

New York's Great Lakes Charter Fishing Industry in 2002

by Frank R. Lichtkoppler,
Ohio Sea Grant Extension &
Diane Kuehn, New York Sea
Grant Extension

This publication summarizes the findings of the Great Lakes Sea Grant Network study on the charter industry in the Great Lakes. Individual fact sheets have been developed in conjunction with the Great Lakes Fisheries Leadership Institute for the following regions: Illinois-Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin. The goal of the Great Lakes Fisheries Leadership Institute is to provide the next generation of fisheries leaders for the Great Lakes region with the skills they need to effectively interact with fisheries management agencies. This document was produced by the Ohio Sea Grant College Program as a part of the Great Lakes Fishery Leadership Institute project of the Great Lakes Sea Grant Network.

Produced by the Ohio Sea Grant College Program as a part of the Great Lakes Fishery Leadership Institute project of the Great Lakes Sea Grant Network. The Great Lakes Sea Grant network is a cooperative program of the Illinois-Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin Sea Grant programs. Through its network of extension agents, researchers, and communicators, the Great Lakes Sea Grant Network supplies the region with usable solutions to pressing problems and provides basic information needed to better manage the Great Lakes and inland waters for both present and future generations (www.greatlakesseagrant.org).

OHSU-TS-039
June 2003



Introduction

In the fall of 2002 and winter of 2003 the Great Lakes Sea Grant Network conducted a comprehensive survey of the charter fishing industry in the Great Lakes. The survey is an effort to provide an update on the status, characteristics and economics of the charter fishing industry in the Great Lakes states and is modeled after a similar survey conducted in 1994. All data reported here are for the year 2002.

Methods

The New York and the Ohio Sea Grant programs surveyed by mail New York's Great Lakes charter-fishing captains in January and February of 2003 using a modified Total Design Method (Dillman 1978). Non-respondents were sent three reminder letters. In 2002, there were 305 licensed New York captains, a decline of almost 24% from the estimated 400 captains in 1994. A total of 143 captains returned surveys with usable data for a response rate of 46%. Of the responding captains, 99% were based in New York and 1% in Ohio.

Business

The typical New York charter-fishing captain in 2002 has been licensed for an average of 15.4 years. Business organization and boat ownership patterns are presented in this summary (Table 1). Almost 99% of the responding captains operated their own charter firm. Most businesses (81%) operated one boat, 15% operated two boats, and almost 4% operated three or more boats. Charterboats were typically 26.7 feet long, almost 15 years old, and powered by an inboard (66%), inboard/outdrive (18%), or outboard (15%) motor.

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.

Captains

All of the responding captains were "six-pack" operators, licensed to carry no more than six passengers. Notably, only 24% of the captains relied on their charter business as their primary source of income in 2002 (Table 2).

Almost 69% of the 143 responding captains are members of a professional charter captains' association. The top three cited benefits from association membership were drug testing; industry representation to state, federal, and local authorities; and education on current issues and regulations (Table 3).

Trips

Responding captains averaged 50.0 full-day and 11.1 half-day paid charter trips in 2002. Most (57%) of these were for lake trout and salmon. Applying the response data to the total population of 305 active captains yields an estimated 18,626 charter trips, of which 82% were full-day and 18% were half-day trips (Table 4). Half-day trips were defined as trips lasting less than seven hours. Eleven percent of New York charter cap-

Table 1
Ownership and Organization of Charter Boat Fishing Businesses in New York

Characteristic	Percent of Respondents	Number of Respondents
Business Ownership		
Sole proprietor	89%	124
Partnership	3%	4
Corporation	6%	8
Other	2%	3
Business Organization		
Owned own boat	99%	138
Leased or rented boat	0%	0
Salaried employee	0%	0
Freelance hire per trip	<1%	1
Other arrangement	<1%	1

Table 2
Reasons for Entering/Remaining in the New York Charter Fishing Business

143 Respondents were asked to check all items that applied.

Reason	Percent of Respondents
Help people enjoy fishing	77%
Like the work	72%
Secondary source of income	55%
Primary income source	24%
Other	4%

Table 3
Benefits of Membership in a New York Professional Charter Boat Association

143 Respondents* were asked to select the top three reasons.

Benefit	Percent of Respondents
Drug testing	48%
Industry representation to state, federal, and local authorities	37%
Education on current issues and regulations	30%
Group insurance	25%
Advertising	20%
Can share charters	19%
Obtain business operation ideas and advice	15%
Increased business	12%
Get tips about fishing	8%
Can obtain pricing information	7%
Other benefits	5%

* 69% are members of a professional charter captains' association.

