WISCONSIN'S LAKE MICHIGAN CHARTER FISHING INDUSTRY

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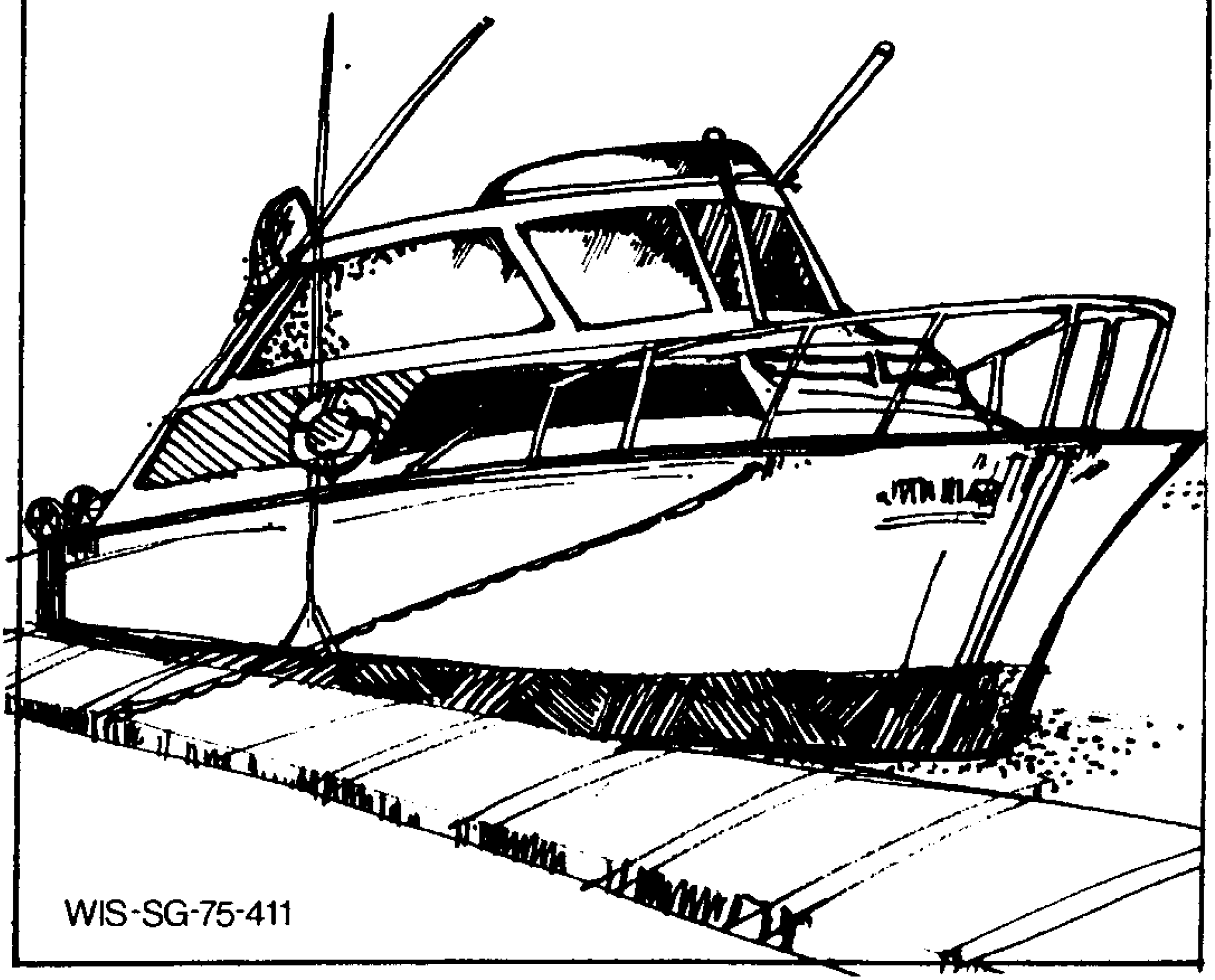

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ABSTRACT

Charter boat fishing on Lake Michigan is one of Wisconsin's newest recreational industries. Since the Wisconsin Department of Natural Resources began planting trout and salmon in the lake in the late 1960s, charter boat fishing has become a big business. This study examines this charter boat industry and assesses its impact on the state of Wisconsin.

From in-depth interviews with 44 of Wisconsin's 98 charter boat operators registered in 1973, a profile of the charter boat operator was compiled. On the average, he:

—is between the ages of 25 and 44
—got into the business because he enjoys fishing
—has been in the business less than four years
—nets less than $1,000 per year in profits
—does not rely on the business as his sole source of income
—has an average investment of $13,254 in fixed assets
—lives within ten miles of his home port

Based on completed questionnaires from 267 charter boat customers, a profile of the average charter fisherman was drawn. Typically, he is:

—an avid sport fisherman
—a Wisconsin resident
—a professional or technical employee with an annual income of $15,000
—age 42, married with three children

The charter boat industry has had major impact on several Lake Michigan coastal communities. The primary beneficiaries of tourist dollars spent in the pursuit of the charter fishing experience were restaurants and taverns, hotels and motels, service stations and grocery stores. Direct sales to charter boat customers in 1973 amounted to $1,660,000, which adds up to nearly four million dollars in total sales when multiplier effects are taken into consideration.

HISTORY AND OVERVIEW OF THE CHARTER FISHING BUSINESS

Charter fishing on Lake Michigan is one of Wisconsin's newest additions to the tourist and recreation industry. In 1966 Algoma, a coastal town which typifies the rapid growth of the business, had no charter fishing boats. Today that port has close to 20 charter boats and at least two businesses, a motel and a restaurant which opened to serve the sport fisherman. Charter boats operate out of ports in a 10-county area from Marinette to Kenosha County.

