

ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 1998 CREEL SURVEY RESULTS

1998 SHELBYVILLE TAILW
 6 ACRES
 REGION 3, DISTRICT 11

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 03/15/1998 through 10/31/1998
 Year periods stratified.
 Fishing modes (boat vs. shore) stratified.
 Day types (weekday vs. weekend/holiday) stratified.
 Day periods (morning, midday, and afternoon) stratified.
 Yearperiod 3 coalesced with yearperiod 4.

SAMPLING RATIO: 165/693 = 23.8%

NUMBER OF INTERVIEWS: 1055

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	289	0-1208 (318%)	52	0-216 (318%)	0%
	HOLIDAY	91	5-178 (95%)	16	1-32 (95%)	0%
	TOTAL	380	0-1307 (244%)	68	0-233 (244%)	0%
SHORE	WEEKDAY	12187	8410-15964 (31%)	2176	1502-2851 (31%)	9%
	HOLIDAY	11959	10309-13609 (14%)	2136	1841-2430 (14%)	20%
	TOTAL	24146	20172-28120 (16%)	4312	3602-5021 (16%)	14%
BOAT & SHORE	WEEKDAY	12476	8638-16314 (31%)	2228	1542-2913 (31%)	8%
	HOLIDAY	12050	10398-13702 (14%)	2152	1857-2447 (14%)	20%
	TOTAL	24526	20501-28551 (16%)	4380	3661-5098 (16%)	14%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
8355	6091-10619 (27%)	.130	.083-.178 (36%)	3686.73	1492.00	All species
169	51-287 (70%)	.002	.000-.004 (89%)	74.48	30.14	Bigmouth buffalo
17	0-64 (278%)	.000	.000-.001 (318%)	7.50	3.03	Bluegill x Green sun
		****	NOT RECORDED ****			Black buffalo
131	0-340 (159%)	.002	.000-.004 (147%)	57.95	23.45	Black crappie
310	0-661 (113%)	.008	.000-.033 (330%)	136.72	55.33	Bluegill
153	35-271 (77%)	.003	.000-.006 (135%)	67.49	27.31	Carp
631	0-1529 (142%)	.010	.001-.018 (86%)	278.57	112.73	Channel catfish
31	0-69 (125%)	.000	.000-.001 (128%)	13.52	5.47	Flathead catfish
781	0-1572 (101%)	.004	.002-.006 (55%)	344.44	139.39	Freshwater drum
		****	NOT RECORDED ****			Green sunfish
288	0-684 (138%)	.005	.000-.013 (155%)	126.94	51.37	Gizzard shad
19	0-80 (318%)	.001	.000-.003 (318%)	8.45	3.42	Largemouth bass
14	0-47 (231%)	.000	.000-.000 (226%)	6.29	2.55	Longnose gar
5	0-17 (257%)	.000	.000-.000 (257%)	2.05	0.83	Muskellunge
24	0-90 (278%)	.000	.000-.001 (278%)	10.54	4.27	Redear sunfish
14	0-31 (120%)	.000	.000-.000 (135%)	6.29	2.54	Smallmouth buffalo
		****	NOT RECORDED ****			Sauger
		****	NOT RECORDED ****			Shortnose gar
21	0-60 (182%)	.000	.000-.001 (197%)	9.33	3.77	Smallmouth bass
12	0-34 (181%)	.000	.000-.000 (197%)	5.37	2.17	Striped bass
58	10-106 (83%)	.001	.000-.001 (92%)	25.72	10.41	Walleye
5506	3711-7302 (33%)	.093	.049-.137 (48%)	2429.74	983.30	White bass
144	44-243 (69%)	.002	.000-.005 (112%)	63.37	25.64	White crappie
25	0-75 (199%)	.000	.000-.001 (248%)	11.08	4.48	Yellow bullhead
2	0-8 (318%)	.000	.000-.000 (318%)	0.89	0.36	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
2387	1787-2988	(25%)	.034	.024-.045 (30%)	1053.43	0.286	All species
