

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

2003 SHELBYVILLE
 10191 ACRES
 REGION 0, DISTRICT 0

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: 503/693 = 72.6%

NUMBER OF INTERVIEWS: 5152

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	82437	74119-90754 (10%)	8	7-9 (10%)	9%
	HOLIDAY	76051	64010-88091 (16%)	7	6-9 (16%)	21%
	TOTAL	158488	143854-173122 (9%)	16	14-17 (9%)	15%
SHORE	WEEKDAY	9926	8669-11183 (13%)	1	1-1 (13%)	8%
	HOLIDAY	6947	5573-8321 (20%)	1	1-1 (20%)	20%
	TOTAL	16873	15011-18735 (11%)	2	1-2 (11%)	13%
BOAT & SHORE	WEEKDAY	92363	83951-100775 (9%)	9	8-10 (9%)	9%
	HOLIDAY	82998	70879-95116 (15%)	8	7-9 (15%)	21%
	TOTAL	175360	160608-190113 (8%)	17	16-19 (8%)	15%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
76555	65268-87842 (15%)	.358	.278-.439 (22%)	18.56	7.51	All species
18	0-39 (114%)	.000	.000-.000 (129%)	0.00	0.00	Bigmouth buffalo
		****	NOT RECORDED ****			Bighead carp
		****	NOT RECORDED ****			Black buffalo
		****	NOT RECORDED ****			Black bullhead
5275	1904-8645 (64%)	.023	.011-.034 (52%)	1.28	0.52	Black crappie
5102	2728-7476 (47%)	.034	.016-.051 (51%)	1.24	0.50	Bluegill
36	0-86 (136%)	.000	.000-.001 (145%)	0.01	0.00	Carp
1631	0-4853 (198%)	.030	.000-.097 (219%)	0.40	0.16	Channel catfish
		****	NOT RECORDED ****			Crappie spp.
48	0-107 (123%)	.000	.000-.001 (175%)	0.01	0.00	Flathead catfish
147	29-264 (80%)	.001	.000-.002 (81%)	0.04	0.01	Freshwater drum
159	6-312 (96%)	.001	.000-.003 (103%)	0.04	0.02	Green sunfish
		****	NOT RECORDED ****			Highfin carpsucker
		****	NOT RECORDED ****			Longear x Bluegill
640	344-936 (46%)	.003	.001-.005 (66%)	0.16	0.06	Largemouth bass
		****	NOT RECORDED ****			Longnose gar
		****	NOT RECORDED ****			Muskellunge
		****	NOT RECORDED ****			Orangespotted sunfish
		****	NOT RECORDED ****			Rock bass
		****	NOT RECORDED ****			Redear sunfish
59	0-157 (165%)	.000	.000-.000 (146%)	0.01	0.01	Striped bass x White
		****	NOT RECORDED ****			Shortnose gar
6	0-17 (196%)	.000	.000-.000 (196%)	0.00	0.00	Smallmouth bass
361	23-698 (93%)	.002	.000-.004 (117%)	0.09	0.04	Striped bass
2172	362-3983 (83%)	.004	.002-.006 (48%)	0.53	0.21	Walleye
		****	NOT RECORDED ****			Warmouth
8670	4388-12952 (49%)	.055	.023-.087 (58%)	2.10	0.85	White bass
52208	44398-60017 (15%)	.204	.174-.235 (15%)	12.66	5.12	White crappie
		****	NOT RECORDED ****			Yellow bullhead
23	0-48 (109%)	.000	.000-.001 (149%)	0.01	0.00	Yellow bass

