

ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 1997 CREEL SURVEY RESULTS

1997 SHABBONA LAKE
 304 ACRES
 REGION 1, DISTRICT 1

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 04/01/1997 through 10/31/1997
 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: 285/642 = 44.4%

NUMBER OF INTERVIEWS: 5251

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	44680	40861-48498 (9%)	147	134-159 (9%)	13%
	HOLIDAY	66710	61264-72155 (8%)	219	201-237 (8%)	21%
	TOTAL	111389	104738-118040 (6%)	366	344-388 (6%)	18%
SHORE	WEEKDAY	18578	16399-20758 (12%)	61	54-68 (12%)	9%
	HOLIDAY	22334	20498-24171 (8%)	73	67-79 (8%)	18%
	TOTAL	40912	38063-43762 (7%)	134	125-144 (7%)	14%
BOAT & SHORE	WEEKDAY	63258	58862-67655 (7%)	208	193-222 (7%)	12%
	HOLIDAY	89044	83297-94791 (6%)	293	274-312 (6%)	21%
	TOTAL	152302	145066-159538 (5%)	500	477-524 (5%)	17%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
25948	22386-29510 (14%)	.157	.128-.187 (19%)	210.70	85.27	All species
11242	8221-14262 (27%)	.064	.040-.088 (38%)	91.29	36.94	Black crappie
4902	3719-6085 (24%)	.034	.018-.050 (47%)	39.81	16.11	Bluegill
11	0-36 (236%)	.000	.000-.001 (236%)	0.09	0.04	Carp
3061	2155-3968 (30%)	.022	.016-.027 (26%)	24.86	10.06	Channel catfish
49	0-143 (194%)	.000	.000-.001 (198%)	0.39	0.16	Flathead
catfish		**** NOT RECORDED ****				Golden shiner
		**** NOT RECORDED ****				Gizzard shad
388	245-532 (37%)	.003	.001-.004 (47%)	3.15	1.28	Largemouth bass
		**** NOT RECORDED ****				Muskellunge
41	0-94 (131%)	.000	.000-.000 (125%)	0.33	0.13	Striped bass x
Whit						
13	0-43 (223%)	.000	.000-.000 (220%)	0.11	0.04	Smallmouth bass
277	126-428 (55%)	.001	.000-.002 (75%)	2.25	0.91	Walleye
3415	2590-4239 (24%)	.015	.010-.019 (30%)	27.73	11.22	White crappie
283	20-545 (93%)	.004	.000-.008 (91%)	2.30	0.93	Yellow bullhead
2267	1617-2916 (29%)	.015	.009-.020 (38%)	18.41	7.45	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
5559	4763-6356 (14%)	.042	.029-.054 (31%)	45.14	0.214	All species
1517	1078-1956 (29%)	.008	.005-.012 (43%)	12.32	0.135	Black crappie
427	315-538 (26%)	.003	.001-.005 (60%)	3.47	0.087	Bluegill
15	0-50 (236%)	.001	.000-.002 (245%)	0.12	1.374	Carp
2111	1618-2604 (23%)	.016	.011-.022 (35%)	17.14	0.689	Channel catfish
27	0-81 (197%)	.000	.000-.000 (200%)	0.22	0.560	Flathead
catfish		**** NOT RECORDED ****				Golden shiner
		**** NOT RECORDED ****				Gizzard shad
477	269-685 (44%)	.003	.001-.006 (59%)	3.87	1.228	Largemouth bass
		**** NOT RECORDED ****				Muskellunge
107	0-248 (132%)	.001	.000-.001 (132%)	0.87	2.618	Striped bass x
Whit						
9	0-30 (223%)	.000	.000-.000 (223%)	0.08	0.699	Smallmouth bass
338	127-549 (62%)	.001	.000-.002 (85%)	2.75	1.220	Walleye
298	217-380 (27%)	.001	.001-.002 (31%)	2.42	0.087	White crappie
129	9-249 (93%)	.006	.000-.017 (196%)	1.05	0.456	Yellow bullhead
105	72-137 (31%)	.001	.000-.001 (35%)	0.85	0.046	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
12256	10500-14013	(14%)	.092	.063-.120 (31%)	40.28	0.472	All species
3345	2377-4312	(29%)	.018	.011-.026 (43%)	10.99	0.298	Black crappie
941	695-1187	(26%)	.007	.003-.011 (60%)	3.09	0.192	Bluegill
33	0-110	(236%)	.001	.000-.004 (236%)	0.11	3.029	Carp
4653	3566-5740	(23%)	.036	.023-.049 (35%)	15.29	1.520	Channel catfish
60	0-178	(197%)	.000	.000-.001 (200%)	0.20	1.236	Flathead
catfish			****	NOT RECORDED ****			Golden shiner
			****	NOT RECORDED ****			Gizzard shad
1051	592-1510	(44%)	.008	.003-.012 (59%)	3.45	2.706	Largemouth bass
			****	NOT RECORDED ****			Muskellunge
235	0-546	(132%)	.001	.000-.003 (132%)	0.77	5.771	Striped bass x
Whit							
21	0-66	(223%)	.000	.000-.000 (223%)	0.07	1.541	Smallmouth bass
746	280-1211	(62%)	.002	.000-.005 (85%)	2.45	2.690	Walleye
657	478-837	(27%)	.003	.002-.004 (31%)	2.16	0.193	White crappie
284	20-549	(93%)	.013	.000-.038 (196%)	0.93	1.006	Yellow bullhead
231	159-303	(31%)	.001	.001-.002 (35%)	0.76	0.102	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
39414	34687-44140	(12%)	.249	.211-.287 (15%)	320.05	129.52	All species
