

ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 2001 CREEL SURVEY RESULTS

2001 FOX CHAIN
Lake Marie & Bluff Lake
 677 ACRES
 REGION 2, DISTRICT 6

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 04/01/2001 through 10/15/2001
 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: 158/594 = 26.6%

NUMBER OF INTERVIEWS: 1481

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	34480	28829-40132 (16%)	51	43-59 (16%)	4%
	HOLIDAY	42005	35998-48011 (14%)	62	53-71 (14%)	7%
	TOTAL	76485	68486-84484 (10%)	113	101-125 (10%)	6%
SHORE	WEEKDAY	4420	3195-5644 (28%)	7	5-8 (28%)	3%
	HOLIDAY	5131	4456-5807 (13%)	8	7-9 (13%)	7%
	TOTAL	9551	8200-10902 (14%)	14	12-16 (14%)	5%
BOAT & SHORE	WEEKDAY	38900	33129-44671 (15%)	57	49-66 (15%)	4%
	HOLIDAY	47136	41087-53185 (13%)	70	61-79 (13%)	7%
	TOTAL	86036	77924-94148 (9%)	127	115-139 (9%)	6%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
52400	43726-61074 (17%)	.634	.480-.788 (24%)	191.14	77.35	All species
36	0-91 (153%)	.000	.000-.001 (155%)	0.13	0.05	Black bullhead
8198	6051-10344 (26%)	.080	.053-.106 (33%)	29.90	12.10	Black crappie
31832	25255-38409 (21%)	.415	.287-.543 (31%)	116.12	46.99	Bluegill
		****	NOT RECORDED ****			Bowfin
56	0-248 (345%)	.000	.000-.001 (378%)	0.20	0.08	Carp
3704	2843-4565 (23%)	.053	.033-.073 (37%)	13.51	5.47	Channel catfish
1069	478-1659 (55%)	.015	.007-.023 (56%)	3.90	1.58	Freshwater drum
250	22-478 (91%)	.004	.000-.009 (124%)	0.91	0.37	Green sunfish
62	2-122 (96%)	.000	.000-.001 (127%)	0.23	0.09	Largemouth bass
36	0-108 (199%)	.000	.000-.000 (199%)	0.13	0.05	Longear sunfish
		****	NOT RECORDED ****			Muskellunge
		****	NOT RECORDED ****			Northern pike
5	0-19 (257%)	.000	.000-.000 (257%)	0.02	0.01	Pumpkinseed x Green
72	0-148 (104%)	.001	.000-.003 (152%)	0.26	0.11	Pumpkinseed
		****	NOT RECORDED ****			Rock bass
3	0-17 (430%)	.000	.000-.000 (430%)	0.01	0.00	Striped bass x Whit
		****	NOT RECORDED ****			Smallmouth bass
883	410-1357 (54%)	.007	.002-.013 (76%)	3.22	1.30	Walleye
40	0-139 (245%)	.000	.000-.000 (245%)	0.15	0.06	Warmouth
3120	1547-4694 (50%)	.016	.008-.023 (48%)	11.38	4.61	White bass
104	0-490 (371%)	.001	.000-.003 (409%)	0.38	0.15	White crappie
65	0-178 (174%)	.000	.000-.001 (173%)	0.24	0.10	Yellow bullhead
2127	1455-2799 (32%)	.036	.012-.060 (67%)	7.76	3.14	Yellow perch
737	374-1100 (49%)	.005	.001-.009 (71%)	2.69	1.09	Yellow bass