Table 4
Estimated Trips and Revenues* for the New York Industry

Fish Species	Number of Trips	Average No. Trips/Business	Average Charge/Trip	Revenues Earned
Lake trout and Salmon				
Full day	8,418	27.6	\$ 407	\$ 11,233
Half day	2,117	6.9	306	2,124
Steelhead				
Full day	2,867	9.4	401	3,769
Half day	567	1.9	299	556
Smallmouth bass				
Full day	2,321	7.6	342	2,603
Half day	525	1.7	251	432
Walleye				
Full day	1,540	5.1	380	1,919
Half day	168	0.6	273	150
Yellow perch				
Full day	98	0.3	364	116
Half day	6	<0.1	254	5
Subtotals				
Full day	15,244	50.0		\$ 19,641
Half day	3,382	11.1		3,267
Totals	18,626	61.1		\$ 22,907

* The numbers of trips are extrapolations of respondent trip rates applied to the total population of New York Great Lakes charter captains (Lake Erie, Niagara River, Lake Ontario & St. Lawrence River). Revenues are calculated from the average number of trips per business multiplied by the average charge per trip.

Table 5
Services Offered by New York Charter Boat Operators

Service or Provision	----- Percent of Respondents -----		Number of Respondents
	Included in Base Charter Fee	Included for Additional Fee	
Tackle	98%	1%	137
Fish cleaning	84%	8%	136
Bait	87%	8%	133
Ice	90%	3%	138
Photos/Video	55%	11%	106
Lodging/Food	13%	35%	97

Table 6
Average Annual Operating Costs for New York Boat-Owning Captains

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

tains fished on a Great Lake or river other than the one on which their homeport was located. Of those who fished on another waterbody, about 26% of their charters were conducted on the other lake or river.

In general, charter fishing is more popular on Lakes Ontario and Erie in the late spring and summer and on the Niagara and St. Lawrence Rivers in the late summer and fall. About 30% of the Lake Ontario charter trips are taken in August, followed by 18% in May, 17% in July, almost 12% in June, just under 14% in September, 7% in April and 2% in October. The percentage of charter fishing effort on Lake Erie is concentrated in July (27%) and August (27%), followed by June with 18%, May with almost 16%, September with 7%, April with 3% and October with about 2%.

Charter fishing on the Niagara River is most popular in the autumn and spring. September (27%), October (21%), March (19%), and April (16%) account for most of the estimated charter fishing trips. August accounts for only 8% of the estimated trips, May less than 6%, July has only 3% and June accounts for only 1% of the charter trips.

Charter fishing on the St. Lawrence River is popular July through October. August has 24% of the trips, September has 22%, followed by July with 17%, October with 15%, June with 14% May with 6% and April with less than 2% of the total trips on the St. Lawrence River.

Charter fees varied according to target species, length of the charter, and services offered. 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).

Services and Provisions

Most charter businesses provide tackle, ice, bait, and fish cleaning as part of their standard charter trip service. A majority of responding captains offered trip photos/videos, and almost 48% provided lodging and food as part of their charter package or for an additional fee (Table 5).

Costs and Returns

For boat-owning captains, the largest annual operating expenses were boat fuel, advertising, hired labor, equipment repair, and boat dockage. Boat loan payments are a high cash outlay but are not part of operating costs (Table 6).

The average cash requirement to operate the charter firm includes the operating expenses plus the boat loan payments. Average annual boat loan payments, including principal and interest, are \$3,776. The average annual amount of cash needed to operate a New York charter firm is \$14,869 for those making boat loan payments and \$11,093 for those who have already paid off their boats (Table 7). This means that the typical charter firm that owns and operates a single vessel must generate sales of either \$14,869 or \$11,093, respectively, just to meet the cash needs of the firm.

Estimated average annual revenues are \$22,907 per business. The result is a net positive cash flow of \$8,038 for firms making boat loan payments and of \$11,814 for firms not making boat loan payments. 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 because all outstanding bills can be paid from the revenues generated by the firm.

Economic costs are all the costs of operating the charter firm. They include operating costs plus capital costs. Boat loan payments are a cash requirement, but are not part of the economic costs. Capital costs include depreciation on the boat, and the opportunity cost of owning a boat instead of investing in stocks, bonds or some other enterprise. In addition, owner

labor and management receive any revenues in excess of operating and capital costs.

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 + interest) is \$7,501.

