

ILLINOIS NATURAL HISTORY SURVEY  
 CENTER FOR AQUATIC ECOLOGY  
 2003 CREEL SURVEY RESULTS

2003 STERLING LAKE  
 68 ACRES  
 REGION 2, DISTRICT 7

STRATIFICATION SUMMARY:

Day creel only.  
 Results cover 03/15/2003 through 10/31/2003  
 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: 304/693 = 43.9%

NUMBER OF INTERVIEWS: 1723

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	1265	869-1661 ( 31%)	18	13-24 ( 31%)	24%
	HOLIDAY	2822	2410-3234 ( 15%)	41	35-47 ( 15%)	48%
	TOTAL	4087	3516-4659 ( 14%)	60	51-68 ( 14%)	40%
SHORE	WEEKDAY	6295	5176-7415 ( 18%)	92	76-108 ( 18%)	16%
	HOLIDAY	8696	7810-9582 ( 10%)	127	114-140 ( 10%)	37%
	TOTAL	14991	13564-16419 ( 10%)	219	198-240 ( 10%)	28%
BOAT & SHORE	WEEKDAY	7560	6373-8748 ( 16%)	110	93-128 ( 16%)	17%
	HOLIDAY	11518	10541-12495 ( 8%)	168	154-182 ( 8%)	39%
	TOTAL	19079	17541-20616 ( 8%)	279	256-301 ( 8%)	31%

