

The Great Lakes Charter Fishing Industry in 2002

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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.

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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 of the Great Lakes. The survey is an effort to provide an update on the status, characteristics and economics of the charter fishing business in the Great Lakes and is modeled after a similar survey conducted in 1994. All data reported here are for the year 2002.

Methods

Lead by Ohio Sea Grant, the Great Lakes Sea Grant Network programs surveyed the Great Lakes charter-fishing captains during October 2002 to April 2003 using a modified Dillman mail survey technique (Dillman 1978). Non-respondents were sent up to three reminder letters. In 2002, there were an estimated 1,932 Great Lakes charter captains representing a decline of over 24% from the estimated 2,547 captains in 1994. A total of 1,767 captains were surveyed and 868 captains returned surveys with usable data, a response rate of 49%. Of the responding captains, about 16% were from New York, 1% from Pennsylvania, 41% from Ohio, 24% from Michigan, 3% from Illinois-Indiana, 13% from Wisconsin, and 2% from Minnesota.

Business

The typical Great Lakes charter-fishing captain in 2002 is a composite of all of the data from all of the lakes. The captain has been licensed for 13.4 years. Business organization and boat ownership patterns are presented in this summary (Table 1). About 90% of the responding captains operated their own charter firm. An estimated 42% of the Great Lakes charter captains had their homeport on Lake Erie/St Clair, 33% on Lake Michigan, 15% on Lake Ontario/Niagara River/St. Lawrence River, and 5% each on Lake Huron and Lake Superior. Most businesses (89%) operated one boat, over 8% operated two boats and just under 3% of respondents operated three or more boats. Charterboats were typically 28.8 feet long, almost 16 years old, and powered by an inboard (76%), inboard/outdrive (16%) or outboard (8%) motor.

The average replacement cost for a Great Lakes charter vessel is \$72,693, and the replacement cost for onboard business-related equipment is, \$12,523. About 33% of the respondents use a vehicle for towing their boat and other charter-related business. The average replacement cost of the vehicle was \$26,533; for the trailer it is \$3,982. The vehicle is used for boat towing over 18% of the time and for other charter business about 36% of the time.

Captains

Over 97% of the responding captains were "six-pack" operators, licensed to carry no more than six passengers. Notably, less than 18% of the captains rely on the charter business as their primary source of income (Table 2).

About 69% of the 847 responding captains are members of a professional charter captains association. The top four cited benefits of membership in a professional charter captains association are drug testing, advertising, and industry representation to state, federal and local authorities and education on current issues and regulations (Table 3).

Table 1
Ownership and Organization of Great Lakes Charter Boat Fishing Businesses

Characteristic	Percent of Respondents	Number of Respondents
Business Ownership		773
Sole proprietor	84%	647
Partnership	4%	29
Corporation	10%	76
Other	2%	21
Business Organization		855
Owned own boat	88%	755
Leased or rented boat	1%	10
Salaried employee	1%	12
Freelance hire per trip	7%	57
Other arrangement	3%	21

Table 2
Reasons for Entering/Remaining in the Great Lakes Charter Fishing Business

868 Respondents were asked to check all items that applied.

Reason	Percent of Respondents
Help people enjoy fishing	72%
Like the work	68%
Secondary source of income	54%
Primary income source	18%
Other	7%

Table 3
Benefits of Membership in an Ohio Professional Charter Boat Association

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

Benefit	Percent of Respondents
Drug testing	50%
Advertising	36%
Industry representation to state, federal, and local authorities	34%
Education on current issues and regulations	30%
Increased business	16%
Can share charters	14%
Obtain business operation ideas and advice	14%
Group insurance	12%
Get tips about fishing	12%
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 Great Lakes Charter Industry
 689 Respondents

Fish Species	Number of Trips	Average No. Trips/Business	Average Charge/Trip	Revenues Earned
Walleye				
Full day	18,857	10.8	\$ 401	\$ 4,334
Half day	5,290	3.0	308	935
Lake trout and Salmon				
Full day	16,709	9.6	453	4,334
Half day	29,944	17.2	328	5,622
Steelhead				
Full day	5,954	3.4	424	1,445
Half day	5,290	3.0	317	961
Smallmouth bass				
Full day	4,679	2.7	380	1,018
Half day	995	0.6	269	153
Yellow perch				
Full day	3,195	1.8	337	617
Half day	2,287	1.3	278	364
Subtotals				
Full day	49,394	28.3		\$ 11,748
Half day	43,807	25.1		8,034
Totals	93,209	53.4		\$ 19,290

* The numbers of trips are an extrapolation of respondent trip rates applied to the total population of Great Lakes charter captains (Lake Erie, Lake St. Clair, Lake Huron, Lake Michigan and Lake Superior). Revenues are calculated from the average number of trips/business multiplied by the average charge/trip.