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

KG HARVESTED	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
10077	8521-11633 (15%)	.121	.096-.145 (21%)	36.76	0.192	All species
16	0-40 (154%)	.000	.000-.000 (144%)	0.06	0.436	Black bullhead
1811	1306-2317 (28%)	.017	.011-.022 (32%)	6.61	0.221	Black crappie
3463	2765-4160 (20%)	.045	.032-.058 (28%)	12.63	0.109	Bluegill
		****	NOT RECORDED ****			Bowfin
70	0-231 (228%)	.000	.000-.001 (229%)	0.26	1.263	Carp
2144	1587-2701 (26%)	.030	.019-.041 (36%)	7.82	0.579	Channel catfish
955	551-1359 (42%)	.016	.005-.027 (70%)	3.48	0.894	Freshwater drum
19	2-37 (91%)	.000	.000-.001 (116%)	0.07	0.077	Green sunfish
61	1-121 (98%)	.000	.000-.001 (135%)	0.22	0.980	Largemouth bass
6	0-19 (243%)	.000	.000-.000 (243%)	0.02	0.153	Longear sunfish
		****	NOT RECORDED ****			Muskellunge
		****	NOT RECORDED ****			Northern pike
		****	NOT RECORDED ****			Pumpkinseed x Green
7	0-13 (97%)	.000	.000-.000 (131%)	0.02	0.092	Pumpkinseed
		****	NOT RECORDED ****			Rock bass
14	0-74 (430%)	.000	.000-.004 (1271%)	0.05	4.416	Striped bass x Whit
		****	NOT RECORDED ****			Smallmouth bass
642	224-1060 (65%)	.004	.001-.007 (66%)	2.34	0.727	Walleye
7	0-23 (245%)	.000	.000-.000 (245%)	0.02	0.166	Warmouth
496	250-742 (50%)	.003	.001-.004 (48%)	1.81	0.159	White bass
20	0-91 (358%)	.000	.000-.001 (404%)	0.07	0.191	White crappie
12	0-33 (173%)	.000	.000-.000 (175%)	0.04	0.184	Yellow bullhead
227	156-299 (32%)	.004	.001-.007 (78%)	0.83	0.107	Yellow perch
107	55-160 (49%)	.001	.000-.001 (68%)	0.39	0.146	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
22216	18785-25647 (15%)	.266	.211-.320 (21%)	32.80	0.424	All species
34	0-87 (154%)	.000	.000-.001 (144%)	0.05	0.962	Black bullhead
3994	2880-5107 (28%)	.037	.025-.049 (32%)	5.90	0.487	Black crappie
7634	6096-9171 (20%)	.099	.071-.127 (28%)	11.27	0.240	Bluegill
		****	NOT RECORDED ****			Bowfin
155	0-508 (228%)	.001	.000-.002 (229%)	0.23	2.784	Carp
4727	3499-5955 (26%)	.066	.042-.090 (36%)	6.98	1.276	Channel catfish
2106	1216-2996 (42%)	.035	.011-.059 (70%)	3.11	1.970	Freshwater drum
42	4-81 (91%)	.001	.000-.001 (116%)	0.06	0.169	Green sunfish
134	3-266 (98%)	.001	.000-.001 (135%)	0.20	2.161	Largemouth bass
12	0-42 (243%)	.000	.000-.000 (243%)	0.02	0.337	Longear sunfish
		****	NOT RECORDED ****			Muskellunge
		****	NOT RECORDED ****			Northern pike
		****	NOT RECORDED ****			Pumpkinseed x Green
15	0-29 (97%)	.000	.000-.000 (131%)	0.02	0.202	Pumpkinseed
		****	NOT RECORDED ****			Rock bass
31	0-163 (430%)	.001	.000-.009 (1271%)	0.05	9.735	Striped bass x Whit
		****	NOT RECORDED ****			Smallmouth bass
1415	493-2337 (65%)	.009	.003-.015 (66%)	2.09	1.602	Walleye
15	0-50 (236%)	.000	.000-.000 (236%)	0.02	0.367	Warmouth
1094	552-1636 (50%)	.006	.003-.008 (48%)	1.61	0.351	White bass
44	0-201 (358%)	.000	.000-.001 (404%)	0.06	0.421	White crappie
26	0-72 (173%)	.000	.000-.000 (175%)	0.04	0.406	Yellow bullhead
501	343-660 (32%)	.009	.002-.016 (78%)	0.74	0.236	Yellow perch
237	122-352 (49%)	.002	.000-.003 (68%)	0.35	0.321	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
132448	115005-149891 (13%)	1.509	1.257-1.760 (17%)	483.14	195.52	All species
