

ILLINOIS NATURAL HISTORY SURVEY  
 CENTER FOR AQUATIC ECOLOGY  
 2002 CREEL SURVEY RESULTS

**2002 PETITE LAKE**  
 201 ACRES  
 REGION 2, DISTRICT 7

STRATIFICATION SUMMARY:

Day creel only.  
 Results cover 05/17/2002 through 10/31/2002  
 Year periods stratified.  
 Fishing modes (boat vs. shore) stratified.  
 Day types (weekday vs. weekend/holiday) stratified.  
 Day periods (morning, midday, and afternoon) stratified.

SAMPLING RATIO: 222/504 = 44.0%

NUMBER OF INTERVIEWS: 609

Table 1. Total fishing effort, by fishing mode and day type.

FISHING MODE	DAYTYPE	ANGLER-HOURS	95% CI	HOURS/ACRE	95% CI	% EFF
BOAT	WEEKDAY	3754	3015-4493 ( 20%)	19	15-22 ( 20%)	18%
	HOLIDAY	2849	2498-3201 ( 12%)	14	12-16 ( 12%)	40%
	TOTAL	6603	5813-7394 ( 12%)	33	29-37 ( 12%)	28%
SHORE	WEEKDAY	743	534-952 ( 28%)	4	3-5 ( 28%)	14%
	HOLIDAY	414	312-516 ( 25%)	2	2-3 ( 25%)	34%
	TOTAL	1157	924-1389 ( 20%)	6	5-7 ( 20%)	21%
BOAT & SHORE	WEEKDAY	4497	3758-5235 ( 16%)	22	19-26 ( 16%)	18%
	HOLIDAY	3263	2898-3629 ( 11%)	16	14-18 ( 11%)	39%
	TOTAL	7760	6936-8584 ( 11%)	39	34-43 ( 11%)	27%

Table 2. Total fishing harvest and harvest rates, in numbers of fish.

# HARVESTED	95% CI		#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
4216	3287-5145	( 22%)	.358	.262-.454 ( 27%)	51.75	20.94	All species
11	0-34	(209%)	.002	.000-.006 (209%)	0.13	0.05	Black bullhead
430	107-753	( 75%)	.033	.002-.064 ( 94%)	5.28	2.14	Black crappie
2603	1888-3318	( 27%)	.242	.162-.322 ( 33%)	31.96	12.93	Bluegill
1	0-5	(213%)	.001	.000-.004 (213%)	0.02	0.01	Brown bullhead
10	0-23	(125%)	.003	.000-.007 (145%)	0.13	0.05	Carp
417	210-624	( 50%)	.032	.018-.046 ( 45%)	5.12	2.07	Channel catfish
3	0-11	(223%)	.001	.000-.002 (226%)	0.04	0.02	Flathead catfish
146	81-212	( 45%)	.011	.005-.017 ( 54%)	1.80	0.73	Freshwater drum
88	35-141	( 60%)	.007	.001-.014 ( 87%)	1.08	0.44	Largemouth bass
			****	NOT RECORDED ****			Longear sunfish
			****	NOT RECORDED ****			Muskellunge
			****	NOT RECORDED ****			Northern pike
			****	NOT RECORDED ****			Orangespotted sunfish
2	0-9	(318%)	.000	.000-.000 (430%)	0.03	0.01	Rock bass
			****	NOT RECORDED ****			Smallmouth bass
62	20-104	( 68%)	.003	.001-.005 ( 74%)	0.76	0.31	Walleye
163	81-244	( 50%)	.009	.003-.016 ( 72%)	2.00	0.81	White bass
162	49-276	( 70%)	.006	.002-.010 ( 63%)	1.99	0.81	White crappie
60	7-114	( 89%)	.005	.000-.009 ( 93%)	0.74	0.30	Yellow perch
56	13-98	( 76%)	.002	.000-.004 ( 79%)	0.68	0.28	Yellow bass

Table 3. Total fishing harvest and harvest rates, in kilograms.

