

ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 2002 CREEL SURVEY RESULTS

2002 SHABBONA
 304 ACRES
 REGION 1, DISTRICT 1

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 03/15/2002 through 10/31/2002
 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: 244/693 = 35.2%

NUMBER OF INTERVIEWS: 3048

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	53565	48234-58897 (10%)	176	159-194 (10%)	9%
	HOLIDAY	64275	58125-70425 (10%)	211	191-231 (10%)	11%
	TOTAL	117840	109702-125979(7%)	387	361-414 (7%)	10%
SHORE	WEEKDAY	21344	18106-24582 (15%)	70	60-81 (15%)	3%
	HOLIDAY	23416	21230-25601 (9%)	77	70-84 (9%)	3%
	TOTAL	44760	40977-48543 (8%)	147	135-160 (8%)	3%
BOAT & SHORE	WEEKDAY	74910	68749-81071 (8%)	246	226-266 (8%)	7%
	HOLIDAY	87691	81164-94217 (7%)	288	267-310 (7%)	9%
	TOTAL	162601	153626-171575(6%)	534	505-564 (6%)	8%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
18431	14575-22287 (21%)	.107	.022-.192 (79%)	149.66	60.57	All species
50	0-208 (318%)	.001	.000-.004 (318%)	0.40	0.16	Black bullhead
7491	5296-9686 (29%)	.028	.018-.038 (36%)	60.83	24.62	Black crappie
6622	4475-8769 (32%)	.041	.023-.059 (44%)	53.77	21.76	Bluegill
16	0-52 (236%)	.000	.000-.000 (236%)	0.13	0.05	Brown bullhead
		****	NOT RECORDED ****			Carp
2866	1575-4157 (45%)	.015	.008-.022 (46%)	23.27	9.42	Channel catfish
		****	NOT RECORDED ****			Crappie spp.
		****	NOT RECORDED ****			Green sunfish
		****	NOT RECORDED ****			Gizzard shad
117	29-205 (75%)	.000	.000-.001 (75%)	0.95	0.38	Largemouth bass
13	0-40 (213%)	.000	.000-.000 (214%)	0.10	0.04	Muskellunge
		****	NOT RECORDED ****			Striped bass x White Bass
20	0-67 (236%)	.000	.000-.000 (236%)	0.16	0.07	Smallmouth bass
28	0-62 (122%)	.000	.000-.001 (175%)	0.23	0.09	Walleye
799	0-1686 (111%)	.004	.000-.009 (120%)	6.49	2.62	White crappie
411	0-2852 (595%)	.017	.000-.221 (1204%)	3.33	1.35	Yellow perch

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

KG HARVESTED	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
6282	3500-9065 (44%)	.032	.018-.047 (43%)	51.01	0.341	All species
47	0-247 (430%)	.001	.000-.004 (318%)	0.38	0.938	Black bullhead
1517	983-2051 (35%)	.005	.003-.007 (35%)	12.32	0.202	Black crappie
603	399-807 (34%)	.004	.002-.006 (54%)	4.90	0.091	Bluegill
2	0-6 (231%)	.000	.000-.000 (231%)	0.01	0.117	Brown bullhead
		****	NOT RECORDED ****			Carp
3699	939-6459 (75%)	.019	.006-.032 (69%)	30.04	1.291	Channel catfish
		****	NOT RECORDED ****			Crappie spp.
		****	NOT RECORDED ****			Green sunfish
		****	NOT RECORDED ****			Gizzard shad
133	23-243 (83%)	.000	.000-.001 (76%)	1.08	1.137	Largemouth bass
97	0-305 (213%)	.000	.000-.001 (213%)	0.79	7.663	Muskellunge
		****	NOT RECORDED ****			Striped bass x White Bass
6	0-21 (231%)	.000	.000-.000 (231%)	0.05	0.319	Smallmouth bass
20	0-50 (143%)	.000	.000-.001 (181%)	0.17	0.735	Walleye
112	0-226 (103%)	.001	.000-.001 (115%)	0.91	0.140	White crappie
46	0-314 (585%)	.002	.000-.024 (1203%)	0.37	0.112	Yellow perch