The evolution and growth of charter fishing is closely related to a series of events which affected the fish population in Lake Michigan. Prior to the entry of the sea lamprey into the lake, the native lake trout and whitefish populations were strong and commercial fishing flourished.

But the opening of the St. Lawrence Seaway introduced a new element into the Great Lakes — the sea lamprey. The effects were devastating. By the mid-1950s, the lamprey had reduced the lake trout population to dangerously low levels. Then, in 1958 chemical treatment of the streams to control the sea lamprey in the Great Lakes was initiated. By 1966 all 98 of the lamprey spawning streams on Lake Michigan had been treated and the results of the control programs were dramatic.

Whitefish production increased from 266,000 pounds in 1962 to 1,422,000 pounds in 1966. Further evidence of the effectiveness of lamprey control in Lake Michigan was the marked improvement in rainbow trout fishing, the successful introduction of lake trout by the Departments of Natural Resources in Michigan and Wisconsin and a 40 percent return of planted coho salmon. Between 1970 and 1971, the sports catch and angler participation on Lake Michigan almost doubled.

This increased interest in fishing was due to two factors. One was the increase in fish populations. The second was the introduction of a new species to Lake Michigan — the salmon. In the spring of 1966, 650,000 coho salmon were released into the lake. A breakthrough in fishery nutrition had made it possible for hatchery production of salmon and their introduction into the Great Lakes.

The salmon has many advantages over trout, for both fishermen and fish managers alike. For the fisherman, it can be caught at or near the surface, it can be located as a school and it provides reasonably fast and exciting fishing. Its large size and good taste make it a very popular fish. Another important contribution of the salmon is that it is a natural predator of the alewife.

Following the initial planting of the coho and later, chinook salmon, the seasons were filled with tales of large fish catches and the excellent "fight" of the landing. Newspaper Sunday supplements which failed to feature a story on salmon fishing were the exception.

The publicity about the opportunities of salmon fishing, coupled with the possibility of catching some delicious lake trout, helped to fan the fire of demand for fishing on Lake Michigan.

Although excellent fishing can be found along areas of Lake Michigan's shoreline, many of the larger fish are caught a good distance from shore. This, of course, calls for a boat, expensive equipment for trolling and special tackle. For many, the expense of these items made deep lake fishing beyond their reach.

The great demand for Lake Michigan fishing and the need for expensive equipment provided an excellent opportunity for the charter boat operator. He supplied the boat and equipment, took the sportsmen out onto the lake, and a new industry was born.

Today almost 100 charter boats operate on Lake Michigan from Wisconsin ports. But beyond estimates of their numbers, remarkably little is known about this industry, its operators or its customers.

Hopefully this paper will be of use to the charter boat operator in evaluating his business and of interest to the potential customer who knows little or nothing about charter boat fishing. Finally, it will be useful to planners and administrators who need to know considerably more about this industry in order to consider it in coastal planning and resource regulation decisions.

The Research Approach

Working through county extension agents and chambers of commerce, a list of 98 Lake Michigan charter boat operators working out of Wisconsin ports was developed. Their distribution among the 11 counties bordering Lake Michigan and Green Bay waters is shown in Figure 1. From these, a geographically proportional sample of 50 operators was drawn for the study.

Using a structured questionnaire, students from UW-Green Bay and UW-Madison completed 44 in-depth interviews. The completed interviews (indicated in parentheses in Figure 1) fulfilled, for the most part, the objective of obtaining geographically proportional data.

The completed questionnaires revealed marked differences between northern and southern Wisconsin operators. Separate tabulations were made on the answers from the two subgroups to better illustrate these differences. The areas defined as "northern" and "southern" are shown in Figure 1. This north/south line was subjectively determined, but state economic planners have defined Ozaukee County as the northernmost county in Wisconsin's southeastern region. Also, informal observation of Sheboygan's charter operations suggested that they resemble most closely those of Manitowoc County to the north. Though not tested for statistical significance due to the small sample sizes, north/south differences are described throughout these findings.

