

## Characteristics, Participation, and Motivations of Texas Charter Boat Fishermen

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**ABSTRACT**—*The characteristics and motivation of Texas charter boat fishermen are identified in this paper. Profiles were compiled for the following: 1) The sociodemographic characteristics of place and residence, age, income, and occupation of charter fishermen; 2) their participation in charter fishing; 3) reasons for participating in charter fishing; and 4) opinions about their charter fishing experiences. This information is provided as a useful input to local and regional decision makers and also to clarify some of the issues involved in defining a "total" fishing experience. Thirteen motives, indicative of some of the reasons fishermen go charter fishing, were identified using factor analysis. Study findings indicate that fishermen consider many things important to a successful trip in addition to catching fish. Study findings are discussed, and implications and future research directions are suggested.*

### INTRODUCTION

Traditionally, fisheries management operates under the notion that sport fishermen are only interested in catching fish and therefore, if a fisherman does not catch anything, he has not had a successful experience. This philosophy tends to classify the fisherman solely as a consumer of a natural resource. As a result, fishery managers concentrate on the number of fish available and the number of fish caught. The nonconsumptive aspects of fishing are not widely being reflected in conventional approaches to fisheries management. Greater efforts need to be made to identify and to manage for the "total" fishing experience.

Data has been gathered and reported by Federal agencies (Bureau of Sport Fisheries and Wildlife, 1972; Deuel, 1973) to provide an understanding of how many Americans fish, their socioeconomic description, and their fishing-related expenditures. Most national surveys appear to be based on the assumption that fishermen are a homogeneous lot because they only present broad trends and averages related to fishing activity. The result is

that State, regional, and local officials wishing to "break out" data relevant to their unique situations or particular concerns are left with insufficient sample sizes if they are able to disaggregate the data at all. Also, generalizations based on national descriptive profiles of fishermen and related expenditures are of little utility to governmental decision makers when dealing with particular

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groups of fishermen, a particular location, or a particular fishery. Studies are needed which identify and evaluate resource requirements of subgroups of specific fishing populations. This approach to the study of fishermen will reveal that fishing populations are diverse, both in terms of their characteristics and their respective resource requirements. The identification of subgroups and their related resource requirements will enable decision makers to better understand the interests involved, the consequential effects of their decisions, and the effects of segments of fishing populations on fisheries.

Social research has begun to deal with problems inherent in understanding and providing useful information relative to the interrelationships of users and particular spatial or physical resources. One such direction has identified factors other than the fish component (biological stock maintenance) that describe nonconsumptive recreational aspects of sport fishing (Ballas et al.<sup>1</sup>; Field<sup>2</sup>; Bryan, 1976; Driver and Knopf, 1976; Graefe and Ditton, 1976). A major recurring topic of this research has dealt with the assumed needs of fishermen to catch fish. Further research needs to be directed at understanding the importance of catching fish in relation to all the other possible reasons for fishing.

Knowledge of fishermen's motivations can give resource decision makers an additional tool for determining whether the type of experience being provided is satisfactory. Comprehensive decision making should attempt to integrate both biological and social understanding. This is required in fisheries management as carried out under the Fishery Conservation and Management Act (P.L. 94-265). This approach has been considered successful in other realms of natural resource

<sup>1</sup>Ballas, J. A., C. J. Gilchrist, and A. S. Williams. 1974. Trout fishermen in the Gallatin Canyon: Motives and perspectives on quality. Paper presented at Annual Meeting of the American Fisheries Society, Honolulu, 8-11 Sept. 1974, 19 p.

<sup>2</sup>Field, D. R. 1974. Patterns of participation, characteristics and preferences of Puget Sound saltwater sport fishermen. Research proposal to State of Washington, Water Research Center, Seattle, 27 p.

decision making and planning like backcountry wilderness management (Ditton, 1977), and is long overdue in fisheries management.

