

Survey Report for Portage Chain of Lakes, Summer, 2014

Waterbody	Portage Chain of Lakes
Year	Summer, 2014
County	
Sites	"Baseline Lake", "Gallagher Lake", "Huron River", "Little Portage Lake", "Portage Lake", "Strawberry Lake", "Whitewood Lake", "Zukey Lake"
Survey period	April 25 to October 31
Survey design	Roving/roving
Clerk time	Full 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 full time to collect angling (interview and count) 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 Portage Chain of Lakes was divided into 8 sections: Baseline Lake, Gallagher Lake, Huron River, Little Portage Lake, Portage Lake, Strawberry Lake, Whitewood Lake and Zukey Lake. Either the west section of lakes or the east section of lakes was sampled once per day. Starting location within a section and direction of travel were randomized for both counting and interviewing. Two counts of boat anglers were made per day. Survey period for both counts and interviews was April 25 to October 31. Months were estimated separately. Estimates are given in the following tables. Where there was no shore angling observed, we do not report the shore table.

Table –Work shifts used to estimate catch and effort at Portage Chain of Lakes, April 25 to October 31, Summer, 2014

	Year	Month	Hrs/day
1	2014	4	15
2	2014	5	16
3	2014	6	17
4	2014	7	17
5	2014	8	16
6	2014	9	15
7	2014	10	14

Table 1. Estimated harvest, catch per hour, and fishing pressure by for Baseline Lake_boat mode. Two standard errors are given in parentheses.

Species	C/H	April	May	June	July	August	September	October	Season
HARVEST									
Walleye	0.0025	0	0	0	0	0	8	0	8
	(0.0053)	(0)	(0)	(0)	(0)	(0)	(18)	(0)	(18)
Northern pike	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Largemouth bass	0.0067	0	12	11	0	0	0	0	23
	(0.0086)	(0)	(23)	(17)	(0)	(0)	(0)	(0)	(29)
Smallmouth bass	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Yellow Perch	0.0012	0	0	4	0	0	0	0	4
	(0.0027)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(9)
Bluegill	0.2629	120	320	295	154	14	0	0	902
	(0.1571)	NAN	(357)	(280)	(181)	(23)	(0)	(0)	(489)
Rock bass	0.0108	0	20	17	0	0	0	0	37
	(0.0136)	(0)	(29)	(35)	(0)	(0)	(0)	(0)	(46)
Black crappie	0.0010	0	0	4	0	0	0	0	4
	(0.0022)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(7)
Rainbow trout	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Brown bullhead	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
TOTAL HARVEST	0.2851	120	352	331	154	14	8	0	979
	(0.1604)	NAN	(359)	(283)	(181)	(23)	(18)	(0)	(493)
RELEASED									
Walleye	0.0015	0	0	0	5	0	0	0	5
	(0.0030)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(10)
Northern pike	0.0107	0	3	19	6	0	0	8	37
	(0.0093)	(0)	(5)	(22)	(12)	(0)	(0)	(17)	(31)
Largemouth bass	0.6779	11	249	605	919	256	238	49	2,327
	(0.3179)	NAN	(175)	(507)	(695)	(191)	(194)	(55)	(921)