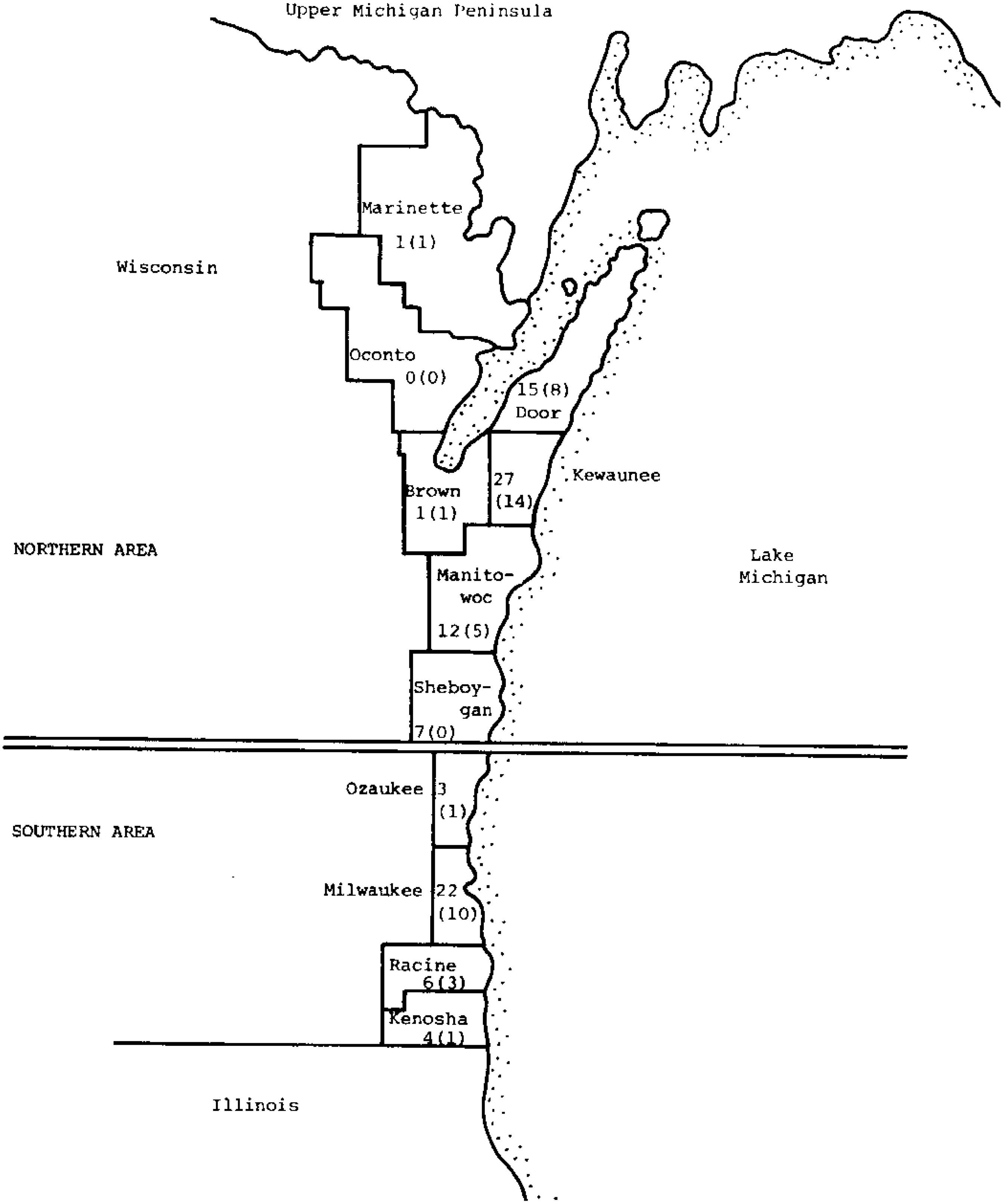


Figure 1. Locations of Wisconsin-Based Charter Businesses Operating on Lake Michigan in 1973 (Number of Completed Interviews are in Parentheses)

Regulating the Industry

The charter boat operator performs the following services: takes customers fishing on his boat, supplies all the equipment and tackle, attempts to locate the fish and, if necessary, shows the customer fishing techniques. In addition, the operator will clean the catch and keep it on ice for the customer. Some operators may even provide other services such as transportation, freezing the fish overnight or finding lodging — but the above services essentially make up the charter trip.

The charter operator must comply with legal regulations from the Wisconsin Department of Natural Resources and the United States Coast Guard.

The DNR requires that the captain possess a guide's license and a trolling license. The only qualifications one must meet to obtain a guide's license is proof of Wisconsin residency and $5. The trolling license, however, is of greater importance.

Assembly Bill 502, entitled the "Outlying Water Sport Trolling License" was passed by the Wisconsin legislature and signed into law in April of 1974. It requires that a charter boat operator be over the age of 18 and that he keep a record of the number and type of fish his customers have caught. The license fee is $5 for residents and $25 for nonresidents. If an operator owns more than one boat, a trolling license is needed for each boat as well as its captain. This law insures that, for the first time, the state will have an accurate record, not only of the charter boat operators, but also of the number and species of fish which have been caught.

In contrast to state regulations, the U.S. Coast Guard requirements are quite specific and more difficult to meet. An operator who takes passengers for hire on a boat that weighs less than 15 gross tons must have a Coast Guard motorboat operator's license. To obtain this he must pass a rigorous examination in which he must be able to demonstrate his knowledge of navigational techniques and rules. He must also have navigational experience for the geographical area he wants to operate in and his boat must meet rigid specifications. Upon meeting these requirements, the captain is then authorized to carry no more than six passengers for hire.

If the captain's boat is larger than 15 gross tons, he must obtain an operator's license. The requirements for this are even stricter than the motorboat operator's license and the vessel must be inspected and certified. With this license he is allowed to carry more than six passengers, based on the size of his boat. At the present time there is only one captain with an operator's license — the rest have motorboat operator's licenses and carry six or fewer passengers. This study addresses itself to this latter group.

Currently there are no laws which require that a charter boat operator be covered by liability insurance. However, of the operators surveyed, 95 percent had risk coverage averaging $11,858 and 100 percent had liability coverage averaging $267,678 per boat. Insurance companies require their clients to comply with Coast Guard regulations but seldom check up on them.

Many operators are concerned with the problem of "bandits," those operators who are not licensed. It is believed that many of these operators don't possess the proper safety equipment or insurance coverage and that they are lacking the skills to take passengers out for hire. Commander Weisskoph of the United States Coast Guard in the Port of Milwaukee acknowledged this problem. He said that they are trying to enforce existing regulations but that the resources just aren't available to eliminate the bandit problem completely.

