

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

**2001 FOX CHAIN**  
**CHANNEL LAKE & CATHERINE LAKE**  
 498 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: 161/594 = 27.1%

NUMBER OF INTERVIEWS: 1503

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	27256	22371-32142 ( 18%)	55	45-65 ( 18%)	4%
	HOLIDAY	44843	38253-51433 ( 15%)	90	77-103 ( 15%)	7%
	TOTAL	72099	64327-79872 ( 11%)	145	129-160 ( 11%)	6%
SHORE	WEEKDAY	4737	3541-5933 ( 25%)	10	7-12 ( 25%)	3%
	HOLIDAY	5005	4164-5845 ( 17%)	10	8-12 ( 17%)	6%
	TOTAL	9742	8280-11203 ( 15%)	20	17-22 ( 15%)	5%
BOAT & SHORE	WEEKDAY	31993	26976-37011 ( 16%)	64	54-74 ( 16%)	4%
	HOLIDAY	49848	43214-56481 ( 13%)	100	87-113 ( 13%)	7%
	TOTAL	81841	73932-89749 ( 10%)	164	148-180 ( 10%)	6%

2001 FOX CHAIN DAY CREEL SECTION 1 04/01/2001 - 10/15/2001  
 CHANNEL LAKE & CATHERINE LAKE

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
51744	41681-61807 ( 19%)	.837	.520-1.155 ( 38%)	256.75	103.90	All species
61	0-137 (123%)	.001	.000-.002 (125%)	0.30	0.12	Black bullhead
11808	8677-14939 ( 27%)	.150	.098-.202 ( 34%)	58.59	23.71	Black crappie
34420	25762-43079 ( 25%)	.605	.295-.915 ( 51%)	170.79	69.12	Bluegill
		****	NOT RECORDED ****			Bowfin
14	0-37 (158%)	.000	.000-.001 (162%)	0.07	0.03	Carp
1855	1264-2445 ( 32%)	.031	.017-.046 ( 46%)	9.20	3.72	Channel catfish
383	19-747 ( 95%)	.006	.001-.011 ( 87%)	1.90	0.77	Freshwater drum
117	0-235 (101%)	.002	.000-.004 (136%)	0.58	0.24	Green sunfish
303	143-463 ( 53%)	.006	.000-.015 (136%)	1.50	0.61	Largemouth bass
42	0-159 (278%)	.000	.000-.000 (278%)	0.21	0.08	Longear sunfish
		****	NOT RECORDED ****			Muskellunge
		****	NOT RECORDED ****			Northern pike
431	162-701 ( 62%)	.007	.000-.016 (117%)	2.14	0.87	Pumpkinseed
		****	NOT RECORDED ****			Rock bass
		****	NOT RECORDED ****			Smallmouth bass
		****	NOT RECORDED ****			Tiger muskie
366	0-828 (126%)	.002	.000-.003 (104%)	1.82	0.74	Walleye
22	0-91 (318%)	.001	.000-.003 (278%)	0.11	0.04	Warmouth
779	0-2406 (209%)	.008	.000-.028 (230%)	3.86	1.56	White bass
18	0-248 (1271%)	.000	.000-.001 (430%)	0.09	0.04	White crappie
		****	NOT RECORDED ****			Yellow bullhead
998	496-1499 ( 50%)	.017	.005-.029 ( 71%)	4.95	2.00	Yellow perch
127	0-363 (186%)	.001	.000-.004 (224%)	0.63	0.25	Yellow bass

