

ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 1991 CREEL SURVEY RESULTS

1991 WELDON SPRINGS
 30 ACRES
 REGION 3, DISTRICT 8

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 03/15/1991 through 09/30/1991
 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: 275/600 = 45.8%

NUMBER OF INTERVIEWS: 2964

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	3676	3126-4226 (15%)	125	106-143 (15%)	21%
	HOLIDAY	4090	3527-4653 (14%)	139	120-158 (14%)	44%
	TOTAL	7766	6979-8553 (10%)	263	237-290 (10%)	33%
SHORE	WEEKDAY	10459	9210-11709 (12%)	355	312-397 (12%)	17%
	HOLIDAY	10447	9272-11622 (11%)	354	314-394 (11%)	32%
	TOTAL	20906	19191-22621 (8%)	709	651-767 (8%)	24%
BOAT & SHORE	WEEKDAY	14135	12770-15500 (10%)	479	433-525 (10%)	18%
	HOLIDAY	14537	13234-15840 (9%)	493	449-537 (9%)	35%
	TOTAL	28673	26786-30559 (7%)	972	908-1036 (7%)	27%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
10731	8730-12732 (19%)	.387	.311-.462 (20%)	898.86	363.76	All species
		****	NOT RECORDED ****			Black bullhead
392	214-571 (46%)	.022	.000-.047 (113%)	32.84	13.29	Black crappie
5971	4096-7846 (31%)	.192	.125-.260 (35%)	500.14	202.40	Bluegill
19	0-39 (102%)	.000	.000-.001 (136%)	1.62	0.66	Brown bullhead
434	242-626 (44%)	.013	.006-.019 (49%)	36.38	14.72	Bluegill x Redear s
3	0-9 (231%)	.000	.000-.000 (231%)	0.23	0.09	Carp
2510	2083-2937 (17%)	.098	.082-.115 (17%)	210.28	85.10	Channel catfish
		****	NOT RECORDED ****			Golden shiner
35	0-74 (109%)	.000	.000-.001 (97%)	2.97	1.20	Green sunfish
6	0-18 (181%)	.000	.000-.000 (152%)	0.53	0.21	Gizzard shad
1005	754-1257 (25%)	.049	.034-.065 (32%)	84.22	34.08	Largemouth bass
354	234-474 (34%)	.011	.006-.016 (45%)	29.65	12.00	Redear sunfish

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

KG HARVESTED	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
2425	2083-2767 (14%)	.101	.085-.118 (16%)	203.15	0.226	All species
		****	NOT RECORDED ****			Black bullhead
60	32-87 (46%)	.003	.000-.007 (111%)	5.00	0.152	Black crappie
494	362-625 (27%)	.016	.011-.021 (33%)	41.36	0.083	Bluegill
11	0-23 (108%)	.000	.000-.001 (154%)	0.91	0.574	Brown bullhead
51	28-74 (46%)	.002	.001-.002 (52%)	4.25	0.117	Bluegill x Redear s
9	0-32 (236%)	.000	.000-.000 (231%)	0.79	4.699	Carp
906	718-1094 (21%)	.037	.029-.044 (20%)	75.90	0.361	Channel catfish
		****	NOT RECORDED ****			Golden shiner
2	0-5 (135%)	.000	.000-.000 (117%)	0.19	0.066	Green sunfish
0	0-0 (147%)	.000	.000-.000 (171%)	0.00	0.004	Gizzard shad
818	619-1018 (24%)	.041	.027-.054 (33%)	68.54	0.814	Largemouth bass
74	48-100 (35%)	.002	.001-.004 (46%)	6.19	0.209	Redear sunfish

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

LB HARVESTED	95% CI		LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
5347	4592-6101	(14%)	.223	.187-.259 (16%)	181.25	0.498	All species
			****	NOT RECORDED	****		Black bullhead
132	71-192	(46%)	.007	.000-.015 (111%)	4.46	0.336	Black crappie
1089	799-1378	(27%)	.035	.024-.047 (33%)	36.90	0.182	Bluegill
24	0-50	(108%)	.001	.000-.002 (154%)	0.81	1.265	Brown bullhead
112	61-163	(46%)	.003	.002-.005 (52%)	3.79	0.258	Bluegill x Redear s
21	0-70	(236%)	.000	.000-.000 (236%)	0.70	10.359	Carp
1998	1584-2412	(21%)	.081	.065-.098 (20%)	67.72	0.796	Channel catfish
			****	NOT RECORDED	****		Golden shiner
5	0-12	(135%)	.000	.000-.000 (117%)	0.17	0.146	Green sunfish
0	0-0	(147%)	.000	.000-.000 (171%)	0.00	0.008	Gizzard shad
1804	1364-2244	(24%)	.090	.060-.119 (33%)	61.15	1.795	Largemouth bass
163	106-220	(35%)	.005	.003-.008 (46%)	5.52	0.462	Redear sunfish

