

Survey Report for GRATIOT LAKE, Summer, 2011

Waterbody	Gratiot Lake
Year	Summer, 2011
Sites	"GRATIOTLAKE "
Survey period	May – July and Oct
Survey design	roving – roving
Interview type/mode	Access - boat
Clerk time	Part time
Survey purpose	Characterize general effort and catch aspects of the fishery

Notes

Survey followed a roving-roving design. All funding was provided through Fisheries Division. One clerk worked part 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 Gratiot Lake and direction of travel were randomized for both counting and interviewing. Two counts of effort were made per day. Survey period for both counts and interviews were May 8 to July 31st and Oct 1st - October 31. Months were estimated separately. August and September estimates were not made because the clerk needed to fill in at Keweenaw Bay.

Table –Work shifts used to estimate catch and effort at Gratiot Lake, May 8 to October 31, Summer, 2011

	Year	Month	Hrs/shift
1	2011	5	16
2	2011	6	16
3	2011	7	16
4	2011	10	13

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

Species	C/H	May	June	July	October	Season
HARVEST						
Walleye	0.2002 (0.1816)	35 (41)	64 (88)	262 (242)	276 (406)	637 (483)
Northern pike	0.0024 (0.0047)	7 (15)	0 (0)	0 (0)	0 (0)	7 (15)
Smallmouth bass	0.0039 (0.0081)	0 (0)	0 (0)	0 (0)	12 (25)	12 (25)
Yellow Perch	0.0198 (0.0374)	0 (0)	2 (4)	59 (115)	2 (4)	63 (115)
Rock bass	0.0096 (0.0196)	0 (0)	0 (0)	30 (61)	0 (0)	30 (61)
Common white sucker	0.0023 (0.0046)	0 (0)	7 (14)	0 (0)	0 (0)	7 (14)
Muskellunge	0.0013 (0.0028)	4 (9)	0 (0)	0 (0)	0 (0)	4 (9)
TOTAL HARVEST	0.2394 (0.1976)	47 (45)	74 (89)	351 (275)	290 (407)	762 (501)
RELEASED						
Walleye	0.2519 (0.2190)	4 (9)	150 (274)	351 (341)	297 (367)	802 (571)
Northern pike	0.1047 (0.0994)	103 (150)	36 (48)	82 (98)	113 (195)	333 (269)
Smallmouth bass	0.0305 (0.0279)	51 (56)	41 (48)	5 (10)	0 (0)	97 (75)
Yellow Perch	0.0286 (0.0391)	0 (0)	3 (6)	28 (44)	60 (107)	91 (116)
Rock bass	0.0064 (0.0131)	0 (0)	0 (0)	20 (40)	0 (0)	20 (40)
Common white sucker	0.0035 (0.0078)	0 (0)	0 (0)	11 (24)	0 (0)	11 (24)
TOTAL RELEASED	0.4257 (0.2941)	158 (160)	230 (283)	497 (361)	470 (429)	1,355 (648)
TOTAL CATCH	0.6651 (0.4198)	205 (166)	304 (296)	848 (453)	760 (591)	2,117 (819)
ANGLER HOURS		626 (675)	651 (598)	1,284 (1,029)	623 (806)	3,184 (1,588)
ANGLER TRIPS		159 (172)	161 (153)	380 (316)	134 (185)	833 (433)