

## Open Water Creel Survey Report for Pentwater Lake, Oceana County, 2017

<b>Waterbody</b>	Pentwater Lake
<b>Year</b>	2017
<b>County</b>	Oceana County
<b>Sites</b>	PentwaterLake
<b>Survey period</b>	April 7 to October 31
<b>Survey design</b>	Roving (instantaneous)-access
<b>Count methods/modes</b>	Roving (instantaneous)/boat and shore
<b>Clerk time</b>	½ Time
<b>Survey purpose</b>	Characterize general effort and catch aspects of the fishery

### Notes

Survey followed a roving (instantaneous)-access design. Funding was provided by the Federal Aid to Sport Fish Restoration Project F-81, Study 230499. One clerk worked 1/2 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. 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. Roving (instantaneous) counts of boat and shore anglers were made twice per day. Survey period for both counts and interviews was April 7 to October 31. Months were estimated separately. “**NAN**” in a table means that there was not sufficient data to make an estimate.

Table 1.–Daylight hours used to estimate catch and effort for Pentwater Lake survey, April 7 to October 31, 2017.

Year	Month	Daylight Hours
2017	4	14
2017	5	15
2017	6	17
2017	7	17
2017	8	17
2017	9	15
2017	10	14

Table 2.—Estimated harvest, catch per hour, and fishing pressure for pentwaterlake\_boat. Two standard errors are given below the estimates.

Species	C/H	April	May	June	July	August	September	October	Season
HARVEST									
Smallmouth Bass	0.0087	–	37	–	–	–	–	–	37
	0.0236	–	81	–	–	–	–	–	81
Yellow Perch	0.4359	871	965	–	–	–	–	–	1,836
	0.7938	1,548	793	–	–	–	–	–	1,740
Rock Bass	0.0327	–	138	–	–	–	–	–	138
	0.0854	–	289	–	–	–	–	–	289
Black Crappie	0.5278	–	1,810	–	–	–	413	–	2,223
	1.1297	–	3,128	–	–	–	952	–	3,269
Brown Trout	0.0069	29	–	–	–	–	–	–	29
	0.0170	55	–	–	–	–	–	–	55
TOTAL HARVEST	1.0120	900	2,950	–	–	–	413	–	4,263
	1.8042	1,549	3,240	–	–	–	952	–	3,716
RELEASED									
Northern Pike	0.0939	35	257	–	–	–	103	–	396
	0.1767	NAN	339	–	–	–	202	–	419
Largemouth Bass	0.3166	35	110	748	–	–	275	165	1,334
	0.8821	NAN	175	NAN	–	–	260	NAN	3,083
Smallmouth Bass	0.5788	35	763	1,130	–	–	511	–	2,438
	1.4933	NAN	757	NAN	–	–	NAN	–	5,018
Yellow Perch	2.7535	8,711	1,544	1,343	–	–	–	–	11,598
	5.7968	15,484	1,495	NAN	–	–	–	–	16,458
Rock Bass	0.6298	29	1,342	1,282	–	–	–	–	2,653
	1.6688	52	2,465	NAN	–	–	–	–	5,691
Black Crappie	0.1112	–	331	–	–	–	138	–	468
	0.2360	–	598	–	–	–	317	–	677
Brown Bullhead	0.0065	–	28	–	–	–	–	–	28
	0.0163	–	54	–	–	–	–	–	54
Freshwater Drum	0.0343	–	110	–	–	–	34	–	145
	0.0657	–	147	–	–	–	67	–	161
TOTAL RELEASED	4.5248	8,845	4,484	4,503	–	–	1,061	165	19,059
	11.8291	NAN	3,068	NAN	–	–	NAN	NAN	40,052
TOTAL CATCH	5.5368	9,745	7,434	4,503	–	–	1,474	165	23,322
	12.8582	NAN	4,462	NAN	–	–	NAN	NAN	40,224
ANGLER HOURS		532	1,321	962	–	–	1,178	220	4,212
		NAN	792	NAN	–	–	NAN	NAN	6,551
ANGLER TRIPS		175	266	209	–	–	223	46	919
		NAN	172	NAN	–	–	NAN	NAN	1,429

Table 3.—Estimated harvest, catch per hour, and fishing pressure for pentwaterlake\_pier/dock. Two standard errors are given below the estimates.

