NEW YORK'S GREAT LAKES CHARTER BOAT FISHING INDUSTRY: 1975-2002

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Abstract

The charter boat fishing industry in New York's Great Lakes Region was established in the 1970s, following the stocking of different species of fish in Lakes Ontario and Erie. Data on this industry were first collected by New York Sea Grant in 1975 when 33 charter businesses were in operation. The industry has since gone through both large increases and decreases in number of charter businesses. In 2002, a charter captain mail survey was conducted by the Great Lakes Sea Grant Network in each Great Lakes state, including New York, in order to identify the current status of the charter boat industry in each state and the Great Lakes Region as a whole. This presentation will focus on New York's charter boat industry by highlighting the results of the 2002 New York charter captain survey and discussing trends in the charter industry since 1975. Results pertaining to average number of charter trips per year, business income and expenses, advertising, customer markets, and future business plans of charter captains will be discussed using descriptive statistics. Results from the 2002 Great Lakes Region charter captain study will also be presented for comparison purposes. An estimated 305 captains were identified in New York's Great Lakes Region in 2002; 143 of these captains returned surveys for a response rate of 46%. Survey results indicate that the average New York State charter business was profitable and had a positive net return of $4,313 in 2002, while the average Great Lakes business had a negative net return of $791. Trends indicate that the size of New York's industry increased from 1975 to 1990, but then decreased between 1990, 1994, and 2002 (a pattern followed by the entire Great Lakes charter industry as well). Although a 24% decline in size occurred in New York's industry between 1994 and 2002, increases in total income from charter boat operators increased by 18% to $6.99 million because of increased business profitability. The size of New York's charter industry is expected to decrease slightly over the next 5 years (based on the stated future plans of charter captains), while profitability is expected to increase.

1.0 Introduction

The sport fisheries of New York's Great Lakes Region (comprised of Lakes Ontario and Erie, and the St. Lawrence and Niagara Rivers) contribute to the economy of the coast as well as the quality of life of residents. In the 1960s and 1970s, the sport fisheries were rehabilitated when five species of salmonines were stocked (i.e., Chinook salmon Oncorhynchus tshawytscha, coho salmon O. kisutch, rainbow trout O. mykiss, lake trout Salvelinus namaycush, and brown trout Salmo trutta), and populations of walleye Stizostedion vitreum were re-established in Lake Erie (Dawson, Lichtkoppler, and Pistis 1989). In response to the rehabilitated sport fisheries, angler effort in the region quickly increased. By 1988, 295,100 and 83,850 anglers were fishing New York's Lake Ontario and Lake Erie, respectively (Connelly, Brown, and Knuth 1990). In response to the expanded salmonid fishery and management policies that fostered sport fisheries rather than commercial net fisheries, a charter boat fishing industry began to develop in the late 1960s. In 1990, at the height of angler effort, 560 charter businesses existed in New York's Great Lakes Region.

In the early 1990s, declines in angler participation began, negatively impacting coastal economies and sport fishing-dependent businesses such as charter boat operations. On Lake Ontario, the estimated number of anglers declined 36% to 188,210 between 1988 and 1996; a decline of 25% occurred on Lake Erie (63,020 anglers estimated in 1996). Estimated at-location expenditures for anglers decreased from nearly $134 million to $88 million during this time period (Connelly, Brown, and Knuth 1990, 1997). By 1994, declines in angler participation had already begun to affect the charter boat industry, reducing the number of charter businesses operating along New York's Great Lakes coast from 560 to 400 (Figure 1).

Similar declines in angler activity and number of charter boat businesses occurred throughout the Great Lakes Region of the United States during this period as well. The estimated number of anglers in the Great Lakes Region declined from 3.766 million in 1985 to 2.552 million anglers by 1991, and decreased further to 1.847 million by 2001. Total angler expenditures from Great

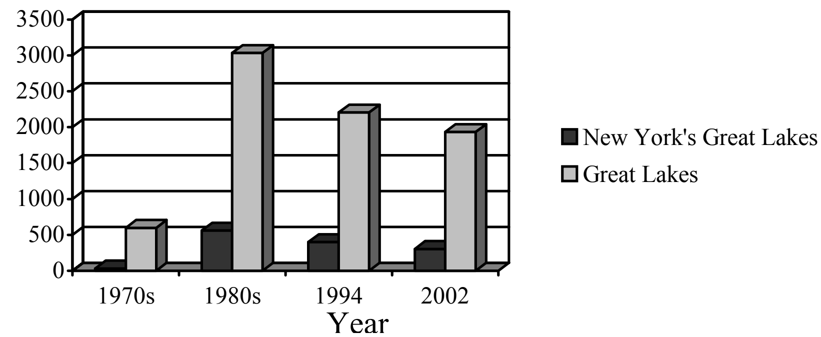

Figure 1.—Number of charter boat businesses in New York's Great Lakes Region and the entire Great Lakes Region, 1970s-2002.