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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
13850	7716-19984	(44%)	.072	.041-.103 (43%)	45.52	0.751	All species
103	0-430	(318%)	.002	.000-.010 (430%)	0.34	2.067	Black bullhead
3344	2166-4522	(35%)	.012	.008-.016 (35%)	10.99	0.446	Black crappie
1330	881-1780	(34%)	.008	.004-.013 (54%)	4.37	0.201	Bluegill
4	0-13	(236%)	.000	.000-.000 (231%)	0.01	0.258	Brown bullhead
			****	NOT RECORDED ****			Carp
8155	2070-14239	(75%)	.042	.013-.071 (69%)	26.80	2.845	Channel catfish
			****	NOT RECORDED ****			Crappie spp.
			****	NOT RECORDED ****			Green sunfish
			****	NOT RECORDED ****			Gizzard shad
293	51-535	(83%)	.001	.000-.002 (76%)	0.96	2.506	Largemouth bass
215	0-673	(213%)	.001	.000-.002 (213%)	0.71	16.894	Muskellunge
			****	NOT RECORDED ****			Striped bass x White Bass
14	0-47	(236%)	.000	.000-.000 (236%)	0.05	0.703	Smallmouth bass
45	0-109	(143%)	.000	.000-.001 (181%)	0.15	1.621	Walleye
246	0-499	(103%)	.001	.000-.003 (115%)	0.81	0.308	White crappie
101	0-693	(585%)	.004	.000-.053 (1203%)	0.33	0.247	Yellow perch

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
131995	116275-147714 (12%)	.901	.000-3.277 (264%)	1071.83	433.76	All species
467	0-988 (112%)	.003	.000-.009 (157%)	3.79	1.53	Black bullhead
17719	13467-21970 (24%)	.088	.034-.143 (62%)	143.88	58.23	Black crappie
56967	46740-67193 (18%)	.341	.237-.445 (31%)	462.59	187.21	Bluegill
33	0-82 (147%)	.000	.000-.001 (152%)	0.27	0.11	Brown bullhead
7	0-25 (262%)	.000	.000-.001 (283%)	0.06	0.02	Carp
4443	2999-5887 (32%)	.023	.012-.035 (48%)	36.08	14.60	Channel catfish
6	0-29 (430%)	.000	.000-.000 (430%)	0.04	0.02	Crappie spp.
20	0-85 (318%)	.000	.000-.000 (318%)	0.16	0.07	Green sunfish
5	0-23 (318%)	.000	.000-.001 (318%)	0.04	0.02	Gizzard shad
22374	15857-28891 (29%)	.141	.103-.178 (27%)	181.69	73.53	Largemouth bass
729	475-983 (35%)	.003	.002-.004 (37%)	5.92	2.40	Muskellunge
322	0-877 (172%)	.002	.000-.004 (158%)	2.62	1.06	Striped bass x White Bass
1007	370-1644 (63%)	.005	.001-.008 (80%)	8.18	3.31	Smallmouth bass
5422	3554-7290 (34%)	.025	.015-.035 (41%)	44.03	17.82	Walleye
1198	187-2209 (84%)	.006	.001-.012 (89%)	9.73	3.94	White crappie
21276	13985-28567 (34%)	.264	.000-2.518 (854%)	172.76	69.92	Yellow perch

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

KG CAUGHT	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
21583	18131-25034 (16%)	.130	.096-.163 (26%)	175.26	0.164	All species
87	0-293 (236%)	.001	.000-.005 (300%)	0.71	0.186	Black bullhead
2375	1758-2993 (26%)	.009	.007-.012 (29%)	19.29	0.134	Black crappie
2843	2324-3362 (18%)	.015	.011-.020 (27%)	23.09	0.050	Bluegill
2	0-7 (180%)	.000	.000-.000 (195%)	0.02	0.073	Brown bullhead
12	0-40 (245%)	.001	.000-.002 (269%)	0.09	1.713	Carp
5024	2348-7700 (53%)	.029	.010-.048 (65%)	40.80	1.131	Channel catfish
0	0-1 (318%)	.000	.000-.000 (318%)	0.00	0.059	Crappie spp.
1	0-5 (278%)	.000	.000-.000 (278%)	0.01	0.060	Green sunfish
0	0-1 (430%)	.000	.000-.000 (318%)	0.00	0.037	Gizzard shad
6773	4622-8924 (32%)	.049	.027-.070 (44%)	55.00	0.303	Largemouth bass
1969	1156-2782 (41%)	.007	.004-.010 (42%)	15.99	2.701	Muskellunge
78	0-215 (177%)	.000	.000-.001 (141%)	0.63	0.242	Striped bass x White Bass
238	0-481 (102%)	.001	.000-.001 (87%)	1.93	0.236	Smallmouth bass
1511	901-2122 (40%)	.006	.004-.008 (38%)	12.27	0.279	Walleye
165	27-303 (83%)	.001	.000-.001 (90%)	1.34	0.138	White crappie
502	62-943 (88%)	.010	.000-.108 (957%)	4.08	0.024	Yellow perch

