aspects of the event demonstrates strong community support for the TIFT.

The economic impact estimates provided in this report were conservative. First, tournament fees and calcutta expenses were not included as expense items in the mail questionnaire. Angler expenditures for tournament participation fees were acknowledged (\$67,976) but not included in the calculations of indirect economic effects and total economic output. It was not certain how and where registration fees were re-spent by tournament officials. Thus, some expenditures made by the TIFT Executive Board within Cameron County can be added to the angler expenditure results reported here; other expenditures were made elsewhere in Texas or out-of-state and do not add to the total economic output of the tournament in Cameron County. Since the calcutta was separate from the TIFT, any consideration of what was paid in or paid out by anglers according to where they lived (to see if more money remained in the county than was paid in) was beyond the scope of this study. Second, anglers were asked to report their expenditures in the South Padre Island – Port Isabel area rather than in Cameron County. It was reasoned that many anglers would not be familiar with the county's boundaries; therefore, it was

possible that some angler expenditures made in Cameron County were recorded as expenditures "in other parts of Texas".

Overall, participation in the Texas International Fishing Tournament has grown 66% overall or 4% per year on average since 1983 (Ditton and Loomis 1985). TIFT has also grown in terms of number of fishing participants and the extent of their economic impacts on Cameron County. Not only has the overall number of registered anglers increased (from 587 to 1,068) but so too has the number of anglers residing outside of Cameron County increased (from 59% to 67%) since 1983. Growth has been most notable in the bay division where 41% and 58% of anglers were from out of the county, respectively, in 1983 and 1999.

Whether the TIFT can continue to grow remains to be seen. The saltwater competitive fishing market includes between 10- 12 percent of the population of saltwater anglers each year (Ditton et al. 1991; Bohnsack and Ditton 1999). Through various marketing means, including the Internet, as well as more conventional outlets, additional tournament anglers can probably be reached and encouraged to participate in the TIFT. Twelve percent (about 89,934) of the estimated 749,440 licensed saltwater anglers in Texas in 1998-1999 participated in one or more saltwater tournaments; they participated in an average of one tournament in the previous twelve months (Bohnsack and Ditton 1999). That there was no web page for the 1999 TIFT may indicate, however, that the tournament is constrained from growing further. Constraints could include docking space, launch and weigh-in facilities, facilities for social events, or other close-by public sector and private sector support facilities. Local tourism, and recreational fishing is a part of the South Padre Island- Port Isabel area tourism mix, depends upon an interdependent system of components if the area is to be successful. These components include: anglers with an interest in competitive fishing; tourism attractions (the TIFT is most definitely a tourism attraction for visitors as well as locals); transportation; lodging, restaurants and other infrastructure support facilities; and, finally, information about the TIFT and benefits afforded to anglers (after Gunn 1988).

The annual TIFT will continue only to the extent these components are sufficiently present. A fishing tournament may be run to perfection but if fish populations decline significantly, participation will be reduced accordingly. Or there may be excellent fishing but with insufficient support facilities; fishing activity will likely decline as anglers seek out other fishing destinations with a better overall mix. This is what happened when angler numbers peaked in the 1982 TIFT and then decreased the next year. As Ditton and Loomis (1985) reported, the most frequent complaint made by anglers in both divisions was that the tournament lacked adequate fueling and weigh-in facilities. In 1984, the TIFT was moved to a larger marina with greater capacity. A fishing tournament can continue to grow but only to the extent the support components are able to accommodate the growth. If facilities are insufficient to accommodate those who have been fishing the tournament regularly, as well as new recruits as a result of Internet marketing efforts or just plain good word-of-mouth feedback on the event, high satisfaction levels are likely to decline. Tournament growth (as well as growth in local economic impacts) must be closely linked with the anticipated capacity of and improvements to the rest of the fishing tourism system.

Ditton and Loomis (1985) have identified four factors that contribute to the economic success of a fishing tournament. They were: 1) the number of anglers that participate, 2) anglers' place of residence (local, elsewhere in Texas, or out of state), 3) the number of non-fishing participants anglers bring with them, and 4) their length of stay in the local area. These are still relevant variables for consideration in future TIFT decision making. First, efforts could be made to recruit additional anglers and participants at subsequent TIFT events to continue the growth trend shown in Figure 1; this is a decision to be made by the TIFT Board. Arguments can be made in favor of continuing future growth as well as for maintaining the status quo. Second, in addition to getting tournament registration materials out to 1999 TIFT participants for the next event, which other groups of anglers (if any) should be targeted as future TIFT participants. Ditton and Loomis (1985: 49) recommended that the 1984 TIFT "concentrate on serving offshore fishermen since they are more likely to originate from out of county, tend to spend more, and participate in greater numbers". Whereas offshore anglers still spend much more per trip per person than bay anglers, the quality of near shore and bay fishing has improved considerably since 1983. This immediately followed the passage of H.B. 1000 (which prohibited the commercial harvest of red drum and spotted sea trout and put an end to overfishing by the commercial sector); bays and near shore areas are now a major fishing tourism attraction in the lower Laguna Madre area. Since many more people can afford bay fishing than offshore fishing, the disproportionate size of the former competitive fishing market segment and its potential for growth are remarkable and cannot be overlooked. Furthermore, today there are many more management issues and catch restrictions in the offshore Federal fisheries jurisdiction than previously. And third, the current TIFT format in terms of number of fishing days (2) and events planned for youth and social purposes on the third day appear to be well received by current participants. Some of the most frequent suggestions made by respondents include a separate "professional" guide division, the allowance of night fishing or better monitoring of the restriction against it, clearer explanations of prizes, pots and rules, and the scheduling of the tournament away from a full moon. Overall, it would appear the TIFT has found a satisfactory tournament format; it could be varied with an eye towards increasing the extent of local expenditures but as always, there are associated risks with making changes in format whether driven by economic impact concerns or not.

Only 14 or 2% of all registered anglers were from out of state in the 1999 TIFT (8 and 6 in the bay and offshore divisions, respectively). This was down from 3% for the 1983 TIFT. (Ditton and Loomis 1985). Perhaps due to accessibility costs, lower cost saltwater fishing opportunities elsewhere, or a lack of information about Texas saltwater fishing, non-resident anglers participate in saltwater fishing at a much lower rate than they do in freshwater fishing. They are also less likely to fish competitively when they come to Texas (Donaldson et al. 1992). As a part of its efforts to attract new tourism monies to the state, the Texas Department of Commerce needs to devote greater efforts to promoting the Texas coast as a destination, saltwater fishing opportunities, and tournament events like the Texas International Fishing Tournament.

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Appendix A
Tables

Table 1. Response Rates

Number Mailed	Returned Usable	Returned Non-Usable	Screened Out	Not Returned	Non-Deliverable	Raw Response Rate	Effective Response Rate
762	438	8	17	274	25	60.7	62.8

Table 2. Frequency Distribution of Anglers by Gender by Tournament Division

GENDER	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Male	172	90.5	215	88.1
Female	18	9.5	29	11.9
No response	1	--	3	--
TOTALS	191	100.0	247	100.0

Table 3. Frequency Distribution of Anglers Age by Tournament Division

AGE	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
17-27	15	8.0	28	11.5
28-37	39	20.7	66	27.2
38-47	73	38.8	64	26.3
48-57	45	23.9	58	23.9
58-67	11	5.9	20	8.2
68-72	5	2.7	7	2.9
No response	3	--	4	--
TOTALS	191	100.0	247	100.0
Mean	42.90	--	42.28	--
Standard Deviation	11.09	--	12.28	--

not significant at .05 level, F=.41, df=431

Table 4. Frequency Distribution of Anglers by Household Income Category by Tournament Division

INCOME	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Under \$20,000	3	1.7	4	1.8
\$20,000 – \$39,000	20	11.0	15	6.7
\$40,000 – \$59,000	17	9.4	27	12.1
\$60,000 – \$79,000	26	14.4	31	13.9
\$80,000 – \$99,000	23	12.7	25	11.2
\$100,000 – \$119,000	19	10.5	32	14.3
\$120,000 – \$139,000	17	9.4	12	5.4
\$140,000 – \$159,000	12	6.6	6	2.7
\$160,000 – \$179,000	8	4.4	8	3.6
\$180,000 – \$199,000	8	4.4	6	2.7
\$200,000 – \$219,000	4	2.2	3	1.3
\$220,000 or above	24	13.3	54	24.2
No response	9	--	24	--
TOTALS	191	100.0	247	100.0

not significant at .05 level, $Z = -1.1276$, $P > |Z| = .2595$

Table 5. Frequency Distribution of Anglers by Residence Location by Tournament Division

LOCATION	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Cameron County, TX	129	41.7	107	23.6
Other parts of Texas	172	55.7	340	75.1
Other states	8	2.6	6	1.3
TOTALS	309	100.0	453	100.0

Table 6. Frequency Distribution of Anglers by Distance Traveled to Compete in TIFT by Tournament Division

DISTANCE TRAVELED (miles)	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
0-100	201	65.0	168	37.1
101-200	13	4.2	112	24.7
201-300	40	12.9	77	17.0
301-400	36	11.7	58	12.8
401-500	4	1.3	5	1.1
500+	15	4.8	33	7.3
TOTALS	309	99.9	453	100.0

Table 7. TIFT Participants by their Residence Location; Determined by Three-Digit Zip Code Area (n=536)

Zip Code	City	%	Zip Code	City	%
750	North Texas	1.8	779	Victoria	4.7
752	Dallas	3.3	780-782	San Antonio	13.4
754	Greenville	0.4	783-784	Corpus Christi	20.3
755	Texarkansas	0.4	785	McAllen	25.4
757	Tyler	0.7	786-789	Austin	7.6
760-761	Ft. Worth	3.6	790	Amarillo	0.4
765	Waco	0.4	794	Lubbock	0.4
769	Midland	0.4	795	Abilene	0.4
770	Houston	6.5	Total		100.0
773-775	North Houston	9.1	Non-respondents		8
776	Beaumont	0.4			
778	Bryan	0.4			

Table 8. Frequency Distribution of Anglers by Number of Days Fished in the Previous Year by Tournament Division

