# Charter and Party Boat Operators in the U.S. Gulf of Mexico: A Social Structure Perspective

DUANE A. GILL, ROBERT B. DITTON, and STEPHEN M. HOLLAND

Duane A. Gill is with the Department of Sociology, Anthropology, and Social Work and the Social Science Research Center, Mississippi State University, Mississippi State, MS 39762. Robert B. Ditton is with the Department of Wildlife and Fisheries Sciences, Texas A&M University, College Station, TX 77843. Stephen M. Holland is with the Department of Recreation, Parks and Tourism, University of Florida, Gainesville, FL 32611. Views or opinions expressed or implied are those of the authors and do not necessarily reflect the position of the National Marine Fisheries Service, NOAA. Mention of trade names or commercial firms does not imply endorsement by the National Marine Fisheries Service, NOAA.

ABSTRACT—To better address the charter and party boat fishery needs in the U.S. Gulf of Mexico, fishery managers must understand the linkages between the industry and other groups and organizations that affect its success. Gulf state charter and party boat operators were interviewed to ascertain the extent of their social network linkages, membership in community organizations, business community relationships, and linkages to information sources. Approximately one-third to one-half of the charter and party boat operators did not belong to local community organizations that could assist their business through tourism promotion or natural resource protection. Despite their limited integration in the community, the vast majority of operators gave and received referrals from other businesses. Of four major information sources, the National Weather Service and the County Marine Extension agents were rated highest and lowest, respectively, in mean importance to charter and party boat operators. Results suggest that business success can be enhanced by strengthening network ties between operators and local businesses, chambers of commerce, and tourism organizations. For this to occur, individual operators and charter/party boat organizations need to become more effective in representing industry interests. Informational linkages between industry and government agencies also need improvement.

### Introduction

U.S. charter and party boat operators in states bordering the Gulf of Mexico (Gulf) occupy an ambiguous position within the marine fisheries community: They do not fit readily into either recreational or commercial fisheries. Marine anglers view charter and party boat operators as commercial fishermen because they earn their livelihood from fishing activities. On the other hand, commercial fishermen view them as a part of the recreational fishing community because their clientele consists of anglers. The picture is further complicated when some charter/party boat operators sell part of the recreational catch at local fish markets or engage in commercial fishing during the off season. Often, charter and party boat operators identify with neither group. This unsettled position is revealed in special regulations promulgated for the charter and party boat industry. In general, the allocation and bag limits for charter and party boat anglers falls under recreational allocation, but sometimes, special limits are promulgated specifically for the charter and party boat fishery (cf. 50 CFR 642.28). These regulations create uncertainty for operators who do not know how their clientele will respond. The rules also impact the traditional role for charter and party boat operators which as been to provide and enhance fishing opportunity.

To better understand the charter and party boat industry, fishery managers need a social structure perspective. This involves an understanding of linkages between the industry and other groups and organizations that affect its success. For example, the charter and party boat industry is tied to some extent to the

larger tourism industry, government agencies that regulate and provide services, and customers. The charter/party boat industry is comprised of individual businesses which are linked to communities through associations with other businesses and organizations. By understanding these linkages, management agencies can better address industry needs as it reacts to changing fish stocks and regulatory policies.

One approach to understanding the social structure of this industry is to examine its social network linkages. Social networks refer to the "web of group affiliations" (Simmel, 1955) and represent the structure of relations among social groups (Wellman, 1983). Network analysis includes the type and number of relations between individuals or groups. Previous work suggests that these relationship patterns affect aspects of power, influence, and communication (Brass, 1948; Czepiel, 1974; Cook, 1977). Previously, network analysis has been used to understand communication patterns and strategies that influence community tourism development (Cobb, 1988).

This paper describes some of the social networks in the U.S. Gulf charter and party boat industry and provides a basis for further understanding and analysis of the industry. Specifically, this paper focuses on operators' demographic characteristics, memberships in community organizations, business community relationships, and linkages to information sources. No previous studies were identified regarding social networks in the Gulf charter and party boat industry or elsewhere. Previous literature on networks is used to understand and assess the social structure of this industry.

