

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

1993 LAKE CARLTON
 71 ACRES
 REGION 1, DISTRICT 2

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 01/01/1993 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: 418/957 = 43.7%

NUMBER OF INTERVIEWS: 3353

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	14067	12374-15759 (12%)	198	174-222 (12%)	24%
	HOLIDAY	17750	16209-19291 (9%)	250	228-272 (9%)	45%
	TOTAL	31816	29527-34105 (7%)	448	416-480 (7%)	35%
SHORE	WEEKDAY	8563	7591-9536 (11%)	121	107-134 (11%)	18%
	HOLIDAY	8915	7756-10074 (13%)	126	109-142 (13%)	36%
	TOTAL	17478	15965-18991 (9%)	246	225-267 (9%)	27%
BOAT & SHORE	WEEKDAY	22630	20678-24582 (9%)	319	291-346 (9%)	21%
	HOLIDAY	26664	24736-28593 (7%)	376	348-403 (7%)	42%
	TOTAL	49294	46550-52038 (6%)	694	656-733 (6%)	32%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
44336	38374-50298 (13%)	.882	.739-1.024 (16%)	1543.01	624.45	All species
5875	4637-7113 (21%)	.138	.087-.190 (37%)	204.47	82.75	Black crappie
37833	32177-43489 (15%)	.732	.598-.866 (18%)	1316.69	532.86	Bluegill
138	59-217 (57%)	.001	.000-.002 (63%)	4.79	1.94	Channel catfish
4	0-11 (223%)	.000	.000-.000 (223%)	0.12	0.05	Green sunfish
233	144-323 (38%)	.006	.002-.011 (62%)	8.13	3.29	Largemouth bass
		****	NOT RECORDED ****			Muskellunge
249	104-393 (58%)	.004	.001-.006 (62%)	8.65	3.50	Redear sunfish
5	0-11 (144%)	.000	.000-.000 (144%)	0.16	0.07	Walleye
		****	NOT RECORDED ****			Walleye x

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

KG HARVESTED	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
4457	3890-5024 (13%)	.090	.076-.103 (16%)	155.12	0.101	All species
781	619-943 (21%)	.019	.011-.027 (44%)	27.19	0.133	Black crappie
3268	2781-3755 (15%)	.062	.050-.074 (19%)	113.74	0.086	Bluegill
134	62-206 (53%)	.001	.000-.003 (98%)	4.67	0.979	Channel catfish
0	0-1 (223%)	.000	.000-.000 (226%)	0.02	0.151	Green sunfish
223	145-302 (35%)	.007	.002-.011 (65%)	7.77	0.959	Largemouth bass
		****	NOT RECORDED ****			Muskellunge
42	18-66 (58%)	.001	.000-.001 (68%)	1.46	0.169	Redear sunfish
8	0-20 (147%)	.000	.000-.000 (147%)	0.28	2.002	Walleye
		****	NOT RECORDED ****			Walleye x

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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
9826	8576-11076 (13%)	.197	.167-.228 (16%)	138.39	0.222	All species
1722	1364-2080 (21%)	.041	.023-.059 (44%)	24.25	0.293	Black crappie
7205	6131-8278 (15%)	.137	.110-.163 (19%)	101.48	0.190	Bluegill
296	138-454 (53%)	.003	.000-.006 (98%)	4.17	2.159	Channel catfish
1	0-3 (226%)	.000	.000-.000 (223%)	0.01	0.332	Green sunfish
492	320-665 (35%)	.015	.005-.025 (65%)	6.93	2.113	Largemouth bass
		****	NOT RECORDED ****			Muskellunge
92	39-146 (58%)	.001	.000-.002 (68%)	1.30	0.373	Redear sunfish
18	0-44 (147%)	.000	.000-.000 (147%)	0.25	4.413	Walleye
		****	NOT RECORDED ****			Walleye x

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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
101041	90895-111187 (10%)	1.845	1.560-2.131 (15%)	3516.511	423.11	All species
8402	6763-10042 (20%)	.176	.121-.231 (31%)	292.42	118.34	Black crappie
88411	78867-97955 (11%)	1.601	1.320-1.882 (18%)	3076.961	245.23	Bluegill
217	110-323 (49%)	.002	.001-.003 (63%)	7.54	3.05	Channel catfish
13	0-27 (115%)	.000	.000-.000 (136%)	0.44	0.18	Green sunfish
3296	2803-3790 (15%)	.059	.046-.072 (22%)	114.72	46.43	Largemouth bass
67	36-99 (47%)	.000	.000-.001 (59%)	2.34	0.95	Muskellunge
258	113-402 (56%)	.004	.001-.006 (61%)	8.96	3.63	Redear sunfish
309	117-502 (62%)	.003	.001-.005 (62%)	10.77	4.36	Walleye
67	0-206 (206%)	.000	.000-.000 (135%)	2.34	0.95	Walleye x

