

ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 1993 CREEL SURVEY RESULTS

1993 WELDON SPRINGS LAKE
 29 ACRES
 REGION 3, DISTRICT 8

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 03/15/1993 through 11/15/1993
 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: 353/738 = 47.8%

NUMBER OF INTERVIEWS: 2663

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	2364	1907-2821 (19%)	82	66-97 (19%)	28%
	HOLIDAY	3472	3057-3888 (12%)	120	105-134 (12%)	55%
	TOTAL	5836	5219-6454 (11%)	201	180-223 (11%)	44%
SHORE	WEEKDAY	6809	5843-7774 (14%)	235	201-268 (14%)	21%
	HOLIDAY	7230	6411-8050 (11%)	249	221-278 (11%)	39%
	TOTAL	14039	12773-15306 (9%)	484	440-528 (9%)	30%
BOAT & SHORE	WEEKDAY	9173	8105-10241 (12%)	316	279-353 (12%)	23%
	HOLIDAY	10703	9784-11621 (9%)	369	337-401 (9%)	44%
	TOTAL	19876	18467-21285 (7%)	685	637-734 (7%)	34%

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

# HARVESTED	95% CI		#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
4962	4281-5642	(14%)	.294	.228-.361 (23%)	422.76	171.09	All species
14	0-29	(113%)	.001	.000-.003 (137%)	1.18	0.48	Black bullhead
1558	1116-2000	(28%)	.140	.079-.201 (44%)	132.75	53.72	Black crappie
981	690-1272	(30%)	.038	.025-.052 (35%)	83.60	33.83	Bluegill
4	0-12	(176%)	.000	.000-.001 (185%)	0.38	0.15	Brown bullhead
28	1-54	(95%)	.001	.000-.001 (87%)	2.37	0.96	Bluegill x Redear s
4	0-14	(220%)	.000	.000-.002 (220%)	0.36	0.15	Carp
1724	1421-2027	(18%)	.087	.068-.106 (22%)	146.88	59.44	Channel catfish
3	0-8	(216%)	.000	.000-.000 (216%)	0.22	0.09	Green sunfish
507	334-681	(34%)	.021	.012-.030 (44%)	43.21	17.49	Largemouth bass
1	0-4	(257%)	.000	.000-.000 (278%)	0.10	0.04	Redear x Green sunf
138	55-221	(60%)	.005	.002-.008 (63%)	11.72	4.74	Redear sunfish
			****	NOT RECORDED	****		White crappie

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

KG HARVESTED	95% CI		KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
1796	1544-2049	(14%)	.094	.079-.110 (16%)	153.07	0.362	All species
8	0-16	(110%)	.001	.000-.001 (133%)	0.67	0.605	Black bullhead
308	218-398	(29%)	.023	.014-.033 (39%)	26.27	0.198	Black crappie
125	90-160	(28%)	.005	.003-.007 (38%)	10.66	0.128	Bluegill
5	0-13	(176%)	.000	.000-.001 (185%)	0.40	1.162	Brown bullhead
7	0-15	(110%)	.000	.000-.000 (89%)	0.60	0.262	Bluegill x Redear s
10	0-31	(218%)	.001	.000-.003 (220%)	0.82	2.420	Carp
876	707-1045	(19%)	.045	.035-.055 (22%)	74.64	0.508	Channel catfish
0	0-1	(216%)	.000	.000-.000 (216%)	0.04	0.231	Green sunfish
416	270-562	(35%)	.017	.009-.025 (45%)	35.47	0.821	Largemouth bass
0	0-1	(278%)	.000	.000-.000 (257%)	0.02	0.180	Redear x Green sunf
41	15-67	(64%)	.001	.000-.002 (59%)	3.49	0.299	Redear sunfish
			****	NOT RECORDED	****		White crappie

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

LB HARVESTED	95% CI		LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
3961	3405-4517	(14%)	.208	.174-.242 (16%)	136.57	0.798	All species
17	0-36	(110%)	.001	.000-.003 (133%)	0.60	1.333	Black bullhead
680	482-878	(29%)	.052	.031-.072 (39%)	23.44	0.437	Black crappie
276	199-353	(28%)	.012	.007-.016 (38%)	9.51	0.281	Bluegill
10	0-28	(176%)	.000	.000-.001 (185%)	0.35	2.563	Brown bullhead
16	0-33	(110%)	.000	.000-.001 (89%)	0.54	0.579	Bluegill x Redear s
21	0-68	(220%)	.002	.000-.008 (218%)	0.74	5.335	Carp
1931	1558-2305	(19%)	.100	.077-.122 (22%)	66.59	1.121	Channel catfish
1	0-3	(214%)	.000	.000-.000 (216%)	0.04	0.509	Green sunfish
918	596-1239	(35%)	.037	.021-.054 (45%)	31.64	1.810	Largemouth bass
0	0-1	(257%)	.000	.000-.000 (278%)	0.01	0.396	Redear x Green sunf
90	32-148	(64%)	.003	.001-.004 (59%)	3.12	0.660	Redear sunfish
			****	NOT RECORDED	****		White crappie