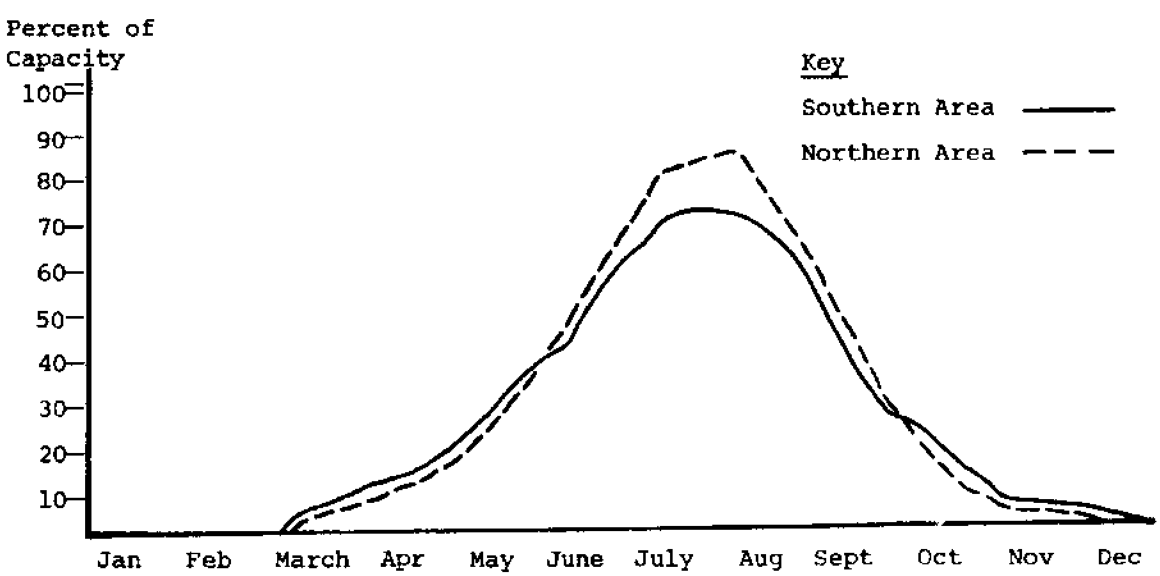
The number of bandits is large enough to be viewed by about 15 percent of the operators as a competitive threat. It is felt by some that the bandits' lower prices entice customers to go charter fishing but that their poor service and equipment sours the customers' attitudes toward the entire industry.

In this research, "charter boat operators" includes all persons advertising their services as charter boat operators on Lake Michigan to the public. There are probably few, if any, bandits included in this study.

Seasons and Rates

Although two northern operators take charters year-round, it is clear that the industry is presently very seasonal, extending generally from May through October. June, July, August and September are the only months when boats operate at 50 percent of capacity or better (see Figure 2). Northern operators achieve higher utilization rates than southern operators in peak months of July and August. During off season periods, the usage rates for operators in the two areas are nearly identical.

Figure 2. Percentage of Industry Capacity Used by Month in 1973



At capacity, operators generally average four to five persons per charter. Vessels are somewhat fuller during peak months.

Each charter day is divided into two five-hour charter periods. While there is general agreement on the length of the one-half day trip, there is more diversity in the length of the full day trip. Full day charters, however, account for a very small percentage of operators' business. Regular individual rates averaged $19.15/half day and $35.69/full day. For exclusive use of the boat by groups, rates averaged $83.15/half day and $161.67/full day, respectively. In-season rates were slightly higher, with considerable variation in the definition of the season.

The charter customer may book his trip directly through the operator or through a charter boat association. While charter operators overall are nearly split in their membership (57 percent) and nonmembership (43 percent), in charter fishing associations a southern operator is twice as likely to belong to an association as a northern operator.

For those captains who do belong to an association, it serves as a booking agency and the operator usually pays a commission for customers referred to him. While all charter boat operators are in competition with each other, the "association" mechanism has been used to reduce competition within ports and to develop an economy of scale conducive to more extensive and flexible operations. The two largest membership groups are the Wisconsin Charter Association in Algoma and Associated Fish Charters of Milwaukee. Major reasons cited for nonmembership included no association in the area and the operators' expressed fears of loss of independence.

THE CHARTER BOAT OPERATOR

In an article in Motorboating and Sailing,* the charter boat business was characterized as "fishing all day, everyday, from your own fully tax-deductible boat — and getting paid for it." The article also concluded that most charter operators "just make a living" and "are not in this for the money alone."

Wisconsin charter captains apparently have similar motivations. Three of every four operators interviewed indicated that they got into the business because they enjoyed fishing. Five captains came from commercial fishing backgrounds, three needed summer employment and one began by taking out business clients to enhance his regular business. Economic motivations seemed to have played a relatively minor role in the decisions to become charter boat operators.

The newness of Wisconsin's charter boat industry is reflected by the fact that operators have been in business an average of only 3.8 years. Charter operators in the north have operated longer on the average (4.3 years) than those from southern ports (2.6 years). The recent growth of the industry in the north and south is graphically shown in Figure 3.

Operators were found to have spent an average of 2.4 years at their present port (less than the average life of each business), indicating that they tend to move between ports until they find a suitable location. Some operators were more mobile in establishing their home port than others. While only 13 percent of the northern captains had worked out of areas other than their present ports, 40 percent of the southern operators had previously worked in other areas, primarily in the northern ports. The early attraction to northern ports might be explained by the earlier charter organization and publicity in these areas. The shift of captains to southern ports might be attributed to the fishing demand exerted by the population centers in this area. Also, operators may wish to be closer to their primary occupations and full-time residences.

The majority of captains (85.1 percent) reside within 10 miles of the town where their port is located, thus facilitating boat repairs and maintenance. Although there are some instances of port mobility, most of the captains charter from their home port only. None lived outside Wisconsin during the off season.