Lake trips likewise declined from an estimated $1.56 billion in 1985 to an estimated $1.27 billion in 2001 (USDI Fish and Wildlife Service 1988; USDI Fish and Wildlife Service and USDC Census Bureau 1993, 2002).

This study was conducted to identify the status of New York's Great Lakes charter boat industry in the United States in 2002. For the purposes of this study, an active charter captain has been defined as a United States Coast Guard licensed captain who operates sport fishing charters for a fee using a charter boat or boats that he or she owns or leases. Descriptive statistics are used to summarize the characteristics of the 2002 New York's Great Lakes charter industry. Data on New York's charter industry have been collected for nearly 30 years by New York Sea Grant and the Great Lakes Sea Grant Network. The strong rapport between Sea Grant and charter captains resulted in a high survey response rate in 2002, indicating a high validity of the results. The extensive charter-business-related experience of both Sea Grant staff and charter captains also likely contributes to the validity of this study.

2.0 Methods

The New York charter boat industry study was part of a Great Lakes wide study undertaken by the Great Lakes Sea Grant Network. In fall 2002, New York Sea Grant compiled a complete list of charter captains along New York's Great lakes coast from charter boat association member lists and the business directories of tourism promotion agencies and chambers of commerce. The questionnaire used in the previous 1994 charter boat survey was used for the 2002 survey to ensure comparability of data between years; several questions were updated to reflect current issues. In January and February of 2003, the New York and Ohio Sea Grant programs surveyed all identified charter fishing captains in New York's Great Lakes Region by mail using a modified Total Design Method (Dillman 1978). Captains throughout the Great Lakes Region of the United States were surveyed at the same time. A sample of captains was randomly selected for Ohio because of the large number of charter businesses in this state; other Great Lakes states surveyed all identified captains. Nonrespondents were sent three reminder letters. Data from responding charter captains was entered into SPSS and analyzed using descriptive statistics.

3.0 Results

A total of 143 captains returned surveys with usable data in 2003 for a response rate of 46%. A 24% decline occurred in the number of charter businesses between 1994 (when an estimated 400 businesses existed) and 2002 (when 305 were identified). Of the responding captains, 99% were based in New York and 1% in Ohio. The homeports of 69% of the responding captains were on Lake Ontario, followed by 11% on the St. Lawrence River, 11% on Lake Erie, and 9% on the Niagara River (Licthkoppler and Kuehn 2003).

Of the 1,767 questionnaires distributed to charter captains throughout the entire Great Lakes Region in 2003, 871 were completed and returned for an overall response rate of 49%. An estimated 1,932 charter businesses existed in the Great Lakes Region of the United States in 2002, a 12% decline from 1994 (Kuehn et al. 2004).

3.1 Business characteristics

The typical New York charter captain in 2002 had been licensed for an average of 15.4 years. All of the responding captains were “six-pack” operators, licensed to carry no more than six passengers. Captains indicated that they work in the charter fishing industry because they enjoy helping people fish (77% of responding captains), like the work (72%), and to provide either a secondary (55%) or primary source of income (24%). Almost 99% of the responding captains operated their own charter firm. Eighty-nine percent of the charter boat businesses were sole proprietorships, 6% were corporations, 3% were partnerships, and 2% had some other form of business structure.

Charter boats were typically 26.7 feet long, almost 15 years old, and powered by an inboard (66%), inboard/outdrive (18%), or outboard (15%) motor. Most businesses (81%) operated one boat; 15% operated two boats and nearly 4% operated three or more boats. The average replacement cost for a New York charter vessel in 2002 was $60,112, and the replacement cost for onboard, business-related equipment was $12,596. About 36% of the respondents used a vehicle for towing their boats. The average replacement cost of the vehicle was $27,116, while that of the trailer was $3,997. The vehicle was used for boat towing 25% of the time and for other charter business 35% of the time.

3.2 Charter Fishing Trips

Charter trip fees varied according to length of the charter, target species, and services offered. Responding captains averaged 50.0 full-day and 11.1 half-day paid charter trips in New York in 2002, 57% of which were for lake trout and salmon. An estimated 18,626 charter trips were made, 82% of which were full-day and 18% half-day trips. The most popular trip was the whole day lake trout and salmon charter, costing an average $407 per boat (a range of $200 to $570). Most charter businesses provided tackle, ice, bait, and fish cleaning as part of their charter trip fee. A majority of responding captains offered trip photos and/or videos, and almost 48% provided lodging and food as part of their charter package or for an additional fee.