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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
47582	39973-55191 (16%)	.286	.212-.360 (26%)	156.36	0.360	All species
192	0-645 (236%)	.003	.000-.011 (300%)	0.63	0.411	Black bullhead
5237	3875-6599 (26%)	.020	.015-.026 (29%)	17.21	0.296	Black crappie
6268	5123-7413 (18%)	.034	.025-.044 (27%)	20.60	0.110	Bluegill
5	0-15 (180%)	.000	.000-.000 (195%)	0.02	0.160	Brown bullhead
26	0-88 (245%)	.001	.000-.005 (269%)	0.08	3.776	Carp
11077	5177-16976 (53%)	.064	.022-.105 (65%)	36.40	2.493	Channel catfish
1	0-3 (318%)	.000	.000-.000 (430%)	0.00	0.131	Crappie spp.
3	0-11 (318%)	.000	.000-.000 (278%)	0.01	0.132	Green sunfish
0	0-2 (430%)	.000	.000-.000 (430%)	0.00	0.081	Gizzard shad
14931	10190-19673 (32%)	.107	.060-.154 (44%)	49.07	0.667	Largemouth bass
4341	2548-6134 (41%)	.016	.009-.023 (42%)	14.27	5.955	Muskellunge
172	0-474 (177%)	.001	.000-.003 (141%)	0.56	0.533	Striped bass x White Bass
525	0-1060 (102%)	.002	.000-.003 (87%)	1.73	0.521	Smallmouth bass
3332	1987-4677 (40%)	.013	.008-.018 (38%)	10.95	0.615	Walleye
364	60-668 (83%)	.002	.000-.003 (90%)	1.20	0.304	White crappie
1108	137-2078 (88%)	.023	.000-.238 (957%)	3.64	0.052	Yellow perch

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

	MEAN	95% CI		MIN	MAX	#SAMPLES
HOURS PER COMPLETED TRIP*						
BOAT	4.6	4.5-4.8	(4%)	0.1	13.3	828
SHORE	2.5	2.1-2.9	(17%)	0.5	6.2	46
BOAT & SHORE	4.5	4.4-4.7	(4%)	0.1	13.3	874
MILES TRAVELED	42.6	40.9-44.2	(4%)	1	1000	1858
SUCCESS RATING (1-10)	3.7	3.6-3.9	(3%)	1	10	1854

*619 samples were from split interviews of completed trips.
37.3% of all 2345 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 2 out of 2345 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	492	1088	280	62	17	3	1	3		
SHORE INTERVIEWS	152	164	54	19	4		1		2	3

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

1021 (43.5%)	ANY	All species
2 (0.1%)	BLC	Black crappie
74 (3.2%)	BLG	Bluegill
1 (0.0%)	CAT	Unidentified catfish
112 (4.8%)	CCF	Channel catfish
375 (16.0%)	CRP	Crappie spp.
334 (14.2%)	LMB	Largemouth bass
291 (12.4%)	MUE	Muskellunge
12 (0.5%)	SUN	Sunfish spp. excluding Crappie and Black Bass
120 (5.1%)	WAE	Walleye
3 (0.1%)	YEP	Yellow perch

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

# OF FISH:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
Smallmouth bass																
HARVEST	1768	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1757	10	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Walleye																
HARVEST	1767	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1648	89	10	14	2	1	2	-	-	-	2	-	-	2	-	-
White crappie																
HARVEST	1745	9	4	8	-	-	-	-	4	-	-	-	-	-	-	-
RELEASE	1760	5	2	-	-	3	-	-	-	-	-	-	-	-	-	-
Yellow perch																
HARVEST	1737	19	2	6	5	-	1	-	-	-	-	-	-	-	-	-
RELEASE	1500	96	64	27	12	17	26	5	13	2	6	-	2	-	-	-