

STUDY PERFORMANCE REPORT

State: Michigan

Project No.: F-53-R-15

Study No.: 462

Title: Charter boat catch and effort from the Michigan waters of the Great Lakes

Period Covered: April 1, 1998 to September 30, 1999

Study Objective: To obtain a continuous annual record of fishing effort as well as the number, type, and location of fish caught by charter boat anglers in the Michigan waters of the Great Lakes.

Summary: Charter boat catch reporting data forms, grid maps of the Great Lakes and instructions were sent to charter fishing operators prior to the 1998 angling season. Completed data forms were sent to the Charlevoix Fisheries Research Station and entered on computer throughout the year. Charter fishing operators who were delinquent with their reports were notified on a regular basis throughout the season via post card or certified mail.

By the end of the 1998 season, data was compiled on 18,700 charter fishing excursions. Ninety-eight percent of all charter operators complied with the reporting requirements. A report was prepared which summarized the results of the project by lake and was mailed to all charter operators during March 1999.

Data from the 1999 fishing season is currently being entered into computer files.

Job 1. Title: Distribute data forms.

Findings: Reporting forms and grid maps of the Great Lakes were mailed to 539 charter operators during March 1998. Charter operators, who used their vessels for fishing, were informed that they were required by law to complete the form each time they fished. The form was to be mailed by the tenth day of the following month to the Michigan Department of Natural Resources (MDNR) Charlevoix Fisheries Research Station.

During March 1999 reporting materials were mailed to 528 charter operators.

Job 2. Title: Data entry and compliance.

Findings: Completed data forms received by the Charlevoix Fisheries Research Station were logged, coded by port fished, and entered on computer. Catch and effort data on 18,700 charter fishing excursions were recorded for the 1998 season. Incomplete forms received were logged and returned to the charter operator with a letter stating the reason the report was returned. Data entry continues at this time for the 1999 season.

Each month (June through October) post-card notices were sent to charter operators who had not filed a report for the previous month. Two notices were sent each month, the first after an operator was delinquent for 10 days, and the second after 30 days.

In December 1998 letters were sent via certified mail to operators who had not filed reports for one or more months during May through September for the 1998 season. The letter informed the operator that this would be the last notice he or she would receive. If the recipient did not respond in writing within 14 days his or her name would be submitted to MDNR's Law Enforcement Division recommending non-issuance of an inspection certificate for the 1999 season. A list of 12 names of charter operators who had not complied with the reporting requirements was sent to MDNR's Law Enforcement Division in February 1999.

During 1998, an average of 34% of charter operators had not filed their monthly reports within 10 days after the date they were due. An average of 15% of all operators were delinquent for at least 30 days. The monthly average rate of non-compliance during 1998 was unchanged as compared to 1997. By end December 1998 98% of all charter operators had complied with the law. The final compliance rate for 1998 was the same as 1997.

Job 3. Title: Quality control and education.

Findings: Presentations regarding the results and importance of the charter boat reporting program were made at several charter boat workshops which were held around the State of Michigan during the winter months (1999). The workshops were organized by the Michigan State University Extension Service (Sea Grant). The presentations stressed the need for accurate and timely information from charter operators. Adequate time was allowed at the end of each session to field questions from charter captains.

I made several field trips during the 1998 and 1999 fishing seasons to various ports on lakes Michigan and Huron. The objective of these trips was to promote the reporting program and to talk informally to charter captains.

Job 4. Title: Compile data and write annual reports.

Findings: Charter boat operators submitted reports for a total of 18,700 charter excursions which took place during 1998. These data were compiled and summarized by lake (Tables 1 through 5) and presented in a report titled *Charter Boat Catch and Effort from the Michigan Waters of the Great Lakes, 1998*. Copies of this report were mailed to all charter operators during March 1999 along with reporting forms to be used in 1999 and grid maps. Charter anglers spent 494,662 hours fishing Michigan's waters of the Great Lakes in 1998. The total catch was 64,300 yellow perch, 54,100 walleye, 45,900 lake trout, 39,800 chinook salmon, 17,300 coho salmon, 15,100 rainbow trout and 2,600 brown trout.