Eleven percent of New York charter captains conducted about 26% of their charters on a Great Lake or river other than the one on which their homeport was located. Almost 73% of the estimated New York charter trips and 65% of the charter businesses were located on Lake Ontario. Ten percent of the trips and almost 9% of the firms were on the St. Lawrence River. Less than nine percent of the trips each were on Lake Erie and the Niagara River, with almost 15% of the firms based on Lake Erie and 11% located on the Niagara River.

3.3 Costs and Returns

The average cash needed to operate a charter business is comprised of operating expenses plus boat loan payments (Table 1). For boat-owning captains, the largest annual operating expenses were boat fuel, advertising, hired labor, equipment repair, and boat dockage. In 2002, the average annual boat loan payment, including principal and interest, was $3,776. The typical New York Great Lake’s charter firm that owned and operated a single boat needed to generate sales of either $14,869 (with boat loan payments) or $11,093 (without boat loan payments) in order to meet its 2002 cash needs.

Estimated average annual revenues were $22,907 per business in 2002 (Table 4). Subtracting operating expenses from these revenues results in a net positive cash flow of $8,038 for firms with boat loan payments and of $11,814 for firms without boat loan payments (Table 2). Depending on the situation, firms with a positive cash flow could pay the day-to-day bills to operate their charter business from the revenues earned from chartering. A firm with a positive cash flow can stay in business temporarily, even if no profit is made, since all outstanding bills can be paid from the revenues generated.

Economic costs are all the costs of operating the charter firm, and include operating costs plus capital costs. Boat loan payments are a cash requirement, but are not part of the economic costs. Capital costs include boat depreciation and the opportunity cost of owning a boat instead of investing in stocks, bonds, or other enterprise. The average annual depreciation reported by responding captains was $3,866. Interest costs are estimated at 5 % of the value of capital equipment. Since the boat ($60,112) plus equipment ($12,595) costs total $72,707, interest costs are estimated at $3,635. Thus the capital cost (depreciation plus interest) is $7,501.

Charter captains receive revenues in excess of operating and capital costs for their time and labor. To provide a positive return to the operating captain, the average New York charter business in 2002 would have had to generate

Table 1.—Average annual operating costs for boat-owning captains in New York (Lichtkoppler and Kuehn 2003).

Item	Expense	Number of respondents
Fuel/Oil	$1,895	119
Advertising	1,200	109
Labor (hired)	1,168	106
Equipment repair	1,115	119
Dockage	1,096	119
Miscellaneous	901	112
Insurance	831	119
Boat maintenance & repair	717	118
Office & communications	531	107
Boat storage fees	429	119
Boat repair not covered by insurance	276	119
Drug testing/Professional dues	92	115
License fees	91	111
Boat launch fees	33	118
TOTAL OPERATING COSTS	$11,093	100

Table 2.—Annual cash flow of the average New York Great Lakes charter firm (Lichtkoppler and Kuehn 2003).

Income/Expenses	Businesses with boat loan payments	Businesses without boat loan payments
Average Revenue[a]	$22,907	$22,907
Cash flow needs		
Average operating costs[b]	11,093	11,093
Boat loan payments[c]	3,862	0
Cash needed	14,869	11,093
Net cash flow	$8,038	$11,814
Economic Cost		
Average operating cost	11,0923	11,093
Capital costs		
Interest costs	3,635	3,635
Depreciation[d]	3,866	0
Total economic cost	$18,594	$14,741
Net Return to Operator	$4,313	$8,166

[a]N = 124 respondents
[b]N = 100 respondents
[c]N = 45 respondents
[d]N = 14 respondents

sales exceeding $18,594 (businesses with depreciation) or $14,741 (businesses without depreciation) to cover the average operating and capital costs. The average New York charter firm operated at a net positive return of either $4,313 (with depreciation) or $8,166 (without depreciation) for the owner's time and labor.

Lake Ontario charter fishing businesses brought in the largest estimated total sales ($3.9 million), followed by Lake Erie ($1.3 million), the Niagara River ($0.5 million), and the St. Lawrence River ($0.4 million). Although the businesses with the largest positive net return or profit ($8,646) had their homeport on Lake Erie, the average Lake Ontario, Niagara River, and St. Lawrence River business was also profitable. Lake Erie captains had the highest economic cost per business ($20,432), followed closely by Lake Ontario captains ($19,731).