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
23707	21186-26228 (11%)	.870	.732-1.007 (16%)	1985.73	803.61	All species
8	0-35 (318%)	.000	.000-.000 (430%)	0.71	0.29	Black bullhead
662	413-911 (38%)	.031	.008-.055 (76%)	55.44	22.44	Black crappie
13445	11216-15675 (17%)	.453	.317-.588 (30%)	1126.23	455.78	Bluegill
22	2-43 (93%)	.001	.000-.001 (123%)	1.85	0.75	Brown bullhead
461	264-657 (43%)	.013	.007-.019 (48%)	38.60	15.62	Bluegill x Redear s
3	0-9 (231%)	.000	.000-.000 (231%)	0.23	0.09	Carp
3104	2587-3621 (17%)	.112	.095-.130 (15%)	260.01	105.23	Channel catfish
7	0-18 (164%)	.000	.000-.000 (167%)	0.56	0.23	Golden shiner
78	23-133 (71%)	.002	.000-.004 (128%)	6.52	2.64	Green sunfish
41	0-83 (105%)	.002	.000-.006 (280%)	3.39	1.37	Gizzard shad
5393	4658-6127 (14%)	.241	.202-.280 (16%)	451.72	182.81	Largemouth bass
483	323-643 (33%)	.015	.008-.023 (48%)	40.46	16.38	Redear sunfish

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

KG CAUGHT	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
5031	4522-5541 (10%)	.210	.185-.235 (12%)	421.44	0.212	All species
5	0-21 (318%)	.000	.000-.000 (430%)	0.42	0.623	Black bullhead
82	49-114 (40%)	.004	.001-.008 (87%)	6.86	0.124	Black crappie
758	619-897 (18%)	.025	.018-.031 (26%)	63.48	0.056	Bluegill
12	0-24 (98%)	.000	.000-.001 (142%)	1.03	0.559	Brown bullhead
54	30-77 (44%)	.002	.001-.002 (51%)	4.49	0.116	Bluegill x Redear s
9	0-32 (236%)	.000	.000-.000 (231%)	0.79	4.699	Carp
996	801-1191 (20%)	.039	.032-.047 (19%)	83.43	0.321	Channel catfish
0	0-1 (189%)	.000	.000-.000 (190%)	0.02	0.041	Golden shiner
3	0-7 (99%)	.000	.000-.000 (144%)	0.28	0.043	Green sunfish
1	0-1 (99%)	.000	.000-.000 (174%)	0.06	0.019	Gizzard shad
3026	2600-3451 (14%)	.137	.114-.160 (17%)	253.46	0.561	Largemouth bass
85	58-113 (32%)	.003	.002-.004 (45%)	7.13	0.176	Redear sunfish

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

LB CAUGHT	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
11092	9969-12215 (10%)	.464	.409-.519 (12%)	376.01	0.468	All species
11	0-46 (318%)	.000	.000-.000 (318%)	0.37	1.374	Black bullhead
180	109-252 (40%)	.009	.001-.017 (87%)	6.12	0.273	Black crappie
1671	1364-1978 (18%)	.055	.041-.069 (26%)	56.64	0.124	Bluegill
27	1-54 (98%)	.001	.000-.002 (142%)	0.92	1.232	Brown bullhead
118	66-170 (44%)	.003	.002-.005 (51%)	4.00	0.257	Bluegill x Redear s
21	0-70 (236%)	.000	.000-.000 (236%)	0.70	10.359	Carp
2196	1767-2625 (20%)	.087	.070-.104 (19%)	74.44	0.707	Channel catfish
1	0-2 (189%)	.000	.000-.000 (190%)	0.02	0.091	Golden shiner
7	0-15 (99%)	.000	.000-.000 (144%)	0.25	0.095	Green sunfish
2	0-3 (99%)	.000	.000-.000 (174%)	0.06	0.041	Gizzard shad
6671	5733-7609 (14%)	.302	.251-.353 (17%)	226.13	1.237	Largemouth bass
188	127-248 (32%)	.007	.004-.009 (45%)	6.36	0.389	Redear sunfish