This paper seeks to provide understanding of charter boat fishing in Texas. Charter fishermen were studied according to the two distinct areas where they fish: coastal bays and the open Gulf. By focusing on particular subgroups of the charter fishing population, a more specific understanding of the requirements of charter fishermen in Texas is achieved.

## OBJECTIVES

The objectives of this study were to: 1) Define and identify a Texas charter boat fishing population; 2) describe Texas charter fishermen based on sociodemographic characteristics; 3) identify subgroups of the population based on variables which describe participation; 4) measure the relative importance of hypothesized reasons for participation; and 5) assess implications of findings for fisheries management decisions.

## STUDY POPULATION

The population of interest is all individuals who utilize charter boats along the Texas Gulf Coast. Since this specialized group of fishermen is not conveniently available, a population which is accessible was defined to represent the total population of charter fishermen. The relatively large study area (the Texas Gulf Coast), the large number of charter operators (88) identified, and the relatively infrequent rate at which individuals participate in charter fishing, would have made it extremely difficult and costly to interview individual charter fishermen on site. As an alternative, a listing of names and addresses of charter fishermen was sought for sampling purposes.

A listing of charter boat fishermen was obtained from personal records maintained by the individual charter boat operators. A sample of 15 of 88 operators resulted in names and addresses of 810 charter fishermen. Inadequate address information rendered 31 percent of the provided names unusable for survey purposes. This left 559 charter fishermen in the sample frame. About 25 percent of the fishermen (141)

were systematically selected for pre-testing the survey instrument. The remaining 418 names constituted a sample of charter fishermen. Each fisherman was mailed a questionnaire in February 1977. One hundred ninety-one (46 percent) useable questionnaires were returned for analysis.

## FINDINGS AND ANALYSIS

### Sociodemographic Characteristics

Charter fishing on Texas' coast is an activity pursued by few out-of-state residents (2 percent). The majority of charter fishermen (64 percent) resided in one of the four largest urban centers of the State: Dallas-Fort Worth (23 percent), Houston (21 percent), San Antonio (14 percent), and Austin (6 percent). Excluding Harris County where Houston is located, only 4 percent of the charter fishermen resided in the counties bordering the Gulf of Mexico. The remaining 32 percent resided primarily in the east-central region of the State.

Most charter fishermen (74 percent) were between 30 and 59 years of age. The mean age was 45. However, this mean age actually represented only 1 percent of the survey sample. The age 30 was common and represented 5 percent of the total sample. Eleven percent of the sample were less than 30 years of age and 15 percent of the survey sample were older than 59. The youngest charter fisherman responding to the survey was 14 years of age; the oldest was 79.

Collectively, the age distribution of charter fishermen is considerably higher than the age distribution for all fishermen in general (Bureau of Sport Fisheries and Wildlife, 1972). The age distribution of charter fishermen in Texas closely parallels the age distribution of Wisconsin's Lake Michigan charter fishermen, reported by Ditton et al. (1975). Seventy-seven percent of the Texas fishermen and 73 percent of the Wisconsin fishermen were 35 years or older while only 45 percent of all U.S. fishermen were 35 years old or older. Unfortunately, studies from other regions do not provide descriptive information about charter fishermen which would enable broader generalization.

Compared to all fishermen in the U.S. (Bureau of Sport Fisheries and Wildlife, 1972), Texas charter fishermen have extremely high incomes. Seventy-eight percent of those Texas charter fishermen surveyed had incomes of about \$20,000 per year. Further, 21 percent had incomes above \$50,000 per year. The mean income of the entire survey sample was approximately \$33,000. Medical doctors, business executives, sales representatives, technical engineers, business owners and managers, and general contractors were common occupations.