First, demographic descriptions provide insight to the characteristics of individual operators in the industry. Cobb (1988) proposed a relationship between demographic characteristics and centrality in business networks as a key to business success. A higher mean age may be problematic to the industry, however, as operators reduce their business activities or retire. As operators retire, the industry might decline due to high business turnover rates perpetuated by a large number of inexperienced operators (Ditton and Loomis, 1985; Ditton and Vize, 1987). This can act to reduce industry credibility (Holland, 1988). Also, the number of years as a captain is a direct measure of experience and indirectly indicates extent of opportunity for cultivating ties with clientele. Length of community residence and number of years operating from one's home port reflect opportunities to establish and maintain community ties and demonstrate business success. We would expect that operators who are older and have a longer tenure in the business and the port community to hold more central positions in business networks.

Organizational membership can promote business interests through interactions with community leaders and other business proprietors. Further, as Cobb (1988) has proposed, involvement in community organizations is correlated with influence and centrality in referral networks. Linkages to local chambers of commerce help to promote business and improve business practices. Memberships in marine fisheries conservation groups are an effort to help protect the resource base on which the industry depends.

Local communities attract new charter/party boat customers (and retain current clientele) with facilities and services such as hotels/motels; restaurants, service stations, bait shops, etc. (Roehl et al., 1989). Giving and receiving business referrals are a significant part of this network. Receiving referrals increases clientele whereas referrals to other local businesses is beneficial to the community and facilitates reciprocal relations between businesses (Cobb, 1988). Centrality in referral exchange networks leads to greater influence with networks (Boje and Whetten, 1981).

Centrality in communication networks has been found to enhance one's ability to control valued resources and influence favorable outcomes (Hinings et al., 1974; Brass, 1984). We would expect charter/party boat operators to require information on fishing conditions and regulations, business and tax regulations, technological innovations, marketing strategies, and weather conditions. Although local organizations such as the chamber of commerce are likely to provide some of this information, boat operators are likely to rely on government agencies to some extent for information and assistance.

## Methods

Personal interviews were conducted with a random sample of operators. The sample included 50% of charter operators in Texas, Louisiana, Mississippi, and Alabama and 30% in Florida. The sample of party boat (also referred to as head boat) operators included all in Texas, Louisiana, Mississippi, and Alabama and 24% in Florida. Interviews in Florida and in the other Gulf coast states were conducted in 1988 and 1987, respectively.

The 19-page interview schedule included sections on operators' demographic characteristics, perceptions of ties to community businesses, organizational membership patterns, and informational linkages. Demographic information included age, gender, race, education, income, and marital status. In addition, data were collected on operators' years of service as captain, years of community residence, and the length of operation from their current home port. Operators were asked whether they were members of various

organizations, including the local chamber of commerce and marine-oriented organizations (e.g., charter and party boat associations).

Ties to the local business community included the operator's receiving and giving business referrals and their perception of the local business community's understanding and appreciation of the economic contributions made by the charter and party boat industry. Data were based on a "yes-no" response to questions about these issues. Operators were also asked to identify marineoriented publications they received. Further, they were asked to rate the importance of information received from the National Marine Fisheries Service (NMFS), National Weather Service (NWS), their state fish and wildlife agency, and local county/parish marine extension agent. These information sources were rated on a 5-point scale ranging from extremely unimportant (5) to extremely important (1). Additional information on the research methods can be found in Ditton et al. (1992) and Holland et al. (1992).

#### Results

#### **Demographic Characteristics**

Demographic data indicate that the average charter boat operator is a 45-year-old male, has more than 13 years of operating experience, has lived in the community for 20 years, and operated out of his home port for 12 years (Table 1).

The survey provides additional insight to charter boat fishery demographics. For example, three-fourths of the sample in Texas, Louisiana, Mississippi, and Alabama and about eighttenths of the Florida sample operated

Table 1.—Demographic characteristics of charter and party boat operators in the U.S. Gulf of Mexico by state.