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

KG HARVESTED	95% CI		KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
26179	21381-30978	(18%)	.140	.061-.218 (56%)	6.35	0.342	All species
103	0-237	(130%)	.001	.000-.002 (122%)	0.03	5.595	Bigmouth buffalo
			****	NOT RECORDED ****			Bighead carp
			****	NOT RECORDED ****			Black buffalo
			****	NOT RECORDED ****			Black bullhead
1615	694-2536	(57%)	.007	.004-.010 (48%)	0.39	0.306	Black crappie
515	263-768	(49%)	.003	.002-.005 (53%)	0.12	0.101	Bluegill
36	0-82	(128%)	.000	.000-.001 (145%)	0.01	0.984	Carp
2047	0-5787	(183%)	.036	.000-.113 (212%)	0.50	1.255	Channel catfish
			****	NOT RECORDED ****			Crappie spp.
147	0-335	(129%)	.001	.000-.002 (170%)	0.04	3.063	Flathead catfish
62	2-122	(97%)	.000	.000-.001 (138%)	0.01	0.422	Freshwater drum
14	1-27	(95%)	.000	.000-.000 (106%)	0.00	0.087	Green sunfish
			****	NOT RECORDED ****			Highfin carpsucker
			****	NOT RECORDED ****			Longear x Bluegill
614	298-930	(51%)	.003	.001-.005 (74%)	0.15	0.960	Largemouth bass
			****	NOT RECORDED ****			Longnose gar
			****	NOT RECORDED ****			Muskellunge
			****	NOT RECORDED ****			Orangespotted sunfish
			****	NOT RECORDED ****			Rock bass
			****	NOT RECORDED ****			Redear sunfish
28	0-74	(164%)	.000	.000-.000 (145%)	0.01	0.476	Striped bass x White
			****	NOT RECORDED ****			Shortnose gar
4	0-12	(196%)	.000	.000-.000 (196%)	0.00	0.699	Smallmouth bass
113	0-233	(107%)	.001	.000-.002 (131%)	0.03	0.313	Striped bass
1727	285-3169	(83%)	.003	.001-.004 (51%)	0.42	0.795	Walleye
			****	NOT RECORDED ****			Warmouth
3087	1408-4766	(54%)	.022	.008-.035 (63%)	0.75	0.356	White bass
16065	13699-18431	(15%)	.063	.053-.072 (15%)	3.90	0.308	White crappie
			****	NOT RECORDED ****			Yellow bullhead
3	0-7	(142%)	.000	.000-.000 (182%)	0.00	0.130	Yellow bass

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

LB HARVESTED	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
57716	47137-68294 (18%)	.308	.135-.480 (56%)	5.66	0.754	All species
227	0-523 (130%)	.002	.000-.003 (122%)	0.02	12.335	Bigmouth buffalo
		****	NOT RECORDED ****			Bighead carp
		****	NOT RECORDED ****			Black buffalo
		****	NOT RECORDED ****			Black bullhead
3561	1531-5590 (57%)	.015	.008-.022 (48%)	0.35	0.675	Black crappie
1136	579-1693 (49%)	.008	.004-.012 (53%)	0.11	0.223	Bluegill
79	0-180 (128%)	.001	.000-.002 (145%)	0.01	2.169	Carp
4512	0-12757 (183%)	.080	.000-.249 (212%)	0.44	2.766	Channel catfish
		****	NOT RECORDED ****			Crappie spp.
323	0-740 (129%)	.001	.000-.003 (170%)	0.03	6.754	Flathead catfish
136	4-268 (97%)	.001	.000-.002 (138%)	0.01	0.930	Freshwater drum
30	2-59 (95%)	.000	.000-.001 (106%)	0.00	0.191	Green sunfish
		****	NOT RECORDED ****			Highfin carpsucker
		****	NOT RECORDED ****			Longear x Bluegill
1354	657-2050 (51%)	.006	.002-.011 (74%)	0.13	2.116	Largemouth bass
		****	NOT RECORDED ****			Longnose gar
		****	NOT RECORDED ****			Muskellunge
		****	NOT RECORDED ****			Orangespotted sunfish
		****	NOT RECORDED ****			Rock bass
		****	NOT RECORDED ****			Redear sunfish
62	0-164 (164%)	.000	.000-.000 (145%)	0.01	1.050	Striped bass x White
		****	NOT RECORDED ****			Shortnose gar
9	0-27 (196%)	.000	.000-.000 (196%)	0.00	1.541	Smallmouth bass
249	0-515 (107%)	.001	.000-.003 (131%)	0.02	0.691	Striped bass
3807	628-6986 (83%)	.006	.003-.009 (51%)	0.37	1.753	Walleye
		****	NOT RECORDED ****			Warmouth
6806	3104-10508 (54%)	.047	.017-.078 (63%)	0.67	0.785	White bass
35417	30201-40633 (15%)	.138	.117-.160 (15%)	3.48	0.678	White crappie
		****	NOT RECORDED ****			Yellow bullhead
7	0-16 (142%)	.000	.000-.000 (182%)	0.00	0.286	Yellow bass