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

KG CAUGHT	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
8215	7425-9006 (10%)	.148	.130-.167 (13%)	285.92	0.081	All species
991	802-1181 (19%)	.022	.013-.030 (38%)	34.51	0.118	Black crappie
5562	4931-6192 (11%)	.099	.083-.116 (17%)	193.56	0.063	Bluegill
157	83-230 (47%)	.002	.000-.003 (84%)	5.46	0.726	Channel catfish
1	0-3 (114%)	.000	.000-.000 (123%)	0.04	0.098	Green sunfish
1222	1019-1426 (17%)	.023	.017-.030 (28%)	42.54	0.371	Largemouth bass
183	94-273 (49%)	.001	.001-.002 (61%)	6.38	2.735	Muskellunge
43	19-67 (57%)	.001	.000-.001 (68%)	1.49	0.167	Redear sunfish
47	19-75 (59%)	.000	.000-.001 (68%)	1.64	0.153	Walleye
9	0-26 (197%)	.000	.000-.000 (138%)	0.30	0.129	Walleye x

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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
18112	16370-19854 (10%)	.327	.286-.368 (13%)	255.09	0.179	All species
2186	1768-2604 (19%)	.048	.030-.066 (38%)	30.79	0.260	Black crappie
12261	10871-13651 (11%)	.219	.182-.255 (17%)	172.70	0.139	Bluegill
346	183-508 (47%)	.003	.001-.006 (84%)	4.87	1.600	Channel catfish
3	0-6 (114%)	.000	.000-.000 (123%)	0.04	0.215	Green sunfish
2695	2246-3144 (17%)	.051	.037-.066 (28%)	37.96	0.818	Largemouth bass
404	207-601 (49%)	.003	.001-.005 (61%)	5.69	6.029	Muskellunge
94	41-148 (57%)	.001	.000-.002 (68%)	1.33	0.367	Redear sunfish
104	43-165 (59%)	.001	.000-.002 (68%)	1.46	0.337	Walleye
19	0-56 (197%)	.000	.000-.000 (138%)	0.27	0.284	Walleye x

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Day creel only.
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 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: 131/249 = 52.6%

NUMBER OF INTERVIEWS: 1342

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	4564	3510-5617 (23%)	64	49-79 (23%)	27%
	HOLIDAY	6573	5695-7451 (13%)	93	80-105 (13%)	47%
	TOTAL	11137	9766-12508 (12%)	157	138-176 (12%)	39%
SHORE	WEEKDAY	3184	2546-3821 (20%)	45	36-54 (20%)	20%
	HOLIDAY	3815	3084-4546 (19%)	54	43-64 (19%)	41%
	TOTAL	6999	6073-7925 (13%)	99	86-112 (13%)	31%
BOAT & SHORE	WEEKDAY	7747	6530-8964 (16%)	109	92-126 (16%)	24%
	HOLIDAY	10388	9268-11509 (11%)	146	131-162 (11%)	45%
	TOTAL	18136	16481-19790 (9%)	255	232-279 (9%)	36%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
17157	12723-21590 (26%)	.694	.559-.829 (20%)	597.10	241.64	All species
2329	1697-2962 (27%)	.189	.118-.260 (38%)	81.07	32.81	Black crappie
14608	10286-18930 (30%)	.493	.377-.610 (24%)	508.40	205.75	Bluegill
4	0-14 (234%)	.001	.000-.003 (413%)	0.15	0.06	Channel catfish
4	0-11 (223%)	.000	.000-.000 (223%)	0.12	0.05	Green sunfish
126	49-203 (61%)	.008	.000-.017 (106%)	4.40	1.78	Largemouth bass
		****	NOT RECORDED ****			Muskellunge
85	0-236 (178%)	.003	.000-.008 (205%)	2.96	1.20	Redear sunfish
		****	NOT RECORDED ****			Walleye
		****	NOT RECORDED ****			Walleye x