NUMBER OF DAYS FISHED	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
0	3	1.6	2	0.8
1-13	36	19.7	51	21.0
14-33	54	29.5	87	35.8
34-63	49	26.8	70	28.8
64-123	24	13.1	26	10.7
124-330	17	9.3	7	2.9
No response	8	--	4	--
TOTALS	191	100.0	247	100.0
Mean	51.37	--	36.18	--
Standard Deviation	57.99	--	30.31	--

significant at .05 level, F=12.25, df=425

Table 9. Frequency Distribution of Anglers Who Participated in Each Type of Fishing During the Previous Year by Tournament Division

TYPE OF FISHING	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Freshwater	66	37.1	76	31.5
Saltwater bays from a boat	171	96.1	170	70.5
Saltwater bays from a shore/pier	60	33.7	68	28.2
Saltwater gulf from a boat	77	43.3	236	97.9
Saltwater gulf from a shore/pier	33	18.5	39	16.2

Table 10. Frequency Distribution of Bay Division Anglers by Fish Species Sought Most Often

SPECIES SOUGHT	PREFERENCE			TOTAL	
	1 st	2 nd	3 rd	N	%
Reds	78	72	25	175	31.9
Trout	55	58	28	141	25.7
Flounder	18	19	75	112	20.4
Speckled trout	10	11	3	24	4.4
Snook	6	8	7	21	3.8
Bass	4	2	8	14	2.6
Marlin	3	0	4	7	1.3
Tarpon	2	3	2	7	1.3
Billfish	1	2	1	4	0.7
Sailfish	1	1	2	4	0.7
King mackerel	0	1	3	4	0.7
Tuna	0	1	3	4	0.7
Snapper	0	0	4	4	0.7
Blue marlin	2	1	0	3	0.5
Wahoo	1	0	2	3	0.5
Dolphin	1	1	1	3	0.5
Catfish	0	0	3	3	0.5
Crappie	0	1	1	2	0.4
Black drum	0	0	2	2	0.4
Largemouth bass	1	0	1	2	0.4
Yellowfin tuna	1	0	0	1	0.2
Ling	1	0	0	1	0.2
Bottom	0	1	0	1	0.2
Smallmouth bass	0	1	0	1	0.2
Gar	0	1	0	1	0.2
Striped bass	0	1	0	1	0.2
Walleye	0	0	1	1	0.2
Shark	0	0	1	1	0.2
Red snapper	0	0	1	1	0.2
No response	6	6	13	25	--
TOTALS	191	191	191	573	99.9

Table 11. Frequency Distribution of Offshore Division Anglers by Fish Species Sought Most Often

SPECIES SOUGHT	PREFERENCE			TOTAL	
	1 st	2 nd	3 rd	N	%
Wahoo	11	41	37	89	12.4
Sailfish	7	40	36	83	11.6
Marlin	62	10	6	78	10.9
Reds	14	24	29	67	9.4
Blue marlin	55	3	2	60	8.4
Trout	16	18	19	53	7.4
Tuna	6	20	23	49	6.8
Dolphin	3	19	25	47	6.6
Billfish	35	2	7	44	6.1
White marlin	0	20	4	24	3.4
Snapper	8	5	7	20	2.8
Yellowfin tuna	0	9	7	16	2.2
Red snapper	5	4	5	14	2.0
King mackerel	7	3	2	12	1.7
Bass	0	3	8	11	1.5
Speckled trout	3	3	3	9	1.3
Amberjack	4	5	0	9	1.3
Flounder	0	2	6	8	1.1
Blackfin tuna	2	2	1	5	0.7
Ling	0	3	1	4	0.6
Bluefin tuna	0	2	0	2	0.3
Catfish	1	0	0	1	0.1
Salmon	1	0	0	1	0.1
Spanish mackerel	1	0	0	1	0.1
Giants	0	1	0	1	0.1
Snook	0	1	0	1	0.1
Black marlin	0	0	1	1	0.1
Mako shark	0	0	1	1	0.1
Swordfish	0	0	1	1	0.1
Anything	2	1	1	4	0.6
No response	4	8	11	33	--
TOTALS	247	247	247	749	99.8

Table 12. Frequency Distributions of Anglers by Whether They Put Most of Their Effort Into Catching One Species by Tournament Division

EFFORT?	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Yes	87	46.0	147	59.8
No	102	54.0	99	40.2
No response	2	--	1	--
TOTALS	191	100.0	247	100.0

significant at .05 level, $\chi^2=7.639$, $df=1$

Table 13. Frequency Distribution of Anglers by Species They Target Most by Tournament Division

SPECIES	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Reds	44	51.2	5	3.4
Marlin	0	0.0	38	26.2
Billfish	0	0.0	36	24.8
Blue marlin	0	0.0	32	22.1
Trout	26	30.2	11	7.6
Flounder	7	8.1	1	0.7
Striper	5	5.9	3	2.1
Snook	2	2.3	1	0.7
Largemouth bass	1	1.2	0	0.0
Bass	1	1.2	1	0.7
Snapper	0	0.0	4	2.8
King mackerel	0	0.0	3	2.1
Tuna	0	0.0	2	1.4
Sailfish	0	0.0	2	1.4
Red snapper	0	0.0	2	1.4
Amberjack	0	0.0	2	1.4
Dolphin	0	0.0	1	0.7
King salmon	0	0.0	1	0.7
No response	105	--	102	--
TOTALS	191	100.0	247	100.0

Table 14. Frequency Distribution of Anglers by the Importance of Fishing to Them Compared to Other Outdoor Recreational Activities by Tournament Division

IMPORTANCE	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Most important activity	129	68.3	153	62.4
Second most important activity	34	18.0	53	21.6
Third most important activity	2	1.1	9	3.7
Only one of many activities	24	12.7	30	12.2
No response	2	--	2	--
TOTALS	191	100.0	247	100.0

not significant at .05 level, $Z=-1.13089$, $P>|Z|= .2581$

Table 15. Frequency Distribution of Anglers by Their Self-Evaluated Fishing Ability Compared to Other Saltwater Anglers by Tournament Division

ABILITY	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Less skilled	30	15.9	34	13.9
Equally skilled	79	41.8	125	51.0
More skilled	80	42.3	86	35.1
No response	2	--	2	--
TOTALS	191	100.0	247	100.0

not significant at .05 level, $Z=.962206$, $P>|Z|= .3359$

Table 16. Frequency Distribution of Anglers by Whether They Own a Boat by Tournament Division

OWN BOAT?	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Yes	142	75.5	196	79.7
No	46	24.5	50	20.3
No response	3	--	1	--
TOTALS	191	100.0	247	100.0

significant at .05 level, $\chi^2=1.046$, $df=1$

Table 17. Frequency Distribution of Anglers by the Lengths of Their Longest Powerboat by Tournament Division

LENGTH (ft)	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
1-12	5	3.5	0	0.0
13-16	13	9.2	13	6.7
17-20	72	51.1	29	14.9
21-24	39	27.7	28	14.4
25-30	8	5.7	46	23.6
31-40	2	1.4	47	24.1
40+	2	1.4	32	16.4
No response	50	--	52	--
TOTALS	191	100.0	247	100.0
Mean	19.79	--	30.11	--
Standard Deviation	4.65	--	11.62	--

Table 18. Frequency Distribution of Anglers by Number of Rod and Reel Combinations Owned by Tournament Division

NUMBER OF COMBINATIONS	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
0	1	0.5	6	2.5
1-3	30	15.9	20	8.3
4-6	42	22.2	33	13.6
7-9	19	10.1	32	13.2
10-12	46	24.3	43	17.8
13-15	15	7.9	21	8.7
16-20	22	11.6	42	17.4
21-25	6	3.2	15	6.2
26-30	2	1.1	13	5.4
31+	6	3.2	17	7.0
No response	2	--	5	--
TOTALS	191	100.0	247	100.0
Mean	11.05	--	14.52	--
Standard Deviation	10.34	--	11.00	--

significant at .05 level, $F=11.11$, $df=430$

Table 19. Frequency Distribution of Bay Division Anglers by Their Feelings About Recreational Fishing

STATEMENTS OF FEELINGS	MEAN	STRONGLY DISAGREE					NEUTRAL	STRONGLY AGREE						
		1	2	3	4	5		1	2	3	4	5		
The more fish I catch, the happier I am	3.42	2.6	23.8	18.0	39.7	15.9								
A fishing trip can be successful even if no fish are caught	3.97	1.6	6.3	11.6	54.5	25.9								
I usually eat the fish I catch	4.11	2.1	6.4	12.2	37.2	42.0								
A successful fishing trip is one in which many fish are caught	2.84	7.9	37.6	25.4	21.2	7.9								
I would rather catch 1 or 2 big fish than 10 smaller fish	3.93	0.5	15.4	14.9	28.7	40.4								
When I go fishing, I am just as happy if I don't catch any fish	2.90	9.6	31.4	28.7	20.2	10.1								
It doesn't matter to me what type of fish I catch	2.89	7.4	38.6	20.6	24.3	9.0								
The bigger the fish I catch, the better the fishing trip	3.44	1.6	26.5	18.5	33.3	20.1								
I'm just as happy if I don't keep the fish I catch	3.73	3.2	12.7	15.9	44.4	23.8								
I like to fish where there are several kinds of fish to catch*	3.97	0.0	5.8	16.9	51.9	25.4								
I want to keep all the fish I catch	1.97	31.7	48.1	14.3	3.2	2.6								
I'm happiest with the fishing trip if I catch a challenging game fish	4.19	1.1	4.2	11.1	41.8	41.8								
I'm just as happy if I release the fish I catch*	4.01	1.1	5.8	16.9	43.9	32.3								
If I thought I wouldn't catch any fish, I wouldn't go fishing	2.80	21.7	28.0	15.3	18.5	16.4								
I like to fish where I know I have a chance to catch a "trophy" fish	3.77	3.2	11.6	19.0	37.6	28.6								
When I go fishing, I'm not satisfied unless I catch at least something	2.95	8.5	33.3	20.6	29.6	7.9								

*** Values given are percentages ***

*significant at .05 level

Table 20. Frequency Distribution of Offshore Division Anglers by Their Feelings About Recreational Fishing