### Recreational Fishing Backgrounds and Participation

All charter fishermen surveyed had recreational fishing backgrounds and nearly all (92 percent) were introduced to fishing in freshwater environments. Most charter fishermen (80 percent) had their first fishing experience before they were 12 years of age. They varied considerably in the number of times they went fishing during 1976. Fifty percent went fishing only six times or less during the year. Another 32 percent went fishing between 6 and 20 times and the remaining 18 percent made more than 20 outings during the year. The mean number of annual outings for the entire survey sample was 13.2 trips; of these, 3.2 were charter fishing trips. Fifty-seven percent of all charter trips taken were to coastal bays; the remaining 43 percent were trips to the deepwater Gulf. Most charter trips (54 percent) involved one day's fishing. Seventy-two percent of the charter fishermen surveyed always returned to the same coastal community for subsequent fishing trips.

Generally, the total amount of time devoted to fishing has remained about the same over time for the entire survey sample. Fifty-three percent indicated that their participation stayed the same over the years since they began fishing. Twenty-four percent indicated that their participation in fishing had increased and 23 percent indicated a decrease in participation since they began fishing. Although overall fishing time has remained somewhat constant for all the fishermen (those increasing were nearly equal to those decreasing), the type of fishing resources used, namely freshwater or saltwater, has changed.

Saltwater fishing participation has increased and participation in inland fishing has decreased for the charter fishing group under study.

**Table 1.—Composition of charter fishing groups, 1976.**

Group type	Percent of groups of this type
Family member only	27
Friends from work (colleagues)	13
Other friends	21
Businessmen entertaining clients	11
Combinations of above	28
Total	100

**Table 2.—Distribution of group type over fishing locations, 1976.**

Group type	n <sup>1</sup>	Gulf	Bay	Both	Total %
Family	89	39%	44%	17%	100
Friends	83	45%	45%	10%	100
Colleagues	51	55%	33%	12%	100
Clients	50	58%	30%	12%	100
Total survey sample	2273	49%	38%	13%	100

<sup>1</sup>The number in each group type was derived from the 191 respondents. The total is greater than 191 because some respondents made more than one trip during 1976. This reason for the greater than 191 total holds for Tables 3 through 6 also.

<sup>2</sup>The combined category which accounts for 28 percent of the charter fishing groups is excluded from Tables 2 through 6 since group composition is unclear. Totals do not reflect this category.

**Table 3.—Percentage of charter trips taken by each group type, 1976.**

Group type	n	Trips				Total %	$\bar{x}$ <sup>1</sup>
		1	2-3	4-5	6 or more		
Family	89	25%	45%	17%	13%	100	3.5
Friends	83	25%	39%	17%	19%	100	3.6
Colleagues	51	35%	43%	8%	14%	100	3.8
Clients	50	32%	38%	8%	22%	100	4.4
Total survey sample	273	31%	42%	14%	13%	100	3.8

<sup>1</sup>The mean number of trips reported in this table is slightly higher than the average 3.2 trips reported earlier because respondents may have been members of a different group type on a previous trip.

**Table 4.—Distribution of group size for each group type, in percent of total group.**

Group type	n	Party size					Total %	$\bar{x}$ <sup>1</sup>
		2	3	4	5	6		
Family	83	12%	21%	31%	13%	23%	100	4.1
Friends	75	8%	16%	35%	16%	25%	100	4.3
Colleagues	42	9%	10%	24%	14%	43%	100	4.7
Clients	41	5%	5%	29%	22%	39%	100	4.9
Total survey sample	241	9%	15%	28%	17%	31%	100	4.6

<sup>1</sup>Four percent of all groups were larger than 6. These parties utilized more than one charter boat and were thus excluded from the analysis.

**Table 5.—Age distribution for each group type.**

Group type	n	Age class			Total %	Mean age
		<35	35-54	>54		
Family	89	21%	51%	28%	100	46
Friends	83	27%	48%	25%	100	45
Colleagues	51	22%	55%	23%	100	45
Clients	50	10%	66%	24%	100	46
Total survey sample	273	23%	51%	26%	100	45

## Types of Charter Fishing Groups

Participation in charter fishing can be characterized by the relationship of the persons in the charter fishing groups: Family members, friends from work (colleagues), friends not from work, businessmen entertaining their clients, or combinations of these four types (Table 1). Family groups were most prevalent. Of the groups composed of multiple relationship types (28 percent), family members were present in 66 percent.