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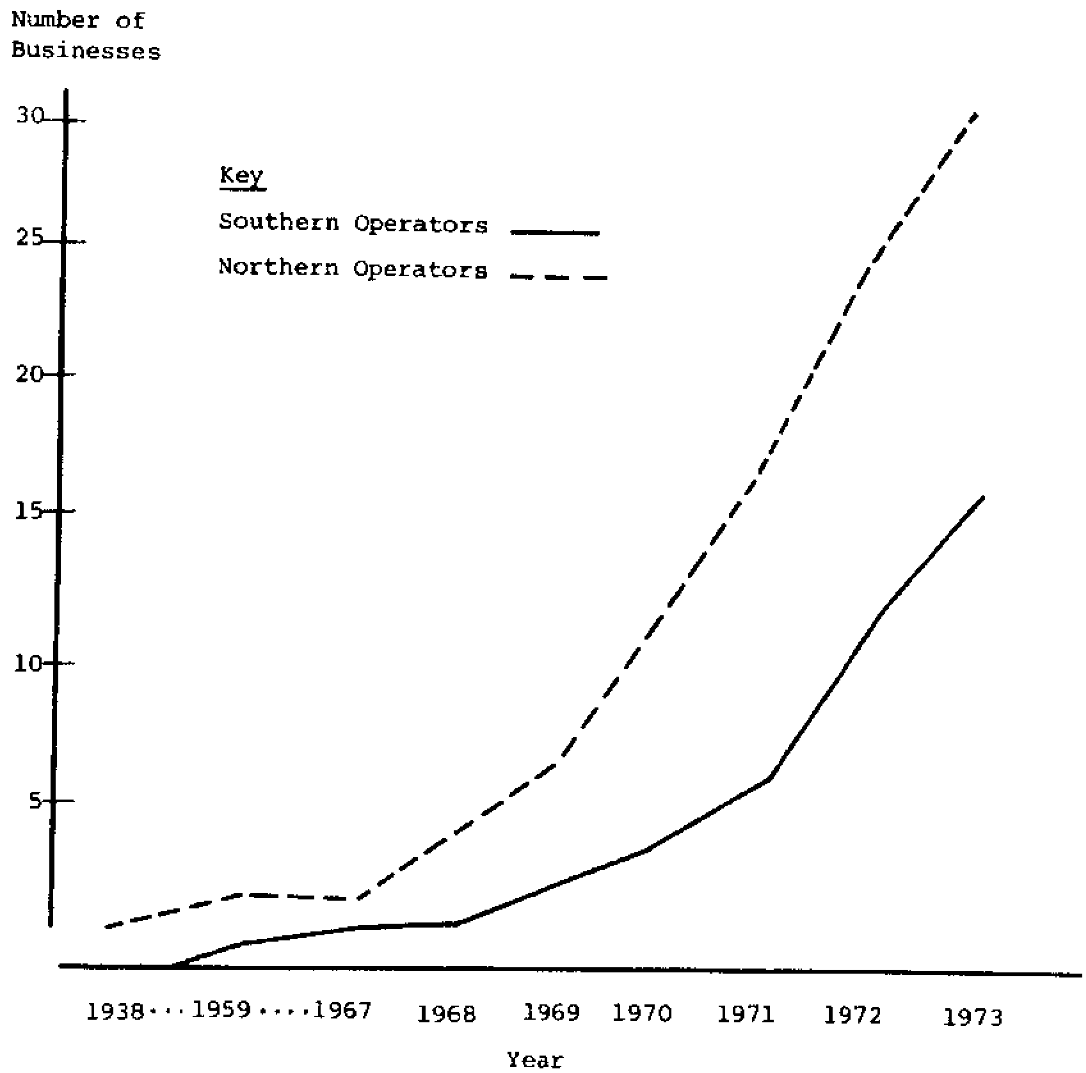
* Janet Groene, "Is the Charter Boat Business for You?" Motorboating and Sailing, p. 72 ff. February 1973.

Figure 3. Growth in Charter Businesses by Year
(44 charter boat operators surveyed)



Prior to the study, a large number of operators were expected to be older, having retired or semiretired from a primary occupation. This proved to be a false expectation. Although 20 percent of the northern captains were at least 55 years old, about two-thirds of the captains were between the ages of 25 and 44. This is consistent with the age range found to be typical of entrepreneurs in other industries. Given the apparent lack of economic potential in the charter industry, however, these entrepreneurs would seem to be different in that many of the relatively young charter operators appear to be attempting to earn a living at a job they enjoy, rather than pursuing more secure and higher paying occupations in industry.

As Table 1 indicates, most charter operators do not depend on the charter boat business for their total source of income. Half of the operators earned only 25 percent or less of their total income from charter operations; fewer than half obtained a major portion of their annual income from chartering. Almost all of those earning 50 percent or more of their income in the industry are found in the north. In the southern area, 11 out of 14 respondents earned 25 percent or less of their income in chartering. In short, northern operators on the average derive nearly half of their income from charter fishing, while southern operators depend on chartering for 25 percent or less.

Table 1. Percentage of Operators' Annual Income From Charter Business

Percentage of Income from the Charter Business	Northern Operators (n=29)	Southern Operators (n=14)*	Total Operators (n=43)
75% or more	7	-	7
50 to 74%	10	3	13
26 to 49%	1	-	1
25% or less	11	11	22

*one southern operator did not respond to this question

Only eight of the charter boat operators — all from the north — have no other occupation (see Table 2). The remaining northern operators earn additional income in the off season through other jobs, most often as service workers, laborers or craftsmen. In the south, all of the charter captains work during the off season, almost half of them in relatively high level white collar jobs. The situation might be summarized as follows: most Wisconsin operators have another occupation besides the charter boat business. For those who depend on the charter boat business as their sole occupation (about one-fifth), all live in the north.