Table 3.—Methods of advertising used by charter fishing businesses in New York (N = 133; Lichtkoppler and Kuehn 2003).

Advertising method	Percent of respondents using method %	Number of respondents using method	Effectiveness[a]
Word of mouth	98	130	2.8
Brochures	90	119	2.2
Direct mailings	64	85	2.3
Website	59	79	2.1
Tourism promotion agency	56	79	1.8
Chamber of commerce publications	52	69	1.7
Sport & travel shows	44	59	2.1
Signs	41	54	1.8
Charter association publications	36	48	1.5
Magazine ads	35	46	1.7
Newspaper ads	35	46	1.6
Telephone directory	17	23	1.7
Other	6	8	2.6

[a]Scale = 1 (not effective) to 3 (very effective)

3.4 Promotion

Approximately 85% of New York charter customers come from 50 miles or more away from the charter firm's homeport. Captains rated different methods of marketing and advertising for effectiveness on a scale of 1 (not effective) to 3 (very effective; Table 3). Captains considered word of mouth (i.e., referrals), brochures, direct mail, and their web sites to be the most effective means of advertising. Almost 98% the respondents indicated that they use referrals, while 90% use brochures, 64% use direct mail, and 59% use a website.

3.5 Industry Trends and the Future of New York's Charter Industry

In 2002, New York's Great Lakes charter firms made an estimated 18,626 charter trips compared to an estimated 23,928 trips in 1994. The average charter firm made 61.1 trips in 2002, slightly more than the average of 59.7 trips made in 1994. The 305 charter captains generated an estimated $7.0 million in gross sales in 2002 (averaging $22,907 per firm), an increase to the inflation-adjusted estimate of $5.9 in gross sales generated by 400 active captains in 1994 (Kuehn and Dawson 1996). Thus, while the number of businesses has decreased over the past decade, the profitability of the remaining businesses appears to have increased.

Over the next five years, most captains (i.e., 57%) indicated that they plan on increasing the number of trips they make; about 34% plan to increase their charter fees as well (Table 4). However, almost 17% of the respondents plan on quitting the business. Based on these plans, future declines in the number of New York's charter businesses appear likely. However, the increased profitability of the remaining businesses due to decreased business competition is likely as well.

4.0 Conclusion

Results of the 2002 New York Great Lakes charter captain survey suggests that to continue increasing profitability, charter captains should aggressively market their industry, increase revenues, and reduce expenses. Charter captains should continually examine the management and marketing of their businesses. Offering nonfishing charters such as scuba diving or bird watching charters could attract new and diverse market groups. Captains should continue to use industry-wide marketing efforts and to advertise their businesses through local, state, and regional tourism bureaus. The increased effectiveness of the Internet also suggests that all charter businesses should consider having a website.

In order to increase revenues, captains can seek ways to increase the number of charter trips made annually.

Table 4.—Five-year plans of New York's Great Lakes charter captains (N = 143; Lichtkoppler and Kuehn 2003).

Activity	Percent of respondents
Increase of number of annual trips	57
Increase prices of charter services	34
Buy/operate newer boat	22
No major changes	22
Quit the charter business	17
Buy/operate bigger boat	12
Branch out into other fishing related businesses	11
Expand into multi-activity and/or non-fishing charters	11
Other	8
Decrease number of annual trips	7
Hire additional charter captains	5
Hire additional first mate(s)	4
Buy/operate an additional boat(s)	3
Decrease prices	1
Buy own charter boat	<1

Some captains have increased their annual number of trips by following the seasonal nature of the fishery and fishing in "hot spots" at different times of the angling season. Diversifying the types of charters offered could also assist with increasing the number of trips. Half-day trips are popular as a way to lower costs to clients and possibly increase the total number of trips made; they are also popular with families with children. Increasing prices may or may not be possible, depending on the demand and the specific market where businesses operate. Refinancing boats at lower interest rates, holding onto an older paid-off boat in good condition, or buying a newer boat at a favorable price to avoid large repair bills may be ways to reduce expenses.

New York's Great Lakes charter industry provides high quality angling experiences and a higher than average catch rate to anglers from around the world. This industry provides the lake fishing access necessary for anglers who do not own boats. However, the size of the industry and the profitability of individual businesses appears to be highly dependent on factors such as angler activity, the national and regional economy, angler concerns over fish diseases, contaminants, and exotic species, and the weather. Seeking new market groups could help offset impacts cause by declines in angler activity.

5.0 Citations

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