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

KG HARVESTED	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
1735	1313-2156 (24%)	.077	.062-.092 (20%)	60.37	0.101	All species
303	221-386 (27%)	.025	.015-.034 (39%)	10.55	0.130	Black crappie
1288	913-1662 (29%)	.043	.033-.054 (23%)	44.82	0.088	Bluegill
2	0-7 (291%)	.000	.000-.000 (228%)	0.06	0.459	Channel catfish
0	0-1 (223%)	.000	.000-.000 (226%)	0.02	0.151	Green sunfish
127	65-189 (49%)	.009	.000-.017 (96%)	4.42	1.007	Largemouth bass
		****	NOT RECORDED ****			Muskellunge
14	0-39 (170%)	.000	.000-.001 (200%)	0.50	0.171	Redear sunfish
		****	NOT RECORDED ****			Walleye
		****	NOT RECORDED ****			Walleye x

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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
3824	2895-4753 (24%)	.170	.137-.204 (20%)	53.86	0.223	All species
669	487-850 (27%)	.055	.033-.076 (39%)	9.42	0.287	Black crappie
2839	2013-3665 (29%)	.096	.073-.118 (23%)	39.99	0.194	Bluegill
4	0-16 (291%)	.000	.000-.000 (228%)	0.06	1.012	Channel catfish
1	0-3 (226%)	.000	.000-.000 (226%)	0.01	0.332	Green sunfish
280	144-416 (49%)	.019	.001-.037 (96%)	3.94	2.221	Largemouth bass
		****	NOT RECORDED ****			Muskellunge
32	0-86 (170%)	.001	.000-.003 (200%)	0.45	0.377	Redear sunfish
		****	NOT RECORDED ****			Walleye
		****	NOT RECORDED ****			Walleye x

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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
34418	28097-40738	(18%)	1.440	1.202-1.679	(17%)	1197.83	484.75 All species
3328	2339-4316	(30%)	.255	.153-.358	(40%)	115.81	46.87 Black crappie
29879	23909-35848	(20%)	1.131	.920-1.342	(19%)	1039.86	420.83 Bluegill
4	0-14	(234%)	.001	.000-.003	(413%)	0.15	0.06 Channel catfish
7	0-17	(130%)	.000	.000-.000	(139%)	0.26	0.10 Green sunfish
873	670-1077	(23%)	.044	.028-.060	(36%)	30.39	12.30 Largemouth bass
19	2-35	(91%)	.001	.000-.001	(106%)	0.65	0.26 Muskellunge
86	0-237	(175%)	.003	.000-.008	(205%)	3.00	1.21 Redear sunfish
159	0-345	(116%)	.005	.001-.009	(85%)	5.55	2.25 Walleye
62	0-200	(223%)	.000	.000-.001	(223%)	2.16	0.87 Walleye x

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

KG CAUGHT	95% CI		KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
2874	2358-3391	(18%)	.130	.108-.152	(17%)	100.03	0.084 All species
383	274-492	(28%)	.030	.018-.042	(39%)	13.33	0.115 Black crappie
1966	1538-2394	(22%)	.073	.058-.087	(20%)	68.42	0.066 Bluegill
2	0-7	(291%)	.000	.000-.000	(228%)	0.06	0.459 Channel catfish
1	0-2	(143%)	.000	.000-.000	(150%)	0.03	0.112 Green sunfish
417	307-527	(26%)	.024	.014-.035	(44%)	14.52	0.478 Largemouth bass
63	0-133	(110%)	.002	.000-.004	(118%)	2.21	3.523 Muskellunge
15	0-39	(168%)	.000	.000-.001	(199%)	0.51	0.169 Redear sunfish
20	0-45	(127%)	.001	.000-.001	(98%)	0.69	0.125 Walleye
8	0-25	(226%)	.000	.000-.000	(223%)	0.26	0.122 Walleye x

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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
6336	5198-7475	(18%)	.286	.238-.335	(17%)	89.24	0.184 All species
844	604-1084	(28%)	.066	.040-.092	(39%)	11.89	0.254 Black crappie
4334	3391-5278	(22%)	.160	.129-.192	(20%)	61.05	0.145 Bluegill
4	0-16	(291%)	.000	.000-.000	(228%)	0.06	1.012 Channel catfish
2	0-4	(143%)	.000	.000-.000	(150%)	0.02	0.247 Green sunfish
920	678-1162	(26%)	.053	.030-.077	(44%)	12.96	1.054 Largemouth bass
140	0-294	(110%)	.004	.000-.009	(118%)	1.97	7.766 Muskellunge
32	0-86	(168%)	.001	.000-.003	(199%)	0.45	0.373 Redear sunfish
44	0-99	(127%)	.001	.000-.002	(98%)	0.62	0.275 Walleye
17	0-54	(223%)	.000	.000-.000	(223%)	0.24	0.269 Walleye x

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