Table 2. Off Season Activities of Charter Operators

Activity	Northern Operators (n=29)	Southern Operators (n=15)	Total Operators (n=44)
Have no other occupation (travel, retired, repair own equipment, etc.)	8	-	8
Have another occupation:	21	15	36
Professional or technical worker, manager, official or proprietor	4	7	11
Service worker, laborer, craftsman, foreman	17	8	25

Nearly all charter businesses are organized as proprietorships, meaning that the managers and owners are one and the same. The businesses are relatively small, having an average investment in fixed assets of $13,254, with about three-fourths of this money invested in a boat and the rest in equipment. Radio, equipment, fish locators, trolling gear, life preservers, tackle and artificial baits comprise the most essential equipment. In many instances, equipment is furnished by manufacturers as a promotional device.

The operators' fixed investments ranged from a low of around $4,500 to a high of almost $30,000. On the average, somewhat more than half (56 percent) of the capital invested in the business is equity; the balance is obtained with a boat mortgage or commercial loan.

THE CHARTER BOAT FISHERMAN

As another part of this study, sports fishermen who had gone charter boat fishing from Wisconsin ports in 1973 were surveyed by mail. Six operators provided lists of their 1973 customers and the names of 483 charter boat customers were obtained. Mail questionnaires were sent to all customers on this list and 267 usable responses were returned. Preliminary information from this customer survey provides some insights about the Lake Michigan charter fishermen using Wisconsin ports.

As might be expected, virtually all of the charter fishermen had sport fishing backgrounds. Twelve percent of the customers surveyed had engaged in salt water fishing during 1973; 42 percent had fished on Great Lakes waters other than Lake Michigan; 42 percent had fished on Lake Michigan other than on charter boats; and 32 percent had fished inland waters in other states. One statistic which demonstrates how avid a fisherman the charter customer really is, is the number of fishing trips on Wisconsin inland waters. The typical charter customer (81 percent) went fishing on Wisconsin's lakes and streams 23 times last year.

Most of the charter fishermen (89 percent) made short, one or two-day trips to participate in the charter excursions. Surprisingly few (less than 5 percent) took charter trips as part of a family excursion. The sport of fishing for salmon or trout was cited as the most important motivation for making a trip that included charter fishing. But there were other motivations. About one-third indicated that one of the reasons for the trip was to relax (see Table 3).

Table 3. Motivations for Taking the Trip

Motivation	Percent Ranking Reason as 1 or 2
To Go Charter Fishing	72.65
Relaxation	32.95
To Learn More About Fishing	23.97
To Meet Business Associates	11.61
Family Vacation	4.86
To Go Camping	1.87
Sightseeing	1.49
To Visit Friends or Relatives	1.49

More than half (54 percent) of the charter fishermen fell in the 35 to 54 year old age group and 27 percent of them were under 35 years old. The average age of the customers, 42.2 years, was, in fact, very close to the average age of the operators, 40. The majority of customers (83.14 percent) were married, with an average of 2.9 children each.

Charter fishermen tended to have above average incomes, with 34 percent of those surveyed having incomes above $20,000 per year. Eighty-four percent had incomes above $10,000 per year. A little over half (57 percent) of the charter customers came from relatively high status, white collar occupations—professionals, technical workers, managers, proprietors, officials and salesmen. Another 25 percent held relatively high paying blue collar jobs, such as craftsmen, foremen and skilled or semiskilled laborers.

About two-thirds of the charter fishermen were Wisconsin residents. The northern operators depended more heavily on out-of-state customers (39 percent of their total customers) than did the southern operators (26 percent of their customers). Given the rather short trips that are typical, it was somewhat surprising that more of the out-of-state customers, most of them coming from the Chicago area, did not make the shorter drive to ports in southern Wisconsin. Their apparent preference for driving farther north may be explained by the "north woods aura" that northern Wisconsin holds for many Chicagoans.

In summary, a profile of the average charter fisherman would read: an avid fisherman on a one-day charter excursion for which his prime motivation is to get in some fishing. He's a Wisconsin resident, a professional or technical employee with an annual income of about $15,000. He is age 42, married, with three children.

Choosing the Captain

Word of mouth is by far the most commonly used method of choosing a particular charter boat captain (see Table 4). Fifty-one percent of the respondents chose the captain because he was recommended by friends.

Table 4. Reasons for Choosing a Particular Charter Captain

Recommended by Friends	51.51%
Personal Acquaintance	11.61
Advertising	10.90
Booking Agency	10.86
Yellow Pages	7.11
Radio Show	5.61
Newspaper Article	4.49
Television	4.11
Sport Shows	1.87
Miscellaneous	10.11

Advertising was the reason why 11 percent of the respondents chose a particular captain, while 10.8 percent chose a captain through a booking agency, i.e., a charter association.

Publicity such as newspaper articles or mention on radio and television shows did not seem to be of much importance in attracting customers to a specific captain.

The amount of money spent on advertising by the charter boat operators fits in with these findings. Formal advertising outlays by the charter operators were small in absolute terms, averaging only $306 per business. Southern operators spent considerably more ($627 or almost 10 percent of their sales) on formal advertising compared to the northern operators ($141 or 2 percent of sales).

Thus, it may be that the low percentage of response to advertising efforts is due to the fact that there is a relatively low degree of advertising in the first place. With this in mind, Table 5 indicates which forms of advertising were most effective to those respondents who were exposed to some form of advertisement. Brochures seem to be the most effective, with posters and cards and then newspapers next.

