

ILLINOIS NATURAL HISTORY SURVEY  
 CENTER FOR AQUATIC ECOLOGY  
 2004 CREEL SURVEY RESULTS

2004 SPRING LAKE NORTH  
 466 ACRES  
 REGION 1, DISTRICT 5

STRATIFICATION SUMMARY:

Day creel only.  
 Results cover 03/15/2004 through 10/31/2004  
 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: 305/693 = 44.0%

NUMBER OF INTERVIEWS: 2091

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	7627	6315-8939 ( 17%)	16	14-19 ( 17%)	21%
	HOLIDAY	9396	7572-11220 ( 19%)	20	16-24 ( 19%)	50%
	TOTAL	17023	14844-19201 ( 13%)	37	32-41 ( 13%)	37%
SHORE	WEEKDAY	3630	3073-4187 ( 15%)	8	7-9 ( 15%)	13%
	HOLIDAY	2925	2492-3358 ( 15%)	6	5-7 ( 15%)	36%
	TOTAL	6555	5861-7249 ( 11%)	14	13-16 ( 11%)	23%
BOAT & SHORE	WEEKDAY	11257	9831-12683 ( 13%)	24	21-27 ( 13%)	18%
	HOLIDAY	12321	10455-14186 ( 15%)	26	22-30 ( 15%)	47%
	TOTAL	23578	21291-25864 ( 10%)	51	46-56 ( 10%)	33%

