

ILLINOIS NATURAL HISTORY SURVEY  
 CENTER FOR AQUATIC ECOLOGY  
 2003 CREEL SURVEY RESULTS

2003 HOMER LAKE  
 81 ACRES  
 REGION 3, DISTRICT 10

STRATIFICATION SUMMARY:

Day creel only.  
 Results cover 03/15/2003 through 10/31/2003  
 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: 293/693 = 42.3%

NUMBER OF INTERVIEWS: 934

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	2237	1760-2713 ( 21%)	28	22-33 ( 21%)	17%
	HOLIDAY	2565	1995-3135 ( 22%)	32	25-39 ( 22%)	32%
	TOTAL	4802	4059-5545 ( 15%)	59	50-68 ( 15%)	25%
SHORE	WEEKDAY	6505	5603-7407 ( 14%)	80	69-91 ( 14%)	12%
	HOLIDAY	7099	6106-8092 ( 14%)	88	75-100 ( 14%)	15%
	TOTAL	13604	12262-14945 ( 10%)	168	151-185 ( 10%)	14%
BOAT & SHORE	WEEKDAY	8741	7721-9762 ( 12%)	108	95-121 ( 12%)	13%
	HOLIDAY	9664	8519-10809 ( 12%)	119	105-133 ( 12%)	20%
	TOTAL	18406	16872-19939 ( 8%)	227	208-246 ( 8%)	17%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
11403	8120-14685 ( 29%)	.372	.241-.503 ( 35%)	347.85	140.77	All species
31	0-88 (180%)	.000	.000-.001 (142%)	0.95	0.39	Black bullhead
498	102-895 ( 80%)	.022	.000-.059 (165%)	15.21	6.15	Black crappie
435	117-754 ( 73%)	.013	.002-.024 ( 84%)	13.28	5.38	Bluegill
8	0-18 (135%)	.001	.000-.004 (198%)	0.24	0.10	Carp
948	588-1308 ( 38%)	.032	.020-.044 ( 38%)	28.92	11.70	Channel catfish
11	0-42 (278%)	.000	.000-.001 (278%)	0.34	0.14	Crappie spp.
		****	NOT RECORDED ****			Golden shiner
		****	NOT RECORDED ****			Green sunfish
330	0-793 (140%)	.007	.000-.017 (147%)	10.07	4.08	Largemouth bass
		****	NOT RECORDED ****			Northern pike
3	0-9 (236%)	.000	.000-.001 (236%)	0.08	0.03	Redear sunfish
9138	6073-12203 ( 34%)	.296	.193-.400 ( 35%)	278.76	112.81	White crappie
		****	NOT RECORDED ****			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
1687	879-2494 ( 48%)	.066	.036-.097 ( 46%)	51.45	0.148	All species
10	0-24 (144%)	.000	.000-.000 (161%)	0.29	0.309	Black bullhead
48	8-87 ( 83%)	.001	.000-.003 (139%)	1.46	0.096	Black crappie
24	4-44 ( 84%)	.001	.000-.001 ( 87%)	0.74	0.056	Bluegill
29	0-66 (126%)	.012	.000-.038 (225%)	0.90	3.797	Carp
569	351-787 ( 38%)	.021	.013-.030 ( 41%)	17.36	0.600	Channel catfish
6	0-24 (318%)	.000	.000-.001 (318%)	0.18	0.528	Crappie spp.
		****	NOT RECORDED ****			Golden shiner
		****	NOT RECORDED ****			Green sunfish
286	0-881 (208%)	.006	.000-.018 (211%)	8.73	0.867	Largemouth bass
		****	NOT RECORDED ****			Northern pike
0	0-2 (236%)	.000	.000-.000 (245%)	0.01	0.186	Redear sunfish
714	468-960 ( 35%)	.025	.015-.035 ( 41%)	21.78	0.078	White crappie
		****	NOT RECORDED ****			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
3718	1938-5499	( 48%)	.147	.079-.214 ( 46%)	45.91	0.326	All species
21	0-52	(144%)	.000	.000-.001 (161%)	0.26	0.681	Black bullhead
105	18-192	( 83%)	.003	.000-.007 (139%)	1.30	0.211	Black crappie
53	9-98	( 84%)	.002	.000-.003 ( 87%)	0.66	0.123	Bluegill
65	0-146	(126%)	.026	.000-.083 (225%)	0.80	8.372	Carp
1254	773-1736	( 38%)	.047	.028-.067 ( 41%)	15.49	1.323	Channel catfish
13	0-54	(318%)	.000	.000-.002 (318%)	0.16	1.163	Crappie spp.
			****	NOT RECORDED ****			Golden shiner
			****	NOT RECORDED ****			Green sunfish
631	0-1943	(208%)	.013	.000-.040 (211%)	7.79	1.912	Largemouth bass
			****	NOT RECORDED ****			Northern pike