Operator characteristics	Florida	Alabama	Mississippi	Louisiana	Texas	Gulf	
Charter boat operators							
Mean age	42.4	45.6	53.8	42.8	47.3	45.0	
Mean years as captain	13.7	14.4	21.8	11.7	10.9	13.3	
Mean years of community residence	19.3	28.8	32.8	22.1	14.4	20.0	
Mean years operating out of home port	12.3	13.2	20.7	8.9	10.6	45.0 13.3 20.0 12.0 Gulf 42.5 14.6 21.9	
	Northern Gulf states						
	Florida		(AL, MS, LA)		Texas	Gulf	
Party boat operators							
Mean age	43.0		46.0		40.2	42.5	
Mean years as captain	15.3		13.4		13.5	14.6	
Mean years of community residence	20.1		29.0		22.1	21.9	
Mean years operating out of home port	11.7		9.5		12.7	11.8	

on a full-time basis (Ditton et al., 1988; Holland and Milon, 1989). Within the former sample, almost two-thirds of Alabama's charter operators were full-time compared to nine-tenths of Mississippi's charter operators. Almost one-fourth of the Florida charter sample was either a second, third, or fourth generation operator compared to about one-fifth of the sample in the remaining Gulf states. These figures indicate sufficient business demand to support most operators on a fulltime basis over time.

Demographic characteristics for party boat operators are similar to charter boat operators (Table 1). The average party boat operator is a 43-year-old male, has about 15 years of operating experience, has lived in his community 22 years, and has operated out of his home port for about 12 years.

There was a greater percentage of full-time operators in the party boat industry than the charter boat industry. All party boat operators in Texas were full-time and over nine-tenths of Florida operators and eight-tenths of operators from the northern Gulf states were full-time. Stability and longevity of the party boat fishery was demonstrated by the fact that over 40%, 25%, and 20% of Texas, Florida, and northern Gulf states party boat operators, respectively, were second or third generation operators (Ditton et al., 1988; Holland and Milon, 1989).

# Organizational Membership Patterns

Charter boat operators were more likely to be members of marine-oriented

organizations than chambers of commerce or other local groups (Table 2). About half of the Gulf operators belong to marine-oriented organizations. Membership was highest in Alabama and Florida and lowest in Mississippi and Texas. Operators in the latter two states reported local charter/party boat organizations were relatively inactive and ineffective in representing the industry. Reported benefits of membership in marine-oriented organizations included promotion and advertising support, fishing information, and support for improved recreational fishing.

Rates of membership in the local chamber of commerce were less than in marine-oriented organizations in all Gulf states except Mississippi. Half of Mississippi operators belonged to their chamber of commerce compared to one-third of all other charter boat operators in the Gulf. Members noted their chamber of commerce supported charter businesses through the distribution of brochures, giving referrals, and promotion of tourism.

Organizational membership patterns among party boat operators indicated the chamber of commerce is more popular than marine organizations and local organizations (Table 2). About half of all party boat operators belonged to their local chamber of commerce. Compared to three-fourths of Florida operators, only one-third of Texas operators were members of their local chamber of commerce. Operators who are members reported they received support in terms of promotion of their business and tourism in general.

Table 2.—Community organization membership of charter and party boat operators in the U.S. Gulf of Mexico by state.

Operator and organization	Percent membership						
	Florida	Alabama	Mississippi	Louisiana	Texas	Gulf	
Charter boat operators who:							
Belonged to a marine-oriented organization	56.6	63.6	37.5	42.1	38.3	51.9	
Belonged to Chamber of Commerce	34.8	13.6	50.0	20.0	29.8	31.1	
Belonged to other local organizations	12.8	13.6	37.5	35.0	22.2	17.4	
	Percent membership						
	Florida	N	Texas	Gulf			
Party boat operators who:							
Belonged to a marine-oriented organization	60.0		20.0		16.7	40.5	
Belonged to Chamber of Commerce	76.2		60.0		33.3	51.3	
Belonged to other local organizations	25.0		20.0		8.3	18.9	

Party boat operators' membership in marine-oriented organizations was more apparent in Florida than in the remaining Gulf states. As with charter operators, party boat operators in the northern Gulf states and Texas reported their local marine-oriented organizations are relatively inactive. Membership in other organizations was not frequent among party boat operators.