12845	9614-16076	(25%)	.076	.051-.102 (33%)	104.30	42.21	Black crappie
6480	5210-7750	(20%)	.044	.028-.061 (38%)	52.62	21.30	Bluegill
11	0-36	(236%)	.000	.000-.001 (236%)	0.09	0.04	Carp
3829	2877-4782	(25%)	.025	.019-.031 (23%)	31.10	12.58	Channel catfish
49	0-143	(194%)	.000	.000-.001 (198%)	0.39	0.16	Flathead
catfish			****	NOT RECORDED ****			Golden shiner
13	0-33	(147%)	.000	.000-.000 (163%)	0.11	0.04	Gizzard shad
4658	3553-5762	(24%)	.032	.021-.042 (33%)	37.82	15.31	Largemouth bass
164	82-245	(50%)	.002	.000-.008 (227%)	1.33	0.54	Muskellunge
56	0-113	(102%)	.000	.000-.000 (109%)	0.45	0.18	Striped bass x
Whit							
529	352-706	(33%)	.003	.002-.005 (45%)	4.29	1.74	Smallmouth bass
1126	828-1424	(26%)	.004	.003-.005 (32%)	9.14	3.70	Walleye
4151	3218-5083	(22%)	.017	.013-.022 (26%)	33.71	13.64	White crappie
564	280-849	(50%)	.007	.003-.010 (60%)	4.58	1.86	Yellow bullhead
4939	4118-5761	(17%)	.037	.027-.048 (28%)	40.11	16.23	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
9351	8136-10566	(13%)	.076	.048-.104 (37%)	75.93	0.237	All species
1669	1208-2130	(28%)	.009	.006-.013 (39%)	13.55	0.130	Black crappie
519	402-636	(23%)	.004	.002-.006 (52%)	4.22	0.080	Bluegill
15	0-50	(236%)	.001	.000-.002 (245%)	0.12	1.374	Carp
2522	2007-3037	(20%)	.019	.013-.025 (31%)	20.48	0.659	Channel catfish
27	0-81	(197%)	.000	.000-.000 (200%)	0.22	0.560	Flathead
catfish			****	NOT RECORDED ****			Golden shiner
1	0-1	(169%)	.000	.000-.000 (205%)	0.00	0.041	Gizzard shad
2683	2018-3348	(25%)	.019	.013-.026 (33%)	21.79	0.576	Largemouth bass
504	196-813	(61%)	.012	.000-.041 (242%)	4.09	3.082	Muskellunge
109	0-250	(129%)	.001	.000-.001 (131%)	0.89	1.959	Striped bass x
Whit							
61	33-89	(46%)	.000	.000-.001 (60%)	0.50	0.116	Smallmouth bass
526	300-752	(43%)	.002	.001-.003 (57%)	4.27	0.467	Walleye
337	248-425	(26%)	.001	.001-.002 (29%)	2.73	0.081	White crappie
200	76-325	(62%)	.007	.000-.018 (175%)	1.63	0.355	Yellow bullhead
177	141-213	(20%)	.001	.001-.002 (27%)	1.44	0.036	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
20615	17937-23294	(13%)	.167	.106-.229 (37%)	67.75	0.523	All species
3680	2663-4697	(28%)	.021	.013-.029 (39%)	12.09	0.286	Black crappie
1145	886-1403	(23%)	.008	.004-.013 (52%)	3.76	0.177	Bluegill
33	0-110	(236%)	.001	.000-.004 (236%)	0.11	3.029	Carp
5560	4425-6695	(20%)	.042	.029-.055 (31%)	18.27	1.452	Channel catfish
60	0-178	(197%)	.000	.000-.001 (200%)	0.20	1.236	Flathead
catfish							
			****	NOT RECORDED ****			Golden shiner
1	0-3	(169%)	.000	.000-.000 (205%)	0.00	0.091	Gizzard shad
5915	4450-7380	(25%)	.042	.028-.056 (33%)	19.44	1.270	Largemouth bass
1112	432-1791	(61%)	.026	.000-.090 (242%)	3.65	6.795	Muskellunge
241	0-552	(129%)	.001	.000-.003 (131%)	0.79	4.319	Striped bass x
Whit							
135	74-197	(46%)	.001	.000-.001 (60%)	0.44	0.256	Smallmouth bass
1160	661-1658	(43%)	.004	.002-.006 (57%)	3.81	1.030	Walleye
742	548-937	(26%)	.003	.002-.004 (29%)	2.44	0.179	White crappie
442	167-716	(62%)	.015	.000-.040 (175%)	1.45	0.783	Yellow bullhead
390	310-470	(20%)	.003	.002-.003 (27%)	1.28	0.079	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	4.5	4.3-4.8 (6%)	0.1	15.1	458
SHORE	3.4	2.2-4.5 (34%)	1.2	7.2	25
BOAT & SHORE	4.5	4.2-4.7 (6%)	0.1	15.1	483
MILES TRAVELED	46.4	45.6-47.1 (2%)	2	723	3585
SUCCESS RATING (1-10)	2.5	2.5-2.6 (3%)	1	10	3403

*260 samples were from split interviews of completed trips.
9.8% of all 4949 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 31 out of 4949 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	846	2128	660	181	19	11				
SHORE INTERVIEWS	253	455	237	88	40	16	7	6	1	1

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

3601 (72.8%)	ANY	All species
247 (5.0%)	BLC	Black crappie
10 (0.2%)	BLG	Bluegill
506 (10.2%)	BSS	Black bass spp.
54 (1.1%)	CAT	Unidentified catfish
38 (0.8%)	CCF	Channel catfish
10 (0.2%)	LMB	Largemouth bass
270 (5.5%)	MUE	Muskellunge
211 (4.3%)	WAE	Walleye
2 (0.0%)	WHC	White crappie