KG HARVESTED	95% CI		KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
832	644-1020	( 23%)	.070	.050-.089 ( 28%)	10.21	0.197	All species
4	0-11	(209%)	.001	.000-.002 (209%)	0.05	0.339	Black bullhead
77	34-119	( 55%)	.006	.001-.010 ( 76%)	0.94	0.178	Black crappie
316	226-405	( 28%)	.028	.019-.038 ( 33%)	3.87	0.121	Bluegill
0	0-1	(214%)	.000	.000-.001 (214%)	0.00	0.282	Brown bullhead
11	0-33	(195%)	.002	.000-.006 (149%)	0.14	1.079	Carp
216	98-334	( 54%)	.019	.005-.034 ( 74%)	2.65	0.518	Channel catfish
0	0-2	(223%)	.000	.000-.000 (226%)	0.01	0.146	Flathead catfish
21	12-30	( 44%)	.002	.001-.003 ( 71%)	0.26	0.144	Freshwater drum
75	28-122	( 63%)	.005	.000-.010 ( 97%)	0.92	0.852	Largemouth bass
			****	NOT RECORDED ****			Longear sunfish
			****	NOT RECORDED ****			Muskellunge
			****	NOT RECORDED ****			Northern pike
			****	NOT RECORDED ****			Orangespotted sunfish
0	0-2	(430%)	.000	.000-.000 (430%)	0.00	0.166	Rock bass
			****	NOT RECORDED ****			Smallmouth bass
36	8-64	( 78%)	.002	.000-.003 ( 72%)	0.44	0.579	Walleye
40	13-66	( 67%)	.002	.000-.005 ( 98%)	0.48	0.243	White bass
18	4-32	( 76%)	.001	.000-.001 ( 70%)	0.23	0.113	White crappie
7	0-19	(158%)	.001	.000-.001 (166%)	0.09	0.120	Yellow perch
10	1-20	( 92%)	.000	.000-.001 ( 95%)	0.13	0.184	Yellow bass

Table 4. Total fishing harvest and harvest rates, in pounds.

LB HARVESTED	95% CI		LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
1833	1419-2248	( 23%)	.153	.111-.196 ( 28%)	9.11	0.435	All species
8	0-25	(209%)	.001	.000-.004 (209%)	0.04	0.748	Black bullhead
169	76-263	( 55%)	.012	.003-.021 ( 76%)	0.84	0.393	Black crappie
696	499-892	( 28%)	.063	.042-.083 ( 33%)	3.46	0.267	Bluegill
1	0-3	(213%)	.001	.000-.002 (214%)	0.00	0.622	Brown bullhead
25	0-72	(195%)	.005	.000-.013 (149%)	0.12	2.379	Carp
476	217-736	( 54%)	.042	.011-.074 ( 74%)	2.37	1.142	Channel catfish
1	0-4	(226%)	.000	.000-.001 (223%)	0.01	0.322	Flathead catfish
46	26-67	( 44%)	.004	.001-.007 ( 71%)	0.23	0.318	Freshwater drum
165	61-270	( 63%)	.012	.000-.023 ( 97%)	0.82	1.879	Largemouth bass
			****	NOT RECORDED ****			Longear sunfish
			****	NOT RECORDED ****			Muskellunge
			****	NOT RECORDED ****			Northern pike
			****	NOT RECORDED ****			Orangespotted sunfish
1	0-3	(318%)	.000	.000-.000 (430%)	0.00	0.367	Rock bass
			****	NOT RECORDED ****			Smallmouth bass
79	18-140	( 78%)	.003	.001-.006 ( 72%)	0.39	1.277	Walleye
87	29-145	( 67%)	.005	.000-.011 ( 98%)	0.43	0.535	White bass
40	10-71	( 76%)	.002	.001-.003 ( 70%)	0.20	0.249	White crappie
16	0-41	(158%)	.001	.000-.003 (166%)	0.08	0.265	Yellow perch
23	2-44	( 92%)	.001	.000-.002 ( 95%)	0.11	0.407	Yellow bass

Table 5. Total fishing catch and catch rates, in numbers of fish.  
Catch includes both harvested and released fish.