STATEMENTS OF FEELINGS	MEAN	STRONGLY			AGREE	STRONGLY
		DISAGREE	DISAGREE	NEUTRAL		
		1	2	3	4	5
The more fish I catch, the happier I am	3.57	3.7	15.9	24.0	33.3	23.2
A fishing trip can be successful even if no fish are caught	3.86	3.6	10.1	10.1	48.6	27.5
I usually eat the fish I catch	4.15	1.6	4.5	11.4	42.3	40.2
A successful fishing trip is one in which many fish are caught	3.12	4.0	27.9	31.2	25.5	11.3
I would rather catch 1 or 2 big fish than 10 smaller fish	3.98	1.6	8.5	19.5	30.5	39.8
When I go fishing, I am just as happy if I don't catch any fish	2.87	8.5	33.6	30.0	18.2	9.7
It doesn't matter to me what type of fish I catch	2.72	9.8	40.2	24.0	20.7	5.3
The bigger the fish I catch, the better the fishing trip	3.60	2.8	12.1	28.3	35.2	21.5
I'm just as happy if I don't keep the fish I catch	3.87	3.3	5.7	18.3	46.3	26.4
I like to fish where there are several kinds of fish to catch*	4.19	0.8	0.4	8.9	58.7	31.2
I want to keep all the fish I catch	1.92	36.8	41.3	16.6	3.2	2.0
I'm happiest with the fishing trip if I catch a challenging game fish	4.34	1.2	1.6	6.9	42.1	48.2
I'm just as happy if I release the fish I catch*	4.26	1.2	2.8	11.4	38.2	46.3
If I thought I wouldn't catch any fish, I wouldn't go fishing	2.86	17.8	28.7	18.2	20.2	15.0
I like to fish where I know I have a chance to catch a "trophy" fish	3.81	2.8	8.9	17.8	45.7	24.7
When I go fishing, I'm not satisfied unless I catch at least something	2.91	8.9	34.4	24.7	20.6	11.3

*** Values given are percentages ***

*significant at .05 level

Table 21. Frequency Distribution of Anglers by Type of Group They Fished With Most Often by Tournament Division

GROUP	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Alone	12	6.4	6	2.4
Family	41	21.9	31	12.6
Friends	62	33.1	74	30.1
Family & friends together	64	34.2	126	51.2
Club	0	0.0	2	0.8
Combination ^{1,2}	8	4.2	7	2.8
No response	4	--	1	--
TOTALS	191	100.0	247	100.0

significant at .05 level, $\chi^2=17.534$, $df=4$

¹ Combinations for the Bay division include: alone and family; family and friends; family and family & friends together; and friends and club.

² Combinations for the Offshore division include: family and friends; friends and club; family & friends together and club; alone, family, and friends; and family, friends, and family & friends together.

Table 22. Frequency Distribution of Anglers by the Number of Their Friends that Fish by Tournament Division

NUMBER OF FRIENDS	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
None	1	0.5	0	0.0
Some	69	36.5	93	37.8
Most	119	63.0	153	62.2
No response	2	--	1	--
TOTALS	191	100.0	247	100.0

Table 23. Frequency Distribution of Anglers by the Number of Their Co-workers that Fish by Tournament Division

NUMBER OF CO-WORKERS	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
None	27	14.5	36	15.0
Some	120	64.5	150	62.5
Most	39	21.0	54	22.5
No response	5	--	7	--
TOTALS	191	100.0	247	100.0

Table 24. Frequency Distribution of Anglers by the Number of Vacation Trips that Include Fishing by Tournament Division

NUMBER OF TRIPS	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
None	20	10.6	14	5.7
Some	104	55.0	116	47.3
Most	65	34.4	115	46.9
No response	2	--	2	--
TOTALS	191	100.0	247	100.0

Table 25. Frequency Distribution of Anglers by Whether They Are Members of a Fishing Club/Organization by Tournament Division

MEMBER OF CLUB?	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Yes	102	55.1	152	61.5
No	83	44.9	95	38.5
No response	6	--	0	--
TOTALS	191	100.0	247	100.0

not significant at .05 level, $\chi^2=1.273$, $df=1$

Table 26. Frequency Distribution of Anglers by Their Favorite Fishing Clubs/Organizations by Tournament Division

CLUB ¹	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
STBGFT	2	2.1	30	21.1
CCA	49	51.0	42	29.6
Corpus Christi Big Game Fishing Club	0	0.0	23	16.2
GCCA	7	7.3	8	5.6
IGFA	1	1.0	5	3.5
GCA	8	8.3	2	1.4
Valley Sportsman	4	4.2	2	1.4
TIFT	5	5.2	4	2.8
The Billfish Foundation	0	0.0	4	2.8
Laguna Flyfishing Association	6	6.3	2	1.4
No response	95	--	105	--
TOTALS¹	177	85.4	227	85.8

¹ Clubs that only 1 or 2 respondents designated as their favorites are not included in the table. This includes 14 (14.6%) Bay division respondents and 20 (14.2%) Offshore division respondents. The clubs are:

ILTTA,	NMLA,	PARR,	STAR,	BASS,	NAFA,
LMGA,	RGVF,	Alamo Offshore Angler,		New Orleans Big Game Fishing Club, Texas	
A&M Chapter,		Beaver Fishing Team,		Sanova Beach Rod & Reel Club,	
South Texas Fishing Club,		Port Aransas Boatmen Inc.,		North American,	
South Padre Island Association,		Fly Fishing Club,		Laguna Madre Fishing Association,	
Saltwater Sportsman,		Coastal Bend Guides Association,		South of Border,	
Troutmasters,		Ft. Isabel, South Padre Island Guides Association			

Table 27. Frequency Distribution of Anglers by the Number of Fishing Clubs/Organizations They Belong to by Tournament Division

NUMBER OF CLUBS	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
1	72	75.0	77	52.7
2	22	22.9	46	31.5
3	2	2.1	12	8.2
4	0	0.0	7	4.8
5+	0	0.0	4	2.8
No response	95	--	101	--
TOTALS	191	100.0	247	100.0

Table 28. Frequency Distribution of Anglers by Whether They Have Used the Internet to Obtain Fishing Information Since Last Year by Tournament Division

USED INTERNET?	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Yes	83	43.9	142	57.7
No	106	56.1	104	42.3
No response	2	--	1	--
TOTALS	191	100.0	247	100.0

significant at .05 level, $\chi^2=5.806$, df=1

Table 29. Frequency Distribution of Anglers by Whether They Subscribe to Fishing/Boating Magazines by Tournament Division

SUBSCRIBE?	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Yes	104	55.3	176	71.3
No	84	44.7	71	28.7
No response	3	--	0	--
TOTALS	191	100.0	247	100.0

significant at .05 level, $\chi^2=11.843$, df=1

Table 30. Frequency Distribution of Anglers by Number of Fishing/Boating Magazines They Subscribe To by Tournament Division

NUMBER OF MAGAZINES	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
1	29	31.5	14	8.5
2	41	44.6	58	35.2
3	16	17.4	42	25.5
4	5	5.4	28	17.0
5	1	1.1	11	6.7
6+	0	0.0	12	7.2
No response	99	--	82	--
TOTALS	191	100.0	247	100.0

Table 31. Frequency Distribution of Anglers by Their Favorite Fishing/Boating Magazines by Tournament Division

MAGAZINE ¹	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Marlin	6	6.5	77	48.4
Texas Fish & Game	27	29.3	4	2.5
Saltwater Sportsman	14	15.2	28	17.6
Sport Fishing	2	2.2	11	6.9
Saltwater Angler	3	3.3	6	3.8
Tide	7	7.6	2	1.3
Flyfishing Saltwater	6	6.5	0	0.0
Saltwater	1	1.1	4	2.5
Texas Parks & Wildlife	4	4.3	2	1.3
Big Game Fishing Journal	0	0.0	3	1.9
Gulf Coast Fisherman	3	3.3	0	0.0
Fish & Game	3	3.3	0	0.0
No response	99	--	88	--
TOTALS¹	175	82.6	225	86.2

¹ Magazines to which only 1 or 2 respondents subscribed are not included in the table. This includes 16 (17.4%) Bay division respondents and 22 (13.8%) Offshore division respondents. The magazines are:

Hawaii Fisherman,	Texas Outdoors,	Power & Motor Yacht,	Field & Stream,	Florida Sportsman,
Bass Pro Shop,	Cruising,	National Fisherman,	Yachting,	GCCA,
Boating,	Texas Sportsman,	Saltwater Texas,	Honey Hole,	IGFA,
Outdoor,	Bass,	Saltwater Sportfishing,	Saltwater Fishing,	Sport Fisherman,
Troutmasters,	Fishin' Texas,	Saltwater Fisherman,	Offshore Angler,	Maury Brothers,
CCA,	Edge,	Valley Sportsman Club		

Table 32. Frequency Distribution of Anglers by Whether They Have Called or Written an Elected Official or Attended a Public Hearing on a Fisheries Matter by Tournament Division

INVOLVEMENT	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Called elected official ¹	30	16.9	44	18.6
Written elected official ²	57	31.3	75	31.1
Attended Public Hearing ³	35	20.0	61	25.3

¹not significant at .05 level, $\chi^2=.036$, df=1

²not significant at .05 level, $\chi^2=.476$, df=1

³not significant at .05 level, $\chi^2=.018$, df=1

Table 33. Frequency Distribution of Anglers by the Number of Previous Times They Have Fished in TIFT by Tournament Division

NUMBER OF PREVIOUS TIMES FISHED	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
0	40	21.3	39	15.9
1-5	84	44.7	113	46.1
6-10	31	16.5	47	19.2
11+	33	17.6	46	18.8
No response	3	--	2	--
TOTALS	191	100.0	247	100.0
Mean	5.83	--	6.25	--
Standard Deviation	7.17	--	7.42	--

not significant at .05 level, $F=.35$, df=432

Table 34. Frequency Distribution of Anglers by the Number of Days Fished in TIFT by Tournament Division

DAYS FISHED	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
0	1	0.6	5	2.2
1	9	5.3	26	11.5
2	159	94.1	195	86.3
No Response	22	--	21	--
TOTALS	191	100.0	247	100.0

Table 35. Frequency Distribution of Anglers by the Number of Nights They Stayed in the South Padre Island Area by Tournament Division

