Florida Charter and Head Boatsin the Gulf of Mexico and Atlantic: 1998 Survey Findings

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ABSTRACT

Charter and head boats are an important means of offshore fisheries access. This paper reports preliminary information from on-site interviews with 339 charter and head boat captains in Florida during 1998. There are an estimated 1,510 charter and head boats based in Florida, with the largest concentration in the Keys. Species most frequently targeted include King Mackerel, Snappers, Groupers, Dolphin, Cobia/Ling and Billfish. About half of the captains do not target any specific species but fish for whatever is biting. Most captains rate the quality of fishing as average to good. Concerns with high overhead and difficulty with making a profit are major problems. Most captains feel the level of enforcement in their industry is about right, or perhaps less than what is needed. About 90% of the captains feel that they will still be in business three years from now.

KEY WORDS: Charter or head boats, offshore fishing, Florida

INTRODUCTION

The Gulf of Mexico and Atlantic fishery resources are a source of economic, biological, nutritional and recreational wealth. The harvest of these resources has created a demand that is apparently exceeding the capacity of the Gulf ecosystem to sustain. In response to decreased fishing resource stock levels, the Gulf of Mexico and South Atlantic Fisheries Management Councils and the Florida Marine Fisheries Commission and other state agencies have established restrictions in an attempt to manage the problem.

The restrictions vary depending on the species and demand segment. In general, the demand segment is divided into commercial and sportfishing sectors. The sportfishing or recreational sector can be further subdivided into categories such as surf and pier fishermen, bay fishermen, boat fishermen, etc.. One important segment of sportfishing demand is the recreational paying passenger vessel fleet, commonly called charter and party boats. Bell et al. (1982) reported annual expenditures by tourists and residents of \$178 million for party and charter boat services in Florida. Charter boats are commonly defined as boats for

hire carrying six or less passengers while party boats carry seven or more passengers.

The charter and party boat fleets play an important role in utilizing fishery resources. On one hand, they offer a valuable service to clients by providing an affordable, movable platform for sport fishermen to utilize in accessing Gulf and South Atlantic fisheries (Graefe and Ditton 1986). This helps build support and appreciation for such resources among the public. On the other hand, advances in technology and the number of boats (each with multiple fishermen) increase demand, particularly in offshore areas, and can aggravate stock depletion Since charter and party boats are businesses involving large problems. investments by captains and/or owners, they usually make an effort to be visible to the public through location and/or advertising. These attributes plus the business orientation make this segment of recreational demand easier to manage than less permanent sectors (e.g., bay fishermen or surf fishermen). However, there is considerable turnover and migration of the fleet (Ditton and Loomis 1985) and periodic updating and revising of information summaries are necessary. In addition, rapid growth in the coastal population of the Southeast and increases in winter residents and tourists (Florida Department of Commerce 1996) are creating new areas of charter/party boat activity. With coastal development approaching the saturation point in many coastal areas, there is increased potential for greater growth in rural coastal zones and growth in the number of party and charter services.

The empirical record also suggests growth in this industry. According to the Marine Recreational Fisheries Statistics Survey data, charter fishing trips have grown from 816,000 in 1990 to 1,631,000 in 1995 for a 128% increase in the Gulf and South Atlantic states. Table 1 reports the number of trips reported in recent MRFSS tables.

Table 1. Charter Boat Fishing Trips in the Gulf and South Atlantic (excluding Texas).

1990	816,486	_
1991	889,402	
1992	964,030	
1994	1,631,238	
1995	1,864,103	

In addition to these trip estimates, the biological evidence suggests a substantial increase in the recreational catch of red drum, red snapper and king mackerel, with private boat and shore based rates relatively flat and charter/party boat catches increasing annually.

Understanding the distribution, characteristics, and economics of

Proceedings of the 51st Gulf and Caribbean Fisheries Institute

charter/party boat operations gives resource allocation decision makers important information about demand. In addition, a more solid basis for justifying differential restrictions (i.e., bag limits, size restrictions and closed seasons) can be established. For example, limits of two king mackerel (*Scomberomorus cavalla*) in possession per trip for recreational fishermen were modified to three king mackerel per trip (exclusive of captain and crew) for passengers on licensed charter vessels. In another example, fishermen on licensed recreational party boats were exempted from the minimum size limits (<13 inches) for red snapper (*Lutjanus campechanus*). It is clear that a good understanding of the rationale and impacts of such management decisions is based on an accurate assessment of demand parameters of the charter/party fleet.

In addition to fishery resource issues, there is the additional consideration of fairness and equity to the charter/party industry. Resource allocations have an impact on the for-hire boat fishing business. Charter and party businesses are an important component of recreational fishing demand that is dependent on the willingness of captains and owners to take business risks in anticipation of a profit. Decisions that influence the business climate in which they operate should be carefully evaluated. There is a need to understand the impact of fishery management decisions on individual operators as well as the industry as a whole. This is required for federal jurisdiction waters under the Magnuson Fishery Conservation and Management Act (16 U.S.C. 1801-1882). The Regulatory Flexibility Act (05 U.S.C. 601-612) also calls for the consideration of the impact of regulations on targeted businesses. Most state and local government bodies have procedures for considering the impact of new rules on special business segments.

