

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

2004 LINCOLN TRAIL LAK
 137 ACRES
 REGION 3, DISTRICT 11

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: 297/693 = 42.9%

NUMBER OF INTERVIEWS: 1404

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	7747	6822-8672 (12%)	57	50-63 (12%)	20%
	HOLIDAY	7200	6275-8125 (13%)	53	46-59 (13%)	45%
	TOTAL	14947	13639-16255 (9%)	109	100-119 (9%)	32%
SHORE	WEEKDAY	3653	2939-4368 (20%)	27	21-32 (20%)	12%
	HOLIDAY	2587	2141-3033 (17%)	19	16-22 (17%)	25%
	TOTAL	6240	5398-7082 (13%)	46	39-52 (13%)	17%
BOAT & SHORE	WEEKDAY	11400	10232-12569 (10%)	83	75-92 (10%)	17%
	HOLIDAY	9787	8760-10814 (10%)	72	64-79 (10%)	39%
	TOTAL	21187	19632-22743 (7%)	155	144-166 (7%)	28%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
15020	12563-17477 (16%)	.539	.430-.647 (20%)	271.50	109.87	All species
		****	NOT RECORDED			Black bullhead
1967	1159-2775 (41%)	.138	.071-.204 (48%)	35.55	14.39	Black crappie
8559	6678-10440 (22%)	.270	.189-.351 (30%)	154.72	62.61	Bluegill
438	252-624 (42%)	.012	.007-.018 (46%)	7.92	3.20	Bluegill x Redear s
814	601-1028 (26%)	.023	.014-.033 (42%)	14.72	5.96	Channel catfish
137	54-220 (60%)	.003	.001-.006 (62%)	2.48	1.00	Redear sunfish x Gr
545	0-1135 (108%)	.013	.005-.022 (66%)	9.84	3.98	Largemouth bass
		****	NOT RECORDED			Rock bass
1756	1252-2260 (29%)	.050	.031-.069 (38%)	31.74	12.84	Redear sunfish
		****	NOT RECORDED			Smallmouth bass
87	31-143 (64%)	.002	.000-.004 (127%)	1.58	0.64	Warmouth
716	216-1215 (70%)	.027	.013-.040 (50%)	12.94	5.24	White crappie
1	0-5 (218%)	.000	.000-.000 (216%)	0.03	0.01	Yellow bullhead

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

KG HARVESTED	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
3410	2871-3948 (16%)	.126	.101-.150 (20%)	61.63	0.227	All species
		****	NOT RECORDED			Black bullhead
450	270-630 (40%)	.030	.016-.045 (48%)	8.13	0.229	Black crappie
1421	1081-1762 (24%)	.046	.031-.060 (33%)	25.69	0.166	Bluegill
103	54-153 (48%)	.003	.002-.004 (48%)	1.87	0.236	Bluegill x Redear s
574	416-732 (27%)	.020	.008-.032 (61%)	10.38	0.705	Channel catfish
31	11-51 (63%)	.001	.000-.001 (67%)	0.56	0.226	Redear sunfish x Gr
234	2-466 (99%)	.006	.002-.010 (62%)	4.22	0.429	Largemouth bass
		****	NOT RECORDED			Rock bass
443	319-567 (28%)	.013	.008-.018 (37%)	8.01	0.252	Redear sunfish
		****	NOT RECORDED			Smallmouth bass
17	6-28 (63%)	.000	.000-.001 (165%)	0.31	0.199	Warmouth
135	60-210 (55%)	.006	.003-.009 (54%)	2.44	0.189	White crappie
1	0-3 (218%)	.000	.000-.000 (218%)	0.02	0.585	Yellow bullhead

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

LB HARVESTED	95% CI		LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
7517	6329-8705	(16%)	.277	.223-.332 (20%)	54.99	0.500	All species
			****	NOT RECORDED	****		Black bullhead
991	594-1388	(40%)	.067	.035-.099 (48%)	7.25	0.504	Black crappie
3133	2382-3885	(24%)	.101	.068-.133 (33%)	22.92	0.366	Bluegill
228	119-336	(48%)	.007	.003-.010 (48%)	1.67	0.520	Bluegill x Redear s
1266	918-1614	(27%)	.043	.017-.070 (61%)	9.26	1.554	Channel catfish
68	25-111	(63%)	.002	.001-.003 (67%)	0.50	0.498	Redear sunfish x Gr
515	4-1027	(99%)	.014	.005-.022 (62%)	3.77	0.946	Largemouth bass
			****	NOT RECORDED	****		Rock bass
977	704-1250	(28%)	.029	.019-.040 (37%)	7.15	0.556	Redear sunfish
			****	NOT RECORDED	****		Smallmouth bass
38	14-62	(63%)	.001	.000-.003 (165%)	0.28	0.438	Warmouth
298	133-463	(55%)	.013	.006-.021 (54%)	2.18	0.417	White crappie
2	0-6	(216%)	.000	.000-.000 (218%)	0.01	1.290	Yellow bullhead