490	132-848	(73%)	.006	.001-.011 (90%)	216.18	2.916	Bigmouth buffalo
1	0-3	(318%)	.000	.000-.000 (278%)	0.30	0.042	Bluegill x Green sun
			****	NOT RECORDED ****			Black buffalo
19	0-49	(160%)	.000	.000-.001 (172%)	8.35	0.145	Black crappie
17	4-30	(77%)	.000	.000-.001 (130%)	7.54	0.055	Bluegill
79	13-145	(84%)	.001	.000-.002 (99%)	34.81	0.519	Carp
242	0-491	(103%)	.005	.000-.009 (101%)	106.96	0.384	Channel catfish
17	0-40	(140%)	.000	.000-.001 (139%)	7.43	0.561	Flathead catfish
178	1-355	(100%)	.001	.000-.002 (67%)	78.60	0.228	Freshwater drum
			****	NOT RECORDED ****			Green sunfish
7	0-18	(140%)	.000	.000-.001 (195%)	3.24	0.026	Gizzard shad
29	0-154	(430%)	.001	.000-.005 (318%)	12.78	1.524	Largemouth bass
16	0-54	(231%)	.000	.000-.000 (226%)	7.19	1.165	Longnose gar
19	0-66	(245%)	.000	.000-.000 (257%)	8.49	4.811	Muskellunge
0	0-1	(278%)	.000	.000-.000 (278%)	0.17	0.017	Redear sunfish
29	0-67	(132%)	.000	.000-.000 (134%)	12.79	2.070	Smallmouth buffalo
			****	NOT RECORDED ****			Sauger
			****	NOT RECORDED ****			Shortnose gar
27	0-80	(198%)	.000	.000-.001 (233%)	11.91	1.285	Smallmouth bass
2	0-8	(233%)	.000	.000-.000 (241%)	1.02	0.193	Striped bass
81	15-146	(81%)	.001	.000-.001 (86%)	35.67	1.394	Walleye
1093	707-1480	(35%)	.017	.009-.026 (46%)	482.46	0.199	White bass
33	4-61	(88%)	.000	.000-.001 (77%)	14.35	0.227	White crappie
7	0-21	(196%)	.000	.000-.000 (245%)	3.13	0.284	Yellow bullhead
0	0-0	(318%)	.000	.000-.000 (430%)	0.04	0.046	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
5263	3939-6588	(25%)	.076	.053-.099 (30%)	939.87	0.630	All species
1080	290-1870	(73%)	.013	.001-.025 (90%)	192.88	6.429	Bigmouth buffalo
1	0-6	(318%)	.000	.000-.000 (318%)	0.27	0.093	Bluegill x Green sun
			****	NOT RECORDED ****			Black buffalo
42	0-108	(160%)	.001	.000-.001 (172%)	7.45	0.319	Black crappie
38	9-67	(77%)	.001	.000-.001 (130%)	6.73	0.122	Bluegill
174	28-320	(84%)	.003	.000-.005 (99%)	31.06	1.144	Carp
534	0-1083	(103%)	.010	.000-.020 (101%)	95.43	0.847	Channel catfish
37	0-89	(140%)	.000	.000-.001 (139%)	6.62	1.237	Flathead catfish
393	2-784	(100%)	.002	.001-.004 (67%)	70.13	0.504	Freshwater drum
			****	NOT RECORDED ****			Green sunfish
16	0-39	(140%)	.000	.000-.001 (195%)	2.89	0.056	Gizzard shad
64	0-339	(430%)	.003	.000-.011 (318%)	11.40	3.360	Largemouth bass
36	0-119	(231%)	.000	.000-.001 (231%)	6.42	2.567	Longnose gar
42	0-146	(245%)	.000	.000-.001 (257%)	7.58	10.606	Muskellunge
1	0-3	(278%)	.000	.000-.000 (318%)	0.15	0.037	Redear sunfish
64	0-144	(125%)	.000	.000-.001 (141%)	11.41	4.564	Smallmouth buffalo
			****	NOT RECORDED ****			Sauger
			****	NOT RECORDED ****			Shortnose gar
60	0-177	(198%)	.001	.000-.003 (233%)	10.63	2.834	Smallmouth bass
5	0-17	(233%)	.000	.000-.000 (241%)	0.91	0.425	Striped bass
