STUDY PERFORMANCE REPORT

Study: Michigan	Project No.: F-53-R-14
Study No.: <u>462</u>	Title: Charter boat catch and effort from the Michigan waters of the Great Lakes
Period Covered:	April 1, 1997 to March 31, 1998

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 1997 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 1997 season, data was compiled on over 15,000 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 February, 1998.

Job 1. Title: <u>Distribute data forms.</u>

Findings: Reporting forms, and grid maps of the Great Lakes were mailed to 483 charter operators during March, 1997. 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.

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 15,912 charter fishing excursions were recorded by year's end (December, 1997). Incomplete forms received were logged and returned to the charter operator with a letter stating the reason the report was returned.

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 November, 1997 letters were sent via certified mail to operators who had not filed reports for one or more months during May through September. 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 1998 season. A list of eight names of charter operators who had not complied with the reporting requirements was sent to MDNR's Law Enforcement Division in February, 1998.

During 1997, 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 1997 was virtually unchanged as compared to 1996. By end of December, 1997 98% of all charter operators had complied with the law. The final compliance rate for 1997 was the same as 1996.

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 (1998). 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 for the project biologist to field questions from charter captains.

Several field trips were made by the project biologist during the 1997 fishing season 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 on a total of 15,912 charter excursions which took place during 1997. These data were compiled and summarized by lake (Tables 1 through 5) and were presented in a report titled *Charter Boat Catch and Effort from the Michigan Waters of the Great Lakes, 1997.* Copies of this report were mailed to all charter operators during February, 1998. Charter anglers spent 443,776 hours fishing Michigan's waters of the Great Lakes in 1997. The total catch was 89,000 yellow perch, 42,100 walleye, 40,200 chinook salmon, 33,100 lake trout, 16,000 rainbow trout, 12,300 coho salmon and 5,000 brown trout.

In addition to the annual report which was sent to charter fishing operators an MDNR Fisheries Technical Report, No. 97-5, titled *Charter boat catch and effort from the Michigan waters of the Great Lakes, 1995* was published during 1997 (Rakoczy 1997).

Literature cited:

Rakoczy G. P. 1997. Charter boat catch and effort from the Michigan waters of the Great Lakes, 1995. Michigan Department of Natural Resources Fisheries, Technical Report 97-5, Ann Arbor.

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Dated: March 31, 1998

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, 1997.

						Month				
	Total	Total								
Species	catch per hour	catch per excursion	Apr	May	Jun	Jul	Aug	Sep	Oct	Season
Coho salmon	0.0381	1.1244	636	2,618	1,309	1,154	3,510	2,414	289	11,930
Chinook salmon	0.0957	2.8227	382	5,088	4,276	5,063	11,608	3,381	151	29,949
Rainbow trout	0.0474	1.3969	372	1,884	2,886	3,306	3,942	1,645	786	14,821
Brown trout	0.0153	0.4505	1,288	1,132	607	647	858	181	67	4,780
Lake trout	0.0716	2.1125	39	2,479	5,072	8,165	6,274	381	4	22,414
Yellow perch	0.1388	4.0918	23,029	6,080	6,538	3,747	3,671	349	0	43,414
Walleye	0.0019	0.0546	7	42	175	208	106	19	22	579
Other	0.0009	0.0278	54	60	8	44	25	69	35	295
Lamprey on chinook salmon			3	7	17	11	21	7	0	66
Lamprey on lake trout			0	22	72	78	67	8	0	247
Angler hours			15,134	41,347	51,619	67,585	99,030	32,468	5,660	312,843
Angler trips			2,600	6,716	8,380	11,201	15,960	5,478	832	51,167
Anglers										
Resident Nonresident			1,451 1,149	3,867 2,849	5,486 2,894	7,340 3,861	11,073 4,887	3,826 1,652	398 434	33,441 17,726
Charter excursions			320	1,221	1,701	2,373	3,483	1,285	227	10,610

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, 1997.

		Month								
Species	Total catch per hour	Total catch per excursion	Apr	May	Jun	Jul	Aug	Sep	Oct	Season
Species	per nour	CACUISION	Арі	iviay	Juli	Jui	Aug	БСР	Oct	Scason
Coho salmon	0.0025	0.0501	6	18	21	30	44	14	1	134
Chinook salmon	0.1850	3.7867	196	1,301	891	1,852	4,684	1,170	24	10,118
Rainbow trout	0.0200	0.4087	154	128	166	279	280	54	31	1,092
Brown trout	0.0036	0.0734	15	26	15	95	30	14	1	196
Lake trout	0.0984	2.0142	2	635	1,212	1,900	1,570	63	0	5,382
Yellow perch	0.0156	0.3200	0	0	3	236	579	37	0	855
Walleye	0.0298	0.6093	5	64	93	1,072	383	11	0	1,628
Other	0.0051	0.1048	3	4	30	134	101	8	0	280
Lamprey on chinook salmon			1	54	26	100	236	57	2	476
Lamprey on lake trout			0	13	47	64	38	0	0	162
Angler hours			1,545	5,697	7,217	14,661	19,937	5,196	438	54,691
Angler trips			235	994	1,230	2,573	3,602	928	67	9,629
Anglers										
Resident			212	932	1,114	2,117	3,040	797	61	8,273
Nonresident			23	62	116	456	562	131	6	1,356
Charter excursions			83	264	360	709	963	265	28	2,672

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, 1997.