Table 5. Customers' Exposure to Charter Operators' Advertising Media

Brochures	21.05%
Posters, Cards	14.23
Newspapers	11.98
Exposed to no Advertising	9.73
Radio	9.73
Yellow Pages	6.36
Television	5.24
Magazines	2.62
Other	4.51

SUCCESS OF THE CHARTER BOAT INDUSTRY

The Operator

From the standpoint of operators seeking to make their living from charter fishing, the industry is not currently an economic success. Table 6 breaks down the average Wisconsin charter boat operator's sales and expenses.

Average sales for the Wisconsin charter boat operator in 1973 were $6,832. After deducting the variable costs associated with charter trips, only $4,331 remained, on the average, to cover his fixed expenses of $2,802. This, then, left a balance of $1,529 to cover taxes, interest, proprietor's wages and profit. Although the data was not obtained from the survey, it seems reasonable to expect that another $600 to $800 of interest and tax expense would typically be required based on Wisconsin's tax rates and the size of the typical loan. This left less than $1,000 for proprietor's wages and profits.

If the proprietors invested their time working in the labor market in Wisconsin, they could probably have averaged $4.00 per hour or $4,000 over a six-month period. Instead of devoting a full six months of their time to their charter businesses, if the operators had only worked at chartering when they had customers and worked at other jobs the rest of the time, they still would have had to invest more than 750 hours in the business each year, sacrificing a potential $3,000 in the labor market.

Even with a 50 percent increase in sales at the current capacity — a plausible but challenging goal — owners could expect an average return of only $3,000 to $4,000 for their labor and investment. Chartering does have some additional value to those operators, primarily in the south, who have apparently entered the industry as a means for offsetting the costs of owning and operating a large boat for personal recreation. In addition to generating some income, they are able to deduct depreciation on the boat and equipment from their income taxes.

The industry's most successful operator in the survey had $20,000 in sales with one boat in operation. Assuming that his expenses are typical of those in the industry, even he would only break even with what he might have earned working for someone else. He would, in effect, obtain no return for the use of his capital in the business.

Chartering, then, appears to be a business with little or no economic potential for the charter operator using conventional accounting standards. However, in assessing the success of the industry to the operators, it is perhaps their own view of "success" or "failure" which is most important. Financial success was not the primary reason operators entered the business in the first place; the enjoyment of fishing was the prime motivator. It is quite likely that the majority of charter boat operators would, in terms of personal satisfaction, consider their venture successful.

Table 6. Average Wisconsin Charter Operator's Income Statement for 1973

		Profit	Expenses
<u>Sales</u>		$6,832	
<u>Variable Expenses</u>			
Gas and Oil	$1,013		
Repairs	528		
Labor	494		
Live Bait; Tackle	466		
TOTAL Variable Expenses			$2,501
→Profit After Variable Expenses		$4,331	
<u>Fixed Expenses</u>			
Depreciation - Boat	$1,025		
Depreciation - Equipment	580		
Insurance	336		
Advertising	307		
Storage	263		
Dockage	251		
Other	40		
TOTAL Fixed Expenses			$2,802
→Net Profit (Before Taxes, Interest and Proprietor's Wages)		$1,529	

The Customer

In terms of customer satisfaction with the charter fishing experience, two features about the trip were found to be most important: the expectation of the fish catch and the reputation of the captain, with 72.25 and 76.7 percent, respectively, ranking them as "important" or "very important."

Normally, data collection regarding sport fishing activity and catch is very difficult. However, charter operators were found to maintain very careful records of the number of fish taken per day, species caught, water depth fished, unusual lake conditions, etc.

Fish harvest data as recorded by charter boat operators is a data source previously untapped by the Wisconsin DNR. It can be used to more completely establish the recreational impact on the fishery, to partially verify creel census data, to evaluate fisherman success and to prevent collective exploitation of the fish populations.

The 44 operators surveyed carried 15,024 individuals during 1973 who harvested a total of 37,741 game fish. Extending this data to the whole population of charter boat operators would suggest that Wisconsin's Lake Michigan charter boats carried 33,418 individuals in 1973 and saw a catch of 84,642 sports fish.

Forty-three charter operators provided harvest data and had an average catch of 878 sport fish (trout and salmon). One operator reported no sport fish in his harvest. Again, differences between northern and southern operators are apparent. Perhaps due to their greater seriousness and/or talent or perhaps due to variations in sport fish populations and size of catch, each northern operator caught nearly twice as many fish on the average as each southern operator (1,031 to 592, respectively). The fish catch also varied proportionate to income obtained from charter fishing. Operators generating 25 percent or less of their total income from chartering averaged 524 fish, while those obtaining more than 25 percent of their income from chartering averaged 1,229 fish.

On a per fisherman basis, the average charter customer caught 2.5 fish/half day charter. Those fishing in the north averaged 2.9 fish; those in the south, 1.8 fish. Although there was undoubtedly substantial variance among individual anglers, 46 percent of the fishermen reported satisfaction with their catch, no doubt because they caught several fish on the average and because lake trout and salmon are highly prized as "big game" fish.

There were several other indicators of the charter customers' satisfaction with his experience. Seventy-six percent reported satisfaction with their captain; four of five stated they would give him repeat business. More than two-thirds of the fishermen also indicated that they were satisfied with the costs of the trip.

From Table 7 it is apparent that the equipment on the boat and the captain's friendliness and skill are the primary reasons why customers wish to return to an operator for more business. If this is the case, the captains do not have to worry about competition from bandits. They should be able to win and keep customers based on their safety, skill and personality, rather than lose business because of price.