Smallmouth bass	0.0533	0	54	21	38	37	34	0	183
	(0.0374)	(0)	(74)	(24)	(48)	(71)	(30)	(0)	(120)
Yellow Perch	0.0365	0	4	39	69	14	0	0	125
	(0.0404)	(0)	(7)	(56)	(121)	(23)	(0)	(0)	(135)
Bluegill	0.4670	5	389	185	956	0	68	0	1,603
	(0.3476)	NAN	(481)	(175)	(990)	(0)	(135)	(0)	(1,123)
Rock bass	0.2505	5	147	337	200	140	27	3	860
	(0.1294)	NAN	(127)	(264)	(195)	(158)	(38)	(5)	(388)
Black crappie	0.0010	0	0	4	0	0	0	0	4
	(0.0022)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(8)
Brown bullhead	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Channel catfish	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Bowfin	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
OTH1	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
TOTAL RELEASED	1.4983	22	845	1,209	2,194	446	366	59	5,142
	(0.5803)	NAN	(533)	(601)	(1,232)	(259)	(242)	(58)	(1,514)
TOTAL CATCH	1.7834	142	1,197	1,540	2,348	460	375	59	6,121
	(0.6454)	NAN	(642)	(664)	(1,246)	(260)	(242)	(58)	(1,592)
ANGLER HOURS		60	441	928	927	373	574	128	3,432
		NAN	(276)	(453)	(534)	(274)	(302)	(117)	(864)
ANGLER TRIPS		11	88	188	NAN	109	136	26	558
		NAN	(61)	(108)	(104)	NAN	(95)	(25)	(189)

Table 2. Estimated harvest, catch per hour, and fishing pressure by Gallagher Lake_boat mode. Two standard errors are given in parentheses.

Species	C/H	April	May	June	July	August	September	October	Season
HARVEST									
Walleye	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Northern pike	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Largemouth bass	0.0056	0	10	0	0	0	0	0	10
	(0.0113)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(20)
Smallmouth bass	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Yellow Perch	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Bluegill	0.4646	0	169	111	187	0	0	349	816
	(0.2793)	(0)	(212)	(182)	(340)	(0)	(0)	NAN	(440)
Rock bass	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Black crappie	0.1022	0	179	0	0	0	0	0	179
	(0.1334)	(0)	(229)	(0)	(0)	(0)	(0)	(0)	(229)
Rainbow trout	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Brown bullhead	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
TOTAL HARVEST	0.5724	0	359	111	187	0	0	349	1,005
	(0.3212)	(0)	(313)	(182)	(340)	(0)	(0)	NAN	(496)
RELEASED									
Walleye	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Northern pike	0.0234	0	0	12	29	0	0	0	41
	(0.0337)	(0)	(0)	(10)	(57)	(0)	(0)	(0)	(58)
Largemouth bass	0.5340	0	134	212	148	380	64	0	938
	(0.2230)	(0)	(145)	(203)	(169)	NAN	NAN	(0)	(301)

Smallmouth bass	0.0497	0	24	1	10	12	39	0	87
	(0.0346)	(0)	(40)	(4)	(21)	(33)	NAN	(0)	(56)
Yellow Perch	0.0849	0	27	30	0	0	0	92	149
	(0.0474)	(0)	(48)	(55)	(0)	(0)	(0)	NAN	(73)
Bluegill	0.6098	0	290	343	0	24	0	414	1,071
	(0.3383)	(0)	(337)	(392)	(0)	(67)	(0)	NAN	(521)
Rock bass	0.2828	0	218	128	31	120	0	0	497
	(0.1880)	(0)	(224)	(141)	(50)	(137)	(0)	(0)	(302)
Black crappie	0.0622	0	91	4	0	0	0	15	109
	(0.0763)	(0)	(127)	(11)	(0)	(0)	(0)	(30)	(131)
Brown bullhead	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Channel catfish	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Bowfin	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
OTH1	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
TOTAL RELEASED	1.6468	0	783	730	219	536	104	521	2,892
	(0.5842)	(0)	(453)	(467)	(186)	NAN	NAN	NAN	(676)
TOTAL CATCH	2.2191	0	1,142	841	406	536	104	869	3,897
	(0.7606)	(0)	(550)	(501)	(388)	NAN	NAN	NAN	(839)
ANGLER HOURS		8	277	553	211	428	113	167	1,756
		NAN	(225)	(302)	(252)	NAN	(119)	NAN	(468)
ANGLER TRIPS		NAN	51	88	NAN	NAN	35	NAN	173
		(0)	(47)	(79)	(0)	(99)	NAN	(25)	(137)

Table 3. Estimated harvest, catch per hour, and fishing pressure for Little Portage Lake_boat mode. Two standard errors are given in parentheses.