In addition to the annual report which was sent to charter fishing operators, two MDNR Fisheries Technical Reports, (in press) titled *Charter boat catch and effort from the Michigan waters of the Great Lakes, 1996* and *Charter boat catch and effort from the Michigan waters of the Great Lakes, 1997* were completed during 1998 (Rakoczy 1998 and Rakoczy and Wesander-Russell 1998).

Literature cited:

Rakoczy G. P. In press. Charter boat catch and effort from the Michigan waters of the Great Lakes, 1996. Michigan Department of Natural Resources Fisheries Technical Report, Ann Arbor.

Rakoczy G. P and D. Wesander-Russell. In press. Charter boat catch and effort from the Michigan waters of the Great Lakes, 1997. Michigan Department of Natural Resources Fisheries Technical Report, Ann Arbor.

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Table 1.—Total catch per hour, catch per excursion, number caught, and fishing effort (angler hours, trips, and charter excursions) for charter boats on Lake Michigan, 1998.

Species	Total catch per hour	Total catch per excursion	Month							Season
			Apr	May	Jun	Jul	Aug	Sep	Oct	
Coho salmon	0.048	1.367	1,967	5,566	1,929	1,981	3,268	2,027	124	16,862
Chinook salmon	0.081	2.336	287	4,920	3,294	7,556	9,710	2,900	144	28,811
Rainbow trout	0.040	1.147	783	1,815	3,235	3,136	3,211	1,235	733	14,148
Brown trout	0.006	0.176	484	428	264	524	335	95	42	2,172
Lake trout	0.094	2.688	99	5,601	6,439	9,258	10,175	1,583	1	33,156
Yellow perch	0.074	2.114	4,137	11,475	2,294	3,904	2,820	1,441	0	26,071
Walleye	0.005	0.137	0	246	318	200	312	320	298	1,694
Other	0.001	0.015	15	12	45	37	36	19	22	186
Lamprey on:										
Chinook salmon			3	16	9	26	54	9	0	117
Lake trout			0	98	62	71	110	16	0	357
Angler hours			14,606	51,498	54,499	78,881	109,974	37,440	7,168	354,065
Angler trips			2,460	8,345	9,067	13,248	17,888	6,322	1,039	58,369
Anglers										
Resident			1,285	4,788	5,763	8,764	12,098	4,393	535	37,626
Nonresident			1,175	3,557	3,308	4,484	5,790	1,929	504	20,747
Charter excursions			389	1,590	1,845	2,795	3,936	1,486	292	12,333

Table 2.—Total catch per hour, catch per excursion, number caught, and fishing effort (angler hours, trips, and charter excursions) for charter boats on Lake Huron, 1998.

Species	Total catch per hour	Total catch per excursion	Month							Season
			Apr	May	Jun	Jul	Aug	Sep	Oct	
Coho salmon	0.004	0.090	9	45	34	54	93	14	40	289
Chinook salmon	0.161	3.384	90	1,120	900	3,241	4,434	1,065	17	10,867
Rainbow trout	0.013	0.274	139	125	157	228	170	39	21	879
Brown trout	0.006	0.123	13	67	188	59	61	5	3	396
Lake trout	0.126	2.639	56	1,519	2,277	2,052	2,318	251	0	8,473
Yellow perch	0.025	0.518	0	59	0	451	326	812	16	1,664
Walleye	0.037	0.784	17	105	267	1,440	647	40	0	2,516
Other	0.005	0.106	0	18	57	162	91	10	1	339
Lamprey on:										
Chinook salmon			3	56	45	147	278	39	0	568
Lake trout			0	21	57	52	36	9	0	175
Angler hours			1,443	8,039	9,232	19,076	23,176	6,032	447	67,444
Angler trips			228	1,388	1,639	3,418	4,084	1,087	65	11,909
Anglers										
Resident			208	1,288	1,478	3,030	3,535	976	55	10,570
Nonresident			20	100	161	391	608	111	10	1,401
Charter excursions			80	364	457	886	1,098	297	29	3,211

Table 3.—Total catch per hour, catch per excursion, number caught, and fishing effort (angler hours, trips, and charter excursions) for charter boats on Lake Erie, 1998.