Table 7. Reasons Why a Customer Would Charter with the Same Captain

Reasons	Percent Ranking Reason as: 1	2	3
Good, Safe Equipment	21.34%	18.35%	11.61%
Friendliness	20.20	14.98	10.48
Safe Navigation	13.85	16.85	12.73
Successful Catch	10.36	8.23	10.11
Enjoyed the Area	.74	.37	2.24
Good Price	.37	2.62	6.36
Won't do Business with Again	9.36	0	0

Benefits to the Community

The community which serves as a port for the charter operator is also affected economically by the industry. In 1973, Wisconsin's charter fishing industry generated sales of about $670,000. Despite the fact that most charter customers made short one or two day trips, they spent an additional $990,000 in the local communities serving as ports for the charter operators. The primary beneficiaries of these expenditures, aside from the charter industry, were eating and drinking places, lodging places, auto service stations and food stores (see Table 8).

Table 8. Average Party Expenditures Per Trip*

	Overall Average n=267	Total Expenditures
Food Purchased in Supermarkets	$11.21	$2,999
Clothing, Apparel	3.71	991
Eating and Drinking	29.11	7,774
Gas Stations	16.77	4,480
Taxidermists	2.18	584
Fish Smoke Houses	.77	207
Lodging	18.34	4,897
Charter Fishing Fees	61.70	16,475
Recreational Activities	3.86	1,031
Government	4.50	1,203
Other	.75	202
TOTAL	$149.10	$39,811

*based on average party of 2.2 persons on a 1.7 day trip

It is interesting to note that nonresidents were found to have spent almost twice as much as residents. These expenditures were particularly heavy for eating and drinking, gas stations and lodging. Nonresident expenditures were also higher for charter fishing fees than residents, although not significantly. Respondents in sales occupations spent more than those in other occupations.

The fishermens' expenditures had additional economic impacts on the port communities as their dollars were respent in the community. Lodging places paid employees who in turn bought food from local stores which again respent a portion of the money locally. The multiplier effect of the fishermens' expenditures is shown in Table 9.

In 1968, an input-output model developed for Door County indicated a community multiplier of 2.16. Door County's economy appears to similar to that of most of the northern area counties, and applying that multiplier figure to the $1.6 million of direct expenditures in the charter industry yields an economic impact of $3,456,000 on Wisconsin's Lake Michigan communities in 1973. In the more heavily industrialized southern area counties, the multiplier would be expected to be somewhat larger.*

While this amount is not extremely large relative to the total economies involved, it does indicate that the industry's total economic impact is more than five times industry sales. This also represents significant economic activity, particularly when viewed in the perspective of many of the communities involved. For instance, Kewaunee and Algoma, two northern charter ports, have 27 charter operators registered. The total population of the two communities is around 7,000. On the basis of their boat population, chartering is probably generating more than $1 million of sales (almost $160 per capita) in those communities and is, thus, very noticeable.

* William A. Strang, "Recreation and the Local Economy: An Input-Output Model of a Recreation-Oriented Economy," Technical Report No. 4 (Madison, Wisconsin, University of Wisconsin Sea Grant College Program, October 1970).

Table 9. Direct and Indirect Economic Impact of Wisconsin's Charter Industry on Local Communities

	Direct Sales to Charter Fishermen	Sales Induced by Multiplier Effects	Total Sales Attributable to Charter Industry
Personal and Business Services	$701,700*	$ 51,000	$752,700
Eating and Drinking Places	315,900	34,700	350,600
Lodging Places	199,000	3,100	202,100
Auto Sales and Service	182,100	149,500	331,600
Food Stores	122,000	148,800	270,800
Local and State Government (licenses)	48,900**	64,300	113,200
Amusements	41,900	3,800	45,700
Apparel Stores	40,300	17,500	57,800
Other Retail Stores	8,200	72,100	80,300
Agriculture	-	11,600	11,600
Construction	-	45,400	45,400
Manufacturing	-	24,800	24,800
Transportation, Communication, Utilities	-	160,200	160,200
Wholesalers	-	153,000	153,000
Building Materials, Farm Equipment	-	38,400	38,400
Finance, Insurance, Real Estate	-	82,000	82,000
General Merchandise Stores	-	61,100	61,100
Furniture, Appliance Stores	-	11,600	11,600
Local Households	-	1,155,600	1,155,600
TOTALS	$1,660,000	$2,288,500	$3,948,500

*Primarily expenditures to the charter industry itself

**Most of these expenditures were license fees paid to state government. The assumption is that state government operations in the local community are proportional to revenues derived from the community.

CONCLUSION

Industries arise to meet market needs, and their success or failure is based on how well they fulfill those needs. When the Wisconsin Department of Natural Resources starting planting coho salmon and lake trout in Lake Michigan, it created a potential target for sport fishermen. However, many of these fishermen were not equipped to fish effectively or safely in deep water far from shore. The charter operators filled this gap, enabling 33,418 charter fishermen to catch 84,642 fish on charter trips in 1973.

Although the charter fishing industry has not provided good economic returns to the operators, most of them seem to have entered the industry in large part because of the personal satisfaction provided by giving them the opportunity to fish and spend time on Lake Michigan. One might question how long this satisfaction will offset the economic opportunity costs to the operators — yet many northern Wisconsin resort operators have continued to operate their businesses for similar reasons and with similar results for decades.

While charter fishing is less than a financial success to its operators, it has had sizeable economic impacts on shoreland communities. These impacts are particularly important in those northern communities where the potential for alternative export industries is limited. With four million dollars in sales indirectly attributable to the charter fishing industry in 1973 alone, its impact on the state seems significant and is probably increasing.

Prior to this study, little has been known about this industry — its operators and its customers. Without such data it is difficult to reflect the social importance or economic impact of charter boat fishing in natural resources regulation or coastal zone management decisions. Hopefully the specific facts brought to light in this study will fill the need for this kind of information and find their way into the decision making process.

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