Species	C/H	April	May	June	July	August	September	October	Season
HARVEST									
Walleye	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Northern pike	0.0012	0	0	0	0	0	0	6	6
	(0.0024)	(0)	(0)	(0)	(0)	(0)	(0)	(12)	(12)
Largemouth bass	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Smallmouth bass	0.0019	0	0	0	9	0	0	0	9
	(0.0035)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(17)
Yellow Perch	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Bluegill	0.6216	0	32	39	1,429	644	832	88	3,065
	(0.3316)	(0)	(44)	(83)	(1,262)	(438)	(556)	(154)	(1,458)
Rock bass	0.0028	0	4	0	9	0	0	0	14
	(0.0045)	(0)	(11)	(0)	(19)	(0)	(0)	(0)	(22)
Black crappie	0.1644	0	271	31	494	6	9	0	811
	(0.1149)	(0)	(238)	(66)	(470)	(15)	(11)	(0)	(532)
Rainbow trout	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Brown bullhead	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
TOTAL HARVEST	0.7920	0	308	71	1,943	650	840	94	3,905
	(0.3683)	(0)	(243)	(106)	(1,347)	(438)	(556)	(155)	(1,552)
RELEASED									
Walleye	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Northern pike	0.1032	0	136	77	0	158	92	47	509
	(0.0810)	(0)	(115)	(72)	(0)	(315)	(151)	(65)	(380)
Largemouth bass	0.1636	0	314	217	115	81	37	42	807
	(0.0916)	(0)	(243)	(263)	(133)	(112)	(74)	(52)	(408)

Smallmouth bass	0.0042	0	11	0	0	0	6	3	21
	(0.0057)	(0)	(24)	(0)	(0)	(0)	(12)	(7)	(28)
Yellow Perch	0.0366	0	0	36	40	105	0	0	180
	(0.0472)	(0)	(0)	(71)	(56)	(210)	(0)	(0)	(229)
Bluegill	0.4126	0	95	16	932	317	616	58	2,034
	(0.2521)	(0)	(137)	(28)	(958)	(265)	(530)	(124)	(1,142)
Rock bass	0.0995	0	161	128	176	0	26	0	491
	(0.0886)	(0)	(179)	(212)	(313)	(0)	(44)	(0)	(421)
Black crappie	0.0958	0	249	157	66	0	0	0	472
	(0.0892)	(0)	(241)	(332)	(111)	(0)	(0)	(0)	(425)
Brown bullhead	0.0006	0	0	0	0	0	0	3	3
	(0.0012)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(6)
Channel catfish	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Bowfin	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
OTH1	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
TOTAL RELEASED	0.9161	0	967	631	1,328	661	776	153	4,516
	(0.3635)	(0)	(426)	(484)	(1,024)	(475)	(558)	(149)	(1,423)
TOTAL CATCH	1.7081	0	1,275	701	3,271	1,310	1,616	247	8,421
	(0.5934)	(0)	(490)	(496)	(1,692)	(647)	(788)	(215)	(2,106)
ANGLER HOURS		0	696	625	1,457	819	879	454	4,930
		(0)	(380)	(402)	(745)	(389)	(488)	(404)	(1,189)
ANGLER TRIPS		0	189	379	389	151	263	98	1,469
		(0)	(120)	(216)	(250)	(85)	NAN	(97)	(375)

Table 4. Estimated harvest, catch per hour, and fishing pressure by Portage Lake_boat mode. Two standard errors are given in parentheses.