Species	C/H	April	May	June	July	August	September	October	Season
<b>HARVEST</b>									
Walleye	0.0071	—	—	—	—	38	—	—	38
	0.0119	—	—	—	—	62	—	—	62
Smallmouth Bass	0.0290	—	—	—	56	98	—	—	154
	0.0431	—	—	—	112	196	—	—	225
Yellow Perch	0.3155	599	539	128	—	380	28	—	1,674
	0.2382	602	651	217	—	763	68	—	1,192
Bluegill	0.0282	—	—	—	150	—	—	—	150
	0.0603	—	—	—	318	—	—	—	318
Rock Bass	0.0668	—	24	—	299	32	—	—	355
	0.1219	—	52	—	635	64	—	—	640
Redhorse	0.0035	—	—	—	—	—	19	—	19
	0.0072	—	—	—	—	—	38	—	38
Brown Bullhead	0.0138	—	24	49	—	—	—	—	73
	0.0225	—	52	106	—	—	—	—	118
Channel Catfish	0.0015	8	—	—	—	—	—	—	8
	0.0021	11	—	—	—	—	—	—	11
Other	0.8361	—	—	—	4,039	392	5	—	4,437
	1.2823	—	—	—	6,689	558	10	—	6,712
<b>TOTAL HARVEST</b>	1.3016	607	587	177	4,544	939	52	—	6,907
	1.3336	602	655	241	6,727	970	79	—	6,859
<b>RELEASED</b>									
Northern Pike	0.0014	—	—	—	—	8	—	—	8
	0.0029	—	—	—	—	15	—	—	15
Largemouth Bass	0.0596	—	125	—	21	151	19	—	316
	0.0689	—	139	—	42	324	37	—	357
Smallmouth Bass	0.2118	—	632	162	88	214	19	9	1,124
	0.1306	—	507	270	128	228	37	21	633
Yellow Perch	0.8885	1,975	1,102	806	299	523	9	—	4,715
	0.5490	1,972	1,052	947	608	901	23	—	2,660
Bluegill	0.0215	—	—	114	—	—	—	—	114
	0.0278	—	—	145	—	—	—	—	145
Pumpkinseed	0.0450	—	42	67	—	130	—	—	239
	0.0555	—	62	106	—	261	—	—	288
Rock Bass	0.2634	—	31	491	496	380	—	—	1,398
	0.2215	—	47	767	607	546	—	—	1,121
Redhorse	0.0153	16	—	—	—	38	27	—	81
	0.0166	22	—	—	—	62	55	—	85
Brown Bullhead	0.0060	—	—	—	—	32	—	—	32
	0.0121	—	—	—	—	64	—	—	64
Carp	0.0096	—	—	—	—	51	—	—	51
	0.0194	—	—	—	—	102	—	—	102
Bowfin	0.0014	—	—	—	—	8	—	—	8
	0.0029	—	—	—	—	15	—	—	15
Freshwater Drum	0.0527	—	—	99	150	32	—	—	280
	0.0460	—	—	150	163	75	—	—	234
Other	0.3874	—	14	247	1,795	—	—	—	2,056
	0.7016	—	28	529	3,648	—	—	—	3,687
<b>TOTAL RELEASED</b>	1.9637	1,990	1,946	1,986	2,849	1,567	74	9	10,420
	1.0241	1,972	1,179	1,376	3,754	1,166	79	21	4,757
<b>TOTAL CATCH</b>	3.2653	2,597	2,533	2,163	7,393	2,506	126	9	17,327
	1.7755	2,061	1,349	1,397	7,704	1,516	111	21	8,347
<b>ANGLER HOURS</b>		280	1,028	862	1,403	1,046	465	223	5,306
		220	545	607	740	671	236	155	1,338
<b>ANGLER TRIPS</b>		116	661	469	1,034	417	252	139	3,088
		113	398	368	707	302	139	106	964

Table 4.—Estimated harvest, catch per hour, and fishing pressure for pentwaterlake\_shore. Two standard errors are given below the estimates.

Species	C/H	April	May	June	July	August	September	October	Season
HARVEST									
Bluegill	0.1167	–	–	41	–	–	–	–	41
	0.4731	–	–	NAN	–	–	–	–	163
TOTAL HARVEST	0.1167	–	–	41	–	–	–	–	41
	0.4731	–	–	NAN	–	–	–	–	163
RELEASED									
Smallmouth Bass	0.1348	–	47	–	–	–	–	–	47
	0.5467	–	NAN	–	–	–	–	–	189
Yellow Perch	1.1665	–	–	408	–	–	–	–	408
	4.7312	–	–	NAN	–	–	–	–	1,632
Bluegill	1.1665	–	–	408	–	–	–	–	408
	4.7312	–	–	NAN	–	–	–	–	1,632
Pumpkinseed	1.1665	–	–	408	–	–	–	–	408
	4.7312	–	–	NAN	–	–	–	–	1,632
Brown Bullhead	0.0534	19	–	–	–	–	–	–	19
	0.1126	37	–	–	–	–	–	–	37
TOTAL RELEASED	3.6878	19	47	1,224	–	–	–	–	1,290
	14.2255	37	NAN	NAN	–	–	–	–	4,900
TOTAL CATCH	3.8045	19	47	1,265	–	–	–	–	1,331
	14.2469	37	NAN	NAN	–	–	–	–	4,902
ANGLER HOURS		70	111	78	23	–	68	–	350
		115	130	115	47	–	96	–	234
ANGLER TRIPS		22	35	24	7	–	21	–	109
		42	54	42	17	–	35	–	89

Table 5.—Estimated harvest, catch per hour, and fishing pressure for pentwaterlake. Two standard errors are given below the estimates.