Work-related groups (colleagues and business entertainment groups) were primarily Gulf fishermen. Non-work-related groups (family and friendship groups) fished in the Gulf and coastal bays almost equally (Table 2). Based on the mean number of trips taken, work-related groups tended to charter more often (Table 3) and were generally larger than non-work-related groups (Table 4). Age comparisons revealed little between group differences (Table 5) and the mean age for each

group was nearly equal. However, the 35-54 age category was represented by more of the business client group than any of the others. Also, the youngest age category, 35 years or less, accounted for only 10 percent of the business client groups, considerably less than any of the other three groups in this age category. As with the age comparison, the family, work-related friendship, and non-work-related friendship groups were similar in terms of income (Table 6). However, the business client group again showed considerable difference when compared to the other three group types. Only 2 percent of the respondents entertaining business clients had annual incomes of less than \$20,000. Fifty-four percent of the business client group had incomes greater than \$40,000, and of this 54 percent, 36 percent had incomes greater than \$50,000.

## UNDERSTANDING FISHING MOTIVATION

The qualities sought in a saltwater sport fishing trip can be measured in terms of a number of different motives. These motivations have been defined as fishermen's expectations (Moeller and Engelken, 1972) or as attitudes and behavior of fishermen (Kennedy<sup>3</sup>; Graefe and Ditton, 1976). Some identified motivations of fishermen include the desire to "escape" from the growing demands of civilization, to be outdoors, to be with friends or family, and to enjoy various satisfactions which can be gained specifically through the activity of sportfishing. Spaulding (1970) considers fishing as a form of tension management. Other theorists feel an experience like fishing establishes and sustains the social bond between kin and friends (Cheek and Burch, 1976).

The consideration of motivation allows observations of behavior to be extended by understanding the qualities which an experience provides the recreationists. Satisfaction with fishing experiences has been obtained even if no fish were caught (Addis and

**Table 6.—Income distribution for each group type.**

Group type	n	Income ( $\times 1,000$ )			Total %	$\bar{x}$
		<\$20	\$20-39	>\$40		
Family	85	24%	47%	29%	100	\$32
Friends	81	30%	36%	34%	100	\$32
Colleagues	51	22%	49%	29%	100	\$31
Clients	50	2%	44%	54%	100	\$41
Total survey sample	267	22%	44%	34%	100	\$33

<sup>3</sup>Kennedy, J. 1974. Attitudes and behavior of fishermen in Utah's Uinta Primitive Area. Paper presented at Annual Meeting of the American Fisheries Society, Honolulu, 8-11 Sept. 1974, 16 p.

Erikson, 1969). Similarly, satisfaction has been obtained not from the quantity of fish caught but rather with the quality of the fishing experience (Gordon et al., 1969). Factors unrelated to catch have been found to be more important to the overall enjoyment of fishing than harvest (Knopf et al., 1973).

Multivariate techniques have been useful for understanding human motivation because the causes of human behavior are due to complex multiple variables acting singularly and/or interactively. Multivariate techniques will often reveal the structure underlying these complex relationships and provide insights into new descriptions and explanations of human behavior. Several studies have incorporated multivariate techniques to understand motivations in different recreation situations, some of which include fishing (Spaulding, 1970; Moeller and Engleken, 1972; Knopf et al., 1973; Ballas et al., footnote 1; Roggenbuck<sup>4</sup>; Driver and Knopf, 1976; Graefe<sup>5</sup>).