Species	C/H	April	May	June	July	August	September	October	Season
HARVEST									
Walleye	0.0024	0	8	14	0	10	0	0	31
	(0.0031)	(0)	(17)	(29)	(0)	(19)	(0)	(0)	(39)
Northern pike	0.0003	0	0	0	0	4	0	0	4
	(0.0007)	(0)	(0)	(0)	(0)	(9)	(0)	(0)	(9)
Largemouth bass	0.0049	0	8	6	17	32	0	0	63
	(0.0044)	(0)	(17)	(13)	(21)	(47)	(0)	(0)	(56)
Smallmouth bass	0.0015	0	0	13	6	0	0	0	19
	(0.0018)	(0)	(0)	(18)	(13)	(0)	(0)	(0)	(22)
Yellow Perch	0.0041	0	0	47	0	0	6	0	53
	(0.0064)	(0)	(0)	(81)	(0)	(0)	(12)	(0)	(82)
Bluegill	0.5958	234	931	1,409	975	505	2,106	1,475	7,635
	(0.2127)	NAN	(667)	(956)	(629)	(572)	(1,420)	(1,274)	(2,392)
Rock bass	0.0577	0	80	418	112	93	37	0	740
	(0.0350)	(0)	(123)	(339)	(130)	(186)	(64)	(0)	(431)
Black crappie	0.0376	176	71	101	36	0	13	84	482
	(0.0209)	NAN	(89)	(199)	(71)	(0)	(20)	(110)	(255)
Rainbow trout	0.0006	0	8	0	0	0	0	0	8
	(0.0014)	(0)	(17)	(0)	(0)	(0)	(0)	(0)	(17)
Brown bullhead	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
TOTAL HARVEST	0.7051	410	1,107	2,008	1,145	644	2,162	1,559	9,035
	(0.2258)	NAN	(684)	(1,037)	(647)	(604)	(1,422)	(1,279)	(2,446)
RELEASED									
Walleye	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Northern pike	0.0288	5	62	45	25	56	102	74	369
	(0.0157)	NAN	(104)	(62)	(27)	(64)	(108)	(74)	(192)
Largemouth bass	0.3538	113	1,409	942	650	778	435	207	4,534
	(0.1319)	NAN	(1,095)	(695)	(383)	(538)	(345)	(133)	(1,501)

Smallmouth bass	0.0248	5	26	96	80	26	60	24	317
	(0.0143)	NAN	(39)	(118)	(83)	(33)	(82)	(24)	(176)
Yellow Perch	0.0316	0	24	142	165	13	46	14	404
	(0.0167)	(0)	(28)	(135)	(122)	(26)	(77)	(21)	(203)
Bluegill	0.7605	423	1,024	1,592	1,406	1,093	2,863	1,343	9,745
	(0.2630)	NAN	(710)	(982)	(775)	(1,225)	(1,913)	(1,161)	(2,929)
Rock bass	0.1456	9	685	759	291	112	9	0	1,866
	(0.0681)	NAN	(547)	(560)	(175)	(123)	(13)	(0)	(812)
Black crappie	0.0207	0	70	158	38	0	0	0	265
	(0.0207)	(0)	(104)	(232)	(57)	(0)	(0)	(0)	(261)
Brown bullhead	0.0004	0	0	0	0	0	0	5	5
	(0.0007)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(9)
Channel catfish	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Bowfin	0.0024	0	0	0	0	31	0	0	31
	(0.0049)	(0)	(0)	(0)	(0)	(62)	(0)	(0)	(62)
OTH1	0.0003	0	0	0	0	0	4	0	4
	(0.0006)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(8)
TOTAL RELEASED	1.3689	554	3,299	3,735	2,656	2,110	3,520	1,667	17,541
	(0.3548)	NAN	(1,423)	(1,360)	(897)	(1,347)	(1,951)	(1,172)	(3,416)
TOTAL CATCH	2.0741	963	4,406	5,743	3,802	2,754	5,683	3,226	26,576
	(0.4831)	NAN	(1,579)	(1,711)	(1,106)	(1,476)	(2,414)	(1,734)	(4,202)
ANGLER HOURS		428	1,792	3,026	2,465	1,698	2,234	1,172	12,813
		NAN	(800)	(1,027)	(747)	(881)	(1,169)	(638)	(2,192)
ANGLER TRIPS		NAN	500	859	631	483	459	239	3,171
		NAN	(265)	(368)	(223)	(400)	(250)	(136)	(704)

Table 5. Estimated harvest, catch per hour, and fishing pressure by Strawberry Lake_boat mode. Two standard errors are given in parentheses.