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
253884	225875-281892 (11%)	1.195	1.041-1.348 (13%)	61.56	24.91	All species
140	11-269 (92%)	.001	.000-.001 (90%)	0.03	0.01	Bigmouth buffalo
7	0-23 (214%)	.000	.000-.000 (213%)	0.00	0.00	Bighead carp
20	0-61 (206%)	.000	.000-.000 (206%)	0.00	0.00	Black buffalo
8	0-24 (216%)	.000	.000-.000 (216%)	0.00	0.00	Black bullhead
14444	8849-20040 (39%)	.071	.043-.098 (39%)	3.50	1.42	Black crappie
18803	14849-22757 (21%)	.145	.104-.187 (28%)	4.56	1.85	Bluegill
398	98-698 (75%)	.003	.000-.007 (101%)	0.10	0.04	Carp
1868	0-5093 (173%)	.031	.000-.098 (211%)	0.45	0.18	Channel catfish
47	0-102 (116%)	.001	.000-.002 (183%)	0.01	0.00	Crappie spp.
60	0-121 (102%)	.000	.000-.001 (164%)	0.01	0.01	Flathead catfish
4425	3297-5553 (25%)	.018	.013-.022 (26%)	1.07	0.43	Freshwater drum
691	341-1042 (51%)	.008	.000-.017 (103%)	0.17	0.07	Green sunfish
5	0-14 (207%)	.000	.000-.000 (206%)	0.00	0.00	Highfin carpsucker
16	0-47 (199%)	.000	.000-.000 (192%)	0.00	0.00	Longear x Bluegill
32728	27789-37667 (15%)	.120	.076-.164 (37%)	7.94	3.21	Largemouth bass
2	0-5 (207%)	.000	.000-.000 (208%)	0.00	0.00	Longnose gar
807	437-1176 (46%)	.002	.000-.004 (118%)	0.20	0.08	Muskellunge
12	0-35 (196%)	.000	.000-.000 (196%)	0.00	0.00	Orangespotted sunfish
180	0-403 (124%)	.005	.000-.013 (187%)	0.04	0.02	Rock bass
4	0-11 (159%)	.000	.000-.000 (163%)	0.00	0.00	Redear sunfish
59	0-157 (165%)	.000	.000-.000 (146%)	0.01	0.01	Striped bass x White
369	165-573 (55%)	.001	.000-.003 (91%)	0.09	0.04	Shortnose gar
142	12-272 (91%)	.002	.000-.006 (146%)	0.03	0.01	Smallmouth bass
2122	1380-2865 (35%)	.017	.003-.032 (85%)	0.51	0.21	Striped bass
4297	2351-6243 (45%)	.014	.006-.022 (57%)	1.04	0.42	Walleye
192	0-404 (110%)	.000	.000-.001 (178%)	0.05	0.02	Warmouth
30572	20030-41114 (34%)	.165	.093-.237 (43%)	7.41	3.00	White bass
141084	123878-158290 (12%)	.583	.510-.655 (12%)	34.21	13.84	White crappie
188	72-304 (62%)	.002	.000-.004 (163%)	0.05	0.02	Yellow bullhead
169	46-291 (73%)	.002	.000-.003 (71%)	0.04	0.02	Yellow bass