178	34-322	(81%)	.002	.000-.003 (86%)	31.82	3.072	Walleye
2411	1558-3263	(35%)	.039	.021-.056 (46%)	430.45	0.438	White bass
72	9-135	(88%)	.001	.000-.002 (77%)	12.81	0.502	White crappie
16	0-46	(196%)	.000	.000-.001 (245%)	2.79	0.625	Yellow bullhead
0	0-1	(318%)	.000	.000-.000 (430%)	0.04	0.101	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
37883	26687-49079 (30%)	.638	.432-.844 (32%)	16715.80	6764.79	All species
255	121-388 (52%)	.007	.000-.013 (98%)	112.35	45.47	Bigmouth buffalo
17	0-64 (278%)	.000	.000-.001 (318%)	7.50	3.03	Bluegill x Green sun
50	0-153 (206%)	.001	.000-.002 (231%)	22.03	8.92	Black buffalo
1820	186-3454 (90%)	.062	.000-.179 (187%)	803.10	325.01	Black crappie
3235	0-20534 (535%)	.055	.000-.323 (490%)	1427.44	577.68	Bluegill
1167	594-1740 (49%)	.017	.008-.026 (52%)	514.86	208.36	Carp
652	0-1550 (138%)	.010	.002-.018 (84%)	287.77	116.46	Channel catfish
31	0-69 (125%)	.000	.000-.001 (128%)	13.52	5.47	Flathead catfish
5180	3571-6788 (31%)	.054	.036-.072 (33%)	2285.52	924.94	Freshwater drum
25	0-68 (173%)	.000	.000-.000 (161%)	10.99	4.45	Green sunfish
3560	1540-5580 (57%)	.060	.023-.096 (61%)	1570.90	635.74	Gizzard shad
239	47-431 (80%)	.005	.000-.010 (103%)	105.42	42.66	Largemouth bass
466	105-827 (77%)	.009	.001-.018 (91%)	205.62	83.21	Longnose gar
239	126-352 (47%)	.006	.000-.012 (92%)	105.44	42.67	Muskellunge
38	0-106 (179%)	.000	.000-.001 (202%)	16.71	6.76	Redear sunfish
18	0-36 (102%)	.000	.000-.000 (107%)	7.94	3.21	Smallmouth buffalo
68	0-220 (223%)	.001	.000-.003 (235%)	30.07	12.17	Sauger
75	6-144 (92%)	.001	.000-.001 (96%)	33.07	13.38	Shortnose gar
295	40-550 (86%)	.003	.001-.006 (76%)	130.08	52.64	Smallmouth bass
12	0-34 (181%)	.000	.000-.000 (197%)	5.37	2.17	Striped bass
249	140-358 (44%)	.004	.001-.008 (82%)	109.93	44.49	Walleye
16102	11607-20597 (28%)	.274	.116-.431 (58%)	7104.93	2875.33	White bass
3211	1139-5283 (65%)	.055	.000-.146 (165%)	1416.98	573.44	White crappie
821	0-3099 (278%)	.013	.000-.049 (286%)	362.16	146.56	Yellow bullhead
59	0-200 (238%)	.001	.000-.004 (278%)	26.12	10.57	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
6788	5384-8193	(21%)	.125	.084-.167 (33%)	2995.39	0.179	All species
706	254-1158	(64%)	.022	.000-.064 (188%)	311.62	2.780	Bigmouth buffalo
1	0-3	(318%)	.000	.000-.000 (278%)	0.30	0.042	Bluegill x Green sun
150	0-375	(149%)	.002	.000-.006 (184%)	66.26	3.065	Black buffalo
132	3-261	(97%)	.007	.000-.022 (222%)	58.42	0.073	Black crappie
113	0-617	(446%)	.002	.000-.009 (477%)	49.82	0.035	Bluegill
450	223-676	(50%)	.007	.003-.011 (53%)	198.47	0.386	Carp
247	0-496	(101%)	.005	.000-.009 (100%)	108.82	0.378	Channel catfish
17	0-40	(140%)	.000	.000-.001 (139%)	7.43	0.561	Flathead catfish
783	440-1125	(44%)	.009	.005-.013 (45%)	345.34	0.151	Freshwater drum
