

Open Water Creel Survey Report for the Sanford Lake Fishery, Midland County, 2015

Waterbody	Sanford Lake
Year	2015
County	Midland County
Sites	Sanford Lake
Survey period	June 1 to August 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

This Survey followed a roving (instantaneous)-access design. All funding was provided by the Federal Aid to Sport Fish Restoration Project F-81, Study 230499. One clerk 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 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. Roving (instantaneous) counts of boat and shore anglers were made once per day. Survey period for both counts and interviews was June 1 to August 31. Months were estimated separately. Estimates are available for boat and shore

Table 1.–Daylight hours used to estimate catch and effort at Sanford Lake, June 1 to August 31, 2015.

Year	Month	Daylight hours
2015	6	17
2015	7	17
2015	8	15

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

Species	C/H	June	July	August	Season
HARVEST					
Walleye	0.0040	53	19	–	72
	0.0049	79	39	–	88
Northern Pike	0.0065	30	26	61	117
	0.0068	60	51	91	120
Largemouth Bass	0.0020	–	36	–	36
	0.0030	–	54	–	54
Smallmouth Bass	0.0017	30	–	–	30
	0.0034	60	–	–	60
Yellow Perch	0.0017	–	–	31	31
	0.0034	–	–	62	62
Bluegill	0.5087	4,841	1,340	3,016	9,196
	0.3422	4,673	1,366	3,267	5,863
Pumpkinseed	0.0331	520	78	–	599
	0.0415	732	105	–	739
Rock Bass	0.0150	60	33	177	271
	0.0200	84	49	344	358
Black Crappie	1.0346	6,643	8,983	3,078	18,704
	0.4573	5,212	4,001	3,008	7,226
Channel Catfish	0.0017	–	16	15	31
	0.0025	–	32	31	45
TOTAL HARVEST	1.6089	12,177	10,531	6,378	29,086
	0.6217	7,039	4,231	4,456	9,344
RELEASED					
Walleye	0.0068	57	66	–	123
	0.0057	80	61	–	100
Northern pike	0.0946	1,008	565	136	1,709
	0.0544	815	368	179	912
Largemouth bass	0.2529	1,951	1,223	1,397	4,571
	0.1244	1,189	566	1,536	2,023
Smallmouth bass	0.1052	883	526	492	1,901
	0.0507	639	292	424	821
Yellow Perch	0.0205	43	–	327	370
	0.0311	62	–	554	557
Bluegill	0.3532	4,587	867	931	6,385
	0.2715	4,556	857	852	4,714
Pumpkinseed	0.0252	100	133	222	455
	0.0289	200	125	455	512
Rock bass	0.0332	487	53	60	600
	0.0309	534	54	88	543
Black crappie	0.5129	4,337	4,601	335	9,272
	0.2485	3,083	2,553	447	4,028
TOTAL RELEASED	1.4043	13,452	8,036	3,899	25,386
	0.4779	5,752	2,795	2,005	6,702
TOTAL CATCH	3.0132	25,629	18,567	10,277	54,473
	0.9074	9,090	5,071	4,886	11,499
ANGLER HOURS		7,811	5,244	5,023	18,078
		2,450	1,114	2,799	3,882
ANGLER TRIPS		2,311	1,322	1,082	4,715
		797	342	660	1,090