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

# HARVESTED	95% CI		#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
6298	3610-8985	( 43%)	.268	.189-.347 ( 30%)	33.40	13.52	All species
163	27-300	( 84%)	.002	.001-.004 ( 79%)	0.87	0.35	Black crappie
5222	2642-7803	( 49%)	.216	.148-.284 ( 31%)	27.70	11.21	Bluegill
			****	NOT RECORDED			Carp
135	35-236	( 74%)	.007	.001-.013 ( 84%)	0.72	0.29	Channel catfish
			****	NOT RECORDED			Crappie spp.
331	196-465	( 41%)	.014	.005-.022 ( 61%)	1.75	0.71	Largemouth bass
			****	NOT RECORDED			Muskellunge
56	0-111	(100%)	.002	.000-.005 ( 94%)	0.29	0.12	Rock bass
196	73-319	( 63%)	.015	.002-.028 ( 89%)	1.04	0.42	Redear sunfish
6	0-18	(223%)	.000	.000-.001 (223%)	0.03	0.01	Threadfin shad
176	27-325	( 84%)	.010	.002-.019 ( 85%)	0.93	0.38	Warmouth
7	0-18	(156%)	.001	.000-.003 (205%)	0.04	0.02	Yellow bullhead
6	0-24	(318%)	.000	.000-.000 (430%)	0.03	0.01	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
1010	753-1267	( 25%)	.048	.023-.073 ( 52%)	5.36	0.160	All species
40	6-75	( 85%)	.001	.000-.001 ( 82%)	0.21	0.247	Black crappie
343	186-500	( 46%)	.013	.009-.018 ( 31%)	1.82	0.066	Bluegill
			****	NOT RECORDED			Carp
196	25-366	( 87%)	.015	.000-.043 (186%)	1.04	1.447	Channel catfish
			****	NOT RECORDED			Crappie spp.
374	211-538	( 44%)	.016	.006-.026 ( 62%)	1.99	1.132	Largemouth bass
			****	NOT RECORDED			Muskellunge
4	0-8	(119%)	.000	.000-.001 (159%)	0.02	0.070	Rock bass
20	7-33	( 63%)	.001	.000-.003 ( 99%)	0.11	0.104	Redear sunfish
			****	NOT RECORDED			Threadfin shad
30	2-57	( 93%)	.002	.000-.003 ( 94%)	0.16	0.168	Warmouth
2	0-5	(156%)	.000	.000-.001 (205%)	0.01	0.304	Yellow bullhead
1	0-3	(318%)	.000	.000-.000 (318%)	0.00	0.133	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
2228	1661-2794	( 25%)	.107	.052-.162 ( 52%)	4.78	0.354	All species
89	13-165	( 85%)	.001	.000-.002 ( 82%)	0.19	0.545	Black crappie
757	411-1103	( 46%)	.030	.021-.039 ( 31%)	1.62	0.145	Bluegill
			****	NOT RECORDED ****			Carp
431	55-808	( 87%)	.033	.000-.094 (186%)	0.93	3.190	Channel catfish
			****	NOT RECORDED ****			Crappie spp.
825	465-1186	( 44%)	.035	.013-.057 ( 62%)	1.77	2.496	Largemouth bass
			****	NOT RECORDED ****			Muskellunge
9	0-19	(119%)	.000	.000-.001 (159%)	0.02	0.153	Rock bass
45	16-73	( 63%)	.003	.000-.006 ( 99%)	0.10	0.228	Redear sunfish
			****	NOT RECORDED ****			Threadfin shad
65	5-125	( 93%)	.004	.000-.008 ( 94%)	0.14	0.370	Warmouth
5	0-12	(156%)	.001	.000-.002 (205%)	0.01	0.669	Yellow bullhead
2	0-9	(430%)	.000	.000-.000 (318%)	0.00	0.293	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
22339	18948-25730 ( 15%)	.899	.748-1.050 ( 17%)	118.48	47.95	All species
941	395-1487 ( 58%)	.034	.009-.059 ( 73%)	4.99	2.02	Black crappie
14104	10916-17291 ( 23%)	.633	.494-.771 ( 22%)	74.80	30.27	Bluegill
2	0-11 (430%)	.000	.000-.002 (1271%)	0.01	0.00	Carp
170	63-277 ( 63%)	.009	.003-.015 ( 68%)	0.90	0.36	Channel catfish
36	0-105 (188%)	.001	.000-.004 (193%)	0.19	0.08	Crappie spp.
6128	5008-7247 ( 18%)	.173	.142-.204 ( 18%)	32.50	13.15	Largemouth bass
313	178-448 ( 43%)	.016	.008-.024 ( 52%)	1.66	0.67	Muskellunge
61	5-116 ( 92%)	.002	.000-.005 ( 89%)	0.32	0.13	Rock bass
354	77-630 ( 78%)	.018	.004-.032 ( 77%)	1.87	0.76	Redear sunfish
6	0-18 (223%)	.000	.000-.001 (223%)	0.03	0.01	Threadfin shad
193	44-342 ( 77%)	.011	.002-.019 ( 81%)	1.02	0.41	Warmouth
7	0-18 (156%)	.001	.000-.003 (205%)	0.04	0.02	Yellow bullhead
15	0-47 (203%)	.001	.000-.002 (290%)	0.08	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
6335	5273-7397 ( 17%)	.203	.166-.239 ( 18%)	33.60	0.284	All species
112	44-179 ( 61%)	.004	.001-.006 ( 76%)	0.59	0.119	Black crappie
543	375-710 ( 31%)	.022	.017-.027 ( 22%)	2.88	0.038	Bluegill
5	0-65 (1271%)	.000	.000-.004 (1271%)	0.03	2.383	Carp
211	39-383 ( 81%)	.016	.000-.044 (176%)	1.12	1.245	Channel catfish
1	0-2 (153%)	.000	.000-.000 (150%)	0.01	0.026	Crappie spp.
4553	3547-5560 ( 22%)	.115	.095-.134 ( 17%)	24.15	0.743	Largemouth bass
836	474-1198 ( 43%)	.042	.020-.064 ( 52%)	4.43	2.673	Muskellunge
4	0-9 (107%)	.000	.000-.001 (142%)	0.02	0.071	Rock bass
34	3-65 ( 92%)	.002	.000-.003 ( 85%)	0.18	0.095	Redear sunfish
		****	NOT RECORDED ****			Threadfin shad
32	4-59 ( 86%)	.002	.000-.003 ( 92%)	0.17	0.164	Warmouth
2	0-5 (156%)	.000	.000-.001 (205%)	0.01	0.304	Yellow bullhead
3	0-9 (244%)	.000	.000-.000 (298%)	0.01	0.169	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
13966	11625-16307 ( 17%)	.447	.367-.527 ( 18%)	29.98	0.625	All species
246	97-395 ( 61%)	.008	.002-.014 ( 76%)	0.53	0.262	Black crappie
1197	827-1566 ( 31%)	.048	.038-.059 ( 22%)	2.57	0.085	Bluegill
11	0-144 (1271%)	.001	.000-.003 (430%)	0.02	5.254	Carp
465	86-844 ( 81%)	.035	.000-.096 (176%)	1.00	2.745	Channel catfish
2	0-5 (153%)	.000	.000-.000 (150%)	0.00	0.058	Crappie spp.
10038	7820-12257 ( 22%)	.252	.210-.295 ( 17%)	21.55	1.638	Largemouth bass
1843	1045-2640 ( 43%)	.094	.045-.142 ( 52%)	3.96	5.893	Muskellunge
10	0-20 (107%)	.000	.000-.001 (142%)	0.02	0.157	Rock bass
74	6-142 ( 92%)	.003	.001-.006 ( 85%)	0.16	0.210	Redear sunfish
		****	NOT RECORDED ****			Threadfin shad
70	9-130 ( 86%)	.004	.000-.008 ( 92%)	0.15	0.362	Warmouth
5	0-12 (156%)	.001	.000-.002 (205%)	0.01	0.669	Yellow bullhead
6	0-20 (244%)	.000	.000-.001 (298%)	0.01	0.373	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	4.7	4.5-4.9	( 5%)	0.5	13.6	567
SHORE	1.5	1.3-1.7	( 13%)	0.3	5.7	84
BOAT & SHORE	4.3	4.1-4.5	( 5%)	0.3	13.6	651
MILES TRAVELED	22.0	19.1-24.8	( 13%)	1	1745	1562
SUCCESS RATING (1-10)	6.3	6.2-6.4	( 2%)	1	10	1559

\*352 samples were from split interviews of completed trips.  
37.6% of all 1730 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 5 out of 1730 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	326	730	58	2		1				
SHORE INTERVIEWS	238	252	78	30	10	3	2			

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

24 ( 1.4%)	ANY	All species
101 ( 5.8%)	BLC	Black crappie
338 ( 19.5%)	BLG	Bluegill
2 ( 0.1%)	BSS	Black bass spp.
1 ( 0.1%)	CAP	Carp
168 ( 9.7%)	CCF	Channel catfish
8 ( 0.5%)	CRP	Crappie spp.
924 ( 53.4%)	LMB	Largemouth bass
163 ( 9.4%)	MUE	Muskellunge
1 ( 0.1%)	WAM	Warmouth