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
15391	12907-17875 (16%)	.777	.617-.937 (21%)	1311.40	530.71	All species
17	0-35 (99%)	.001	.000-.003 (131%)	1.48	0.60	Black bullhead
3523	2405-4640 (32%)	.282	.193-.370 (31%)	300.15	121.47	Black crappie
6781	5263-8300 (22%)	.258	.132-.385 (49%)	577.81	233.84	Bluegill
4	0-12 (176%)	.000	.000-.001 (185%)	0.38	0.15	Brown bullhead
34	5-64 (85%)	.001	.000-.001 (82%)	2.93	1.19	Bluegill x Redear s
4	0-14 (220%)	.000	.000-.002 (220%)	0.36	0.15	Carp
2599	2110-3088 (19%)	.127	.097-.158 (24%)	221.41	89.60	Channel catfish
32	5-58 (84%)	.001	.000-.001 (83%)	2.70	1.09	Green sunfish
2142	1752-2532 (18%)	.099	.078-.120 (21%)	182.50	73.86	Largemouth bass
1	0-4 (257%)	.000	.000-.000 (278%)	0.10	0.04	Redear x Green sunf
245	95-396 (61%)	.006	.003-.009 (52%)	20.90	8.46	Redear sunfish
8	0-33 (318%)	.002	.000-.008 (430%)	0.68	0.28	White crappie

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

KG CAUGHT	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
2866	2527-3205 (12%)	.152	.131-.172 (13%)	244.18	0.186	All species
10	0-20 (97%)	.001	.000-.001 (128%)	0.85	0.585	Black bullhead
456	343-569 (25%)	.038	.026-.049 (31%)	38.83	0.129	Black crappie
284	229-339 (19%)	.012	.007-.017 (42%)	24.18	0.042	Bluegill
5	0-13 (176%)	.000	.000-.001 (185%)	0.40	1.162	Brown bullhead
7	0-15 (107%)	.000	.000-.000 (88%)	0.63	0.216	Bluegill x Redear s
10	0-31 (218%)	.001	.000-.003 (220%)	0.82	2.420	Carp
1034	843-1224 (18%)	.052	.041-.063 (22%)	88.07	0.398	Channel catfish
1	0-2 (104%)	.000	.000-.000 (105%)	0.09	0.034	Green sunfish
1011	782-1241 (23%)	.046	.035-.058 (24%)	86.17	0.472	Largemouth bass
0	0-1 (278%)	.000	.000-.000 (257%)	0.02	0.180	Redear x Green sunf
47	20-74 (57%)	.001	.001-.002 (55%)	4.00	0.192	Redear sunfish
1	0-6 (318%)	.000	.000-.001 (430%)	0.12	0.208	White crappie

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

LB CAUGHT	95% CI		LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
6318	5570-7066	(12%)	.334	.290-.379 (13%)	217.86	0.411	All species
22	1-43	(97%)	.001	.000-.003 (128%)	0.76	1.289	Black bullhead
1005	756-1253	(25%)	.083	.058-.108 (31%)	34.65	0.285	Black crappie
626	504-747	(19%)	.026	.015-.037 (42%)	21.57	0.092	Bluegill
10	0-28	(176%)	.000	.000-.001 (185%)	0.35	2.563	Brown bullhead
16	0-33	(107%)	.000	.000-.001 (88%)	0.56	0.476	Bluegill x Redear s
21	0-68	(220%)	.002	.000-.008 (218%)	0.74	5.335	Carp
2279	1859-2698	(18%)	.115	.090-.140 (22%)	78.58	0.877	Channel catfish
2	0-5	(104%)	.000	.000-.000 (105%)	0.08	0.075	Green sunfish
2230	1724-2735	(23%)	.102	.078-.127 (24%)	76.88	1.041	Largemouth bass
0	0-1	(257%)	.000	.000-.000 (278%)	0.01	0.396	Redear x Green sunf
104	45-163	(57%)	.003	.001-.004 (55%)	3.57	0.423	Redear sunfish
3	0-17	(430%)	.001	.000-.003 (430%)	0.11	0.458	White crappie