NUMBER OF NIGHTS	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
0	18	10.5	9	4.0
1-2	18	10.5	30	13.5
3-4	105	61.4	124	55.6
5-6	16	9.4	42	18.8
7+	14	8.2	18	8.1
No response	20	--	24	--
TOTALS	191	100.0	247	100.0
Mean	3.53	--	4.08	--
Standard Deviation	2.30	--	3.39	--

not significant at .05 level, F=3.33, df=393

Table 36. Frequency Distribution of Anglers by the Number of Additional Persons They Brought to TIFT by Tournament Division

NUMBER OF ADDITIONAL PERSONS	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
0	53	28.3	78	32.0
1-2	69	36.9	63	25.8
3-4	33	17.6	49	20.1
5+	32	17.1	54	22.1
No response	4	--	3	--
TOTALS	191	100.0	247	100.0
Mean	2.37	--	2.75	--
Standard Deviation	2.60	--	3.12	--

not significant at .05 level, F=1.78, df=430

Table 37. Frequency Distribution of Anglers by the Type of Lodging They Used in the South Padre Island Area by Tournament Division

TYPE OF LODGING	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Hotel/Motel	25	13.7	49	20.2
Private Residence	72	39.3	69	28.5
Boat	0	0.0	30	12.4
Condo/Home Rental	50	27.3	60	24.8
Other ¹	33	18.0	22	9.1
Combination ^{2,3}	3	1.5	12	4.9
No response	8	--	5	--
TOTALS	191	100.0	247	100.0

significant at .05 level, $\chi^2=36.13$, $df=4$

¹See Table 37A for identification and frequencies of other types of lodging used.

²Combinations for the Bay division include: hotel/motel and condo/home rental; hotel/motel and other; and private residence and condo/home rental.

³Combinations for the Offshore division include: hotel/motel and private residence; hotel/motel and boat; hotel/motel and condo/home rental; boat and condo/home rental; and boat and other.

Table 37A. Frequency Distribution of Anglers by the Other Types of Lodging Used in the South Padre Island Area by Tournament Division

OTHER TYPE OF LODGING	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
RV/travel trailer	13	38.2	7	30.4
Commuted from home	5	14.7	4	17.4
Camping	1	2.9	0	0.0
Trailer park	8	23.5	4	17.4
Own condo	2	5.9	2	8.7
Friend/family	1	2.9	3	13.0
House	3	8.8	0	0.0
Port Mansfield	0	0.0	1	4.3
Outdoor resort	1	2.9	2	8.7
TOTALS	34	100.0	23	100.0

Table 38. Frequency Distribution of Anglers by the Sources of Information Used to Find Out About the Tournament by Tournament Division

SOURCE OF INFORMATION	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Friends	125	45.3	166	55.5
Radio	16	5.8	7	2.3
Television	27	9.8	12	4.0
Mail advertisement	24	8.7	39	13.0
Magazine	8	2.9	4	1.3
Newspaper	30	10.9	16	5.4
Internet	0	0.0	3	1.0
Other ¹	46	16.7	52	17.4
TOTALS²	276	100.0	299	100.0

¹ See Table 38A for identification and frequencies of other sources of information.

² Some respondents listed more than one source of information.

Table 38A. Frequency Distribution of Anglers by the Other Sources of Information From Which They Found Out About the Tournament by Tournament Division

OTHER SOURCE OF INFORMATION	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Previous trips	0	0.0	1	1.9
Grew up around TIFT	4	8.7	0	0.0
Originally from South Padre area	5	10.9	3	5.8
Used to work dock	0	0.0	2	3.8
Directly from TIFT by mail	0	0.0	1	1.9
Husband fished it last year	0	0.0	1	1.9
From/Live there	6	13.0	8	15.4
Family member/friend	8	17.4	13	25.0
Guide	2	4.3	1	1.9
Past spectator	1	2.2	2	3.8
Past participant/tradition	8	17.4	14	26.9
Known about it for years	2	4.3	2	3.8
Advisory board member	2	4.3	0	0.0
Know/are sponsor	2	4.3	0	0.0
Life	1	2.2	0	0.0
Local boy	1	2.2	0	0.0
Manage South Point Marina	0	0.0	1	1.9
T-shirts/caps	1	2.2	0	0.0
Charter customers	0	0.0	1	1.9
CCA Banquet	1	2.2	0	0.0
Word of mouth	1	2.2	0	0.0
Boat catalog	0	0.0	1	1.9
Just knew	1	2.2	0	0.0
Other tournaments	0	0.0	1	1.9
TOTALS	46	100.0	52	100.0

Table 39. Frequency Distribution of Bay Division Anglers by Their Experience Preferences (Reasons for Fishing) in Saltwater Tournaments

REASON	MEAN	NOT AT ALL IMPORTANT				
		1	2	3	4	5
To be outdoors (NC)	3.86	3.2	1.6	25.5	45.2	24.5
For family recreation (NC)*	3.60	8.5	6.9	23.4	38.3	22.9
To experience new and different things (NC)	3.37	7.0	9.6	35.3	35.8	12.3
For relaxation (NC)	3.80	5.9	6.4	20.3	36.4	31.0
To be close to the sea (NC)*	3.56	4.3	10.7	28.9	36.9	19.3
To obtain fish for eating (C)	2.28	31.4	28.7	26.1	8.5	5.3
To get away from the demands of other people (NC)*	3.60	9.6	11.2	18.7	29.9	30.5
For the experience of the catch (C)	3.74	4.8	8.5	20.2	40.4	26.1
To test my equipment (NC)	2.36	28.7	28.7	26.1	11.2	5.3
To be with friends (NC)	3.82	1.6	7.4	22.9	43.6	24.5
To experience unpolluted natural surroundings (NC)	4.05	1.1	3.2	22.0	36.6	37.1
To win a tournament trophy (C)	2.95	16.7	19.4	33.9	12.4	17.7
To develop my skills (C)	3.50	5.9	12.2	25.5	38.8	17.6
To get away from the regular routine (NC)	4.03	2.7	4.8	13.9	43.9	34.8
To obtain a "trophy" fish (C)	3.21	11.7	16.0	34.6	15.4	22.3
For the challenge or sport (C)	4.06	2.7	2.1	16.0	44.9	34.2
For the prize money (C)*	2.42	34.8	19.3	26.2	9.1	10.7
To experience adventure and excitement (NC)*	4.04	1.6	3.7	19.7	39.4	35.6

*** Values given are percentages ***

(C) - Catch Related
(NC) - Non-catch Related
*significant at .05 level

Table 40. Frequency Distribution of Offshore Division Anglers by Their Experience Preferences (Reasons for Fishing) in Saltwater Tournaments

REASON	MEAN	NOT AT ALL IMPORTANT				
		1	2	3	4	5
			SLIGHTLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	EXTREMELY IMPORTANT
To be outdoors (NC)	3.69	3.3	6.9	24.4	48.4	17.1
For family recreation (NC)*	3.25	8.9	16.3	28.0	34.1	12.6
To experience new and different things (NC)	3.54	2.4	13.4	29.3	37.8	17.1
For relaxation (NC)	3.60	8.1	8.9	20.3	40.2	22.4
To be close to the sea (NC)*	3.91	4.9	5.3	17.5	38.2	34.1
To obtain fish for eating (C)	2.39	27.6	24.8	32.9	9.8	4.9
To get away from the demands of other people (NC)*	3.38	11.0	11.8	26.1	29.8	21.2
For the experience of the catch (C)	3.93	2.0	6.1	18.0	44.1	29.8
To test my equipment (NC)	2.43	28.9	24.0	26.4	16.3	4.5
To be with friends (NC)	3.96	0.8	4.9	19.3	47.1	27.9
To experience unpolluted natural surroundings (NC)	3.81	5.3	8.2	16.7	39.6	30.2
To win a tournament trophy (C)	3.13	15.1	14.7	31.8	19.2	19.2
To develop my skills (C)	3.53	6.5	10.6	25.2	39.0	18.7
To get away from the regular routine (NC)	3.88	3.7	6.1	19.5	40.2	30.5
To obtain a "trophy" fish (C)	3.35	9.8	15.4	24.8	30.1	19.9
For the challenge or sport (C)	4.16	1.2	2.0	14.3	44.3	38.1
For the prize money (C)*	2.92	22.0	15.9	27.8	16.3	18.0
To experience adventure and excitement (NC)*	4.27	0.4	1.6	10.2	45.9	41.9

*** Values given are percentages ***

(C) - Catch Related
 (NC) - Non-catch Related
 *significant at .05 level

Table 41. Frequency Distribution of Anglers by Their Responses as to Whether Prize Money Should be Offered in Tournaments by Tournament Division

PRIZE MONEY?	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Yes	134	72.8	203	84.2
No	50	27.2	38	15.8
No response	7	--	6	--
TOTALS	191	100.0	247	100.0

significant at .05 level, $\chi^2=10.259$, $df=1$

Table 42. Frequency Distribution of Anglers as to Their Evaluation of Overall Satisfaction with the 1999 TIFT Tournament by Tournament Division

LEVEL OF SATISFACTION	BAY		OFFSHORE	
	Absolute Frequency	Adjusted Frequency (%)	Absolute Frequency	Adjusted Frequency (%)
Not at all satisfied	2	1.1	0	0.0
Slightly satisfied	4	2.1	4	1.7
Moderately satisfied	43	22.9	38	15.8
Very satisfied	101	53.7	145	60.2
Extremely satisfied	38	20.2	54	22.4
No response	3	--	6	--
TOTALS	191	100.0	247	100.0

not significant at .05 level, $Z=-1.72537$, $P>|Z|=0.0845$

Table 43. Frequency Distribution of Bay Division Anglers by Their by Their Feelings About Their Fishing Trip and Participation in the TIFT