Species	Total catch per hour	Total catch per excursion	Month							Season
			Apr	May	Jun	Jul	Aug	Sep	Oct	
Coho salmon	0.000	0.001	0	0	1	0	0	0	0	1
Chinook salmon	0.000	0.001	0	0	1	0	0	0	0	1
Rainbow trout	0.000	0.010	0	10	6	1	0	0	0	17
Brown trout	0.000	0.000	0	0	0	0	0	0	0	0
Lake trout	0.000	0.000	0	0	0	0	0	0	0	0
Yellow perch	0.704	18.880	0	185	300	2,380	11,485	13,370	3,979	31,699
Walleye	1.067	28.610	298	7,392	28,127	10,646	69	1,415	90	48,037
Other	0.018	0.485	11	130	388	137	15	69	64	814
Lamprey on:										
Chinook salmon			0	0	0	0	0	0	0	0
Lake trout			0	0	0	0	0	0	0	0
Angler hours			435	8,785	21,105	8,898	2,415	2,635	758	45,031
Angler trips			79	1,507	3,798	1,620	489	524	150	8,167
Anglers										
Resident			58	1,413	3,438	1,510	473	487	148	7,527
Nonresident			21	94	360	157	16	37	2	687
Charter excursions			20	311	750	348	103	114	33	1,679

Table 4.—Total catch per hour, catch per excursion, number caught, and fishing effort (angler hours, trips, and charter excursions) for charter boats on Lake Superior, 1998.

Species	Total catch per hour	Total catch per excursion	Month							Season
			Apr	May	Jun	Jul	Aug	Sep	Oct	
Coho salmon	0.007	0.234	0	14	21	28	46	12	0	121
Chinook salmon	0.007	0.233	0	0	1	7	37	75	0	120
Rainbow trout	0.002	0.076	0	1	2	10	22	4	0	39
Brown trout	0.000	0.004	0	0	0	2	0	0	0	2
Lake trout	0.252	8.182	0	97	680	1,653	1,572	214	6	4,222
Yellow perch	0.000	0.000	0	0	0	0	0	0	0	0
Walleye	0.000	0.002	0	1	0	0	0	0	0	1
Other	0.001	0.047	0	0	14	6	4	0	0	24
Lamprey on:										
Chinook salmon			0	0	0	0	0	0	0	0
Lake trout			0	1	4	8	5	1	0	19
Angler hours			0	400	2,857	6,306	6,027	1,105	28	16,722
Angler trips			0	70	371	847	818	190	4	2,300
Anglers										
Resident			0	55	179	374	342	143	4	1,097
Nonresident			0	15	192	473	476	47	0	1,203
Charter excursions			0	18	83	183	176	55	1	516

Table 5.—Total catch per hour, catch per excursion, number caught, and fishing effort (angler hours, trips, and charter excursions) for charter boats on Lake St. Clair and the St. Clair River, 1998.

Species	Total catch per hour	Total catch per excursion	Month							Season
			Apr	May	Jun	Jul	Aug	Sep	Oct	
Coho salmon	0.001	0.014	0	0	0	0	0	0	6	6
Chinook salmon	0.000	0.007	0	0	1	0	2	0	0	3
Rainbow trout	0.000	0.000	0	0	0	0	0	0	0	0
Brown trout	0.000	0.000	0	0	0	0	0	0	0	0
Lake trout	0.000	0.000	0	0	0	0	0	0	0	0
Yellow perch	0.429	11.324	0	44	687	661	1,643	1,009	848	4,892
Walleye	0.161	4.243	42	228	262	895	340	66	0	1,833
Other	0.254	6.692	0	56	635	884	850	448	18	2,891
Lamprey on:										
Chinook salmon			0	0	0	0	0	0	0	0
Lake trout			0	0	0	0	0	0	0	0
Angler hours			94	1,111	2,176	3,293	2,649	1,585	492	11,400
Angler trips			17	212	339	520	409	233	78	1,808
Anglers										
Resident			13	205	325	469	374	224	78	1,688
Nonresident			4	7	14	51	35	9	0	120
Charter excursions			6	45	85	123	99	57	17	432