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

# HARVESTED	95% CI		#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
2378	1657-3099	( 30%)	.103	.055-.152 ( 47%)	85.79	34.72	All species
			****	NOT RECORDED	****		Black bullhead
1581	886-2277	( 44%)	.067	.027-.107 ( 60%)	57.04	23.08	Black crappie
438	168-708	( 62%)	.025	.000-.059 (133%)	15.78	6.39	Bluegill
12	0-27	(120%)	.000	.000-.001 (100%)	0.44	0.18	Bowfin
138	77-199	( 44%)	.003	.001-.006 ( 76%)	4.97	2.01	Carp
48	18-77	( 63%)	.001	.000-.002 ( 75%)	1.71	0.69	Channel catfish
			****	NOT RECORDED	****		Green sunfish
8	0-19	(134%)	.000	.000-.000 (127%)	0.29	0.12	Largemouth bass
4	0-8	(122%)	.000	.000-.000 (143%)	0.13	0.05	Muskellunge
2	0-6	(223%)	.000	.000-.000 (220%)	0.06	0.03	Northern pike
			****	NOT RECORDED	****		Smallmouth bass
81	37-125	( 54%)	.003	.001-.005 ( 69%)	2.91	1.18	Walleye
39	6-72	( 85%)	.002	.000-.004 ( 97%)	1.40	0.57	Warmouth
			****	NOT RECORDED	****		White bass
4	0-11	(155%)	.000	.000-.000 (156%)	0.16	0.06	Yellow bullhead
22	1-44	( 96%)	.001	.000-.001 (139%)	0.80	0.32	Yellow perch
2	0-7	(236%)	.000	.000-.000 (236%)	0.07	0.03	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
496	379-614	( 24%)	.017	.012-.023 ( 30%)	17.91	0.209	All species
			****	NOT RECORDED	****		Black bullhead
167	94-241	( 44%)	.007	.003-.012 ( 58%)	6.04	0.106	Black crappie
19	8-30	( 60%)	.001	.000-.002 (115%)	0.68	0.043	Bluegill
4	0-9	(134%)	.000	.000-.000 (115%)	0.14	0.319	Bowfin
163	86-239	( 47%)	.004	.001-.007 ( 80%)	5.87	1.179	Carp
51	17-86	( 68%)	.001	.000-.002 ( 87%)	1.84	1.076	Channel catfish
			****	NOT RECORDED	****		Green sunfish
7	0-20	(187%)	.000	.000-.000 (162%)	0.25	0.844	Largemouth bass
11	0-26	(138%)	.000	.000-.001 (141%)	0.40	2.986	Muskellunge
3	0-10	(220%)	.000	.000-.001 (223%)	0.12	1.823	Northern pike
			****	NOT RECORDED	****		Smallmouth bass
62	30-93	( 51%)	.003	.001-.004 ( 63%)	2.23	0.764	Walleye
8	0-15	( 95%)	.000	.000-.001 ( 99%)	0.28	0.197	Warmouth
			****	NOT RECORDED	****		White bass
1	0-1	(152%)	.000	.000-.000 (160%)	0.02	0.120	Yellow bullhead
1	0-2	(100%)	.000	.000-.000 (147%)	0.03	0.043	Yellow perch
0	0-2	(245%)	.000	.000-.000 (245%)	0.02	0.236	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
1094	835-1354	( 24%)	.039	.027-.050 ( 30%)	15.98	0.460	All species
			****	NOT RECORDED	****		Black bullhead
369	206-532	( 44%)	.016	.007-.026 ( 58%)	5.39	0.233	Black crappie
42	17-67	( 60%)	.002	.000-.004 (115%)	0.61	0.095	Bluegill
9	0-20	(134%)	.000	.000-.000 (115%)	0.12	0.703	Bowfin
358	190-527	( 47%)	.009	.002-.016 ( 80%)	5.23	2.600	Carp
113	37-189	( 68%)	.003	.000-.005 ( 87%)	1.65	2.372	Channel catfish
			****	NOT RECORDED	****		Green sunfish
15	0-43	(187%)	.000	.000-.001 (162%)	0.22	1.861	Largemouth bass
24	0-58	(138%)	.001	.000-.002 (141%)	0.36	6.582	Muskellunge
7	0-23	(223%)	.000	.000-.001 (220%)	0.10	4.020	Northern pike
			****	NOT RECORDED	****		Smallmouth bass
136	66-206	( 51%)	.006	.002-.009 ( 63%)	1.99	1.685	Walleye
17	1-33	( 95%)	.001	.000-.002 ( 99%)	0.25	0.434	Warmouth
			****	NOT RECORDED	****		White bass
1	0-3	(152%)	.000	.000-.000 (160%)	0.02	0.264	Yellow bullhead
2	0-4	(100%)	.000	.000-.000 (147%)	0.03	0.095	Yellow perch
1	0-4	(236%)	.000	.000-.000 (236%)	0.02	0.521	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
11377	9661-13093 ( 15%)	.479	.307-.651 ( 36%)	410.40	166.09	All species
14	0-38 (175%)	.000	.000-.001 (167%)	0.49	0.20	Black bullhead
4002	2561-5443 ( 36%)	.219	.041-.397 ( 81%)	144.36	58.42	Black crappie
4531	3623-5439 ( 20%)	.154	.100-.208 ( 35%)	163.44	66.14	Bluegill
27	5-48 ( 81%)	.001	.000-.001 ( 75%)	0.96	0.39	Bowfin
203	135-271 ( 33%)	.005	.003-.008 ( 51%)	7.32	2.96	Carp
175	109-241 ( 38%)	.005	.002-.008 ( 55%)	6.32	2.56	Channel catfish
107	0-290 (171%)	.001	.000-.004 (191%)	3.86	1.56	Green sunfish
780	579-981 ( 26%)	.037	.023-.051 ( 38%)	28.15	11.39	Largemouth bass
51	18-83 ( 64%)	.002	.001-.004 ( 56%)	1.83	0.74	Muskellunge
26	1-51 ( 98%)	.001	.000-.001 ( 93%)	0.92	0.37	Northern pike
72	18-125 ( 75%)	.002	.000-.004 (104%)	2.59	1.05	Smallmouth bass
820	582-1059 ( 29%)	.030	.019-.040 ( 34%)	29.59	11.97	Walleye
163	13-313 ( 92%)	.005	.001-.008 ( 69%)	5.88	2.38	Warmouth
22	0-72 (220%)	.001	.000-.005 (220%)	0.81	0.33	White bass
120	14-227 ( 89%)	.004	.000-.009 (102%)	4.34	1.76	Yellow bullhead
263	174-351 ( 34%)	.010	.005-.016 ( 53%)	9.47	3.83	Yellow perch
2	0-7 (236%)	.000	.000-.000 (236%)	0.07	0.03	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
1613	1384-1842 ( 14%)	.069	.053-.084 ( 23%)	58.18	0.142	All species
4	0-13 (190%)	.000	.000-.000 (169%)	0.16	0.321	Black bullhead
276	178-374 ( 35%)	.016	.004-.029 ( 77%)	9.96	0.069	Black crappie
174	133-214 ( 23%)	.005	.004-.007 ( 32%)	6.27	0.038	Bluegill
6	0-11 ( 99%)	.000	.000-.000 ( 91%)	0.20	0.209	Bowfin
220	139-301 ( 37%)	.006	.003-.009 ( 57%)	7.93	1.084	Carp
95	53-137 ( 44%)	.003	.001-.004 ( 57%)	3.42	0.541	Channel catfish
4	0-10 (178%)	.000	.000-.000 (193%)	0.13	0.035	Green sunfish
307	193-421 ( 37%)	.017	.007-.028 ( 58%)	11.07	0.393	Largemouth bass
116	45-187 ( 61%)	.007	.001-.012 ( 82%)	4.18	2.291	Muskellunge
42	0-94 (126%)	.001	.000-.002 (126%)	1.51	1.632	Northern pike
13	3-24 ( 76%)	.000	.000-.001 ( 87%)	0.48	0.187	Smallmouth bass
314	214-415 ( 32%)	.011	.007-.015 ( 38%)	11.34	0.383	Walleye
22	5-39 ( 78%)	.001	.000-.001 ( 70%)	0.78	0.133	Warmouth
2	0-5 (220%)	.000	.000-.000 (223%)	0.06	0.074	White bass
11	4-18 ( 63%)	.000	.000-.001 ( 77%)	0.39	0.090	Yellow bullhead
8	4-12 ( 51%)	.000	.000-.001 (106%)	0.28	0.030	Yellow perch
0	0-2 (245%)	.000	.000-.000 (245%)	0.02	0.236	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
3556	3050-4061 ( 14%)	.151	.116-.186 ( 23%)	51.91	0.313	All species
10	0-28 (190%)	.000	.000-.001 (169%)	0.14	0.707	Black bullhead
609	393-825 ( 35%)	.036	.008-.063 ( 77%)	8.89	0.152	Black crappie
383	294-472 ( 23%)	.012	.008-.016 ( 32%)	5.59	0.085	Bluegill
12	0-24 ( 99%)	.000	.000-.001 ( 91%)	0.18	0.460	Bowfin
485	306-664 ( 37%)	.013	.006-.021 ( 57%)	7.08	2.389	Carp
209	116-301 ( 44%)	.006	.002-.009 ( 57%)	3.05	1.193	Channel catfish
8	0-23 (178%)	.000	.000-.000 (193%)	0.12	0.077	Green sunfish
677	426-927 ( 37%)	.038	.016-.061 ( 58%)	9.88	0.867	Largemouth bass
256	100-412 ( 61%)	.015	.003-.027 ( 82%)	3.73	5.051	Muskellunge
92	0-208 (126%)	.002	.000-.005 (126%)	1.34	3.598	Northern pike
30	7-52 ( 76%)	.001	.000-.002 ( 87%)	0.43	0.412	Smallmouth bass
693	472-914 ( 32%)	.024	.015-.034 ( 38%)	10.12	0.845	Walleye
48	10-85 ( 78%)	.002	.001-.003 ( 70%)	0.70	0.293	Warmouth
4	0-12 (223%)	.000	.000-.001 (223%)	0.05	0.162	White bass
24	9-39 ( 63%)	.001	.000-.001 ( 77%)	0.35	0.197	Yellow bullhead
17	8-26 ( 51%)	.001	.000-.002 (106%)	0.25	0.065	Yellow perch
1	0-4 (236%)	.000	.000-.000 (236%)	0.02	0.521	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	3.8	3.5-4.1	( 8%)	0.6	9.3	202
SHORE	1.8	1.7-1.9	( 6%)	0.2	8.8	360
BOAT & SHORE	2.5	2.4-2.7	( 6%)	0.2	9.3	562
MILES TRAVELED	17.1	15.7-18.5	( 8%)	1	850	1405
SUCCESS RATING (1-10)	6.5	6.4-6.7	( 2%)	1	10	1103