2001 FOX CHAIN DAY CREEL SECTION 1 04/01/2001 - 10/15/2001  
 CHANNEL LAKE & CATHERINE LAKE

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

KG HARVESTED	95% CI		KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
8414	6934-9893	( 18%)	.125	.088-.161 ( 29%)	41.75	0.163	All species
30	0-67	(122%)	.000	.000-.001 (125%)	0.15	0.490	Black bullhead
2338	1736-2940	( 26%)	.029	.019-.038 ( 33%)	11.60	0.198	Black crappie
3826	2839-4812	( 26%)	.065	.031-.099 ( 52%)	18.98	0.111	Bluegill
			****	NOT RECORDED ****			Bowfin
17	0-45	(163%)	.000	.000-.001 (174%)	0.08	1.194	Carp
1028	658-1398	( 36%)	.015	.009-.022 ( 42%)	5.10	0.554	Channel catfish
337	56-617	( 83%)	.005	.001-.009 ( 87%)	1.67	0.878	Freshwater drum
9	0-18	(101%)	.000	.000-.000 (132%)	0.04	0.075	Green sunfish
314	114-513	( 64%)	.004	.000-.008 ( 94%)	1.56	1.036	Largemouth bass
5	0-19	(257%)	.000	.000-.000 (257%)	0.03	0.130	Longear sunfish
			****	NOT RECORDED ****			Muskellunge
			****	NOT RECORDED ****			Northern pike
53	18-88	( 67%)	.001	.000-.002 (128%)	0.26	0.123	Pumpkinseed
			****	NOT RECORDED ****			Rock bass
			****	NOT RECORDED ****			Smallmouth bass
			****	NOT RECORDED ****			Tiger muskie
197	0-476	(142%)	.001	.000-.002 (103%)	0.98	0.538	Walleye
4	0-18	(318%)	.000	.000-.001 (278%)	0.02	0.195	Warmouth
118	0-359	(206%)	.001	.000-.004 (228%)	0.58	0.151	White bass
3	0-17	(430%)	.000	.000-.000 (1271%)	0.02	0.182	White crappie
			****	NOT RECORDED ****			Yellow bullhead
117	54-180	( 54%)	.002	.001-.003 ( 68%)	0.58	0.117	Yellow perch
18	0-51	(186%)	.000	.000-.001 (224%)	0.09	0.141	Yellow bass

2001 FOX CHAIN DAY CREEL SECTION 1 04/01/2001 - 10/15/2001  
 CHANNEL LAKE & CATHERINE LAKE

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

LB HARVESTED	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
18549	15287-21810 ( 18%)	.275	.194-.356 ( 29%)	37.25	0.358	All species
66	0-147 (122%)	.001	.000-.002 (125%)	0.13	1.081	Black bullhead
5155	3828-6482 ( 26%)	.064	.043-.085 ( 33%)	10.35	0.437	Black crappie
8434	6259-10609 ( 26%)	.144	.068-.219 ( 52%)	16.94	0.245	Bluegill
		****	NOT RECORDED ****			Bowfin
38	0-99 (163%)	.001	.000-.002 (174%)	0.08	2.633	Carp
2267	1452-3082 ( 36%)	.034	.020-.048 ( 42%)	4.55	1.222	Channel catfish
742	125-1360 ( 83%)	.011	.001-.020 ( 87%)	1.49	1.936	Freshwater drum
19	0-39 (101%)	.000	.000-.001 (132%)	0.04	0.166	Green sunfish
692	251-1132 ( 64%)	.009	.001-.018 ( 94%)	1.39	2.283	Largemouth bass
12	0-43 (257%)	.000	.000-.000 (278%)	0.02	0.286	Longear sunfish
		****	NOT RECORDED ****			Muskellunge
		****	NOT RECORDED ****			Northern pike
117	39-195 ( 67%)	.002	.000-.004 (128%)	0.24	0.271	Pumpkinseed
		****	NOT RECORDED ****			Rock bass
		****	NOT RECORDED ****			Smallmouth bass
		****	NOT RECORDED ****			Tiger muskie
434	0-1049 (142%)	.002	.000-.004 (103%)	0.87	1.186	Walleye
9	0-35 (278%)	.000	.000-.001 (318%)	0.02	0.431	Warmouth
259	0-792 (206%)	.003	.000-.009 (228%)	0.52	0.333	White bass
7	0-100 (1271%)	.000	.000-.000 (430%)	0.01	0.401	White crappie
		****	NOT RECORDED ****			Yellow bullhead
258	119-396 ( 54%)	.004	.001-.007 ( 68%)	0.52	0.258	Yellow perch
39	0-113 (186%)	.000	.000-.001 (224%)	0.08	0.312	Yellow bass