Within the recreational paying passenger fleet, there are distinct sub-entities. The four categories included in the first comprehensive study of the industry in Florida (Browder et al. 1978) are: offshore-charter, inshore-charter, guide boats and offshore party boats.

PREVIOUS STUDIES

In 1978, Browder et al. completed a study of recreational paying passenger boats docked on the Florida Gulf Coast. This study was an important milestone in understanding the charter/party fishing industry in Florida. However, it suffered from a relatively low response rate (23% of mailed surveys, adjusted to 31% of estimated businesses still in operation). The study is dated in an industry with considerable migration and turnover. The Browder et al. study took place at a time when fuel prices were increasing and there was much uncertainty about the economy. In 1987, Ditton conducted a charter/party boat study of the central and western Gulf states (Ditton et al. 1989). The following year, Holland and Milon conducted a study of the structure and economics of the

charter/party boat fleet of the Gulf Coast of Florida (Holland and Milon, 1989; Holland et al. 1992). These studies were based on in-person interviews with boat owner/operators and were compatible with each other and were more indepth than the Browder et al. study, both in the focus on species targeted and business economics. A replication and extension of these studies would provide updated information and allow some comparison to evaluate the growth (decline) of the industry over a twenty year period, with this being the third ten year data point in the series.

METHODS

A population of charter boats was identified though license records, a NMFS maintained listing of for-hire boats, and yellow page directories. Efforts were made to eliminate duplications and this list was used as a sample frame. A random sample of boats was taken, and these captains or owners were contacted by letter or phone and asked to set up a time to be interviewed. Trained field interviewers read a custom designed survey form and recorded responses. some cases, available captains on the dock were asked to participate, if the selected captain had booked a trip and was not available. The sample design facilitated a proportional sample distributed around the state of Florida for geographic diversity. The surveys were conducted between April and September, 1998. A total of 339 interviews were conducted, including 307 charter boat and 24 headboat operators. Unexpected delays in interviewing and data coding delayed the availability of data until just a few weeks before this paper was Extensive data analysis has not been possible; however, this descriptive update of the Florida charter- head boat industry is the first comprehensive overview in ten years.

RESULTS

Distribution of Boats

There appears to have been growth in the industry in the last ten years. The estimate ten years ago was about 1,100 charter-head boats but this study identified 1,510 statewide. The largest concentration is in the Florida Keys (n=467) (Key West and Islamorada have the largest number of boats in the state (n=234). The next largest concentration is on the southwest and central Florida Gulf coast, with 384 boats, though they are scattered throughout that coast with no major concentrations. This is closely followed by the Southeast coast with concentrations of boats in Miami and Ft. Lauderdale. Clearly, South Florida is the location of the largest concentration of charter and head boats in the U.S., over 1,100 boats. The panhandle region is where 232 boats dock (Destin and Panama City as concentrations), and northeast Florida (north of Cape Canaveral) is the location for 100 known boats.

Number of Trips

The average number of full-day trips reported by the captains was 68, with a range from 0 to 250 trips in 1997. They also reported an average of 76 half-day trips. Two-thirds of the trips fished at least partially in federal waters. Relatively few overnight trips (mean = 7), or dive trips or nature observation trips were reported. On average, each boat participated in three fishing tournaments a year.

Species Targeted

The primary species targeted are: king mackerel (70%), snappers (50%), groupers (50%), dolphin (42%), cobia/ling (35%), billfish (35%). The species targeted least frequently include: flounder, ladyfish and bluefish. A little over half of the captains indicated that they did not typically target any particular species but rather trolled (52%) or bottom fished (63%) for whatever was biting. Compared to the Holland and Milon (1989) study, there has been a reported drop in targeting most species, especially for Amberjack, Shark, Bonito and Barracuda. Snappers and Groupers have also experienced reduced targeting, by about 20%, no doubt due to the bag limits and closed seasons that have been implemented in the last decade. Tarpon, flounder and red drum have experienced some modest increase in targeting effort.

Fishing Quality Evaluations

Boat operators were asked how they would rate fishing quality and whether it has gotten better or worse in recent years. Table 2 summarizes the results on fishing quality.

Table 2. Charter and Head Boat (perators Percept	tions of Fishing Quality
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	Number of Fish Caught	Size of Fish
Very Poor	2.4%	3.5%
Poor	22.6%	23.0%
Average	35.3%	43.0%
Good	32.9%	27.0%
Very Good	6.8%	3.5%

Overall, about two-thirds of the operators thought fishing quality was average or good, with about a quarter thinking it was poor. Fifty percent of the operators indicated fishing quality had declined in the last five years, 28% indicated it had improved and about 17% thought it had remained the same. When asked what they attributed the change in fishing quality to, 34% said

Fishing Regulations, 17% said Overfishing, 11% Habitat Degradation and 10% said Commercial Fishing. A variety of other factors such as pollution, more private boats, and natural disasters were also mentioned by 28% of the sample.