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

KG CAUGHT	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
66480	58447-74514 (12%)	.293	.210-.375 (28%)	16.12	0.262	All species
589	0-1179 (100%)	.002	.000-.004 (104%)	0.14	4.218	Bigmouth buffalo
		****	NOT RECORDED ****			Bighead carp
8	0-26 (207%)	.000	.000-.000 (206%)	0.00	0.427	Black buffalo
1	0-4 (218%)	.000	.000-.000 (218%)	0.00	0.174	Black bullhead
3030	1843-4218 (39%)	.014	.009-.019 (39%)	0.73	0.210	Black crappie
1240	897-1583 (28%)	.009	.006-.011 (30%)	0.30	0.066	Bluegill
603	35-1172 (94%)	.006	.000-.012 (121%)	0.15	1.516	Carp
2399	0-6153 (156%)	.037	.000-.114 (208%)	0.58	1.284	Channel catfish
7	0-14 (115%)	.000	.000-.000 (190%)	0.00	0.142	Crappie spp.
212	0-427 (101%)	.001	.000-.002 (158%)	0.05	3.542	Flathead catfish
1069	746-1392 (30%)	.004	.003-.005 (36%)	0.26	0.242	Freshwater drum
40	20-60 (50%)	.001	.000-.001 (119%)	0.01	0.058	Green sunfish
0	0-1 (206%)	.000	.000-.000 (207%)	0.00	0.102	Highfin carpsucker
0	0-1 (170%)	.000	.000-.000 (159%)	0.00	0.016	Longear x Bluegill
15918	13095-18741 (18%)	.048	.032-.065 (34%)	3.86	0.486	Largemouth bass
2	0-5 (208%)	.000	.000-.000 (207%)	0.00	1.143	Longnose gar
2872	1321-4423 (54%)	.008	.000-.017 (124%)	0.70	3.561	Muskellunge
1	0-2 (196%)	.000	.000-.000 (196%)	0.00	0.054	Orangespotted sunfish
12	0-28 (138%)	.000	.000-.000 (129%)	0.00	0.066	Rock bass
0	0-0 (159%)	.000	.000-.000 (163%)	0.00	0.022	Redear sunfish
28	0-74 (164%)	.000	.000-.000 (145%)	0.01	0.476	Striped bass x White
397	150-644 (62%)	.001	.000-.002 (99%)	0.10	1.075	Shortnose gar
19	1-36 (92%)	.000	.000-.001 (132%)	0.00	0.132	Smallmouth bass
409	221-597 (46%)	.003	.000-.007 (106%)	0.10	0.193	Striped bass
2675	1206-4144 (55%)	.008	.003-.012 (60%)	0.65	0.623	Walleye
9	0-19 (109%)	.000	.000-.000 (177%)	0.00	0.047	Warmouth
6704	4237-9172 (37%)	.037	.019-.054 (48%)	1.63	0.219	White bass
28190	24669-31712 (12%)	.114	.099-.129 (13%)	6.84	0.200	White crappie
29	11-47 (61%)	.000	.000-.001 (189%)	0.01	0.154	Yellow bullhead
15	7-23 (55%)	.000	.000-.000 (72%)	0.00	0.088	Yellow bass