1	0-3	(171%)	.000	.000-.000 (159%)	0.52	0.049	Green sunfish
91	25-157	(72%)	.002	.000-.003 (87%)	40.12	0.026	Gizzard shad
112	2-222	(98%)	.002	.000-.006 (157%)	49.38	0.470	Largemouth bass
328	120-535	(63%)	.005	.001-.009 (73%)	144.52	0.703	Longnose gar
771	334-1208	(57%)	.019	.000-.037 (98%)	340.28	3.240	Muskellunge
1	0-2	(179%)	.000	.000-.000 (202%)	0.27	0.017	Redear sunfish
33	0-71	(114%)	.000	.000-.000 (111%)	14.71	1.961	Smallmouth buffalo
142	0-421	(197%)	.004	.000-.017 (381%)	62.54	2.084	Sauger
67	0-133	(101%)	.001	.000-.002 (113%)	29.36	0.899	Shortnose gar
273	0-746	(173%)	.003	.000-.007 (151%)	120.42	0.928	Smallmouth bass
2	0-8	(233%)	.000	.000-.000 (241%)	1.02	0.193	Striped bass
140	66-213	(53%)	.002	.000-.004 (106%)	61.73	0.562	Walleye
1919	1320-2518	(31%)	.030	.020-.040 (34%)	846.80	0.119	White bass
157	88-226	(44%)	.002	.000-.004 (79%)	69.38	0.049	White crappie
151	0-592	(291%)	.002	.000-.009 (297%)	66.76	0.185	Yellow bullhead
2	0-10	(291%)	.000	.000-.000 (308%)	1.09	0.042	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
14966	11870-18062	(21%)	.276	.185-.368 (33%)	2672.49	0.395	All species
1557	561-2553	(64%)	.049	.000-.140 (188%)	278.02	6.130	Bigmouth buffalo
1	0-6	(318%)	.000	.000-.000 (318%)	0.27	0.093	Bluegill x Green sun
331	0-826	(149%)	.004	.000-.012 (184%)	59.12	6.756	Black buffalo
292	8-576	(97%)	.015	.000-.049 (222%)	52.13	0.160	Black crappie
249	0-1360	(446%)	.004	.000-.021 (477%)	44.45	0.077	Bluegill
992	492-1491	(50%)	.016	.007-.024 (53%)	177.08	0.850	Carp
544	0-1093	(101%)	.010	.000-.020 (100%)	97.09	0.834	Channel catfish
37	0-89	(140%)	.000	.000-.001 (139%)	6.62	1.237	Flathead catfish
1725	970-2481	(44%)	.019	.011-.028 (45%)	308.11	0.333	Freshwater drum
3	0-7	(171%)	.000	.000-.000 (159%)	0.46	0.108	Green sunfish
200	56-345	(72%)	.004	.001-.007 (87%)	35.80	0.056	Gizzard shad
247	4-490	(98%)	.005	.000-.014 (157%)	44.06	1.037	Largemouth bass
722	265-1179	(63%)	.012	.003-.020 (73%)	128.94	1.550	Longnose gar
1700	736-2664	(57%)	.041	.001-.081 (98%)	303.60	7.144	Muskellunge
1	0-4	(179%)	.000	.000-.000 (202%)	0.24	0.037	Redear sunfish
73	0-157	(114%)	.000	.000-.001 (111%)	13.12	4.323	Smallmouth buffalo
312	0-928	(197%)	.008	.000-.038 (381%)	55.80	4.595	Sauger
147	0-294	(101%)	.002	.000-.004 (113%)	26.20	1.982	Shortnose gar
602	0-1645	(173%)	.006	.000-.015 (151%)	107.44	2.046	Smallmouth bass
5	0-17	(233%)	.000	.000-.000 (241%)	0.91	0.425	Striped bass
308	146-471	(53%)	.005	.000-.010 (106%)	55.08	1.239	Walleye
4231	2910-5551	(31%)	.066	.044-.089 (34%)	755.51	0.263	White bass
347	195-499	(44%)	.005	.001-.009 (79%)	61.90	0.108	White crappie
334	0-1304	(291%)	.005	.000-.021 (297%)	59.56	0.407	Yellow bullhead
5	0-21	(291%)	.000	.000-.000 (308%)	0.97	0.092	Yellow bass