### ANALYSIS OF CHARTER FISHING MOTIVATIONS

A procedure was designed to identify charter fishing motives and measure their relative importance. Respondents were provided with an array of 36 hypothesized reasons for charter fishing to be rated on a six point Likert scale ranging from 1 = "not at all important" to 6 = "extremely important." Factor analysis was used to identify a smaller set of valid factors or components contained in the array of independent items. Interpretation of the factor analysis resulted in nine motive scales and four unfactored items (Table 7). These will be regarded as 13 motivations of a charter fishing experience. The final determination of the motivations was not based strictly on the

Table 7.—Description of motive scales derived from 36-item construct scales.

Motive scale name and items	Factor loadings	Alpha reliability	Motive scale name and items	Factor loadings	Alpha reliability
Motive scale 1: Fishing challenge		.84	Motive scale 5: Catch fish		.80
For adventure	.41246		To catch fish	.73950	
To catch a big fish	.79981		For the assurance of a catch	.72293	
For a unique fishing experience	.48579		To catch a lot of fish	.69696	
To catch various types of fish	.51787		Motive scale 6: Personal achievement		.72
For excitement	.43623		To do things on my own	.45283	
For more challenging game fish	.76420		For a convenient means to go fishing	.44837	
To catch a trophy fish	.62465		To learn to be a better fisherman	.51791	
Motive scale 2: Escape		.80	Because people I respect go fishing	.53087	
For relaxation and rest	.55876		To introduce others to fishing	.36188	
To get away from routine demands of family life	.52769		To feel independent	.36218	
To enjoy the tranquility and peace of nature	.50094		Motive scale 7: Affiliation		.55
To relieve my tensions	.84573		To be with people of similar interests	.73258	
To escape the pressures of work	.76585		To be with friends	.60739	
Motive scale 3: Status achievement		.77	To be with other fishermen	.41862	
To do an impressive thing	.37256		Motive scale 8: Adventure experience		.72
To talk about my fishing trip at home	.48336		To have an outdoor experience	.47145	
To be in charge of a situation	.63523		For adventure	.69091	
To show my fishing skill to others	.76259		For excitement	.38497	
To feel independent	.67783		Motive scale 9: Learning about nature		.68
To do things on my own	.36750		To enjoy the tranquility and peace of nature	.51894	
Motive scale 4: Outdoor coastal experience		.78	To learn about nature	.54163	
To be on the ocean	.64649		Unfactored items		
To enjoy the smells and sounds of the coast	.77228		To eat fish		
To be near the coast for its scenic quality	.72040		To establish/maintain business relationships		
To have an outdoor experience	.34662		To have fun		
			Convenience in fishing		

mathematical sense provided by factor analysis. Rather, those variables which made statistical sense in a particular scale also had to make sense in terms of the literature and the intuitive meaning of the particular motive being described.

The items which comprise motive scale 1 correlated strongly together. The scale items in motive scale 1 indicate the desire for excitement, adventure, big fish, trophy fish, challenging game fish, unique fishing, and various fish. These items relate to catching a specific type of fish which was anticipated to be part of an adventurous experience. Because of the emphasis in this factor on fishing and having a unique adventure, the motive was named "Fishing challenge." In motive scale 4, "Outdoor coastal experience," all items except "to have an outdoor experience" correlated strongly. Even though the factor loading of "to have an outdoor experience" was low, the item

was maintained in this motive scale because it added theoretical meaning. Similarly, the factor analytic process defined the remaining 11 motives. Reliability of each motive scale was determined by the statistical reliability of the final grouping of scale items (Table 7). Each scale item contributed to the overall understanding of the motive being derived.

### IMPORTANCE OF MOTIVES

Tabulated motive scale scores across the sample of charter fishermen yield a profile of motives (Table 8). The data show how the defined motives are perceived by respondents. Mean factor importance indicates the average overall importance of each motive with respect to the other motives. Standard deviation provides a measure of how consistently respondents rated motives. It is important to note that the majority of charter fishermen endorse all the dimensions of motivation hypothesized

<sup>4</sup>Roggenbuck, J. W. 1975. Socio-psychological inputs into carrying capacity assessment for float-trip use of whitewater rivers in Dinosaur National Monument. Ph.D. Thesis, Utah State Univ., Logan, 287 p.