## **Business Community Ties**

Gulfwide, half of the charter operators felt the local business community understood and appreciated the economic contributions of the charter/party boat industry (Table 3). However, most operators in Louisiana, Mississippi, and Alabama felt their economic contributions were not well understood by the local community. In business referrals, charter boat operators tended to give more than they received. The greatest disparity was in Florida and Alabama. Trends in these states indicate charter boat operators may be less integrated into the local business community, particularly with tourism and service businesses which have opportunities to make referrals.

Party boat operators appear to have a more favorable relationship with the local business community (Table 3). These businesses tended to be located in larger communities with a greater likelihood of better port facilities and a more extensive network of business services and referrals. About two-thirds of the operators in Florida and Texas felt the economic contributions of their industry were understood and appreciated by the local business community. In the northern Gulf states, however, none of the operators felt this way. Likewise, this pattern was reflected in the giving and receiving of referrals. All operators in Florida and Texas gave and received referrals, but only two of the five operators in the northern Gulf states reported giving and receiving referrals.

#### **Informational Linkages**

Two-thirds of the Gulf charter boat operators subscribed to one or more marine-oriented publications<sup>1</sup> (Table 4).

<sup>&</sup>lt;sup>1</sup>Mention of trade names or commercial firms does not imply endorsement by the National Marine Fisheries Service, NOAA.

Saltwater Sportsman was the most commonly taken publication. Other popular publications were Boats and Harbor, Yachting, National Fisherman, and Charter Industry Magazine. In Florida, the Florida Sportsman was received by about one-fifth of the charter operators.

Data on informational linkages among Gulf party boat operators (Table 4) were similar to that of charter operators. About two-thirds of the party boat operators received a marine-oriented publication. Saltwater Sportsman and Boats and Harbor were the most commonly taken. Other publications mentioned frequently by party boat operators included National Fisherman and Gulf Tide.

Based on the mean importance rating of information sources, both charter and party boat operators value information from the NWS more than information from other sources. The majority of charter and party boat operators rated NWS data as either extremely important or important. In contrast, information from county/parish marine extension agents was rated as moderately or extremely unimportant by the majority of boat operators.

Operators were neutral regarding information from NMFS and state fish and wildlife agencies.

# Discussion

Demographic differences in the region have implications for the charter/party boat industry. Whereas charter operators in Mississippi, for example, have more years of experience and longer tenure in their local communities, their retirement could impact service provision unless the next genera-

Table 3.—Business community relationships of charter and party boat operators in the U.S. Gulf of Mexico by state.

Operator characteristics	Percent membership						
	Florida	Alabama	Mississippi	Louisiana	Texas	Gulf	
Charter boat operators who:							
Felt that the business community understands economic contributions							
of the charter/party boat industry	52.1	40.9	37.5	35.0	56.5	50.0	
Received business referrals	64.3	63.6	100.0	84.2	91.5	72.4	
Gave business referrals	95.1	86.4	100.0	85.0	95.7	93.8	
	Florida		(AL, MS, LA)		Texas	Gulf	
Party boat operators who:							
Felt that the business community understands economic contributions							
of the charter/party boat industry	71.4		0.0		63.6	60.5	
Received business referrals	100.0		40.0		100.0	92.1	
Gave business referrals	100.0		40.0		100.0	92.1	

Table 4.—Information linkages of charter and party boat operators in the U.S. Gulf of Mexico by state.

Information service	Florida	Alabama	Mississippi	Louisiana	Texas	Gulf
Charter boat operators						
Percent who subscribed to						
marine-oriented publications	62.9	63.6	87.5	60.0	76.6	66.3
Mean rating <sup>1</sup> of importance of						
information from:						
National Marine Fisheries Service	2.6	2.7	2.1	2.8	2.9	2.7
National Weather Service	1.8	2.3	1.4	1.8	1.6	1.8
State Fish and Wildlife Agency	3.1	2.3	3.6	2.5	2.3	2.9
County Marine Extension Service	3.9	3.8	3.7	3.2	3.4	3.7
		es				
	Florida		(AL, MS, LA)		Texas	Gulf
Party boat operators	·					
Percent who subscribed to						
marine-oriented publications	45.0		80.0		91.7	64.9
Mean rating <sup>1</sup> of importance of information from:					•	•
National Marine Fisheries Service	2.3		3.0		2.5	2.6
National Weather Service	2.0		1.4		1.6	1.8
State Fish and Wildlife Agency	2.7		2.4		3.1	2.8
County Marine Extension Service	3.7		4.3		3.9	3.8