# CAUGHT	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
9555	7726-11385 ( 19%)	.768	.558-.979 ( 27%)	117.29	47.47	All species
17	0-42 (147%)	.002	.000-.006 (175%)	0.21	0.08	Black bullhead
780	265-1295 ( 66%)	.066	.000-.132 (100%)	9.58	3.88	Black crappie
4742	3417-6067 ( 28%)	.422	.270-.573 ( 36%)	58.21	23.56	Bluegill
1	0-5 (213%)	.001	.000-.004 (213%)	0.02	0.01	Brown bullhead
43	3-83 ( 94%)	.007	.001-.013 ( 87%)	0.52	0.21	Carp
854	536-1172 ( 37%)	.067	.047-.088 ( 30%)	10.48	4.24	Channel catfish
3	0-11 (223%)	.001	.000-.002 (226%)	0.04	0.02	Flathead catfish
610	418-802 ( 31%)	.042	.028-.056 ( 34%)	7.49	3.03	Freshwater drum
696	459-934 ( 34%)	.044	.027-.062 ( 39%)	8.55	3.46	Largemouth bass
2	0-10 (318%)	.000	.000-.000 (278%)	0.03	0.01	Longear sunfish
26	0-55 (115%)	.001	.000-.002 (162%)	0.31	0.13	Muskellunge
8	0-26 (241%)	.001	.000-.004 (300%)	0.09	0.04	Northern pike
7	0-24 (226%)	.002	.000-.007 (223%)	0.09	0.04	Orangespotted sunfish
2	0-9 (318%)	.000	.000-.000 (430%)	0.03	0.01	Rock bass
27	0-69 (158%)	.002	.000-.004 (148%)	0.33	0.13	Smallmouth bass
617	256-979 ( 59%)	.030	.016-.044 ( 47%)	7.58	3.07	Walleye
433	294-573 ( 32%)	.034	.020-.048 ( 42%)	5.32	2.15	White bass
322	125-519 ( 61%)	.015	.008-.022 ( 48%)	3.95	1.60	White crappie
277	132-422 ( 52%)	.027	.011-.043 ( 61%)	3.40	1.38	Yellow perch
87	8-166 ( 91%)	.004	.000-.008 (108%)	1.07	0.43	Yellow bass

Table 6. Total fishing catch and catch rates, in kilograms.

KG CAUGHT	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
1728	1434-2021 ( 17%)	.131	.104-.158 ( 21%)	21.21	0.181	All species
9	0-20 (123%)	.001	.000-.002 (149%)	0.11	0.520	Black bullhead
104	49-159 ( 53%)	.008	.001-.014 ( 85%)	1.28	0.133	Black crappie
439	325-552 ( 26%)	.039	.027-.051 ( 31%)	5.38	0.092	Bluegill
0	0-1 (214%)	.000	.000-.001 (214%)	0.00	0.282	Brown bullhead
31	1-60 ( 96%)	.005	.000-.011 ( 99%)	0.38	0.717	Carp
381	234-528 ( 39%)	.031	.016-.047 ( 49%)	4.68	0.446	Channel catfish
0	0-2 (223%)	.000	.000-.000 (226%)	0.01	0.146	Flathead catfish
117	55-179 ( 53%)	.008	.003-.013 ( 60%)	1.44	0.192	Freshwater drum
280	181-380 ( 35%)	.018	.009-.026 ( 50%)	3.44	0.402	Largemouth bass
0	0-1 (278%)	.000	.000-.000 (278%)	0.00	0.087	Longear sunfish
56	0-133 (136%)	.001	.000-.003 (162%)	0.69	2.198	Muskellunge
6	0-17 (159%)	.001	.000-.003 (275%)	0.08	0.849	Northern pike
0	0-1 (223%)	.000	.000-.000 (223%)	0.00	0.054	Orangespotted sunfish
0	0-2 (430%)	.000	.000-.000 (430%)	0.00	0.166	Rock bass
5	0-12 (146%)	.000	.000-.001 (186%)	0.06	0.187	Smallmouth bass
155	91-220 ( 42%)	.008	.004-.012 ( 49%)	1.91	0.252	Walleye
79	39-119 ( 50%)	.005	.003-.008 ( 53%)	0.98	0.183	White bass
30	11-49 ( 63%)	.001	.001-.002 ( 51%)	0.37	0.093	White crappie
21	3-39 ( 88%)	.002	.000-.004 ( 84%)	0.26	0.075	Yellow perch
12	1-23 ( 91%)	.000	.000-.001 ( 95%)	0.15	0.139	Yellow bass

Table 7. Total fishing catch and catch rates, in pounds.