Species	C/H	April	May	June	July	August	September	October	Season
<b>HARVEST</b>									
Walleye	0.0038	–	–	–	–	38	–	–	38
	0.0076	–	–	–	–	62	–	–	62
Smallmouth Bass	0.0193	–	37	–	56	98	–	–	191
	0.0325	–	81	–	112	196	–	–	240
Yellow Perch	0.3557	1,470	1,504	128	–	380	28	–	3,510
	0.4521	1,661	1,026	217	–	763	68	–	2,109
Bluegill	0.0193	–	–	41	150	–	–	–	190
	0.0421	–	–	NAN	318	–	–	–	357
Rock Bass	0.0499	–	162	–	299	32	–	–	493
	0.0905	–	293	–	635	64	–	–	703
Black Crappie	0.2253	–	1,810	–	–	–	413	–	2,223
	0.4164	–	3,128	–	–	–	952	–	3,269
Brown Trout	0.0029	29	–	–	–	–	–	–	29
	0.0065	55	–	–	–	–	–	–	55
Redhorse	0.0019	–	–	–	–	–	19	–	19
	0.0044	–	–	–	–	–	38	–	38
Brown Bullhead	0.0074	–	24	49	–	–	–	–	73
	0.0145	–	52	106	–	–	–	–	118
Channel Catfish	0.0008	8	–	–	–	–	–	–	8
	0.0014	11	–	–	–	–	–	–	11
Other	0.4496	–	–	–	4,039	392	5	–	4,437
	0.8462	–	–	–	6,689	558	10	–	6,712
<b>TOTAL HARVEST</b>	1.1360	1,507	3,537	218	4,544	939	465	–	11,210
	1.5003	1,662	3,306	NAN	6,727	970	955	–	7,846
<b>RELEASED</b>									
Northern Pike	0.0409	35	257	–	–	8	103	–	403
	0.0624	NAN	339	–	–	15	202	–	419
Largemouth Bass	0.1672	35	236	748	21	151	294	165	1,650
	0.3660	NAN	223	NAN	42	324	263	NAN	3,104
Smallmouth Bass	0.3657	35	1,441	1,292	88	214	529	9	3,609
	0.9112	NAN	NAN	NAN	128	228	NAN	21	8,032
Yellow Perch	1.6944	10,686	2,646	2,558	299	523	9	–	16,721
	2.6879	15,609	1,828	NAN	608	901	23	–	18,784
Bluegill	0.0529	–	–	522	–	–	–	–	522
	0.2198	–	–	NAN	–	–	–	–	2,089
Pumpkinseed	0.0656	–	42	475	–	130	–	–	647
	0.2078	–	62	NAN	–	261	–	–	1,918
Rock Bass	0.4105	29	1,373	1,773	496	380	–	–	4,051
	0.8930	52	2,466	NAN	607	546	–	–	7,554
Black Crappie	0.0475	–	331	–	–	–	138	–	468
	0.0868	–	598	–	–	–	317	–	677
Redhorse	0.0082	16	–	–	–	38	27	–	81
	0.0126	22	–	–	–	62	55	–	85
Brown Bullhead	0.0079	19	28	–	–	32	–	–	78
	0.0128	37	54	–	–	64	–	–	91
Carp	0.0052	–	–	–	–	51	–	–	51
	0.0118	–	–	–	–	102	–	–	102
Bowfin	0.0008	–	–	–	–	8	–	–	8
	0.0018	–	–	–	–	15	–	–	15
Freshwater Drum	0.0430	–	110	99	150	32	34	–	425
	0.0561	–	147	150	163	75	67	–	284
Other	0.2083	–	14	247	1,795	–	–	–	2,056
	0.4405	–	28	529	3,648	–	–	–	3,687
<b>TOTAL RELEASED</b>	3.1180	10,854	6,478	7,713	2,849	1,567	1,135	174	30,769
	6.9711	NAN	NAN	NAN	3,754	1,166	NAN	NAN	59,538
<b>TOTAL CATCH</b>	4.2540	12,361	10,014	7,931	7,393	2,506	1,600	174	41,980
	7.7288	NAN	NAN	NAN	7,704	1,516	NAN	NAN	60,053
<b>ANGLER HOURS</b>		882	2,460	1,902	1,426	1,046	1,710	443	9,868
		NAN	970	NAN	741	671	NAN	NAN	11,053
<b>ANGLER TRIPS</b>		312	962	702	1,041	417	495	185	4,115
		NAN	437	NAN	708	302	NAN	NAN	3,833