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

LB CAUGHT	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
146564	128853-164274 (12%)	.645	.464-.826 (28%)	14.38	0.577	All species
1299	0-2598 (100%)	.004	.000-.009 (104%)	0.13	9.300	Bigmouth buffalo
		****	NOT RECORDED ****			Bighead carp
19	0-57 (206%)	.000	.000-.000 (206%)	0.00	0.940	Black buffalo
3	0-9 (218%)	.000	.000-.000 (218%)	0.00	0.383	Black bullhead
6681	4062-9299 (39%)	.031	.019-.043 (39%)	0.66	0.463	Black crappie
2733	1976-3490 (28%)	.019	.014-.025 (30%)	0.27	0.145	Bluegill
1330	76-2583 (94%)	.012	.000-.027 (121%)	0.13	3.342	Carp
5290	0-13565 (156%)	.081	.000-.251 (208%)	0.52	2.831	Channel catfish
15	0-32 (115%)	.000	.000-.001 (190%)	0.00	0.312	Crappie spp.
468	0-941 (101%)	.001	.000-.003 (158%)	0.05	7.810	Flathead catfish
2356	1644-3069 (30%)	.009	.006-.012 (36%)	0.23	0.532	Freshwater drum
88	44-132 (50%)	.001	.000-.003 (119%)	0.01	0.127	Green sunfish
1	0-3 (206%)	.000	.000-.000 (207%)	0.00	0.225	Highfin carpsucker
1	0-1 (170%)	.000	.000-.000 (159%)	0.00	0.035	Longear x Bluegill
35094	28870-41318 (18%)	.106	.070-.143 (34%)	3.44	1.072	Largemouth bass
4	0-12 (207%)	.000	.000-.000 (208%)	0.00	2.520	Longnose gar
6332	2913-9751 (54%)	.017	.000-.038 (124%)	0.62	7.850	Muskellunge
1	0-4 (196%)	.000	.000-.000 (196%)	0.00	0.120	Orangespotted sunfish
26	0-62 (138%)	.000	.000-.001 (129%)	0.00	0.145	Rock bass
0	0-1 (159%)	.000	.000-.000 (163%)	0.00	0.048	Redear sunfish
62	0-164 (164%)	.000	.000-.000 (145%)	0.01	1.050	Striped bass x White
875	331-1419 (62%)	.002	.000-.005 (99%)	0.09	2.370	Shortnose gar
41	3-80 (92%)	.001	.000-.002 (132%)	0.00	0.291	Smallmouth bass
901	486-1316 (46%)	.008	.000-.016 (106%)	0.09	0.425	Striped bass
5898	2659-9137 (55%)	.017	.007-.027 (60%)	0.58	1.373	Walleye
20	0-42 (109%)	.000	.000-.000 (177%)	0.00	0.104	Warmouth
14781	9341-20220 (37%)	.081	.042-.119 (48%)	1.45	0.483	White bass
62149	54385-69913 (12%)	.252	.218-.285 (13%)	6.10	0.441	White crappie
64	25-103 (61%)	.001	.000-.003 (189%)	0.01	0.339	Yellow bullhead
33	15-51 (55%)	.000	.000-.000 (72%)	0.00	0.195	Yellow bass

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

	MEAN	95% CI		MIN	MAX	#SAMPLES
HOURS PER COMPLETED TRIP*						
BOAT	5.5	5.4-5.6	(2%)	0.2	13.7	1827
SHORE	1.9	1.6-2.1	(13%)	0.2	10.5	167
BOAT & SHORE	5.2	5.1-5.3	(2%)	0.2	13.7	1994
MILES TRAVELED	68.6	65.3-71.9	(5%)	1	1200	3024
SUCCESS RATING (1-10)	4.6	4.5-4.7	(2%)	1	10	3019

*1420 samples were from split interviews of completed trips.
57.5% of all 3467 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 4 out of 3467 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	671	1597	306	92	17	3	3	1	1	3
SHORE INTERVIEWS	342	277	98	39	9	5		2		1

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

581 (16.8%)	ANY	All species
7 (0.2%)	BLC	Black crappie
15 (0.4%)	BLG	Bluegill
2 (0.1%)	CAP	Carp
33 (1.0%)	CCF	Channel catfish
1583 (45.7%)	CRP	Crappie spp.
710 (20.5%)	LMB	Largemouth bass
146 (4.2%)	MUE	Muskellunge
4 (0.1%)	STB	Striped bass
154 (4.4%)	WAE	Walleye
96 (2.8%)	WHB	White bass
136 (3.9%)	WHC	White crappie