Table 5
Services Offered by Great Lakes Charter Boat Operators

Service or Provision	----- Percent of Respondents -----		Number of Respondents
	Included in Base Charter Fee	Included for Additional Fee	
Tackle	97%	2%	797
Ice	93%	2%	743
Bait	88%	5%	755
Fish cleaning	65%	18%	752
Photos/Video	35%	14%	601
Lodging/Food	8%	33%	545

Table 6
Average Annual Operating Costs for Great Lakes Boat-Owning Captains

Item	Expense	Number of Respondents
Fuel/Oil	\$ 2,282	635
Dockage	1,417	637
Labor (hired)	1,288	624
Equipment repair	1,083	636
Advertising	897	627
Miscellaneous	823	632
Insurance	785	637
Boat maintenance & repair	772	635
Office & communications	628	626
Boat storage fees	620	636
Boat repair not covered by insurance	355	636
License fees	162	632
Drug testing/Professional dues	125	638
Boat launch fees	53	635
Total Operating Costs	\$ 11,443	614

Trips

Responding captains average 28.3 full-day and 25.1 half-day paid charter trips per year. Just over 50% of these trips are for lake trout and salmon. Almost 26% of the trips are for walleye, 12% are for steelhead, over 6% are for small mouth bass and not quite 6% are for yellow perch. Applying the response data to the total population of active captains yields an estimated 93,209 charter trips of which 53% were full day and 47% were half-day trips (Table 4).

On average, 7% of Great Lakes charter captains fished on a Great Lake other than the one on which their homeport was located. Of those captains that fished on another waterbody, about 33% of their charters were conducted on the other lakes.

In the Great Lakes an estimated 25% of the total trips conducted are run in August, 24% in July, 20% in June, over 12% in the September, 12% in May, over 3% in October, 3% in April and less than 1% in March.

Charter fees vary according to lake, state, target species, length of the charter, and services offered. The most popular trip was the half-day lake trout and salmon charter; its cost across the region averaged \$328 per boat (range \$25 to \$560). Half-day trips were defined as trips lasting less than seven hours.

Services and Provisions

Most charter businesses provide tackle, ice, bait, and fish cleaning as part of their standard charter trip service. Some captains also offer fish cleaning, trip photos/videos, or lodging and food for an additional fee (Table 5).

Costs and Returns

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

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 \$4,041. The average annual cash needed to operate a Great Lakes charter firm is \$15,484 for those making boat loan payments and \$11,443 for those who do not (Table 7). This means that the typical charter firm that owns and operates a single vessel must generate sales of either \$15,484 or \$11,443 just to meet the cash needs of the firm.

Estimated average annual revenues are \$19,782. The result is a net positive cash flow of \$4,298 for firms making boat loan payments and a positive cash flow of \$8,339 for firms not making boat loan payments. Depending on the situation, those firms with a positive cash flow could pay the day-to-day bills to operate the charter business from the revenues earned from chartering.

Economic costs are all the costs of operating the charter firm. Boat loan costs are a cash requirement if a loan exists, but are not part of the economic costs. The economic costs include operating costs (\$11,443) plus capital costs. Capital costs include depreciation of 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 revenue in excess of operating and capital costs.

The average annual depreciation reported by responding captains was \$4,869. Estimated replacement cost of the boat (\$72,693) and equipment (\$12,523) totals \$85,216. Interest costs based on 5% of this value are \$4,261. Thus the capital cost (depreciation + interest) is \$9,130. The economic cost to operate a typical Great Lakes charter firm is estimated to be \$20,573 for a firm depreciating a vessel and \$15,704 for a firm with a fully depreciated vessel.

To provide a positive return to the operating captain for time and labor, an average Great Lakes charter business would have had to generate sales exceeding \$20,573 or \$15,704 to cover the average operating and capital costs. Depending on the depreciation situation, the average Great Lakes charter firm operated at a net return of either negative (-\$791) or positive \$4,078 for the owner's time and labor. At an average price of \$328 for a half-day salmon/lake trout charter a captain would have to run as many as 63 trips to cover average operating and capital costs.