LB CAUGHT	95% CI		LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
3809	3162-4456	( 17%)	.289	.229-.349 ( 21%)	18.92	0.399	All species
19	0-43	(123%)	.002	.000-.005 (149%)	0.10	1.147	Black bullhead
229	108-350	( 53%)	.017	.003-.032 ( 85%)	1.14	0.294	Black crappie
967	716-1218	( 26%)	.086	.059-.113 ( 31%)	4.80	0.204	Bluegill
1	0-3	(213%)	.001	.000-.002 (214%)	0.00	0.622	Brown bullhead
67	3-132	( 96%)	.012	.000-.024 ( 99%)	0.33	1.582	Carp
840	516-1164	( 39%)	.069	.035-.103 ( 49%)	4.17	0.984	Channel catfish
1	0-4	(226%)	.000	.000-.001 (223%)	0.01	0.322	Flathead catfish
258	122-395	( 53%)	.019	.007-.030 ( 60%)	1.28	0.424	Freshwater drum
618	399-837	( 35%)	.039	.019-.058 ( 50%)	3.07	0.887	Largemouth bass
0	0-2	(318%)	.000	.000-.000 (318%)	0.00	0.191	Longear sunfish
124	0-292	(136%)	.003	.000-.008 (162%)	0.62	4.847	Muskellunge
14	0-36	(159%)	.002	.000-.006 (275%)	0.07	1.872	Northern pike
1	0-3	(223%)	.000	.000-.001 (223%)	0.00	0.120	Orangespotted sunfish
1	0-3	(318%)	.000	.000-.000 (430%)	0.00	0.367	Rock bass
11	0-27	(146%)	.000	.000-.001 (186%)	0.05	0.412	Smallmouth bass
343	200-485	( 42%)	.018	.009-.027 ( 49%)	1.70	0.555	Walleye
175	87-263	( 50%)	.012	.006-.018 ( 53%)	0.87	0.404	White bass
66	24-108	( 63%)	.003	.002-.005 ( 51%)	0.33	0.206	White crappie
46	6-86	( 88%)	.005	.001-.009 ( 84%)	0.23	0.165	Yellow perch
27	2-51	( 91%)	.001	.000-.002 ( 95%)	0.13	0.306	Yellow bass

Table 8. Hours per completed trip and supplementary questions for all trips.

	MEAN	95% CI		MIN	MAX	#SAMPLES
HOURS PER COMPLETED TRIP*						
BOAT	2.0	1.5-2.5	( 26%)	0.5	4.6	22
SHORE	1.7	0.8-2.6	( 51%)	0.5	3.2	8
BOAT & SHORE	1.9	1.5-2.3	( 22%)	0.5	4.6	30
MILES TRAVELED	29.2	25.5-33.0	( 13%)	1	915	573
SUCCESS RATING (1-10)	4.0	3.8-4.2	( 5%)	1	10	549

\*1 samples were from split interviews of completed trips.

4.9% of all 608 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 1 out of 608 interviews with illegal harvests.

Table 9. Frequency distribution of angler party size for all interviews.

PARTY SIZE:	1	2	3	4	5	6	7	8	9	10+
BOAT INTERVIEWS	113	303	75	15	1	2				
SHORE INTERVIEWS	48	43	5	3						

Table 10. Number of interviews (and %) per species sought for all interviews.

262 ( 43.1%)	ANY	All species
77 ( 12.7%)	BLG	Bluegill
2 ( 0.3%)	CAP	Carp
12 ( 2.0%)	CCF	Channel catfish
44 ( 7.2%)	CRP	Crappie spp.
77 ( 12.7%)	LMB	Largemouth bass
29 ( 4.8%)	MUE	Muskellunge
97 ( 16.0%)	WAE	Walleye
6 ( 1.0%)	WHB	White bass
2 ( 0.3%)	YEP	Yellow perch