Species	C/H	April	May	June	July	August	September	October	Season
HARVEST									
Walleye	0.0040	0	0	16	0	0	0	3	19
	(0.0068)	(0)	(0)	(32)	(0)	(0)	(0)	(5)	(32)
Northern pike	0.0024	0	0	0	3	0	3	6	11
	(0.0030)	(0)	(0)	(0)	(5)	(0)	(6)	(12)	(14)
Largemouth bass	0.0051	0	0	4	6	5	0	10	24
	(0.0050)	(0)	(0)	(8)	(8)	(5)	(0)	(19)	(23)
Smallmouth bass	0.0005	0	0	0	0	2	0	0	2
	(0.0009)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(4)
Yellow Perch	0.0010	0	0	0	0	0	0	5	5
	(0.0020)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(10)
Bluegill	1.1742	0	1,613	883	702	1,225	710	463	5,597
	(0.5267)	(0)	(1,182)	(639)	(577)	(894)	(742)	(927)	(2,085)
Rock bass	0.0078	0	6	31	0	0	0	0	37
	(0.0091)	(0)	(12)	(40)	(0)	(0)	(0)	(0)	(42)
Black crappie	0.0280	0	56	14	31	0	0	32	133
	(0.0227)	(0)	(73)	(18)	(29)	(0)	(0)	(64)	(103)
Rainbow trout	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Brown bullhead	0.0008	0	0	0	4	0	0	0	4
	(0.0014)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)
TOTAL HARVEST	1.2237	0	1,675	948	746	1,232	712	519	5,833
	(0.5343)	(0)	(1,184)	(641)	(578)	(894)	(742)	(929)	(2,089)
RELEASED									
Walleye	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Northern pike	0.0363	0	7	19	54	28	49	16	173
	(0.0277)	(0)	(15)	(29)	(102)	(31)	(50)	(26)	(125)
Largemouth bass	0.3114	0	111	448	327	434	152	12	1,484
	(0.1327)	(0)	(96)	(311)	(244)	(278)	(140)	(19)	(513)

Smallmouth bass	0.0300	0	0	93	17	18	14	0	143
	(0.0249)	(0)	(0)	(104)	(26)	(32)	(18)	(0)	(113)
Yellow Perch	0.0059	0	0	0	21	5	3	0	28
	(0.0091)	(0)	(0)	(0)	(41)	(9)	(6)	(0)	(43)
Bluegill	1.7740	0	1,738	962	1,102	3,438	856	360	8,455
	(0.8378)	(0)	(1,246)	(716)	(834)	(2,748)	(807)	(719)	(3,389)
Rock bass	0.0724	0	73	165	14	81	12	0	345
	(0.0455)	(0)	(77)	(154)	(23)	(96)	(15)	(0)	(199)
Black crappie	0.0128	0	0	19	5	0	37	0	61
	(0.0136)	(0)	(0)	(38)	(12)	(0)	(48)	(0)	(63)
Brown bullhead	0.0008	0	0	0	4	0	0	0	4
	(0.0017)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(8)
Channel catfish	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Bowfin	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
OTH1	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
TOTAL RELEASED	2.2436	0	1,930	1,707	1,543	4,004	1,122	388	10,694
	(0.9135)	(0)	(1,253)	(804)	(877)	(2,764)	(822)	(720)	(3,438)
TOTAL CATCH	3.4673	0	3,605	2,655	2,289	5,236	1,835	906	16,527
	(1.2094)	(0)	(1,724)	(1,028)	(1,051)	(2,906)	(1,107)	(1,176)	(4,023)
ANGLER HOURS		0	664	868	708	1,347	955	225	4,766
		(0)	(375)	(361)	(326)	(597)	(751)	(347)	(1,191)
ANGLER TRIPS		0	170	223	188	407	183	47	1,218
		(0)	(107)	(115)	(98)	(201)	(154)	(74)	(322)

Table 6. Estimated harvest, catch per hour, and fishing pressure by Whitewood Lake_boat. Two standard errors are given in parentheses.