STATEMENTS OF FEELINGS	MEAN	STRONGLY				
		DISAGREE 1	DISAGREE 2	NEUTRAL 3	AGREE 4	STRONGLY AGREE 5
I thoroughly enjoyed the tournament	4.27	0.5	2.1	6.3	51.9	39.2
I cannot imagine better fishing	3.05	6.9	24.5	35.6	22.9	10.1
Tournament staff were always helpful	4.16	1.1	2.7	10.6	50.5	35.1
The tournament was well worth the money spent to take this trip	4.07	1.1	3.8	14.1	49.2	31.9
I would like to fish other tournaments like this one	3.98	2.1	2.1	19.6	47.6	28.6
The lodging facilities in the local area met my needs	4.02	0.0	0.6	23.5	49.2	26.8
I caught more fish than I expected in this tournament	2.60	14.3	35.4	31.2	13.8	5.3
I encountered more people in the tournament than I expected	3.40	0.5	9.7	46.8	34.9	8.1
I caught what I consider a "trophy" fish	2.10	33.3	38.6	16.9	7.4	3.7
My fishing skills were tested in this tournament *	3.80	2.7	9.6	18.1	44.7	25.0
I was disappointed with some aspects of this tournament	2.73	13.4	34.4	26.9	16.1	9.1

Values given are percentages

*significant at .05 level

Table 44. Frequency Distribution of Offshore Division Anglers by Their Feelings About Their Fishing Trip and Participation in the TIFT

STATEMENTS OF FEELINGS	MEAN	STRONGLY				
		DISAGREE 1	DISAGREE 2	NEUTRAL 3	AGREE 4	STRONGLY AGREE 5
I thoroughly enjoyed the tournament	4.35	0.8	0.8	4.5	50.4	43.4
I cannot imagine better fishing	2.99	6.6	22.5	44.7	18.0	8.2
Tournament staff were always helpful	4.20	0.4	1.7	12.0	49.8	36.1
The tournament was well worth the money spent to take this trip	4.04	2.1	2.1	18.8	44.2	32.9
I would like to fish other tournaments like this one	4.13	1.7	1.7	12.4	50.4	33.9
The lodging facilities in the local area met my needs	3.94	0.9	2.1	23.0	50.2	23.8
I caught more fish than I expected in this tournament	2.49	15.4	37.9	34.2	7.1	5.4
I encountered more people in the tournament than I expected	3.31	1.3	8.9	53.4	30.5	5.9
I caught what I consider a "trophy" fish	2.25	31.4	36.8	14.9	9.5	7.4
My fishing skills were tested in this tournament *	3.20	11.2	16.2	26.6	34.0	12.0
I was disappointed with some aspects of this tournament	2.52	18.3	31.1	36.1	9.5	5.0

Values given are percentages

*significant at .05 level

Table 45. Average Tournament Expenditures of All Bay Division Anglers by Type of Purchase

Type of purchase	Percent of bay anglers who purchased each item	Average amount spent by bay anglers who purchased the item	Average amount spent by all bay anglers
Automobile transportation	85.2	\$69.94	\$59.57
Other transportation	25.3	179.33	45.32
Gas and oil for boat	82.4	68.92	56.80
Slip or dockage fees	17.6	38.60	16.20
Charter fees	9.9	655.28	64.81
Bait	45.6	39.67	18.09
Fishing tackle/equipment	65.9	83.13	54.81
Boat repairs/upgrades	8.8	1,050.74	109.69
Lodging	50.5	414.91	209.74
Restaurant meals	89.0	165.74	147.53
Groceries, snack foods, drinks	97.3	94.08	91.50
Ice	82.4	19.07	15.71
Tips	46.2	37.10	17.12
Other1	8.8	120.75	10.62
Other2	17.0	267.68	45.59
Other3	5.5	107.80	5.92

Table 46. Total Direct Purchases by All Bay Division Anglers by Type of Purchase

Type of Purchase	Total Amount Spent	Percent of Total
Automobile transportation	\$18,404.04	6.15
Other transportation	\$14,006.97	4.68
Gas and oil for boat	\$17,551.20	5.86
Slip or dockage fees	\$5,005.80	1.67
Charter fees	\$20,026.29	6.69
Bait	\$5,589.81	1.87
Fishing tackle/equipment	\$16,936.29	5.66
Boat repairs/upgrades	\$33,897.30	11.32
Lodging	\$64,806.57	21.64
Restaurant meals	\$45,586.77	15.22
Groceries, snack foods, drinks	\$28,273.50	9.44
Ice	\$4,857.48	1.62
Tips	\$5,290.08	1.77
Other1	\$3,278.49	1.09
Other2	\$14,090.40	4.71
Other3	\$1,832.37	0.61
		100.00

The total amount spent above does not add to the total presented in Table 47 due to rounding error.

Table 47. Total Expenditures (Direct Economic Impact) made by TIFT Bay Division Anglers by Residence Location Using Personal Expenditure Data.

Residency	Dollars spent in South Padre Island - Port Isabel area	Dollars spent elsewhere in Texas	Total
Cameron County	\$100,712.88	\$7,291.08	\$108,003.96
Texas residents (not Cameron County)	\$164,308.16	\$6,666.72	\$170,974.88
Non-residents	\$17,233.28	\$213.36	\$17,446.64
Total	\$282,254.32	\$14,171.16	\$296,425.48

Table 48. Average Tournament Expenditures of All Offshore Division Anglers by Type of Purchase

Type of purchase	Percent of offshore anglers who purchased each item	Average amount spent by offshore anglers who purchased item	Average amount spent by all offshore anglers
Automobile transportation	84.2	\$107.89	\$90.81
Other transportation	22.2	528.35	117.14
Gas and oil for boat	74.2	454.29	337.12
Slip or dockage fees	36.2	337.40	114.50
Charter fees	9.5	1,370.71	130.25
Bait	60.2	92.14	55.45
Fishing tackle/equipment	41.2	444.36	182.97
Boat repairs/upgrades	15.8	1,151.45	218.82
Lodging	49.8	548.84	273.18
Restaurant meals	88.2	229.56	202.55
Groceries, snack foods, drinks	92.3	155.23	143.29
Ice	76.9	53.36	41.05
Tips	58.8	90.01	53.35
Other1	11.3	597.72	67.62
Other2	22.2	545.98	121.05
Other3	8.6	926.83	75.49

Table 49. Total Direct Purchases of All Offshore Division Anglers by Type of Purchase

Type of Purchase	Total Amount Spent	Percent of Total
Automobile transportation	\$41,132.40	4.08
Other transportation	\$53,064.42	5.27
Gas and oil for boat	\$152,715.36	15.15
Slip or dockage fees	\$51,868.50	5.15
Charter fees	\$59,003.25	5.85
Bait	\$25,118.85	2.49
Fishing tackle/equipment	\$82,885.41	8.22
Boat repairs/upgrades	\$99,129.99	9.84
Lodging	\$123,750.54	12.28
Restaurant meals	\$91,755.15	9.10
Groceries, snack foods, drinks	\$64,910.37	6.44
Ice	\$18,591.12	1.84
Tips	\$24,167.55	2.40
Other1	\$30,631.86	3.04
Other2	\$54,835.65	5.44
Other3	\$34,196.97	3.39
		100.00

The total amount spent above does not add to the total presented in Table 50 due to rounding error.

Table 50. Total Expenditures (Direct Economic Impact) made by TIFT Offshore Division Anglers by Residence Location Using Personal Expenditure Data.

Residency	Dollars spent in South Padre Island – Port	Dollars spent elsewhere in Texas	Total
	Isabel area		
Cameron County	\$159,985.33	\$2,539.11	\$162,524.44
Texas residents (not Cameron County)	\$646,089.93	\$172,049.28	\$818,139.21
Non-residents	0.00	0.00	0.00
Total	\$806,075.26	\$174,588.39	\$980,663.65

Table 51. Total Amount Spent by All Anglers in SPI by Type of Purchase and Division

Type of Purchase	Bay		Offshore	
	Total Amount Spent	% of Total	Total Amount Spent	% of Total
Automobile transportation	\$16,071.09	5.64	\$33,028.23	3.97
Other transportation	\$12,974.91	4.55	\$41,046.33	4.94
Gas and oil for boat	\$16,908.48	5.93	\$132,873.96	15.98
Slip or dockage fees	\$4,996.53	1.75	\$48,085.95	5.78
Charter fees	\$20,026.29	7.02	\$59,003.25	7.10
Bait	\$5,249.91	1.84	\$15,827.82	1.90
Fishing tackle/equipment	\$14,167.65	4.97	\$44,543.49	5.36
Boat repairs/upgrades	\$29,617.65	10.39	\$40,815.30	4.91
Lodging	\$64,296.72	22.54	\$115,601.07	13.90
Restaurant meals	\$45,280.86	15.88	\$83,814.06	10.08
Groceries, snack foods, drinks	\$26,907.72	9.43	\$56,856.03	6.84
Ice	\$4,761.69	1.67	\$17,259.30	2.08
Tips	\$5,265.36	1.85	\$23,574.12	2.84
Other1	\$3,263.04	1.14	\$30,369.12	3.65
Other2	\$13,580.55	4.76	\$54,745.05	6.58
Other3	\$1,826.19	0.64	\$34,011.24	4.09
		100.00		100.00

significant at .05 level, F=25.246, df=406

The total amount spent above does not add to the total presented in Tables 47 and 50 due to rounding error.