Problems in the Charter - Head Boat Industry

The high cost of overhead, profitability and cost of insurance were the three issues receiving the most votes as major problems in the industry (Table 3). Community support, unsafe captains or unsafe boats were rated as not a problem or only a minor problem by the majority of captains. Fishing regulations received a moderate rating as a source of problems.

Table 3. Perceived Problems in Florida Charter - Head Boat Industry

	Mean	Std. Deviation
High cost of overhead	1.7	.83
Profitability	1.6	.91
Cost of insurance	1.6	.96
Weather/natural events	1.4	1.0
Fuel costs	1.4	1.0
Crew personnel	1.2	2.1
Fishing regulations	1.1	.98
Too many operators	1.0	1.0
Unavailability of fish	.89	.83
Competition	.89	.94
Getting customers	.77	.86
Community support	.69	1.19
Unsafe captains	.66	1.11
Unsafe boats	.58	.80

0= no problem, 1=minor problem, 2=major problem

Enforcement

Operators were asked how many times they had been inspected in 1997, either for boating safety or for fishery regulations. About 39% said they had not been inspected but a majority had been inspected with about 17% being inspected once, 17% twice, about 20% more than twice, and 3% more than ten times. When asked how they reacted to these levels of enforcement, 50% said that enforcement was about right, 37% thought it was less than needed and 12% thought the enforcement was more than what was needed.

Attitude Towards the Future

The operators were asked if they expected to be in the charter - head boat business in three years. Ninety-three percent said yes and seven percent said no. For those who responded negatively (n=22), they were asked "why?". The most common responses were: "can't make enough money", "fishing regulations", "retiring ", and changing interests.

DISCUSSION

The U.S. economy has performed well and the Florida tourism trends have been modestly upwards in recent years. The business climate seems to have supported a growth in the charter - head boat industry, at the same time major restrictions to reduce catch have been implemented. Some species have begun to recover (e.g., redfish, Spanish mackerel, and groupers), but management regulations are still used to restrain landings of these and other species. In spite of these restrictions, the "thrill of the catch", even with reduced take home fish, seems to be supporting the for-hire industry, though the growth in number of boats means that competition is strong and the ability to raise prices is limited. With lower interest rates, boats are more affordable and this may have played a role in the increase in boats. Even though there are a proportion of captains who are reporting hardships, it seems to be a small percent (10-25%). Targeting of many species has declined and captains seem to be adopting a more opportunistic strategy of fishing for whatever is biting and rotating among species to fill bag limits on more than one species, rather than focusing on particular species. More in-depth analysis of this data set will follow and more detailed comparisons with the 1988 study will be completed to uncover additional trends.

ACKNOWLEDGMENTS

This study was supported by the Gulf of Mexico Marine Fisheries Initiative (MARFIN) program administered by the National Marine Fisheries Service, NOAA.

LITERATURE CITED

- Bell, F. W., P.E. Sorensen and V. R. Leeworthy.. 1982. The economic impact and valuation of saltwater recreational fisheries in Florida. Florida Sea Grant College Program, SGR-47, Gainesville.
- Browder, J.A., J.C. Davis and B.C. Austin. 1978. Study of the structure and economics of the recreational paying-passenger fisheries of the Florida Gulf coast and keys, from Pensacola to Key West. U.S. Dept of Commerce, NOAA, National Marine Fisheries Service.

- Ditton, R..B. and D. K. Loomis. 1985. Examining business turnover in the Texas charter fishing industry, 1975-85. Marine Fisheries Review 49(2):162-165
- Ditton, R.B, J.R. Stoll and D.A. Gill. 1989. The social structure and economics of the charter and party boat fishing fleets in Alabama, Mississippi, Louisiana and Texas. Final report for the Southeast Regional Office, National Marine Fisheries Service, St. Petersburg, Florida.
- Florida Department of Commerce. 1996. Florida visitor study. Tallahassee: Florida Tourism Industry Marketing Corporation.
- Graefe, A. R. and R.B. Ditton. 1986. Bay and offshore fishing in the Galveston Bay area: a comparative study of fishing patterns, fishermen characteristics and expenditures. North American Journal of Fisheries Management 6:192-199.
- Holland, S. M. and J.W. Milon. 1989. The structure and economics of the charter and party boat fishing fleet of the Gulf coast of Florida. Final report for the Southeast Regional Office, National Marine Fisheries Service, St. Petersburg, Florida.
- Holland, S.M., R.B. Ditton, and D.A. Gill. 1992. The U.S. Gulf of Mexico charter boat industry: activity centers, species targeted, and fisheries management opinions. *Marine Fisheries Review* 54(2):21-27.