Species	C/H	May	June	July	August	September	October	Season
HARVEST								
Walleye	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Northern pike	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Largemouth bass	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Smallmouth bass	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Yellow Perch	0.0223	0	26	0	0	0	0	26
	(0.0452)	(0)	(51)	(0)	(0)	(0)	(0)	(51)
Bluegill	0.5565	0	638	0	0	0	0	638
	(1.1311)	(0)	(1,275)	(0)	(0)	(0)	(0)	(1,275)
Rock bass	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Black crappie	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Rainbow trout	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Brown bullhead	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
TOTAL HARVEST	0.5788	0	663	0	0	0	0	663
	(1.1334)	(0)	(1,276)	(0)	(0)	(0)	(0)	(1,276)
RELEASED								
Walleye	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Northern pike	0.2070	48	10	90	22	68	0	237
	(0.1266)	NAN	(13)	(112)	(32)	NAN	(0)	(117)
Largemouth bass	0.8805	100	386	351	140	32	0	1,009
	(0.6005)	NAN	(486)	(284)	(155)	NAN	(0)	(583)

Smallmouth bass	0.0054	0	0	4	0	2	0	6
	(0.0081)	(0)	(0)	(8)	(0)	(5)	(0)	(9)
Yellow Perch	0.0085	0	10	0	0	0	0	10
	(0.0234)	(0)	(27)	(0)	(0)	(0)	(0)	(27)
Bluegill	1.1090	0	468	248	480	74	0	1,270
	(0.8570)	(0)	(546)	(277)	(615)	NAN	(0)	(868)
Rock bass	0.1443	0	74	92	0	0	0	165
	(0.1464)	(0)	(128)	(90)	(0)	(0)	(0)	(157)
Black crappie	0.0208	0	0	4	20	0	0	24
	(0.0363)	(0)	(0)	(8)	(40)	(0)	(0)	(41)
Brown bullhead	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Channel catfish	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Bowfin	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
OTH1	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
TOTAL RELEASED	2.3754	148	948	788	661	176	0	2,721
	(1.2652)	NAN	(742)	(422)	(637)	NAN	(0)	(1,065)
TOTAL CATCH	2.9542	148	1,611	788	661	176	0	3,384
	(1.8011)	NAN	(1,476)	(422)	(637)	NAN	(0)	(1,662)
ANGLER HOURS		120	321	265	258	135	46	1,145
		(152)	(235)	(177)	(195)	(155)	NAN	(414)
ANGLER TRIPS		24	147	81	103	32	NAN	387
		NAN	(163)	(54)	NAN	NAN	(0)	(172)

Table 7. Estimated harvest, catch per hour, and fishing pressure by Zukey Lake_boat. Two standard errors are given in parentheses.