Table 52. Location of Purchases by Out-of-state Bay Division Anglers

Type of Purchase	Total Amount Spent	
	in SPI	Percent Spent in SPI
Automobile transportation	2,333.36	100.0
Other transportation	3,866.64	100.0
Gas and oil for boat	33.36	100.0
Slip or dockage fees	0.00	0.0
Charter fees	2,300.00	100.0
Bait	26.64	100.0
Fishing tackle/equipment	440.00	100.0
Boat repairs/upgrades	0.00	0.0
Lodging	5,066.64	97.8
Restaurant meals	1,666.64	100.0
Groceries, snack foods, drinks	760.00	88.4
Ice	133.36	100.0
Tips	293.36	100.0
Other1	46.64	100.0
Other2	0	0.0
Other3	266.64	100.0
TOTAL	17,446.64	

Table 53. Cameron County Impacts of TIFT Anglers by Division and Economic Impact Variable

Economic Impact Variable	Division	
	Bay	Offshore
Direct Impact	\$181,541.44	\$646,089.93
Output	\$320,497.39	\$1,136,646.59
Personal Income	\$121,096.23	\$438,094.62
Value-added	\$191,562.77	\$697,029.19
Employment (Jobs)	7.54	28.67

Table 54. State Impacts of TIFT Anglers by Division and Economic Impact Variable

Economic Impact Variable	Division	
	Bay	Offshore
Direct Impact	\$17,446.64	\$0
Output	\$33,889.25	\$0
Personal Income	\$13,595.82	\$0
Value-added	\$20,954.18	\$0
Employment (Jobs)	0.69	0

Appendix B

Multipliers for the Study Area

Source: Tanyeri-Abur et al. 1998

Output Multipliers for the Laguna Madre Estuary Region

Sector	Direct	Indirect	Induced	Total
Food and Eating & Drinking	1	0.31	0.45	1.76
Automotive Dealers & Service Stations	1	0.25	0.49	1.75
Miscellaneous Retail	1	0.20	0.51	1.70
Hotel and Lodging Places	1	0.34	0.44	1.78
Amusement and Recreation Services	1	0.47	0.39	1.86

Employment Multipliers for the Laguna Madre Estuary Region

Sector	Direct	Indirect	Induced	Total
Food and Eating & Drinking	.00003061	.00000380	.00000715	0.00004156
Automotive Dealers & Service Stations	.00001910	.00000323	.00000794	0.00003027
Miscellaneous Retail	.00004389	.00000255	.00000812	0.00005456
Hotel and Lodging Places	.00002271	.00000565	.00000703	0.00003539
Amusement and Recreation Services	.00002054	.00000734	.00000628	0.00003416

Personal Income Multipliers for the Laguna Madre Estuary Region

Sector	Direct	Indirect	Induced	Total
Food and Eating & Drinking	0.42	0.09	0.15	0.65
Automotive Dealers & Service Stations	0.48	0.08	0.17	0.73
Miscellaneous Retail	0.51	0.06	0.17	0.74
Hotel and Lodging Places	0.37	0.12	0.15	0.64
Amusement and Recreation Services	0.30	0.14	0.13	0.57

Total Value Added Multipliers for the Laguna Madre Estuary Region

Sector	Direct	Indirect	Induced	Total
Food and Eating & Drinking	0.58	0.16	0.26	1.00
Automotive Dealers & Service Stations	0.73	0.15	0.29	1.17
Miscellaneous Retail	0.79	0.11	0.30	1.20
Hotel and Lodging Places	0.60	0.18	0.26	1.04
Amusement and Recreation Services	0.41	0.24	0.23	0.87

Output Multipliers for Texas State

Sector	Direct	Indirect	Induced	Total
Food and Eating & Drinking	1	0.3782	0.5604	1.9386
Automotive Dealers & Service Stations	1	0.2792	0.6166	1.8958
Miscellaneous Retail	1	0.2183	0.6169	1.8352
Hotel and Lodging Places	1	0.3964	0.5687	1.9651
Amusement and Recreation Services	1	0.5251	0.6169	2.1421

Employment Multipliers for Texas State

Sector	Direct	Indirect	Induced	Total
Food and Eating & Drinking	.000029	.000004	.000008	0.000041
Automotive Dealers & Service Stations	.000017	.000003	.000009	0.000029
Miscellaneous Retail	.000041	.000002	.000009	0.000052
Hotel and Lodging Places	.000020	.000006	.000008	0.000034
Amusement and Recreation Services	.000020	.000008	.000009	0.000037

Income Multipliers for Texas State Estuary

Sector	Direct	Indirect	Induced	Total
Food and Eating & Drinking	0.4209	0.1183	0.1956	0.7348
Automotive Dealers & Service Stations	0.4939	0.0993	0.2152	0.8084
Miscellaneous Retail	0.5165	0.0770	0.2153	0.8089
Hotel and Lodging Places	0.3923	0.1548	0.1985	0.7456
Amusement and Recreation Services	0.4049	0.1887	0.2153	0.8089

Total Value Added Multipliers for Texas State

Sector	Direct	Indirect	Induced	Total
Food and Eating & Drinking	0.5809	0.2002	0.3312	1.1123
Automotive Dealers & Service Stations	0.7335	0.1680	0.3644	1.2660
Miscellaneous Retail	0.7906	0.1309	0.3646	1.2861
Hotel and Lodging Places	0.6104	0.2262	0.3361	1.1727
Amusement and Recreation Services	0.4774	0.2859	0.3646	1.1280

Appendix C

**Estimated County Level and Statewide
Impacts for the Texas International
Fishing Tournament**

County Impacts of Bay Division Anglers by Sector

Sector	Direct Effects	Indirect Effects	Induced Effects	Total
Food and Eating & Drinking	\$50,777.56	\$15,741.04	\$22,849.90	\$89,368.51
Automotive Dealers & Service Stations	\$11,832.92	\$2,958.23	\$5,798.13	\$20,589.28
Miscellaneous Retail	\$46,874.16	\$9,374.83	\$23,905.82	\$80,154.81
Hotels and Lodging Places	\$45,510.72	\$15,473.64	\$20,024.72	\$81,009.08
Amusement and Recreation Services	\$26,546.08	\$12,476.66	\$10,352.97	\$49,375.71

County Employment Impact of Bay Division Anglers by Sector

Sector	Direct Effects	Indirect Effects	Induced Effects	Total
Food and Eating & Drinking	1.55	0.19	0.36	2.11
Automotive Dealers & Service Stations	0.23	0.04	0.09	0.36
Miscellaneous Retail	2.06	0.12	0.38	2.56
Hotels and Lodging Places	1.03	0.26	0.32	1.61
Amusement and Recreation Services	0.55	0.19	0.17	0.91

County Personal Income Impact of Bay Division Anglers by Sector

Sector	Direct Effects	Indirect Effects	Induced Effects	Total
Food and Eating & Drinking	\$21,326.58	\$4,569.98	\$7,616.63	\$33,513.19
Automotive Dealers & Service Stations	\$5,679.80	\$946.63	\$2,011.60	\$8,638.03
Miscellaneous Retail	\$23,905.82	\$2,812.45	\$7,968.61	\$34,686.88
Hotels and Lodging Places	\$16,838.97	\$5,461.29	\$6,826.61	\$29,126.86
Amusement and Recreation Services	\$7,963.82	\$3,716.45	\$3,450.99	\$15,131.27

County Value Added Impact of Bay Division Anglers by Sector

Sector	Direct Effects	Indirect Effects	Induced Effects	Total
Food and Eating & Drinking	\$29,450.98	\$8,124.41	\$13,202.17	\$50,777.56
Automotive Dealers & Service Stations	\$8,638.03	\$1,774.94	\$3,431.55	\$13,844.52
Miscellaneous Retail	\$37,030.59	\$5,156.16	\$14,062.25	\$56,248.99
Hotels and Lodging Places	\$27,306.43	\$8,191.93	\$11,832.79	\$47,331.15
Amusement and Recreation Services	\$10,883.89	\$6,371.06	\$6,105.60	\$23,360.55

County Impacts of Offshore Division Anglers by Sector

Sector	Direct Effects	Indirect Effects	Induced Effects	Total
Food and Eating & Drinking	\$110,480.10	\$34,248.83	\$49,716.05	\$194,444.98
Automotive Dealers & Service Stations	\$29,754.03	\$7,438.51	\$14,579.47	\$51,772.01
Miscellaneous Retail	\$282,970.08	\$56,594.02	\$144,314.74	\$483,878.84
Hotels and Lodging Places	\$100,208.40	\$34,070.86	\$44,091.70	\$178,370.95
Amusement and Recreation Services	\$122,677.32	\$57,658.34	\$47,844.15	\$228,179.82

County Employment Impact of Offshore Division Anglers by Sector

Sector	Direct Effects	Indirect Effects	Induced Effects	Total
Food and Eating & Drinking	3.38	0.42	0.79	4.59
Automotive Dealers & Service Stations	0.57	0.10	0.24	0.90
Miscellaneous Retail	12.42	0.72	2.30	15.44
Hotels and Lodging Places	2.28	0.57	0.70	3.55
Amusement and Recreation Services	2.52	0.90	0.77	4.19

County Personal Income Impact of Offshore Division Anglers by Sector

Sector	Direct Effects	Indirect Effects	Induced Effects	Total
Food and Eating & Drinking	\$46,401.64	\$9,943.21	\$16,572.02	\$72,916.87
Automotive Dealers & Service Stations	\$14,281.93	\$2,380.32	\$5,058.19	\$21,720.44
Miscellaneous Retail	\$144,314.74	\$16,978.20	\$48,104.91	\$209,397.86
Hotels and Lodging Places	\$37,077.11	\$12,025.01	\$15,031.26	\$64,133.38
Amusement and Recreation Services	\$36,803.20	\$17,174.82	\$15,948.05	\$69,926.07

County Value Added Impact of Offshore Division Anglers by Sector

Sector	Direct Effects	Indirect Effects	Induced Effects	Total
Food and Eating & Drinking	\$64,078.46	\$17,676.82	\$28,724.83	\$110,480.10
Automotive Dealers & Service Stations	\$21,720.44	\$4,463.10	\$8,628.67	\$34,812.22
Miscellaneous Retail	\$223,546.36	\$31,126.71	\$84,891.02	\$339,564.10
Hotels and Lodging Places	\$60,125.04	\$18,037.51	\$26,054.18	\$104,216.74
Amusement and Recreation Services	\$50,297.70	\$29,442.56	\$28,215.78	\$107,956.04

State Impacts of Bay Division Anglers by Sector

Sector	Direct	Indirect	Induced	Total
Food and Eating & Drinking	\$2,526.64	\$955.58	\$1,415.93	\$4,898.14
Automotive Dealers & Service Stations	\$2,333.36	\$651.47	\$1,438.75	\$4,423.58
Miscellaneous Retail	\$4,813.28	\$1,050.74	\$2,969.31	\$8,833.33
Hotel and Lodging Places	\$5,066.64	\$2,008.42	\$2,881.40	\$9,956.45
Amusement and Recreation Services	\$2,706.72	\$1,421.30	\$1,669.78	\$5,797.79

State Employment Impact of Bay Division Anglers by Sector

Sector	Direct	Indirect	Induced	Total
Food and Eating & Drinking	0.07	0.01	0.02	0.10
Automotive Dealers & Service Stations	0.04	0.01	0.02	0.07
Miscellaneous Retail	0.20	0.01	0.04	0.25
Hotel and Lodging Places	0.10	0.03	0.04	0.17
Amusement and Recreation Services	0.05	0.02	0.02	0.10