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

Species	C/H	June	July	August	Season
HARVEST					
Walleye	—	—	—	—	—
	—	—	—	—	—
Northern Pike	—	—	—	—	—
	—	—	—	—	—
Largemouth Bass	—	—	—	—	—
	—	—	—	—	—
Smallmouth Bass	—	—	—	—	—
	—	—	—	—	—
Yellow Perch	—	—	—	—	—
	—	—	—	—	—
Bluegill	0.3203	1,078	119	—	1,197
	0.4654	1,714	146	—	1,720
Pumpkinseed	0.0860	—	121	200	321
	0.1128	—	242	338	416
Rock Bass	0.0084	—	31	—	31
	0.0170	—	63	—	63
Black Crappie	0.2991	262	856	—	1,117
	0.3050	524	983	—	1,114
Channel Catfish	—	—	—	—	—
	—	—	—	—	—
TOTAL HARVEST	0.7138	1,340	1,127	200	2,667
	0.5803	1,792	1,025	338	2,092
RELEASED					
Walleye	—	—	—	—	—
	—	—	—	—	—
Northern pike	—	—	—	—	—
	—	—	—	—	—
Largemouth bass	0.0077	—	—	29	29
	0.0149	—	—	55	55
Smallmouth bass	—	—	—	—	—
	—	—	—	—	—
Yellow Perch	—	—	—	—	—
	—	—	—	—	—
Bluegill	0.6558	1,745	215	490	2,450
	0.9710	3,491	279	791	3,590
Pumpkinseed	0.0580	102	—	115	217
	0.0814	204	—	221	300
Rock bass	0.1553	393	—	187	580
	0.1776	533	—	375	652
Black crappie	0.0504	59	129	—	188
	0.0701	91	242	—	259
TOTAL RELEASED	0.9271	2,299	344	820	3,464
	1.0022	3,538	370	905	3,671
TOTAL CATCH	1.6409	3,639	1,471	1,021	6,131
	1.1838	3,966	1,090	966	4,225
ANGLER HOURS		1,819	1,119	799	3,736
		590	477	246	797
ANGLER TRIPS		753	463	331	1,546
		345	245	147	448

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

Species	C/H	June	July	August	Season
HARVEST					
Walleye	0.0033	53	19	–	72
	0.0041	79	39	–	88
Northern Pike	0.0054	30	26	61	117
	0.0056	60	51	91	120
Largemouth Bass	0.0016	–	36	–	36
	0.0025	–	54	–	54
Smallmouth Bass	0.0014	30	–	–	30
	0.0028	60	–	–	60
Yellow Perch	0.0014	–	–	31	31
	0.0028	–	–	62	62
Bluegill	0.4764	5,918	1,459	3,016	10,393
	0.2932	4,977	1,374	3,267	6,110
Pumpkinseed	0.0422	520	199	200	920
	0.0396	732	264	338	848
Rock Bass	0.0139	60	65	177	302
	0.0168	84	80	344	363
Black Crappie	0.9086	6,904	9,838	3,078	19,821
	0.3736	5,238	4,120	3,008	7,312
Channel Catfish	0.0014	–	16	15	31
	0.0021	–	32	31	45
TOTAL HARVEST	1.4556	13,517	11,658	6,579	31,753
	0.5125	7,264	4,353	4,469	9,575
RELEASED					
Walleye	0.0056	57	66	–	123
	0.0047	80	61	–	100
Northern pike	0.0784	1,008	565	136	1,709
	0.0442	815	368	179	912
Largemouth bass	0.2109	1,951	1,223	1,426	4,600
	0.1004	1,189	566	1,537	2,024
Smallmouth bass	0.0872	883	526	492	1,901
	0.0408	639	292	424	821
Yellow Perch	0.0170	43	–	327	370
	0.0257	62	–	554	557
Bluegill	0.4050	6,332	1,083	1,420	8,835
	0.2814	5,739	901	1,163	5,925
Pumpkinseed	0.0308	202	133	336	671
	0.0278	286	125	506	594
Rock bass	0.0541	880	53	247	1,180
	0.0401	754	54	385	849
Black crappie	0.4337	4,396	4,730	335	9,461
	0.2011	3,085	2,564	447	4,036
TOTAL RELEASED	1.3225	15,751	8,380	4,719	28,850
	0.4248	6,753	2,819	2,200	7,641
TOTAL CATCH	2.7782	29,268	20,038	11,298	60,604
	0.7551	9,918	5,186	4,981	12,250
ANGLER HOURS		9,630	6,363	5,822	21,814
		2,520	1,211	2,809	3,963
ANGLER TRIPS		3,063	1,785	1,413	6,261
		868	421	677	1,178