56	0-121 (117%)	.001	.000-.001 (119%)	0.20	0.08	Black bullhead
14013	10567-17459 (25%)	.151	.106-.197 (30%)	51.12	20.69	Black crappie
70040	58031-82049 (17%)	.904	.697-1.111 (23%)	255.49	103.40	Bluegill
22	0-60 (167%)	.000	.000-.000 (186%)	0.08	0.03	Bowfin
480	283-677 (41%)	.011	.003-.019 (74%)	1.75	0.71	Carp
6908	5564-8251 (19%)	.080	.060-.101 (26%)	25.20	10.20	Channel catfish
8252	6057-10447 (27%)	.078	.055-.102 (30%)	30.10	12.18	Freshwater drum
250	22-478 (91%)	.004	.000-.009 (124%)	0.91	0.37	Green sunfish
10049	7695-12403 (23%)	.092	.066-.118 (28%)	36.66	14.83	Largemouth bass
36	0-108 (199%)	.000	.000-.000 (199%)	0.13	0.05	Longear sunfish
699	441-958 (37%)	.004	.002-.006 (54%)	2.55	1.03	Muskellunge
137	2-273 (99%)	.001	.000-.003 (149%)	0.50	0.20	Northern pike
5	0-19 (257%)	.000	.000-.000 (257%)	0.02	0.01	Pumpkinseed x Green
161	0-392 (143%)	.002	.000-.004 (117%)	0.59	0.24	Pumpkinseed
13	0-45 (245%)	.000	.000-.001 (245%)	0.05	0.02	Rock bass
3	0-17 (430%)	.000	.000-.000 (430%)	0.01	0.00	Striped bass x Whit
103	0-281 (173%)	.000	.000-.001 (173%)	0.38	0.15	Smallmouth bass
4544	3328-5759 (27%)	.041	.016-.065 (61%)	16.57	6.71	Walleye
40	0-139 (245%)	.000	.000-.000 (245%)	0.15	0.06	Warmouth
10951	7706-14195 (30%)	.070	.047-.094 (33%)	39.95	16.17	White bass
378	0-1898 (402%)	.003	.000-.014 (421%)	1.38	0.56	White crappie
128	0-258 (102%)	.001	.000-.004 (180%)	0.47	0.19	Yellow bullhead
4210	3135-5286 (26%)	.058	.032-.083 (44%)	15.36	6.22	Yellow perch
969	437-1501 (55%)	.006	.002-.010 (63%)	3.54	1.43	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
25193	21789-28596 (14%)	.302	.044-.560 (86%)	91.90	0.190	All species
22	0-48 (116%)	.000	.000-.001 (116%)	0.08	0.402	Black bullhead
2404	1791-3016 (26%)	.036	.000-.097 (167%)	8.77	0.172	Black crappie
4665	3818-5513 (18%)	.060	.046-.074 (24%)	17.02	0.067	Bluegill
3	0-10 (222%)	.000	.000-.000 (199%)	0.01	0.142	Bowfin
381	211-551 (45%)	.007	.001-.012 (83%)	1.39	0.793	Carp
3330	2643-4017 (21%)	.040	.029-.052 (28%)	12.15	0.482	Channel catfish
3741	2896-4586 (23%)	.040	.027-.053 (33%)	13.65	0.453	Freshwater drum
19	2-37 (91%)	.000	.000-.001 (116%)	0.07	0.077	Green sunfish
4564	3317-5812 (27%)	.034	.023-.045 (32%)	16.65	0.454	Largemouth bass
6	0-19 (243%)	.000	.000-.000 (243%)	0.02	0.153	Longear sunfish
2218	1201-3234 (46%)	.012	.004-.020 (65%)	8.09	3.171	Muskellunge
220	18-421 (92%)	.001	.000-.003 (152%)	0.80	1.601	Northern pike
		****	NOT RECORDED ****			Pumpkinseed x Green
8	1-15 (85%)	.000	.000-.000 (120%)	0.03	0.051	Pumpkinseed
2	0-7 (245%)	.000	.000-.000 (257%)	0.01	0.166	Rock bass
14	0-74 (430%)	.000	.000-.004 (1271%)	0.05	4.416	Striped bass x Whit
59	0-161 (173%)	.000	.000-.001 (173%)	0.21	0.571	Smallmouth bass
2119	1392-2846 (34%)	.058	.000-.247 (328%)	7.73	0.466	Walleye
7	0-23 (245%)	.000	.000-.000 (245%)	0.02	0.166	Warmouth
919	643-1195 (30%)	.005	.004-.007 (31%)	3.35	0.084	White bass
44	0-215 (387%)	.000	.000-.002 (416%)	0.16	0.117	White crappie
19	0-41 (110%)	.000	.000-.001 (156%)	0.07	0.152	Yellow bullhead
301	221-382 (27%)	.005	.001-.008 (68%)	1.10	0.072	Yellow perch
127	67-186 (47%)	.001	.000-.001 (62%)	0.46	0.131	Yellow bass