<sup>&</sup>lt;sup>1</sup> Based on a 5-point scale: 1=extremely important; 2=moderately important; 3=neutral; 4=moderately unimportant; 5=extremely unimportant.

tion has prepared to remain in and contribute to the industry. The extent to which tourism opportunities in Mississippi may be affected if retiring captains are not replaced or replaced with less experienced operators has even greater implications. Alternately, with charter operators in Texas having the shortest tenure in their local communities, they will need to increase their community ties to enhance their business networks.

Overall, Gulf charter and party boat operators, as an industry, are not well positioned for business success from a social structure perspective. Since membership in organizations and networking capabilities are strong predictors of business success, we can begin to understand the highest business turnover in the for-hire marine operator business (Ditton and Loomis, 1985; Ditton and Vize, 1987). Since only onehalf and one-third of charter and party boat operators, respectively, belonged to organizations or community business organizations they should not expect their economic contributions to be well appreciated locally. Beyond being good fishermen, operators need to join local community organizations to develop networks that can lead to business referrals and cooperative efforts. If, however, they entered this type of business for lifestyle reasons and for the independence of being one's own boss (Thursland et al., 1982), this expectation may not be realistic.

Operators need to consider working more closely with other businesses and local agencies and organizations to identify strategies to enhance their business and increase overall local tourism activity. Organizations such as chambers of commerce, tourism development councils, and local marine-oriented groups can provide a forum for improving support facilities and services, establishing a more effective referral program, and informing the business community of the economic contributions of local charter/party boat operations. Further, since many counties make local hotel-motel tax monies available for promotion of events and infrastructure development, operators need to be involved in these types or organizations if they are to access these funds. Few operators belong to these organizations, indicating they are not representing the needs of the industry (Ditton et al., 1988). Likewise, captains' associations in some areas are inactive, ineffective, or nonexistent. Operators should work to improve the ability of these organizations to better represent their interests.

If operators are to succeed in an increasingly regulated environment, they will need better access to information affecting their industry. With the exception of the NWS, it is not clear where operators get information in support of their business. Survey results indicate government agencies responsible for information transfer are not effective with this fishery sector. But using publications frequently read by operators, agencies could expand indirect communications and enable operators to anticipate and react to changing conditions that may impact their business, e.g., stock assessments, proposed regulatory changes, fuel prices, markets, and insurance conditions. The emergence of better information networks can help alleviate the adversarial feelings which often characterize operator reactions to fisheries policy making.

This paper has implications for future research and extension efforts. First, a variety of applied research projects are needed to provide support for this fishery. More research needs to be done to document the expenditures and economic impact of this industry at the community, regional, and statewide level (after Ditton et al., 1978). Also, research should provide a means for measuring and understanding business success and the health of the industry. Here, the goal should be to develop predictive models of business success which could identify areas where operators and local organizations can work to enhance tourism. Finally, research is needed to help operators develop new products (types of trips) that are appealing to customers and feasible in light of current regulatory regimes.

Second, the Gulf charter and party boat industry could benefit from a strengthened marine extension initiative aimed at improving business success. Marine extension programs could play a major role in providing information and technical assistance to the industry to help mitigate regulatory impacts. Educational workshops on the importance of customer satisfaction are needed. Also, as catch levels are reduced through regulations to enable stock recovery, extension personnel need to emphasize the importance of noncatch aspects of trips, e.g., crew hospitality, safety, marine education, sightseeing, and boat guest comforts.

As increased attention is paid to the social structure, social interaction, and business networks of charter and party boat fisheries, we should expect less business turnover, greater support for attracting tourists and coastal communities, more operator attention to and involvement in fisheries management issues, and greater community appreciation of charter/party boat services and their economic contribution. Ultimately, better service to consumers, a stronger industry, and more positive relationships with government agencies should result.