Species	C/H	April	May	June	July	August	September	October	Season
HARVEST									
Walleye	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Northern pike	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Largemouth bass	0.0017	0	0	0	0	0	0	3	3
	(0.0036)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(6)
Smallmouth bass	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Yellow Perch	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Bluegill	1.4468	0	271	756	0	64	378	993	2,461
	(0.8706)	(0)	(391)	(570)	(0)	NAN	(429)	(943)	(1,246)
Rock bass	0.0294	0	0	50	0	0	0	0	50
	(0.0595)	(0)	(0)	(100)	(0)	(0)	(0)	(0)	(100)
Black crappie	0.0901	0	128	25	0	0	0	0	153
	(0.0954)	(0)	(146)	(50)	(0)	(0)	(0)	(0)	(155)
Rainbow trout	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Brown bullhead	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
TOTAL HARVEST	1.5679	0	399	831	0	64	378	995	2,667
	(0.8990)	(0)	(418)	(581)	(0)	NAN	(429)	(943)	(1,259)
RELEASED									
Walleye	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Northern pike	0.0382	0	0	11	41	9	4	0	65
	(0.0481)	(0)	(0)	(16)	(74)	(21)	(8)	(0)	(79)
Largemouth bass	0.5551	0	52	82	496	209	78	27	944
	(0.4205)	(0)	(68)	(70)	(632)	NAN	(83)	(34)	(646)

Smallmouth bass	0.0113	0	0	12	4	0	0	3	19
	(0.0122)	(0)	(0)	(17)	(8)	(0)	(0)	(6)	(20)
Yellow Perch	0.0085	0	0	11	4	0	0	0	14
	(0.0109)	(0)	(0)	(16)	(8)	(0)	(0)	(0)	(18)
Bluegill	1.3263	0	134	738	46	408	511	419	2,256
	(0.7024)	(0)	(188)	(589)	(74)	NAN	(577)	(409)	(943)
Rock bass	0.2422	0	36	216	6	118	37	0	412
	(0.1747)	(0)	(34)	(256)	(11)	NAN	(59)	(0)	(265)
Black crappie	0.0430	0	73	0	0	0	0	0	73
	(0.0578)	(0)	(95)	(0)	(0)	(0)	(0)	(0)	(95)
Brown bullhead	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Channel catfish	0.0054	0	0	0	0	0	9	0	9
	(0.0074)	(0)	(0)	(0)	(0)	(0)	(12)	(0)	(12)
Bowfin	0.0176	0	0	0	0	30	0	0	30
	(0.0057)	(0)	(0)	(0)	(0)	NAN	(0)	(0)	(0)
OTH1	0	0	0	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
TOTAL RELEASED	2.2476	0	295	1,070	596	773	639	449	3,823
	(1.0080)	(0)	(224)	(647)	(641)	NAN	(586)	(411)	(1,180)
TOTAL CATCH	3.8155	0	695	1,901	596	837	1,017	1,445	6,490
	(1.6033)	(0)	(474)	(869)	(641)	NAN	(726)	(1,029)	(1,726)
ANGLER HOURS		0	169	434	367	270	247	214	1,701
		(0)	(147)	(299)	(272)	(208)	(203)	(192)	(554)
ANGLER TRIPS		NAN	59	117	185	128	94	67	651
		(0)	(61)	(108)	(136)	NAN	(99)	(61)	(218)

Table 1. Estimated harvest, catch per hour, and fishing pressure all sites combined, 2014. Two standard errors are given in parentheses.