In the Great Lakes Region, charter-fishing firms brought in an estimated total sales of \$34.5 million (Table 8). Captains from Ohio had estimated sales of \$10.4 million followed by Michigan at \$10.1, New York at an estimated \$7.0 million, Wisconsin at \$4.8 million, Illinois-Indiana at \$1.0 million, Minnesota at \$0.6 million and Pennsylvania at \$0.4 million. It is estimated that over 36% of Great Lakes charter trips are run on Lake Erie /Lake St. Clair, 35% on Lake Michigan, almost 19% on Lake Ontario/Niagara River/St. Lawrence River, just under 6% on Lake Superior and about 5% on Lake Huron.

Table 7
Annual Cash Flow of Average Great Lakes Charter Firm

Income/Expenses	Businesses WITH Boat Loan Payments	Businesses WITHOUT Boat Loan Payments	Number of Respondents
Average Revenue	\$ 19,782	\$ 19,782	689
Cash Flow Needs			
Average operating costs	11,443	11,443	614
Boat loan payments	4,041	0	269
Cash Needed	15,484	11,443	
Net Cash Flow	\$ 4,298	\$ 8,339	
Economic Cost			
Average operating cost	11,443	11,443	
Capital Costs			
Interest costs	4,261	4,261	
Depreciation	4,869	0	138
Total Economic Cost	\$ 20,573	\$ 15,704	
Net Return to Operator	(-791)	4,078	

Table 8
Average Income, Average Economic Cost, Estimated Net Profit or Loss for Great Lakes Charter Businesses by State

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)	----- Depreciation -----	
						Average Depreciation Reported	Number of Respondents
All G.L. States 689 Respondents	1,746	\$ 19,782	\$ 20,573 or 15,704	\$ (-791) or 4,078	\$ 34.5 ¹	NA ¹	
Illinois-Indiana 20 Respondents	64	\$ 15,484	\$ 21,277 or 18,430	\$ (-5,793) or (-2,946)	\$ 1.0	\$ 2,847	10
Michigan 183 Respondents	468	\$ 22,200	\$ 22,317 or 17,386	\$ (-117) or 4,814	\$ 10.4	\$ 4,931	78
Minnesota 24 Respondents	44	\$ 13,983	\$ 16,973 or 14,333	\$ (-2,990) or (-350)	\$ 0.6	\$ 2,640	5
New York 124 Respondents	305	\$ 22,907	\$ 18,594 or 14,741	\$ 4,313 or 8,166	\$ 7.0	\$ 3,866	14
Ohio 213 Respondents	651	\$ 15,956	\$ 20,381 or 14,585	\$ (-4,426) or 1,370	\$ 10.4	\$ 5,796	47
Pennsylvania 12 Respondents	28	\$ 13,312	\$ 10,427 or 9,427	\$ 2,885 or 3,885	\$ 0.4	\$ 1,000	2
Wisconsin 85 Respondents	209	\$ 22,340	\$ 21,599 or 16,482	\$ 741 or 5,912	\$ 4.7	\$ 5,171	24

* The average economic cost is calculated with and without depreciation costs.

¹ The combined estimates for the individual lakes do not equal the estimates for all the Great Lakes states because of missing data and differing estimation methodologies

Table 9
Methods of Advertising Used by Great Lakes Charter Fishing Businesses
 868 Respondents

Advertising Method	Effectiveness *	Percent of Respondents	Number of Respondents
Word of mouth	2.7	89%	768
Brochures	2.2	77%	666
Direct mailings	2.2	55%	476
Website	2.2	52%	450
Charter association publications	1.7	42%	364
Chamber of commerce publications	1.8	37%	319
Signs	1.8	37%	323
Sport & travel shows	2.0	32%	275
Tourism promotion agency	1.8	32%	274
Newspaper ads	1.6	25%	216
Telephone directory	1.8	21%	181
Magazine ads	1.7	21%	180
Other	2.5	5%	44

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

Table 10
Concerns of the Great Lakes Charter Industry
 868 Respondents

Concerns	Percent of Respondents
The economy	45%
Lack of fish/reduced abundance	38%
Impacts of exotic species (zebra mussels)	31%
Boating equipment and operating costs	24%
Poor weather/climate	21%
Fish consumption advisories	20%
Drawing clients	19%
Fisheries management	19%
Illegal fishing practices	17%
Other problems	15%
Over harvest of fish stocks	12%
Government regulations	10%
Changes in forage fish populations	10%
Toxic contaminants	8%
Poor weather forecasting	7%
Lack of one-day nonresident fishing license	7%
Un-sportsmanlike behavior of captains	6%
Lack of information on the fishery	5%
Un-sportsmanlike behavior of anglers	5%
Overcrowding of the fishery	4%
Avian Botulism	2%
Changes in water currents	2%

Promotion

Approximately 80% of Great Lakes charter customers come from over 50 miles or further away from the charter firm's homeport bringing nature based tourism dollars into the local community.