1	0-4	(245%)	.000	.000-.000 (245%)	0.01	0.410	Redear sunfish
1574	1031-2117	( 35%)	.055	.033-.078 ( 41%)	19.43	0.172	White crappie
			****	NOT RECORDED ****			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
47779	41417-54142 ( 13%)	1.613	1.409-1.817 ( 13%)	1457.56	589.87	All species
109	5-212 ( 95%)	.002	.000-.005 ( 90%)	3.31	1.34	Black bullhead
946	401-1490 ( 58%)	.032	.000-.068 (114%)	28.85	11.67	Black crappie
15607	12758-18456 ( 18%)	.522	.409-.635 ( 22%)	476.11	192.68	Bluegill
100	20-179 ( 80%)	.003	.000-.006 ( 86%)	3.04	1.23	Carp
2650	2086-3214 ( 21%)	.111	.079-.143 ( 29%)	80.84	32.72	Channel catfish
54	2-106 ( 96%)	.002	.000-.005 (162%)	1.65	0.67	Crappie spp.
108	0-370 (241%)	.003	.000-.006 (121%)	3.31	1.34	Golden shiner
80	0-193 (140%)	.007	.000-.020 (190%)	2.46	0.99	Green sunfish
5525	4536-6514 ( 18%)	.292	.226-.359 ( 23%)	168.54	68.21	Largemouth bass
29	7-51 ( 75%)	.002	.000-.003 (105%)	0.90	0.36	Northern pike
3	0-9 (236%)	.000	.000-.001 (236%)	0.08	0.03	Redear sunfish
22499	17922-27076 ( 20%)	.630	.508-.752 ( 19%)	686.36	277.76	White crappie
70	0-209 (199%)	.007	.000-.021 (213%)	2.13	0.86	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
5461	4501-6420 ( 18%)	.250	.200-.300 ( 20%)	166.58	0.114	All species
41	0-92 (123%)	.001	.000-.002 (121%)	1.26	0.381	Black bullhead
74	26-122 ( 64%)	.002	.000-.004 (105%)	2.26	0.078	Black crappie
858	683-1033 ( 20%)	.029	.022-.036 ( 24%)	26.17	0.055	Bluegill
340	6-675 ( 98%)	.017	.000-.044 (154%)	10.39	3.415	Carp
912	678-1146 ( 26%)	.037	.024-.049 ( 34%)	27.82	0.344	Channel catfish
9	0-25 (196%)	.000	.000-.001 (210%)	0.26	0.158	Crappie spp.
5	0-16 (204%)	.000	.000-.000 (100%)	0.16	0.047	Golden shiner
4	0-10 (129%)	.000	.000-.001 (184%)	0.13	0.053	Green sunfish
1891	1222-2561 ( 35%)	.122	.079-.165 ( 35%)	57.70	0.342	Largemouth bass
18	0-36 ( 98%)	.001	.000-.003 (151%)	0.55	0.614	Northern pike
0	0-2 (236%)	.000	.000-.000 (245%)	0.01	0.186	Redear sunfish
1301	1010-1591 ( 22%)	.039	.028-.049 ( 27%)	39.68	0.058	White crappie
6	0-20 (202%)	.001	.000-.002 (215%)	0.20	0.093	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
12039	9923-14154 ( 18%)	.551	.440-.662 ( 20%)	148.63	0.252	All species
91	0-203 (123%)	.002	.000-.004 (121%)	1.13	0.839	Black bullhead
164	58-269 ( 64%)	.004	.000-.008 (105%)	2.02	0.173	Black crappie
1891	1505-2278 ( 20%)	.065	.049-.080 ( 24%)	23.35	0.121	Bluegill
751	13-1489 ( 98%)	.038	.000-.097 (154%)	9.27	7.528	Carp
2010	1495-2526 ( 26%)	.081	.053-.108 ( 34%)	24.82	0.759	Channel catfish
19	0-56 (196%)	.001	.000-.002 (210%)	0.23	0.347	Crappie spp.
11	0-34 (204%)	.000	.000-.001 (100%)	0.14	0.104	Golden shiner
9	0-22 (129%)	.001	.000-.002 (184%)	0.12	0.117	Green sunfish
4170	2694-5645 ( 35%)	.270	.175-.365 ( 35%)	51.48	0.755	Largemouth bass
40	1-79 ( 98%)	.003	.000-.007 (151%)	0.49	1.354	Northern pike
1	0-4 (245%)	.000	.000-.000 (245%)	0.01	0.410	Redear sunfish
2867	2227-3508 ( 22%)	.086	.062-.109 ( 27%)	35.40	0.127	White crappie
14	0-43 (202%)	.001	.000-.004 (215%)	0.18	0.205	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	4.4	3.8-4.9	( 13%)	0.8	8.5	57
SHORE	2.3	1.7-2.8	( 25%)	0.5	8.0	46
BOAT & SHORE	3.4	3.0-3.9	( 13%)	0.5	8.5	103
MILES TRAVELED	15.8	15.1-16.4	( 4%)	1	90	754
SUCCESS RATING (1-10)	4.2	4.1-4.4	( 4%)	1	10	744

