

Survey Report for Manistee Lake Open Water Fishery, Manistee County, 2016

Waterbody	Manistee Lake
Year	2016
County	Manistee County
Sites	129
Survey period	February 20 to March 31
Survey design	Roving (instantaneous)-access
Count methods/modes	Roving (instantaneous)/boat and shore
Clerk time	full time
Survey purpose	Characterize general effort and catch aspects of the fishery

Notes

Survey followed a roving (instantaneous)-access design. Funding was provided by the Federal Aid to Sport Fish Restoration Project F-81, Study 230499. Two clerks worked full time to collect angler survey data. Two weekend days and 3 week days were randomly selected for sampling during each week of the survey season. No holidays were sampled. The clerks followed a randomized count and interview schedule. One of two shifts was selected each sample day. The entire water body was sampled each day. Starting location within the waterbody and direction of travel were randomized for both counting and interviewing. Roving (instantaneous) counts of boat and shore anglers were made once per day. Survey period for both counts and interviews was February 20 to March 31. Months were estimated separately. “NAN” in a table means there was not enough information to make an estimate.

Table 1.–Daylight hours used to estimate catch and effort on Manistee Lake, February 20 to March 31, 2016.

Year	Month	Daylight hours
2016	February	11
2016	March	11

Table 2.—Estimated harvest, catch per hour, and fishing pressure for Manistee Lake boat fishery. Two standard errors are given below the estimates.

Species	C/H	February	March	Season
HARVEST				
Northern Pike	—	—	—	—
	—	—	—	—
Yellow Perch	0.8254	—	613	613
	2.3652	—	966	966
Bluegill	0.0110	—	8	8
	0.0345	—	17	17
Black Crappie	0.0220	—	16	16
	0.0645	—	28	28
Coho Salmon	0.0110	—	8	8
	0.0349	—	17	17
TOTAL HARVEST	0.8694	—	646	646
	2.4544	—	966	966
RELEASED				
Northern pike	0.0110	—	8	8
	0.0345	—	17	17
Largemouth bass	0.0110	—	8	8
	0.0343	—	16	16
Yellow Perch	1.9335	—	1,436	1,436
	9.0125	—	NAN	5,742
Rainbow trout	0.1111	82	—	82
	0.3466	165	—	165
Brown trout	0.0278	21	—	21
	0.0866	41	—	41
TOTAL RELEASED	2.0944	103	1,452	1,555
	9.2930	170	NAN	5,810
TOTAL CATCH	2.9638	103	2,097	2,201
	10.6417	170	NAN	5,890
ANGLER HOURS		330	413	743
		660	NAN	1,777
ANGLER TRIPS		41	73	114
		83	NAN	304

Table 3.—Estimated harvest, catch per hour, and fishing pressure for Manistee Lake shore fishery. Two standard errors are given below the estimates.

Species	C/H	February	March	Season
HARVEST				
Northern Pike	0.0132	—	2	2
	0.0314	—	4	4
Yellow Perch	0.0066	—	1	1
	0.0157	—	2	2
Bluegill	—	—	—	—
	—	—	—	—
Black Crappie	—	—	—	—
	—	—	—	—
Coho Salmon	—	—	—	—
	—	—	—	—
TOTAL HARVEST	0.0197	—	3	3
	0.0390	—	4	4
RELEASED				
Northern pike	0.0329	—	5	5
	0.0784	—	10	10
Largemouth bass	—	—	—	—
	—	—	—	—
Yellow Perch	—	—	—	—
	—	—	—	—
Rainbow trout	—	—	—	—
	—	—	—	—
Brown trout	—	—	—	—
	—	—	—	—
TOTAL RELEASED	0.0329	—	5	5
	0.0784	—	10	10
TOTAL CATCH	0.0526	—	8	8
	0.0993	—	11	11
ANGLER HOURS		44	106	150
		88	174	195
ANGLER TRIPS		16	17	32
		33	29	44

Table 4.—Estimated harvest, catch per hour, and fishing pressure for the combined shore and boat fishery on Manistee Lake. Two standard errors are given below the estimates.

Species	C/H	February	March	Season
HARVEST				
Northern Pike	0.0022	–	2	2
	0.0070	–	4	4
Yellow Perch	0.6875	–	614	614
	1.9967	–	966	966
Bluegill	0.0092	–	8	8
	0.0290	–	17	17
Black Crappie	0.0183	–	16	16
	0.0543	–	28	28
Coho Salmon	0.0092	–	8	8
	0.0294	–	17	17
TOTAL HARVEST	0.7263	–	649	649
	2.0774	–	966	966
RELEASED				
Northern pike	0.0147	–	13	13
	0.0419	–	19	19
Largemouth bass	0.0092	–	8	8
	0.0289	–	16	16
Yellow Perch	1.6079	–	1,436	1,436
	7.5347	–	NAN	5,742
Rainbow trout	0.0924	82	–	82
	0.2916	165	–	165
Brown trout	0.0231	21	–	21
	0.0729	41	–	41
TOTAL RELEASED	1.7472	103	1,457	1,560
	7.7994	170	NAN	5,830
TOTAL CATCH	2.4736	103	2,105	2,209
	8.9594	170	NAN	5,910
ANGLER HOURS		374	519	893
		666	NAN	2,180
ANGLER TRIPS		57	90	146
		90	NAN	370