<sup>5</sup>Graefe, A. R. 1977. Elements of motivation and satisfaction in the float trip experience in Big Bend National Park. Masters Thesis, Dep. Recreation Parks, Texas A&M Univ., College Stn., 170 p.

as contributing to their satisfaction. The ranking of the importance of the motives provides some insight into the specific dimensions of motivation which may contribute to a satisfactory charter fishing experience.

The undifferentiated motive "Have fun" was the most important of all the motives. The standard deviation was low for this motive. Thus, there is high agreement among respondents regarding the importance of the "Have fun" motive. The remaining twelve motives are presented in order of decreasing importance based on the mean factor importance.

From Table 7 and Table 8, it is apparent that charter fishermen consider many things to be important to a successful trip. Having fun, escaping normal routines, adventure, being with others, and learning about nature rank high, as do other aspects not generally considered along with catching fish.

Would people go fishing if there was no hope of catching fish? Probably not but this is a different matter than going fishing and simply not catching fish. Surely some charter customers would be dissatisfied if they caught nothing. Nevertheless, the above findings indicate that some persons, if not the majority, consider the fishing experience more than just catching fish.

Respondents were also asked to select one-line statements written to indicate the degree of desire to catch fish. Sixty-three percent of the survey sample (Table 9) indicated that they didn't necessarily go fishing to catch a lot of fish as long as they catch something. Twenty-nine percent of the sample wouldn't go fishing if they couldn't catch any fish. Further, 8 percent of the population indicated they are happy even if they don't catch a fish. This together with the previous finding pertaining to "just catching something" (63 percent) adds support to the growing recognition that the quality of a fishing experience to a fisherman means something more than just the quantity of fish caught.

However, a more precise meaning of catching fish may be gained by examining the mean importance of the catch-

Table 8.—Number of cases, sample means and standard deviations, explained for derived motives of charter fishermen.

Motive	n	Mean factor importance	SD
Have fun	178	5.14	.97
Escape	176	3.75	1.21
Adventure experience	172	3.54	1.33
Affiliation	172	3.42	1.18
Learn about nature	176	3.34	1.34
Catch fish	176	3.29	1.59
Outdoor coastal experience	172	3.21	1.29
Fishing challenge	173	3.17	1.98
Convenience in fishing	178	3.12	1.76
To eat fish	174	2.81	1.52
Personal achievement	172	2.11	.96
Establish/maintain business relationships	175	2.09	1.30
Status achievement	175	1.68	.81

Table 9.—Distribution of responses to the question pertaining to how fishermen feel about catching fish (n = 191).

Percent	Response
29	If I thought that I wouldn't catch any fish, I wouldn't go fishing.
63	When I go fishing I don't have to catch a lot of fish as long as I catch something
8	When I go fishing I'm just as happy if I don't catch a fish.
0	When I go fishing I would rather not catch anything at all.
100	

Table 10.—Catch-related items.

Item	Item mean importance
To catch fish	4.2
For excitement	3.6
For a unique fishing experience	3.5
To catch a big fish	3.4
For more challenging gamefish	3.3
For adventure	3.2
To catch a lot of fish	2.9
For the assurance of a catch	2.8
To catch various types of fish	2.8
To catch a trophy fish	2.3

related items in motive scale 1 "Fishing challenge" and motive scale 5 "Catch fish" in Table 7. These 10 items are rank ordered according to mean importance in Table 10.

"To catch fish" clearly has the greatest mean importance. The remaining items help to define what catching fish means in terms of their relative importance order. The excitement, unique experience, big fish, challenging fish, and adventure items, are quality dimensions of the fishing experience. The lower rated items identified as a lot of fish, assurance of a catch, and

various types of fish, suggest quantity dimension of catching fish.

