

Survey Report for Big Manistique Lake, Winter, 2009

Waterbody	Big Manistique Lake
Year	Winter, 2009
Sites	" Big Manistique Lake "
Survey period	February 1 to March 15
Survey design	Roving-roving (roving counts and interviews)
Interview type/mode	roving/open ice, shanty
Count type/mode	progressive/open ice and shanty
Clerk time	full time
Survey purpose	Characterize general effort and catch aspects of the fishery

Notes

Survey followed a roving-roving (roving counts and interviews) design. All funding was provided through Fisheries Division. One clerk worked full time to collect angler survey data. Both weekend days and 3 randomly selected weekdays were selected for sampling during each week of the survey season. No holidays were sampled. Clerk 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. aerial, progressive counts of open ice and shanty anglers were made once per day. Survey period for both counts and interviews was February 1 to March 15. Months were estimated separately. Estimates are given in Tables xxx.

Table –Work shifts used to estimate catch and effort at Big Manistique Lake, February 1 to March 15, Winter, 2009

	Year	Month	F
1	2009	2	10
2	2009	3	13

Estimated harvest, catch per hour, and fishing pressure for open ice. Two standard errors are given in parentheses.

Species	C/H	February	March	Season
HARVEST				
Walleye	0.0884 (0.0488)	931 (550)	212 (161)	1,143 (573)
Northern pike	0.0079 (0.0064)	72 (73)	30 (31)	102 (79)
Yellow Perch	0.1412 (0.0640)	1,510 (681)	318 (204)	1,828 (711)
Common white sucker	0.0005 (0.0009)	0 (0)	6 (12)	6 (12)
Cisco	0.0465 (0.0328)	562 (398)	39 (42)	602 (400)
TOTAL HARVEST	0.2844 (0.1017)	3,076 (964)	605 (266)	3,681 (1,000)
RELEASED				
Walleye	0.0679 (0.0376)	645 (415)	234 (151)	879 (442)
Northern pike	0.0186 (0.0145)	95 (129)	146 (124)	241 (179)
Smallmouth bass	0.0021 (0.0030)	11 (17)	17 (34)	28 (38)
Yellow Perch	0.2968 (0.1272)	3,041 (1,301)	800 (468)	3,841 (1,382)
Common white sucker	0.0004 (0.0007)	5 (9)	0 (0)	5 (9)
Cisco	0.0001 (0.0002)	0 (0)	1 (3)	1 (3)
OTH1	0.0011 (0.0022)	0 (0)	14 (28)	14 (28)
TOTAL RELEASED	0.3870 (0.1445)	3,796 (1,372)	1,213 (509)	5,009 (1,463)
TOTAL CATCH	0.6714 (0.2077)	6,872 (1,676)	1,818 (574)	8,690 (1,772)
ANGLER HOURS		6,733 (1,761)	6,210 (2,443)	12,942 (3,011)
ANGLER TRIPS		1,164 (456)	771 (520)	1,935 (691)

Estimated harvest, catch per hour, and fishing pressure for shanty. Two standard errors are given in parentheses.

Species	C/H	February	March	Season
HARVEST				
Walleye	0.0285 (0.0347)	107 (129)	1 (2)	108 (129)
Northern pike	0.0247 (0.0216)	92 (79)	2 (3)	94 (79)
Yellow Perch	0.1988 (0.1252)	624 (421)	128 (132)	752 (441)
Common white sucker	0.0003 (0.0006)	1 (2)	0 (0)	1 (2)
Cisco	0.0279 (0.0266)	101 (97)	5 (6)	106 (97)
TOTAL HARVEST	0.2802 (0.1413)	924 (458)	136 (132)	1,060 (476)
RELEASED				
Walleye	0.0494 (0.0387)	94 (93)	93 (104)	187 (140)
Northern pike	0.0218 (0.0242)	68 (87)	14 (20)	82 (90)
Smallmouth bass	0.0045 (0.0090)	0 (0)	17 (34)	17 (34)
Yellow Perch	0.1723 (0.1227)	607 (434)	45 (70)	651 (439)
Common white sucker	0 (0)	0 (0)	0 (0)	0 (0)
Cisco	0.0068 (0.0098)	24 (36)	2 (4)	26 (36)
OTH1	0.0045 (0.0090)	0 (0)	17 (34)	17 (34)
TOTAL RELEASED	0.2592 (0.1385)	793 (454)	187 (136)	980 (474)
TOTAL CATCH	0.5394 (0.2161)	1,717 (644)	323 (190)	2,040 (672)
ANGLER HOURS		2,590 (654)	1,191 (562)	3,781 (862)
ANGLER TRIPS		486 (231)	146 (65)	632 (240)

Estimated harvest, catch per hour, and fishing pressure for Big Manistique Lake. Two standard errors are given in parentheses.

Species	C/H	February	March	Season
HARVEST				
Walleye	0.0748 (0.0378)	1,038 (564)	213 (161)	1,251 (587)
Northern pike	0.0117 (0.0070)	164 (108)	32 (31)	196 (112)
Yellow Perch	0.1542 (0.0578)	2,134 (801)	445 (243)	2,579 (837)
Common white sucker	0.0004 (0.0007)	1 (2)	6 (12)	7 (12)
Cisco	0.0423 (0.0259)	663 (410)	44 (43)	707 (412)
TOTAL HARVEST	0.2835 (0.0849)	4,000 (1,067)	741 (297)	4,740 (1,108)
RELEASED				
Walleye	0.0637 (0.0302)	739 (425)	327 (183)	1,066 (463)
Northern pike	0.0193 (0.0125)	163 (156)	160 (126)	323 (200)
Smallmouth bass	0.0027 (0.0031)	11 (17)	34 (48)	44 (51)
Yellow Perch	0.2686 (0.1003)	3,648 (1,371)	845 (473)	4,492 (1,450)
Common white sucker	0.0003 (0.0006)	5 (9)	0 (0)	5 (9)
Cisco	0.0016 (0.0022)	24 (36)	3 (5)	27 (37)
OTH1	0.0019 (0.0027)	0 (0)	31 (44)	31 (44)
TOTAL RELEASED	0.3581 (0.1138)	4,589 (1,445)	1,400 (526)	5,989 (1,538)
TOTAL CATCH	0.6416 (0.1652)	8,588 (1,796)	2,141 (604)	10,729 (1,895)
ANGLER HOURS		9,323 (1,879)	7,401 (2,506)	16,723 (3,132)
ANGLER TRIPS		1,650 (511)	917 (524)	2,567 (732)