State Personal Income Impact of Bay Division Anglers by Sector

Sector	Direct	Indirect	Induced	Total
Food and Eating & Drinking	\$1,063.46	\$298.90	\$494.21	\$1,856.58
Automotive Dealers & Service Stations	\$1,152.45	\$231.70	\$502.14	\$1,886.29
Miscellaneous Retail	\$2,486.06	\$370.62	\$1,036.30	\$3,892.98
Hotel and Lodging Places	\$1,987.64	\$784.32	\$1,005.73	\$3,777.69
Amusement and Recreation Services	\$1,095.95	\$510.76	\$582.76	\$2,189.47

State Value Added Impact of Bay Division Anglers by Sector

Sector	Direct	Indirect	Induced	Total
Food and Eating & Drinking	\$1,467.73	\$505.83	\$836.82	\$2,810.38
Automotive Dealers & Service Stations	\$1,711.52	\$392.00	\$850.28	\$2,953.80
Miscellaneous Retail	\$3,805.38	\$630.06	\$1,754.92	\$6,190.36
Hotel and Lodging Places	\$3,092.68	\$1,146.07	\$1,702.90	\$5,941.65
Amusement and Recreation Services	\$1,292.19	\$773.85	\$986.87	\$3,052.91

Appendix D

Mail Questionnaire with Cover Letters

Non-respondent Interview Schedule

Methodology for Calculating Margins of Error

**Texas International
Fishing Tournament
Angler Survey**

**TEXAS INTERNATIONAL
FISHING TOURNAMENT**

July 28 - August 1, 1993



Sponsored by
**Texas International Fishing Tournament
and
Texas Sea Grant College Program**

In Cooperation with
**Department of Wildlife and Fisheries Sciences
Texas A&M University - College Station**



FOR QUESTIONS #1 - #16, PLEASE TELL US ABOUT YOUR GENERAL FISHING ACTIVITY AND EXPERIENCE. (Not just your tournament fishing, but all fishing.)

- 1. Since this time last year, how many *days* did you go fishing in: *(If NONE, please enter 0)*
 - _____ FRESHWATER
 - _____ SALTWATER BAYS FROM A BOAT
 - _____ SALTWATER BAYS FROM SHORE OR PIERS
 - _____ SALTWATER GULF FROM A BOAT
 - _____ SALTWATER GULF FROM SHORE OR PIERS
 - _____
 - _____ TOTAL DAYS FISHED SINCE THIS TIME LAST YEAR *(Sum of above)*

- 2. What fish species do you prefer to catch?
 - _____ FIRST CHOICE
 - _____ SECOND CHOICE
 - _____ THIRD CHOICE

- 3. Do you or someone in your household own a powerboat?
 - 1 YES If YES, please indicate the length of your longest powerboat: _____ feet
 - 2 NO

- 4. Compared to your other outdoor recreation activities (such as golf, tennis, hunting, camping, etc.), would you rate fishing as: *(Please circle only one)*
 - 1 YOUR MOST IMPORTANT OUTDOOR ACTIVITY
 - 2 YOUR SECOND MOST IMPORTANT OUTDOOR ACTIVITY
 - 3 YOUR THIRD MOST IMPORTANT OUTDOOR ACTIVITY
 - 4 ONLY ONE OF MANY OUTDOOR ACTIVITIES

- 5. How do you compare your fishing ability to that of other *saltwater* anglers in general?
 - 1 LESS SKILLED
 - 2 EQUALLY SKILLED
 - 3 MORE SKILLED



6. Do you put most of your effort into fishing for one particular species of fish?

- 1 YES If YES, what species? _____
- 2 NO

7. Since this time last year, have you used the Internet as a source for information on fishing?

- 1 YES
- 2 NO

8. Do you subscribe to fishing or boating magazines?

- 1 YES If YES, how many? _____ Which is your favorite? _____
- 2 NO

9. Are you a member of a fishing club or organization?

- 1 YES If YES, how many? _____ Which is your favorite? _____
- 2 NO

10. Have you ever:

- Called your legislator/elected official on a fisheries matter? 1 YES 2 NO
- Written your legislator/elected official on a fisheries matter? 1 YES 2 NO
- Attended a public hearing on a fisheries matter? 1 YES 2 NO

11. Please indicate the extent to which you agree or disagree with each of the following statements about recreational fishing.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) The more fish I catch, the happier I am.....	1	2	3	4	5
b) A fishing trip can be successful even if no fish are caught	1	2	3	4	5
c) I usually eat the fish I catch.....	1	2	3	4	5
d) A successful fishing trip is one in which many fish are caught.....	1	2	3	4	5
e) I would rather catch 1 or 2 big fish than 10 smaller fish	1	2	3	4	5
f) When I go fishing, I am just as happy if I don't catch any fish	1	2	3	4	5
g) It doesn't matter to me what type of fish I catch.....	1	2	3	4	5
h) The bigger the fish I catch, the better the fishing trip	1	2	3	4	5
i) I'm just as happy if I don't keep the fish I catch	1	2	3	4	5
j) I like to fish where there are several kinds of fish to catch	1	2	3	4	5
k) I want to keep all the fish I catch.....	1	2	3	4	5
l) I'm happiest with the fishing trip if I catch a challenging game fish	1	2	3	4	5
m) I'm just as happy if I release the fish I catch	1	2	3	4	5
n) If I thought I wouldn't catch any fish, I wouldn't go fishing	1	2	3	4	5
o) I like to fish where I know I have a chance to catch a "trophy" fish	1	2	3	4	5
p) When I go fishing, I'm not satisfied unless I catch at least something	1	2	3	4	5



12. How many rod and reel combinations do YOU own?

_____ NUMBER OF ROD AND REEL COMBINATIONS

13. What type of group do you fish with most often? (Please circle only one)

- 1 BY YOURSELF
- 2 FAMILY
- 3 FRIENDS
- 4 FAMILY and FRIENDS TOGETHER
- 5 CLUB

14. How many of your friends fish? _____ NONE _____ SOME _____ MOST

15. About how many of your co-workers fish? _____ NONE _____ SOME _____ MOST

16. How many of your vacation trips include fishing? _____ NONE _____ SOME _____ MOST

QUESTIONS #17 - #29 ASK ABOUT YOUR ACTIVITY, EXPENDITURES, AND OPINIONS REGARDING THE 1999 TEXAS INTERNATIONAL FISHING TOURNAMENT. PLEASE TRY TO RECALL THE INFORMATION ASKED FOR AS ACCURATELY AS POSSIBLE

17. Below is a list of reasons why people fish in saltwater fishing tournaments. Please circle the number that indicates how important each item was to you as a reason for fishing in this tournament

		Not at all important	Slightly important	Moderately important	Very important	Extremely important
a) To be outdoors	1	2	3	4	5	
b) For family recreation	1	2	3	4	5	
c) To experience new and different things	1	2	3	4	5	
d) For relaxation	1	2	3	4	5	
e) To be close to the sea	1	2	3	4	5	
f) To obtain fish for eating	1	2	3	4	5	
g) To get away from the demands of other people	1	2	3	4	5	
h) For the experience of the catch	1	2	3	4	5	
i) To test my equipment	1	2	3	4	5	
j) To be with friends	1	2	3	4	5	
k) To experience unpolluted natural surroundings	1	2	3	4	5	
l) To win a tournament trophy	1	2	3	4	5	
m) To develop my skills	1	2	3	4	5	
n) To get away from the regular routine	1	2	3	4	5	
o) To obtain a "trophy" fish	1	2	3	4	5	
p) For the challenge or sport	1	2	3	4	5	
q) For the prize money	1	2	3	4	5	
r) To experience adventure and excitement	1	2	3	4	5	



18. How many times have you fished in the Texas International Fishing Tournament before?
(Not including the 1999 tournament)

_____ TIMES FISHED IN THE TEXAS INTERNATIONAL FISHING TOURNAMENT

19. How many days did you fish in this tournament? _____ DAYS FISHED IN TOURNAMENT

20. How many non-tournament fishing family members or friends came with you to the Tournament?

_____ FAMILY MEMBERS or FRIENDS (EXCLUDING YOURSELF)

21. How many nights did you spend in the Port Isabel-South Padre Island area?

_____ NIGHTS IN THE PORT ISABEL- SOUTH PADRE ISLAND AREA

22. On your most recent fishing trip to participate in the Texas International Fishing Tournament, how much did **YOU** spend on each of the following items in the Port Isabel-South Padre Island area?

	Total Amount Spent	
	In the Port Isabel – South Padre Island Area	In Other Parts Of Texas
Automobile transportation (gas, rental car, etc.)	\$ _____	\$ _____
Other transportation (airplane, boat, etc.)	\$ _____	\$ _____
Gas and oil for boat	\$ _____	\$ _____
Slip or dockage fees	\$ _____	\$ _____
Charter fees	\$ _____	\$ _____
Bait	\$ _____	\$ _____
Fishing Tackle/Equipment	\$ _____	\$ _____
Boat repairs/upgrades	\$ _____	\$ _____
Lodging (hotel, condo rental, etc.).....	\$ _____	\$ _____
Restaurant meals	\$ _____	\$ _____
Groceries, snack foods, drinks	\$ _____	\$ _____
Ice	\$ _____	\$ _____
Tips.....	\$ _____	\$ _____
Anything else for this trip (please specify below)	\$ _____	\$ _____
.....	\$ _____	\$ _____
.....	\$ _____	\$ _____
Total Spent On This Fishing Trip	\$ _____	\$ _____



23. What type of lodging did you use while in the Port Isabel - South Padre Island area?

- HOTEL/MOTEL CONDOMINIUM/HOME RENTAL
 PRIVATE RESIDENCE OTHER (Please specify _____)
 BOAT

24. How did you find out about this tournament? (Please check all that apply)

- FRIENDS MAGAZINE
 RADIO NEWSPAPER
 TELEVISION INTERNET
 MAIL ADVERTISEMENT OTHER (Please specify: _____)

25. Do you believe prize money should be offered in tournaments?

- 1 YES
 2 NO

26. *How well do the following statements describe your feelings about your fishing trip and participation in the Texas International Fishing Tournament? Please indicate the extent to which you agree or disagree with the following:*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) I thoroughly enjoyed the tournament	1	2	3	4	5
b) I cannot imagine better fishing	1	2	3	4	5
c) Tournament staff were always helpful	1	2	3	4	5
d) The tournament was well worth the money spent to take this trip	1	2	3	4	5
e) I would like to fish other tournaments like this one	1	2	3	4	5
f) The lodging facilities in the local area met my needs	1	2	3	4	5
g) I caught more fish than I expected in this tournament	1	2	3	4	5
h) I encountered more people in the tournament than I expected	1	2	3	4	5
i) I caught what I consider a "trophy" fish	1	2	3	4	5
j) My fishing skills were tested in this tournament	1	2	3	4	5
k) I was disappointed with some aspects of this tournament	1	2	3	4	5



27. What would you like to see changed with the tournament?

28. What did you like about the tournament or how it was run?

Not at all Satisfied Slightly Satisfied Moderately Satisfied Very Satisfied Extremely Satisfied

29. Overall, how satisfied were you with this tournament? 1 2 3 4 5

THE FOLLOWING QUESTIONS WILL HELP US KNOW MORE ABOUT TOURNAMENT PARTICIPANTS. THE INFORMATION YOU PROVIDE WILL REMAIN STRICTLY CONFIDENTIAL AND YOU WILL NOT BE IDENTIFIED WITH YOUR ANSWERS.