## Acknowledgments

This research was supported by the Gulf of Mexico Marine Fisheries Initiative (MARFIN) administered by NMFS. Additional funding support was provided by the Texas Agricultural Experiment Station, the University of Florida Division of Sponsored Research, and the Mississippi Agricultural and Forestry Experiment Station (Project #MIS-4315). We appreciate the review comments of Ronald L. Schmied on an earlier version of this manuscript. We acknowledge the efforts of our coinvestigators John R. Stoll and J. Walter Milon, field interviewers, and project support staff. Most importantly, we acknowledge the charter and party boat operators who answered our questions and voluntarily provided us with the information essential to this paper.

## **Literature Cited**

- Boje, D. M., and D. A. Whetten. 1981. Effects of organizational strategies and contextual constraints on centrality and attributions of influence in interorganizational networks. Admin. Sci. Q. 26:378-395.
- Brass, D. J. 1984. Being in the right place: A structural analysis of individual influence in

- an organization. Admin. Sci. Q. 29:518-539. Cobb, M. 1988. Influence and exchange networks among tourism oriented businesses in four Michigan communities. Mich. State Univ., East Lansing. Ph.D. dissert. (unpubl).
- Cook, K. S. 1977. Exchange and power in networks of interorganizational relations. Soc. Q. 18:62-82.
- Czepiel, J. A. 1974. Word of mouth processes in the diffusion of a major technological innovation. J. Market Res. 11:172-180.
- Ditton, R. B., and D. A. Gill. 1988. Developing strategies to enhance charter and headboat fishing operations in Texas, Louisiana, Mississippi and Alabama. U.S. Dep. Commer., NOAA, Natl. Mar. Fish. Serv., Final Rep. NMFS Contr. NA86WC-H-06107, 331 p.
  - S. M. Holland, and D. A. Gill. 1992. The U.S. Gulf of Mexico party boat industry: Activity centers, species targeted, and fisheries management opinions. Mar. Fish. Rev. 54(2):15-20.
- R. N. Jarman, and S. A. Woods 1978.
  An analysis of the charter boat fishing industry on the Texas gulf coast. Mar. Fish. Rev. 40(8):1-7.
- and D. K. Loomis. 1985. Examining business turnover in the Texas charter boat fishing industry: 1975-1980. Mar. Fish. Rev. 47(1):43-47.
- , J. R. Stoll, and D. A. Gill. 1988. The social structure and economics of the charter and party boat fishing fleets in Alabama, Mississippi. Louisiana and Texas. U.S. Dep. Commer., NOAA, Natl. Mar. Fish. Serv., Final Rep. NMFS Contr. 5617000. 323 p.
- and J. D. Vize. 1987. Business turnover in the Texas charter fishing industry: Revisited. Mar. Fish. Rev. 49(2):162-165.
- Hinings, C. R., D. J. Hickson, J. M. Pennings, and R. E. Schneck. 1974. Structural conditions of interorganizational power. Admin. Sci. Q. 19:22-24.
- Holland, S. M. 1988. Charter and headboat fishing as a sector of the tourism industry in Florida: Guidelines for greater integration and improved economic vitality. U.S. Dep. Commer., NOAA, Natl. Mar. Fish. Serv., Final Rep. NMFS Contr. NA86WC-H-06107, 179 p.
- 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. Mar. Fish. Rev. 54(2):21-27.
- and J. W. Milon. 1989. The structure and economics of the charter and party boat fishing fleet of the Gulf coast of Florida. U.S. Dep. Commer., NOAA, Natl. Mar. Fish. Serv., Final Rep. NMFS Contr. NA87WC-H-06141, 278 p.
- Roehl, W., R. B. Ditton, and D. R. Fesenmaier. 1989. An exploratory investigation of community-tourism industry ties. Ann. Tour. Res. 16:505-513.
- Simmel, G. 1955. Conflict and the web of groupaffiliations. Free Press, N.Y. [K. H. Wolff and R. Bendix, transl.], 195 p.
- Thursland, M. E., M. A. Altobello, and N. K. Bender. 1982. The Connecticut charter boat fleet: Its characteristics, costs, and returns. Univ. Conn. Coop. Ext. Prog., Storrs., Rep. 82-23, 36 p.
- Wellman, B. 1983. Network analysis: Some basic principles. *In R. Collins* (Editor), Sociological theory 1983, p. 155-200. Jossey-Bass, San Franc.