	Month									
Species	Total catch per hour	Total catch per excursion	Apr	May	Jun	Jul	Aug	Sep	Oct	Season
1										
Coho salmon	0.0000	0.0000	0	0	0	0	0	0	0	0
Chinook salmon	0.0000	0.0000	0	0	0	0	0	0	0	0
Rainbow trout	0.0003	0.0087	0	6	9	0	0	0	0	15
Brown trout	0.0000	0.0000	0	0	0	0	0	0	0	0
Lake trout	0.0000	0.0000	0	0	0	0	0	0	0	0
Yellow perch	0.7423	19.7924	17	239	542	810	12,720	17,312	2,581	34,221
Walleye	0.8363	22.3013	240	4,079	18,352	14,684	1,149	6	49	38,559
Other	0.0328	0.8739	0	528	649	318	8	0	8	1,511
Lamprey on chinook salmon			0	0	0	0	0	0	0	0
Lamprey on lake trout			0	0	0	0	0	0	0	0
Angler hours			355	6,917	19,273	12,358	3,740	3,039	422	46,104
Angler trips			65	1,203	3,456	2,213	690	603	91	8,321
Anglers										
Resident			56	979	3,163	2,007	635	575	80	7,495
Nonresident			9	224	293	206	55	28	11	826
Charter excursions			16	253	708	459	149	123	21	1,729

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, 1997.

		<u>-</u>				Month				
Species	Total catch per hour	Total catch per excursion	Apr	May	Jun	Jul	Aug	Sep	Oct	Season
Species	per nour	CACUISIOII	Арі	Way	Jun	Jui	Aug	БСР	Oct	Scason
Coho salmon	0.0110	0.4320	0	7	93	85	22	12	0	219
Chinook salmon	0.0020	0.0769	0	1	6	3	10	19	0	39
Rainbow trout	0.0033	0.1302	0	0	36	15	15	0	0	66
Brown trout	0.0007	0.0256	0	4	9	0	0	0	0	13
Lake trout	0.2674	10.5444	0	25	1,164	2,031	1,871	255	0	5,346
Yellow perch	0.0009	0.0355	0	18	0	0	0	0	0	18
Walleye	0.0000	0.0000	0	0	0	0	0	0	0	0
Other	0.0002	0.0079	0	0	0	1	3	0	0	4
Lamprey on chinook salmon			0	0	0	0	0	1	0	1
Lamprey on lake trout			0	1	8	10	10	3	0	32
Angler hours			0	188	4,646	7,462	6,636	1,061	0	19,993
Angler trips			0	30	539	893	876	143	0	2,481
Anglers			6	26	225	166	201	70		1.267
Resident Nonresident			0	26 4	333 206	469 424	381 495	78 65	0	1,287 1,194
Charter excursions			0	9	104	177	181	36	0	507

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, 1997.

			Month							
	Total catch	Total catch per								
Species	per hour	excursion	Apr	May	Jun	Jul	Aug	Sep	Oct	Season
Coho salmon	0.0006	0.0152	0	0	0	0	0	6	0	6
Chinook salmon	0.0062	0.1599	12	47	4	0	0	0	0	63
Rainbow trout	0.0000	0.0000	0	0	0	0	0	0	0	0
Brown trout	0.0000	0.0000	0	0	0	0	0	0	0	0
Lake trout	0.0000	0.0000	0	0	0	0	0	0	0	0
Yellow perch	1.0379	26.7234	0	545	2,067	1,390	902	4,437	1,188	10,529
Walleye	0.1321	3.4010	117	143	186	475	372	47	0	1,340
Other	0.2617	6.7386	0	3	758	889	572	432	1	2,655
Lamprey on chinook salmon			0	0	0	0	0	0	0	0
Lamprey on lake trout			0	0	0	0	0	0	0	0
Angler hours			211	726	2,173	2,802	1,998	1,828	407	10,145
Angler trips			47	157	377	425	331	273	72	1,682
Anglers										
Resident Nonresident			47 0	157 0	371 6	395 30	302 29	244 29	66 6	1,582 100
Charter excursions			12	34	89	103	75	63	18	394