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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
55540	48037-63043 (14%)	.666	.096-1.235 (86%)	81.99	0.419	All species
49	0-107 (116%)	.001	.000-.001 (116%)	0.07	0.885	Black bullhead
5299	3947-6650 (26%)	.080	.000-.214 (167%)	7.82	0.378	Black crappie
10286	8417-12154 (18%)	.132	.101-.164 (24%)	15.18	0.147	Bluegill
7	0-23 (222%)	.000	.000-.000 (199%)	0.01	0.313	Bowfin
840	465-1214 (45%)	.014	.002-.026 (83%)	1.24	1.749	Carp
7342	5828-8856 (21%)	.089	.064-.114 (28%)	10.84	1.063	Channel catfish
8248	6385-10110 (23%)	.088	.059-.117 (33%)	12.18	0.999	Freshwater drum
42	4-81 (91%)	.001	.000-.001 (116%)	0.06	0.169	Green sunfish
10063	7313-12813 (27%)	.076	.052-.100 (32%)	14.85	1.001	Largemouth bass
12	0-42 (243%)	.000	.000-.000 (243%)	0.02	0.337	Longear sunfish
4889	2649-7129 (46%)	.027	.010-.045 (65%)	7.22	6.990	Muskellunge
485	40-929 (92%)	.003	.000-.008 (152%)	0.72	3.530	Northern pike
		****	NOT RECORDED ****			Pumpkinseed x Green
18	3-33 (85%)	.000	.000-.000 (120%)	0.03	0.112	Pumpkinseed
5	0-16 (245%)	.000	.000-.000 (257%)	0.01	0.367	Rock bass
31	0-163 (430%)	.001	.000-.009 (1271%)	0.05	9.735	Striped bass x Whit
130	0-354 (173%)	.001	.000-.001 (173%)	0.19	1.259	Smallmouth bass
4672	3070-6275 (34%)	.127	.000-.545 (328%)	6.90	1.028	Walleye
15	0-50 (236%)	.000	.000-.000 (236%)	0.02	0.367	Warmouth
2026	1417-2635 (30%)	.012	.008-.016 (31%)	2.99	0.185	White bass
97	0-473 (387%)	.001	.000-.003 (416%)	0.14	0.257	White crappie
43	0-90 (110%)	.000	.000-.001 (156%)	0.06	0.334	Yellow bullhead
664	486-842 (27%)	.010	.003-.017 (68%)	0.98	0.158	Yellow perch
279	148-410 (47%)	.002	.001-.003 (62%)	0.41	0.288	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	4.5	3.4-5.6 (24%)	1.5	8.5	17
SHORE	3.5	*** undefined ***	3.5	3.5	1
BOAT & SHORE	4.5	3.5-5.5 (22%)	1.5	8.5	18
MILES TRAVELED	37.6	34.6-40.6 (8%)	1	1000	1168
SUCCESS RATING (1-10)	2.9	2.8-3.1 (4%)	1	10	1150

*11 samples were from split interviews of completed trips.
1.2% of all 1470 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 1 out of 1470 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	378	675	212	28	1					
SHORE INTERVIEWS	64	101	10	1						

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

123 (8.4%)	ANY	All species
2 (0.1%)	BLC	Black crappie
125 (8.5%)	BLG	Bluegill
1 (0.1%)	CAP	Carp
2 (0.1%)	CAT	Unidentified catfish
82 (5.6%)	CCF	Channel catfish
204 (13.9%)	CRP	Crappie spp.
209 (14.2%)	LMB	Largemouth bass
278 (18.9%)	MUE	Muskellunge
1 (0.1%)	NOP	Northern pike
6 (0.4%)	SUN	Sunfish spp. excluding Crappie and Black Bass
375 (25.5%)	WAE	Walleye
62 (4.2%)	WHB	White bass