Captains used various methods of marketing and advertising and rated them for effectiveness on a scale of 1 (not effective) to 3 (very effective) (Table 9). Two advertising methods that were 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 mailings and a web site to be the most effective means of advertising. About 89% of the respondents use word of mouth, 77% use brochures, 55% use direct mail and 52% use a web site to promote their business.

Lake Information

About 32% of 759 responding captains utilize the Great Lakes Forecasting System web site (<http://superior.eng.ohio-state.edu>) and almost 44% of 793 responding captains use the Sea Grant Coastwatch web 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 help make decisions, find fish, improve fish catch, improve charter safety, and plan charter trips.

Industry Trends and the Future

In 2002, the estimated 1,746 Great Lakes charter firms made an estimated 93,209 charter trips. In general, we had fewer charter captains making more trips per captain in 2002 than in 1994.

Captains were asked to select the three most important problems facing the charter industry (Table 10). The top concern is the economy, followed by the lack of fish/reduced fish abundance, the impacts of exotic species (ie. zebra mussels), and boating equipment and operating costs. It is interesting to note that except for possibly boating equipment and operating costs these concerns are largely outside the control of individual charter captains.

With almost 18% of the respondents planning to quit the business in the next five years a continuing decline in the number of Great Lakes charter firms may be expected (Table 11). Except for Illinois-Indiana and Pennsylvania, captains in most states increased the numbers of charters made from 1994 to 2002. The estimated number of charters by state in 2002 and 1994 are respectively: OH (42.1 and 39.0); MI (59.2 and 36 to 46); IL-IN (46.3 and 47.1); WI (65.5 and 48.8); PA (34.2 and 46.2); MN (45.3 and 37.0) and NY (61.1 and 59.7). Most captains (59%) plan to increase the number of trips they make over the next five years and about 41% plan to increase their charter fees. About 22% do not plan any major changes.

The changing Great Lakes charter fishing industry is a reflection of the changing Great Lakes sport fisheries and may, if carefully studied, prove to be a useful barometer of the status of the Great Lakes sport fisheries.

Strategies for Charter Businesses

It is a good idea to occasionally examine your charter business management with an eye to improvement. Results of the 2002 Great Lakes charter captain surveys suggest that to increase future profitability, charter captains should reduce expenses, increase revenues and aggressively market their industry.

Refinancing your boat at a lower interest rate, 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 your expenses.

The most direct ways to increase revenues is to increase the number of charter trips that are made and by offering additional services such as executive charters, or dive charter trips. Increasing your 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 make by following the seasonal nature of the fishery and fishing out of the “hot” ports at different times of the angling season. Half-day trips are popular as a way to lower costs to clients and 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 the client base to include the growing number of middle aged, nature-experience tourists with above average disposable incomes. Captains should seek ways to expand the client base by using industry-wide marketing efforts or by cooperating with local, state, and regional tourism bureaus.

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 efficient angling opportunities, a higher than average catch rate and a “world class Great Lake angling experience” in their marketing efforts.

Captains should consider membership in a professional charter captain’s organization. Belonging to a professional organization allows members to work with decision makers, fishery managers, and regulators from an organized power base.

Table 11
Five-Year Plans of Great Lakes Charter Captains
868 Respondents

Activity	Percent of Respondents
Increase of number of annual trips	59%
Increase prices of charter services	41%
No major changes	22%
Buy/Operate newer boat	19%
Quit the charter business	18%
Buy/Operate bigger boat	14%
Branch out into other fishing related businesses	10%
Expand into multi-activity and/or non-fishing charters	9%
Other	8%
Hire additional first mate(s)	8%
Decrease number of annual trips	7%
Hire additional charter captain(s)	6%
Buy/Operate an additional boat(s)	5%
Buy/Own charter boat	2%
Decrease Prices	1%

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