To provide a positive return to the operating captain for time and labor, the average New York charter business would have had to generate in 2002 sales exceeding \$18,594 (businesses with depreciation) or \$14,741 (businesses with out depreciation) to cover the average operating and capital costs. Depending on the depreciation situation, the average New York charter firm operated at a net positive return of either \$4,313 or \$8,166 for the owner's time and labor. At an average price of \$407 for a full day salmon/lake trout charter a captain would have to run as many as 46 trips to cover average operating and capital costs.

In New York's Great Lakes Region, 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) (Table 8). 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). Almost 73% of the estimated New York charter trips and 65% (198) of the charter businesses were located on Lake Ontario. Ten percent of the trips and almost 9% (28) of the firms were on the St. Lawrence River. Less than 9% of the trips each were on Lake Erie and the Niagara River, with almost 15% (45) of the firms based on Lake Erie and 11% (34) located on the Niagara River.

Table 8 is useful in that it shows the differences between New York charter captains on the different water bodies. However, because of missing data and differences in estimation methods one can not simply add up the numbers from the separate water bodies to get the totals for the New York charter captains.

Promotion

Approximately 85% of New York charter customers come from 50 miles or more away from the charter firm's homeport, bringing nature-based tourism dollars into the community.

Captains used various methods of marketing and advertising and rated them for effectiveness on a scale of one (not effective) to three (very effective) (Table 9). Two advertising methods that we included in the 2002 survey that were not in the 1994 survey were a "world wide web site" and "tourism promotion agency publications/web site". Captains consider word of mouth, brochures, direct mail, and their web site to be the most effective means of advertising. Almost 98% the respondents use word of mouth, while 90% use brochures, 64% use direct mail, and 59% use a web site for advertising.

Lake Information

About 33% of 126 responding captains utilize the Great Lakes Forecasting System web site (<http://superior.eng.ohio-state.edu>) and over 46% of 125 respondents use the Sea Grant Coastwatch site (<http://coastwatch.msu.edu>) for information on lake waves, water currents, surface temperatures and lake status. Those accessing these web sites use them to make decisions, help find fish, plan charter trips, improve charter safety, and improve fish catch rates.

Table 7

Annual Cash Flow of Average Charter Firm in New York

Income/Expenses	Businesses WITH Boat Loan Payments	Businesses WITHOUT Boat Loan Payments	Number of Respondents
Average Revenue	\$ 22,907	\$ 22,907	124
Cash Flow Needs			
Average operating costs	11,093	11,093	100
Boat loan payments	3,776	0	45
Cash Needed	14,869	11,093	
Net Cash Flow	\$ 8,038	\$ 11,814	
Economic Cost			
Average operating cost	11,093	11,093	
Capital Costs			
Interest costs	3,635	3,635	
Depreciation	3,866	0	14
Total Economic Cost	\$ 18,594	\$ 14,741	
Net Return to Operator	4,313	8,166	

Table 8

Average Income, Economic Cost, and Estimated Net Return for New York Charter Businesses by Body of Water on Which Their Homeport is Located

Region/Body of Water	Estimated Number of Business	Average Income per Business	Average Economic Cost Per Business	Net Return (Profit or Loss)	Estimated Total Sales (millions)
NY's Great Lakes Region ¹	305	\$ 22,907	\$ 18,594 ² or 14,741	\$ 4,313 ² or 8,166	\$ 7.0
<i>124 Respondents</i>					
L. Ontario	198	\$ 19,940	\$ 19,731 ³ or 15,504	\$ 209 ³ or 4,436	\$ 3.9
<i>78 Respondents</i>					
L. Erie	45	\$ 29,078	\$ 20,432	\$ 8,646	\$ 1.3
<i>12 Respondents</i>					
Niagara River	34	\$ 13,538	\$ 10,873 ⁴ or 9,173	\$ 2,665 ⁴ or 4,410	\$ 0.5
<i>12 Respondents</i>					
St. Lawrence R.	28	\$ 14,739	\$ 10,900	\$ 3,839	\$ 0.4
<i>13 Respondents</i>					

¹ The combined estimates for Lakes Erie and Ontario and the Niagara and St. Lawrence River do not equal the estimates for New York's Great Lakes Region because of missing data concerning home port location and differences in estimation methodologies.

² Average depreciation reported by 14 respondents was \$3,866

³ Average depreciation reported by 12 respondents was \$4,227

⁴ Average depreciation reported by 2 respondents was \$1,700

Table 9

Methods of Advertising Charter New York Fishing Businesses

133 Respondents

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

* Scale = 1 (not effective) to 3 (very effective).