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
35816	29951-41680 (16%)	1.192	.977-1.406 (18%)	647.41	262.00	All species
9	0-22 (140%)	.000	.000-.001 (149%)	0.17	0.07	Black bullhead
2561	1682-3440 (34%)	.175	.102-.248 (42%)	46.29	18.73	Black crappie
21593	16773-26413 (22%)	.632	.473-.792 (25%)	390.32	157.96	Bluegill
475	285-664 (40%)	.013	.007-.019 (45%)	8.58	3.47	Bluegill x Redear s
1605	1207-2004 (25%)	.045	.030-.060 (33%)	29.02	11.74	Channel catfish
147	63-231 (57%)	.004	.001-.006 (64%)	2.66	1.07	Redear sunfish x Gr
5175	3561-6788 (31%)	.199	.057-.341 (71%)	93.54	37.85	Largemouth bass
15	0-63 (318%)	.002	.000-.008 (430%)	0.27	0.11	Rock bass
2394	1726-3063 (28%)	.065	.045-.086 (32%)	43.28	17.52	Redear sunfish
11	0-36 (245%)	.000	.000-.001 (245%)	0.19	0.08	Smallmouth bass
181	96-265 (47%)	.005	.002-.008 (65%)	3.26	1.32	Warmouth
1649	632-2666 (62%)	.052	.027-.076 (48%)	29.81	12.06	White crappie
1	0-5 (218%)	.000	.000-.000 (216%)	0.03	0.01	Yellow bullhead

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

KG CAUGHT	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
7355	5908-8801 (20%)	.290	.158-.422 (45%)	132.94	0.205	All species
5	0-12 (159%)	.000	.000-.000 (169%)	0.08	0.490	Black bullhead
512	328-695 (36%)	.033	.019-.048 (44%)	9.25	0.200	Black crappie
2039	1619-2459 (21%)	.063	.046-.080 (27%)	36.85	0.094	Bluegill
106	57-156 (47%)	.003	.002-.004 (48%)	1.92	0.224	Bluegill x Redear s
905	667-1144 (26%)	.029	.015-.042 (46%)	16.36	0.564	Channel catfish
32	13-52 (61%)	.001	.000-.002 (68%)	0.59	0.220	Redear sunfish x Gr
2981	1649-4313 (45%)	.136	.004-.267 (97%)	53.88	0.576	Largemouth bass
1	0-5 (318%)	.000	.000-.001 (430%)	0.02	0.079	Rock bass
531	394-668 (26%)	.016	.011-.020 (31%)	9.59	0.222	Redear sunfish
0	0-1 (236%)	.000	.000-.000 (245%)	0.00	0.016	Smallmouth bass
33	14-52 (58%)	.001	.000-.001 (83%)	0.59	0.181	Warmouth
209	103-315 (51%)	.008	.004-.012 (48%)	3.78	0.127	White crappie
1	0-3 (218%)	.000	.000-.000 (218%)	0.02	0.585	Yellow bullhead

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

LB CAUGHT	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
16214	13025-19403 (20%)	.639	.349-.930 (45%)	118.61	0.453	All species
10	0-26 (159%)	.000	.000-.001 (169%)	0.07	1.080	Black bullhead
1128	723-1533 (36%)	.074	.041-.106 (44%)	8.25	0.441	Black crappie
4495	3569-5421 (21%)	.139	.101-.177 (27%)	32.88	0.208	Bluegill
234	125-344 (47%)	.007	.003-.010 (48%)	1.71	0.494	Bluegill x Redear s
1996	1470-2522 (26%)	.064	.034-.093 (46%)	14.60	1.243	Channel catfish
71	28-115 (61%)	.002	.001-.003 (68%)	0.52	0.486	Redear sunfish x Gr
6572	3636-9508 (45%)	.299	.010-.589 (97%)	48.08	1.270	Largemouth bass
3	0-11 (318%)	.000	.000-.001 (318%)	0.02	0.174	Rock bass
1170	868-1472 (26%)	.034	.024-.045 (31%)	8.56	0.489	Redear sunfish
0	0-1 (245%)	.000	.000-.000 (236%)	0.00	0.034	Smallmouth bass
72	30-114 (58%)	.002	.000-.003 (83%)	0.53	0.398	Warmouth
461	226-695 (51%)	.018	.010-.027 (48%)	3.37	0.279	White crappie
2	0-6 (216%)	.000	.000-.000 (218%)	0.01	1.290	Yellow bullhead

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

	MEAN	95% CI		MIN	MAX	#SAMPLES
HOURS PER COMPLETED TRIP*						
BOAT	4.5	4.3-4.7	(5%)	0.5	12.3	538
SHORE	2.6	2.0-3.2	(22%)	0.2	12.0	37
BOAT & SHORE	4.4	4.2-4.6	(5%)	0.2	12.3	575
MILES TRAVELED	61.9	53.0-70.8	(14%)	2	2500	895
SUCCESS RATING (1-10)	4.2	4.0-4.4	(5%)	1	10	890

*385 samples were from split interviews of completed trips.
58.7% of all 980 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 2 out of 980 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	193	379	74	11			1		2	
SHORE INTERVIEWS	112	127	39	26	9	5	1	1		

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

301 (30.7%)	ANY	All species
200 (20.4%)	BLG	Bluegill
2 (0.2%)	BSS	Black bass spp.
51 (5.2%)	CCF	Channel catfish
133 (13.6%)	CRP	Crappie spp.
171 (17.4%)	LMB	Largemouth bass
5 (0.5%)	RSF	Redear sunfish
117 (11.9%)	SUN	Sunfish spp. excluding Crappie and Black Bass