Species	C/H	April	May	June	July	August	September	October	Season
HARVEST									
Walleye	0.0019	0	8	29	0	10	8	3	59
	(0.0018)	(0)	(17)	(43)	(0)	(19)	(18)	(5)	(54)
Northern pike	0.0007	0	0	0	3	4	3	12	22
	(0.0007)	(0)	(0)	(0)	(5)	(9)	(6)	(17)	(20)
Largemouth bass	0.0040	0	30	21	23	37	0	13	123
	(0.0023)	(0)	(35)	(23)	(23)	(47)	(0)	(20)	(70)
Smallmouth bass	0.0010	0	0	13	16	2	0	0	30
	(0.0009)	(0)	(0)	(18)	(21)	(4)	(0)	(0)	(28)
Yellow Perch	0.0029	0	0	77	0	0	6	5	87
	(0.0032)	(0)	(0)	(96)	(0)	(0)	(12)	(10)	(98)
Bluegill	0.6912	354	3,336	4,130	3,447	2,452	4,025	3,368	21,113
	(0.1242)	NAN	(1,473)	(1,841)	(1,572)	NAN	(1,749)	NAN	(3,330)
Rock bass	0.0287	0	111	516	121	93	37	0	878
	(0.0148)	(0)	(127)	(358)	(131)	(186)	(64)	(0)	(447)
Black crappie	0.0577	176	706	175	562	6	22	116	1,762
	(0.0221)	NAN	(380)	(216)	(476)	(15)	(23)	(127)	(659)
Rainbow trout	0.0003	0	8	0	0	0	0	0	8
	(0.0006)	(0)	(17)	(0)	(0)	(0)	(0)	(0)	(17)
Brown bullhead	0.0001	0	0	0	4	0	0	0	4
	(0.0002)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)
TOTAL HARVEST	0.7886	530	4,199	4,962	4,175	2,604	4,101	3,516	24,086
	(0.1309)	NAN	(1,527)	(1,891)	(1,648)	NAN	(1,751)	NAN	(3,419)
RELEASED									
Walleye	0.0002	0	0	0	5	0	0	0	5
	(0.0003)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(10)
Northern pike	0.0468	5	257	194	245	272	314	145	1,431
	(0.0137)	NAN	NAN	(105)	(180)	(325)	NAN	(103)	(400)
Largemouth bass	0.3942	123	2,369	2,892	3,007	2,279	1,035	338	12,042
	(0.0612)	NAN	NAN	(1,090)	(1,103)	NAN	NAN	(158)	(1,558)

Smallmouth bass	0.0254	5	116	224	153	93	156	30	776
	(0.0079)	NAN	(95)	(160)	(102)	(91)	NAN	(26)	(233)
Yellow Perch	0.0298	0	54	268	299	136	49	106	911
	(0.0116)	(0)	(56)	(175)	(185)	(213)	(78)	NAN	(346)
Bluegill	0.8654	428	3,670	4,304	4,690	5,760	4,988	2,593	26,434
	(0.1190)	NAN	(1,567)	(1,519)	(1,810)	NAN	NAN	NAN	(2,835)
Rock bass	0.1518	14	1,321	1,807	809	570	112	3	4,636
	(0.0374)	NAN	(636)	(744)	(422)	NAN	(85)	(5)	(1,070)
Black crappie	0.0330	0	482	341	113	20	37	15	1,008
	(0.0176)	(0)	(307)	(407)	(125)	(40)	(48)	(30)	(529)
Brown bullhead	0.0004	0	0	0	4	0	0	8	11
	(0.0004)	(0)	(0)	(0)	(8)	(0)	(0)	(11)	(14)
Channel catfish	0.0003	0	0	0	0	0	9	0	9
	(0.0004)	(0)	(0)	(0)	(0)	(0)	(12)	(0)	(12)
Bowfin	0.0020	0	0	0	0	61	0	0	61
	(0.0002)	(0)	(0)	(0)	(0)	NAN	(0)	(0)	(0)
OTH1	0.0001	0	0	0	0	0	4	0	4
	(0.0003)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(8)
TOTAL RELEASED	1.5495	575	8,268	10,030	9,325	9,191	6,704	3,237	47,330
	(0.1656)	NAN	NAN	(2,069)	(2,183)	NAN	NAN	NAN	(3,007)
TOTAL CATCH	2.3381	1,105	12,467	14,992	13,500	11,795	10,805	6,753	71,416
	(0.2502)	NAN	NAN	(2,803)	(2,735)	NAN	NAN	NAN	(4,553)
ANGLER HOURS		495	4,159	6,756	6,401	5,193	5,136	2,405	30,545
		NAN	(1,047)	(1,337)	(1,293)	NAN	(1,529)	NAN	(2,626)
ANGLER TRIPS		NAN	1,082	2,001	NAN	NAN	1,201	NAN	4,284
		NAN	NAN	(502)	(393)	NAN	NAN	(196)	(667)