In conclusion, by utilizing different perspectives related to the "Catch fish" motive, insight as to the meaning of catching fish has been obtained: 1) Catching fish is an important motivation for a charter fishing experience although it is not the only motivation; 2) catching fish does not necessarily mean catching "a lot" of fish; and 3) qualitative aspects of catch were considered more important than quantitative aspects of catch.

## DISCUSSION AND IMPLICATIONS

Marine fisheries management is complex owing to its many components. These components are both people-related and resource-based. The diversity of fishing populations is at least as diverse as the species of fish to be managed. This research has identified one particular fishing population and has focused on the human aspect of the fishing experience.

Charter fishermen, as identified, are one important constituency to which the goals of fisheries management must be addressed. Descriptions of fishermen are useful in predicting the type of people who are most likely to utilize a particular resource. For example, the identifiable bay/Gulf use distinction evidenced in Texas may imply a different management strategy. The extent of the market, the frequency of participation, and the extent of their numbers reflect a measure of utilization. Further, the recognition of a unique population or subgroups of the population, in terms of their resource requirements, identifies possible areas of constituency conflict regarding specific resources. Identification of the interests involved and the impact each has on the resource to be managed, can enable management and regulatory decision-making to evaluate the best direction for policy.

The realization that many aspects of a fishing experience contribute to its success can encourage management to reorient present policy to reflect more of a "total" fishing experience. A "total" fishing experience implies that

multiple satisfactions exist, of which fish catch is only one element. Fisheries management requires an integration of numerous factors associated with fishing, not just the harvest of fish. The implications for managing for a total fishing experience seem to challenge the very nature of fisheries management as currently institutionalized. Although it is impossible to draw implications from each of the motivations derived, some have meaning for management. The array of reasons identified should at least get managers beyond the narrow concept of "angling success" as discussed by Radovich (1975). Study findings provide support, for example, for fisheries managers to be involved in interpreting man-fisheries-habitat relationships. To not do so might be to miss an outstanding educational opportunity already considered a part of the fishing experience. A recognition of the "Escape" motivation may prompt managers to develop or to rethink their views on open and unlimited boat access. Perhaps there is just as much rationale to limit boat access vis-à-vis boat ramp siting to maintain some optimum density of fishermen and boats as there is to protect the natural resources involved.

Implications of understanding fishing motivations are more easily drawn for the entrepreneur who is in a better position to change what he does and how he does it. If a charter operator knows the type of fishing group in advance of the charter trip, and has an understanding of the reasons why people go charter fishing (i.e., fishing challenge, escape) he could seek to provide for those particular needs. For example, the Freeport, Tex., area has established a clientele of charter fishing businessmen. Perhaps the lack of support facilities at this location is an attraction to these groups who utilize charter operations primarily for "business." On the other hand, the South

Padre, Tex., location, where support facilities are well developed, attracts primarily family and friendship groups who remain in the community several days but charter fish infrequently. The future development of this specialized sport fishery will depend on decisions which consider both consumptive and nonconsumptive aspects.

#### FURTHER RESEARCH

The validity of any inference based on the motive scales utilized in this study is limited to the extent that the scales measured what they were supposed to. The items selected for investigation in this study were of an exploratory nature to the extent that they were tested for a population of charter fishermen. Thus, further testing, verification, and refinement will lead to a more valid and reliable measure of the conceptual foundations presented.

This study has obtained baseline data upon which future measurements can be compared. A longitudinal panel study which allows the researcher to follow a particular group of charter fishermen would monitor commitment as well as the dropout rate. It would also show whether charter fishing leads people to purchase their own boat so they can go fishing themselves.

Finally, this research design needs to be applied in other coastal locations and with other fishing subgroups. This would enable broader generalization among various fishing populations.

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