Ohio Sea Grant
College Program
The Ohio State University
1314 Kinnear Road
Columbus, OH 43212-1194
614.292.8949
Fax 614.292.4364
www.sg.ohio-state.edu

New York Sea Grant Institute
SUNY at Stony Brook
121 Discovery Hall
Stony Brook, NY 11794-5001
631.632.6905
Fax 631.632.6917
www.nyseagrant.org

Support for this publication is provided by the Ohio Regional Fisheries Extension project (A/EP-5, grant NA16RG2252) from the National Sea Grant College Program of the National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce. Support is also provided by the Ohio Board of Regents, The Ohio State University, Ohio State University Extension, participating universities and the private sector.

Acknowledgments
The authors wish to thank Carmina Chiappone, Beth Bollas, and Kelly Reisen for their assistance with this project.

Industry Trends and the Future

In 2002, New York charter firms made an estimated 18,626 charter trips compared to an estimated 23,928 trips in 1994 (Kuehn and Dawson 1996). The 305 charter captains generated an estimated \$7.0 million in gross sales in 2002 (305 firms x \$22,907 per firm). This is compared to the inflation-adjusted estimate of \$5.9 in gross sales generated by 400 active captains in 1994.

Captains were asked to select the three most important problems facing the charter industry (Table 10). The top concern is lack of fish, followed by the economy, impacts of exotic species, and fisheries management. It is interesting to note that these concerns are outside the control of individual charter captains.

Almost 17% of the respondents are planning to quit the business. However, charter firms in 2002 did make slightly more trips per firm (61.1) than in 1994 (59.7) (Kuehn and Dawson 1996). Most captains (57%) plan to increase the number of trips they make over the next five years and over 34% plan to increase their charter fees (Table 11). Future declines in the number of New York's charter businesses appear likely.

Strategies for Charter Businesses

Results of the 2002 Great Lakes charter captain surveys suggest that to continue 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. 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.

The most direct ways to increase revenues is to increase the number of charter trips that are made and to expand additional services such as executive charters or dive charter trips. Increasing prices may or may not be possible depending on the demand and the specific market where you operate. Some captains increased the number of trips they made by following the seasonal nature of the fishery and fishing out of the "hot" ports or "hot" lake or river at different times of the angling season. Half-day trips are popular as a way to lower costs to clients and possibly increase the total number of trips made.

Captains should carefully market their product (a nature-based tourism experience on a world class resource) and try to expand their client base to include the growing number of middle aged, nature-seeking tourists with above-average disposable incomes. Captains should use industry-wide marketing efforts or cooperate with local, state, and regional tourism bureaus in their marketing and promotion efforts.

Marketing toward non-traditional customers (i.e. women and minorities) may present opportunities for increased business as does marketing executive, fly-fishing, or other special charters. Captains may also want to consider differential pricing of charters to even out charter activity. Differential pricing (discount pricing) may help to increase charter trip activity in the spring and fall "shoulder" seasons.

Captains can continue to build on a positive professional image of the charter industry by stressing safety, effective and efficient angling opportunities, a higher than average catch rate, and a "world class Great Lakes angling experience" in their marketing efforts.

Captains should consider membership in a professional charter captain's organization in order to work with decision makers, fishery managers, and regulators through an organized power base.

Table 10
**Concerns of the
New York Lake Erie Charter Fishing Industry**
143 Respondents

Concerns	Percent of Respondents
Lack of fish/Fish abundance was down	64%
The economy	45%
Impacts of exotic species (zebra mussels)	32%
Fisheries management	30%
Fish consumption advisories	27%
Poor weather/climate	17%
Drawing clients	16%
Changes in forage fish populations	15%
Boating equipment and operating costs	14%
Other problems	14%
Lack of information on the fishery	10%
Avian botulism	10%
Toxic contaminants	7%
Over harvest of fish stocks	6%
Illegal fishing practices	6%
Government regulations	5%
Poor weather forecasting	4%
Un-sportsmanlike behavior of captains	3%
Overcrowding of the fishery	1%
Changes in water currents	1%
Un-sportsmanlike behavior of angler	<1%

Table 11
**Five-Year Plans of New York Lake Erie
Charter Captains**
143 Respondents

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 captain(s)	5%
Hire additional first mate(s)	4%
Buy/Operate an additional boat(s)	3%
Decrease prices	1%
Buy/Own charter boat	<1%

References

- Dillman, D.A. 1978, *Mail and Telephone Surveys: The Total Design Method*. New York: John Wiley and Sons.
- Kuehn, D. and C. Dawson. 1996. *New York's 1994 Great Lakes Charter Fishing Industry*. Stony Brook, NY: New York Sea Grant Institute.