\*174 samples were from split interviews of completed trips.  
36.4% of all 1542 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 6 out of 1542 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	88	132	44	4	1					
SHORE INTERVIEWS	416	509	179	119	33	12	2	2		1

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

831 ( 53.9%)	ANY	All species
1 ( 0.1%)	BLB	Black bullhead
112 ( 7.3%)	BLC	Black crappie
26 ( 1.7%)	BLG	Bluegill
77 ( 5.0%)	CAP	Carp
74 ( 4.8%)	CCF	Channel catfish
140 ( 9.1%)	LMB	Largemouth bass
127 ( 8.2%)	MUE	Muskellunge
23 ( 1.5%)	NOP	Northern pike
2 ( 0.1%)	SMB	Smallmouth bass
129 ( 8.4%)	WAE	Walleye

Table 11. Number of anglers with a given harvest &amp; release for completed trips

# OF FISH:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
Black bullhead																
HARVEST	1069	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1068	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Black crappie																
HARVEST	1028	2	3	7	10	-	-	3	5	4	1	-	-	2	-	4
RELEASE	978	39	10	16	8	4	-	1	7	-	4	-	-	-	-	2
Bluegill																
HARVEST	1055	6	3	2	3	-	-	-	-	-	-	-	-	-	-	-
RELEASE	889	91	30	35	6	6	1	4	2	2	-	-	-	2	-	1
Bowfin																
HARVEST	1065	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1067	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carp																
HARVEST	1062	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1056	12	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Channel catfish																
HARVEST	1064	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1042	22	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Green sunfish																
HARVEST	1069	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1063	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Largemouth bass																
HARVEST	1069	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	965	81	10	6	4	2	-	-	1	-	-	-	-	-	-	-
Muskellunge																
HARVEST	1067	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1056	12	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Northern pike																
HARVEST	1067	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1065	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Smallmouth bass																
HARVEST	1069	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1065	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Walleye																
HARVEST	1046	17	4	-	2	-	-	-	-	-	-	-	-	-	-	-
RELEASE	979	48	7	8	4	11	4	2	2	-	-	-	3	-	-	1