30. What is your age? _____

31. Are you? 1 MALE
 2 FEMALE

32. What is the Zip Code of your current home residence? _____

33. What is your approximate household income before taxes?

- | | |
|--------------------------|---------------------------|
| 1 UNDER \$20,000 | 7 \$120,000 to \$139,999 |
| 2 \$20,000 to \$39,999 | 8 \$140,000 to \$159,999 |
| 3 \$40,000 to \$59,999 | 9 \$160,000 to \$179,999 |
| 4 \$60,000 to \$79,999 | 10 \$180,000 to \$199,999 |
| 5 \$80,000 to \$99,999 | 11 \$200,000 to \$219,999 |
| 6 \$100,000 to \$119,999 | 12 \$220,000 OR ABOVE |



34. Was this survey completed by the person to whom it was addressed?

- 1 YES
- 2 NO

Is there anything else you would like to share with us?

Your contribution of time to this study is greatly appreciated. Please return your completed questionnaire in the business reply envelope as soon as possible.

Texas A&M University
Department of Wildlife and Fisheries Sciences
College Station, TX 77843-2258

8/2/99

XXXXXXX

August 10, 1999

XXXXXX
XXXXXX
XXXXXX, XX XXXXX

Dear : XXXXXX

Your name was selected from the list of participants in the 61st Annual Texas International Fishing Tournament to be included in the socio-economic study of this tournament. Within the next few days you will receive a questionnaire in the mail regarding your opinions, expenditures and other items associated with this fishing trip.

The study is being conducted by Texas International Fishing Tournaments in cooperation with the Texas Sea Grant Program and a research team at Texas A&M University is helping us learn more about participants in our tournament. The information gathered will provide a social and economic information base on tournament participants. The information you provide will be used by us for planning future tournaments.

We would greatly appreciate your taking the few minutes to complete and return your questionnaire as soon as possible.

Thank you in advance for your help.

Sincerely,

A handwritten signature in cursive script that reads "Betty Wells".

Betty Wells
Tournament Director

XXXXXX

August 24, 1999

XXXXXX

XXXXXX

XXXXXX, XX XXXXXX

Dear : XXXXXX

We are conducting a survey of anglers that fished in the 61st Annual Texas International Fishing Tournament in cooperation with the Texas Sea Grant Program and a research team from Texas A&M University. Our tournament is an important and popular recreational activity in the Port Isabel area. Therefore, it is important to learn about the impact of the tournament on the local area and get feedback from the participants so we can do an even better job with next year's event.

We have enclosed a questionnaire to help us learn more about the economic impacts of the Texas International Fishing Tournament. This survey is designed to tell us about **YOUR** fishing opinions, preferences, activities and expenditures. This information will be very useful to us for planning purposes. Your household or group may have received more than one copy of the questionnaire. *We want to hear from YOU since your opinions and recommendations may differ from your family or friends!*

You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. This is so the research team can check your name off the mailing list when your questionnaire is returned. Your name will never be placed on the questionnaire itself and all names and addresses will be destroyed by the research team as soon as the data collection is complete.

Your prompt response is appreciated and will save us cost of mailing additional surveys. If we do not receive your returned questionnaire within two weeks, we will send you another. After you complete the questionnaire, please return it in the postage-paid business reply envelope provided as soon as possible. For questions or clarifications about the survey, please call Dr. Bob Ditton with the Department of Wildlife and Fisheries Sciences, Texas A&M University at 409-845-4283.

Thank you very much for your assistance.

Sincerely,



Betty Wells
Tournament Director

XXXXXX

September 8, 1999

XXXXXX
XXXXXX
XXXXXX, XX XXXXX

Dear : XXXXXXX

About three weeks ago, we sent you a survey of anglers who fished the Texas International Fishing Tournament. As of today, we have not yet received your completed questionnaire. If you have recently returned your survey, please accept our thanks.

The success and accuracy of our study depends on you and the others who have not yet responded. You and the other tournament anglers who have not responded may have different opinions and may represent a completely different portion of the fishing public than those who have sent in their questionnaires. We need to hear from YOU.

The enclosed survey is designed to tell us about your general fishing activities, your fishing activity and preferences at the tournament, and your expenditures incurred on your trip. The information will be useful in understanding the economic impacts of the Texas International Fishing Tournament. Additionally, the information will allow us to determine the value anglers place on the tournament.

You are one of a small number of anglers selected to participate in this study. It is important that YOU and no one else complete the questionnaire. Your responses are important to us whether you fish at the tournament often, or this was your first time. All responses will be strictly confidential, and you will not be identified with your answers.

After you complete the questionnaire, please return it in the postage-paid, business reply envelope as soon as possible. If you have any questions, please feel free to call Bob Ditton at Texas A&M University at (409) 845-4283. Thanks for your assistance!

Sincerely,



Betty Wells
Tournament Director

1999 Texas International Fishing Tournament Angler Survey-Nonrespondent Follow-up Survey

Phone: _____
 Hello, may I please speak to: _____
 Date/Time to call back: _____

My name is _____, and I'm calling from Texas A&M University on behalf of the Texas International Fishing Tournament. We recently sent you a survey regarding your participation in the 1999 Texas International Fishing Tournament, but we never heard back from you. I would like to ask you about 10 quick questions to help complete our study. It will only take a couple of minutes.

1. Compared to your other outdoor recreation activities (such as golf, tennis, hunting, camping), would you rate fishing as:

- 1 YOUR MOST IMPORTANT OUTDOOR ACTIVITY
- 2 YOUR SECOND MOST IMPORTANT OUTDOOR ACTIVITY
- 3 YOUR THIRD MOST IMPORTANT OUTDOOR ACTIVITY
- 4 ONLY ONE OF MANY OUTDOOR ACTIVITIES

2. Since this time last year, how many days did you go fishing in:

- SALTWATER FROM A BOAT _____
- SALTWATER FROM SHORE OR PIER _____
- FRESHWATER _____

3. How many times have you fished in the Texas International Fishing Tournament before? (not including the 1999 tournament)

_____ TIMES FISHED IN THE TEXAS INTERNATIONAL FISHING TOURNAMENT

4. How many days did you fish in this tournament? _____

5. How many non-tournament fishing family members or friends came with you to the tournament?

6. On your most recent fishing trip to participate in the Texas International Fishing Tournament, how much did you spend on each of the following items in the Port Isabel-South Padre Island area?

	In the Port Isabel/SPI Area	In other parts of Texas
Transportation (gas, rental car, other transportation)	_____	_____
Gas and oil for boat/Slip and dockage fees	_____	_____
Charter Fees/Tips	_____	_____
Fishing Tackle and Equipment/Bait	_____	_____
Boat Repairs/upgrades	_____	_____
Lodging (hotel/condo rental) and restaurant meals	_____	_____
Groceries, snacks, foods, drinks, ice	_____	_____

7. How did you find out about this tournament? (Please check all that apply)

- ____ FRIENDS
- ____ RADIO
- ____ TELEVISION
- ____ MAIL ADVERTISEMENT
- ____ MAGAZINE
- ____ NEWSPAPER
- ____ INTERNET
- ____ OTHER (Please Specify: _____)

8. Overall, how satisfied were you with this tournament?

NOT AT ALL SLIGHTLY MODERATELY VERY EXTREMELY

9. What is your age? _____

DON'T ASK MALE FEMALE

Thanks for your time and helping us complete this survey.

Methodology for Calculating Margins of Error

The results of sample surveys are prone to uncertainty since only part of the population is being sampled and because of errors in measurement (McNamara 1994). Therefore, all sample surveys have a margin of error associated with population estimates. The precision around each estimate is determined by the level of significance chosen for the study (in this case, 95%), and the number of observations used to make each estimate. Therefore, we are 95% confident that the true population proportion falls in the interval specified by each estimate and its associated margin of error. The formula to calculate the margin of error for proportions (percentages) is:

$$d = \frac{t \sqrt{pq}}{\sqrt{n}} * \sqrt{\frac{N-n}{N}}$$

where d=margin of error
t= critical value for 95% confidence interval
p=estimated proportion
q=1-p
n=sample size
N=population

For example, the margin of error for Question #6 (Do you put most of your effort into fishing for one particular species of fish?) is as follows (for bay division).

$$d = \frac{1.96 \sqrt{.46(.54)}}{\sqrt{189}} * \sqrt{\frac{309-189}{309}}$$

$$d = .044$$

Thus, we are 95% confident that the true proportion of bay division anglers that put their most effort into fishing for one particular species of fish lies between 41.6 and 50.4% (i.e. 46% ± 4.4%).

Note: Although there were 438 respondents who provided usable responses to the survey, not all of them answered each question. Therefore, the margin of error will be different for different for different sample sizes. Item non-response is included in each table presented in Appendix A.

