

Survey Report for the Manistee River Open Water Fishery, Manistee County, 2016

Waterbody	Manistee River
Year	2016
County	Manistee County
Sites	130,131,341
Survey period	February 19 to March 31
Survey design	Roving (instantaneous)-roving
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)-roving design. Funding was provided by the Federal Aid to Sport Fish Restoration Project F-81, Study 230499. Two clerks worked full time to collect angling survey data. 2 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 Manistee River was divided into 3 sections: 130,131,341. All sites were sampled each day. Starting direction of travel was downstream 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 19 to March 31. Months were estimated separately. “**NAN**” in a table means there was not enough information to make an estimate. There was no ice fishery on the river portion of this survey during this time.

Table 1.—Daylight hours used to estimate catch and effort for the Manistee River winter fishery for the period of February 19 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 the winter boat fishery on the Manistee River. Two standard errors are given below the estimates.

Species	C/H	February	March	Season
HARVEST				
Walleye	—	—	—	—
	—	—	—	—
Rainbow Trout	0.1083	414	1,145	1,559
	0.1412	NAN	589	1,759
Brown Trout	—	—	—	—
	—	—	—	—
Common White Sucker	—	—	—	—
	—	—	—	—
Redhorse	—	—	—	—
	—	—	—	—
TOTAL HARVEST	0.1083	414	1,145	1,559
	0.1412	NAN	589	1,759
RELEASED				
Walleye	0.0021	—	30	30
	0.0034	—	44	44
Northern pike	—	—	—	—
	—	—	—	—
Rainbow trout	0.0364	47	476	524
	0.0352	55	369	373
Brown trout	0.0417	141	460	601
	0.0555	NAN	404	695
Chinook salmon	—	—	—	—
	—	—	—	—
Coho salmon	—	—	—	—
	—	—	—	—
TOTAL RELEASED	0.0802	188	966	1,154
	0.0833	NAN	549	933
TOTAL CATCH	0.1884	603	2,110	2,713
	0.1853	NAN	805	1,991
ANGLER HOURS		2,113	12,287	14,400
		NAN	4,169	9,426
ANGLER TRIPS		419	2,423	2,842
		NAN	869	1,887

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

Species	C/H	February	March	Season
HARVEST				
Walleye	0.0028	–	54	54
	0.0043	–	80	80
Rainbow Trout	0.1457	31	2,810	2,841
	0.1270	47	2,025	2,026
Brown Trout	0.0036	15	56	71
	0.0062	23	113	115
Common White Sucker	0.0016	–	32	32
	0.0026	–	48	48
Redhorse	0.0024	–	47	47
	0.0039	–	72	72
TOTAL HARVEST	0.1562	46	2,999	3,045
	0.1304	52	2,032	2,033
RELEASED				
Walleye	0.0114	–	223	223
	0.0132	–	232	232
Northern pike	–	–	–	–
	–	–	–	–
Rainbow trout	0.0824	–	1,606	1,606
	0.0687	–	1,072	1,072
Brown trout	0.1598	593	2,522	3,115
	0.2029	NAN	2,754	3,635
Chinook salmon	0.0090	–	175	175
	0.0178	–	335	335
Coho salmon	0.0034	–	66	66
	0.0054	–	100	100
TOTAL RELEASED	0.2660	593	4,592	5,185
	0.2367	NAN	2,985	3,813
TOTAL CATCH	0.4222	639	7,590	8,230
	0.3064	NAN	3,611	4,321
ANGLER HOURS		1,445	18,048	19,493
		NAN	7,871	9,764
ANGLER TRIPS		383	4,125	4,508
		NAN	1,827	2,383

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

Species	C/H	February	March	Season
HARVEST				
Walleye	0.0016	–	54	54
	0.0025	–	80	80
Rainbow Trout	0.1298	446	3,954	4,400
	0.1038	NAN	2,109	2,762
Brown Trout	0.0021	15	56	71
	0.0035	23	113	115
Common White Sucker	0.0009	–	32	32
	0.0015	–	48	48
Redhorse	0.0014	–	47	47
	0.0022	–	72	72
TOTAL HARVEST	0.1358	460	4,143	4,604
	0.1067	NAN	2,116	2,805
RELEASED				
Walleye	0.0075	–	253	253
	0.0079	–	236	236
Northern pike	–	–	–	–
	–	–	–	–
Rainbow trout	0.0628	47	2,083	2,130
	0.0457	55	1,133	1,134
Brown trout	0.1096	734	2,982	3,716
	0.1312	NAN	2,784	4,047
Chinook salmon	0.0052	–	175	175
	0.0102	–	335	335
Coho salmon	0.0019	–	66	66
	0.0031	–	100	100
TOTAL RELEASED	0.1870	781	5,558	6,339
	0.1585	NAN	3,035	4,357
TOTAL CATCH	0.3229	1,242	9,701	10,943
	0.2213	NAN	3,700	5,182
ANGLER HOURS		3,558	30,335	33,893
		NAN	8,907	16,789
ANGLER TRIPS		801	6,548	7,349
		NAN	2,023	3,790