\*47 samples were from split interviews of completed trips.  
11.6% of all 886 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 10 out of 886 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	105	163	25	4						
SHORE INTERVIEWS	277	196	78	27	1	5	1	2	1	1

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

218 ( 24.6%)	ANY	All species
22 ( 2.5%)	BLG	Bluegill
16 ( 1.8%)	CAP	Carp
209 ( 23.6%)	CCF	Channel catfish
178 ( 20.1%)	CRP	Crappie spp.
168 ( 19.0%)	LMB	Largemouth bass
75 ( 8.5%)	WHC	White crappie

Table 11. Number of anglers with a given harvest &amp; release for completed trips

# OF FISH:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
Black crappie																
HARVEST	160	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-
RELEASE	162	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Bluegill																
HARVEST	163	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	121	5	6	5	6	5	6	-	3	1	2	2	1	-	-	-
Carp																
HARVEST	163	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	161	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Channel catfish																
HARVEST	153	6	4	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	143	13	5	2	-	-	-	-	-	-	-	-	-	-	-	-
Crappie spp.																
HARVEST	163	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	159	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-
Golden shiner																
HARVEST	163	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	162	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Green sunfish																
HARVEST	163	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	162	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Largemouth bass																
HARVEST	163	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	103	24	15	3	4	3	6	-	1	-	-	1	-	-	-	3
Northern pike																
HARVEST	163	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	162	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
White crappie																
HARVEST	148	4	-	-	2	-	2	-	1	-	-	-	-	2	-	4
RELEASE	136	9	8	2	-	1	2	-	3	-	2	-	-	-	-	-