2001 FOX CHAIN DAY CREEL SECTION 1 04/01/2001 - 10/15/2001  
 CHANNEL LAKE & CATHERINE LAKE

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
132102	113768-150436 ( 14%)	1.919	1.472-2.366 ( 23%)	655.47	265.26	All species
73	0-152 (108%)	.001	.000-.002 (106%)	0.36	0.15	Black bullhead
23196	17934-28459 ( 23%)	.294	.201-.388 ( 32%)	115.10	46.58	Black crappie
78306	62742-93871 ( 20%)	1.303	.877-1.729 ( 33%)	388.54	157.24	Bluegill
109	0-330 (202%)	.000	.000-.001 (178%)	0.54	0.22	Bowfin
544	136-953 ( 75%)	.015	.000-.029 ( 98%)	2.70	1.09	Carp
2823	2155-3490 ( 24%)	.042	.028-.056 ( 33%)	14.01	5.67	Channel catfish
1943	1233-2654 ( 37%)	.038	.011-.066 ( 72%)	9.64	3.90	Freshwater drum
131	15-248 ( 89%)	.002	.000-.004 (130%)	0.65	0.26	Green sunfish
17673	14010-21335 ( 21%)	.153	.125-.180 ( 18%)	87.69	35.49	Largemouth bass
42	0-159 (278%)	.000	.000-.000 (278%)	0.21	0.08	Longear sunfish
786	502-1069 ( 36%)	.004	.002-.006 ( 52%)	3.90	1.58	Muskellunge
346	183-510 ( 47%)	.003	.001-.004 ( 72%)	1.72	0.70	Northern pike
447	176-718 ( 61%)	.007	.000-.016 (114%)	2.22	0.90	Pumpkinseed
80	0-185 (131%)	.001	.000-.003 (282%)	0.40	0.16	Rock bass
27	0-70 (163%)	.000	.000-.000 (183%)	0.13	0.05	Smallmouth bass
35	0-106 (199%)	.000	.000-.002 (326%)	0.18	0.07	Tiger muskie
1446	709-2182 ( 51%)	.010	.003-.017 ( 71%)	7.17	2.90	Walleye
22	0-91 (318%)	.001	.000-.003 (278%)	0.11	0.04	Warmouth
1321	0-2974 (125%)	.013	.000-.032 (154%)	6.56	2.65	White bass
18	0-248 (1271%)	.000	.000-.001 (430%)	0.09	0.04	White crappie
58	0-156 (169%)	.001	.000-.004 (153%)	0.29	0.12	Yellow bullhead
2547	1500-3595 ( 41%)	.029	.014-.044 ( 51%)	12.64	5.12	Yellow perch
127	0-363 (186%)	.001	.000-.004 (224%)	0.63	0.25	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
23943	20983-26903 ( 12%)	.268	.225-.311 ( 16%)	118.80	0.181	All species
32	0-69 (114%)	.000	.000-.001 (114%)	0.16	0.439	Black bullhead
3566	2693-4439 ( 24%)	.043	.030-.056 ( 30%)	17.69	0.154	Black crappie
5450	4257-6643 ( 22%)	.087	.052-.123 ( 41%)	27.04	0.070	Bluegill
12	0-33 (166%)	.000	.000-.000 (172%)	0.06	0.114	Bowfin
314	14-615 ( 96%)	.008	.000-.021 (143%)	1.56	0.577	Carp
1470	1081-1860 ( 26%)	.020	.013-.027 ( 34%)	7.29	0.521	Channel catfish
948	582-1314 ( 39%)	.017	.007-.028 ( 61%)	4.70	0.488	Freshwater drum
10	1-20 ( 90%)	.000	.000-.000 (123%)	0.05	0.079	Green sunfish
8999	6957-11040 ( 23%)	.069	.055-.083 ( 20%)	44.65	0.509	Largemouth bass
5	0-19 (257%)	.000	.000-.000 (257%)	0.03	0.130	Longear sunfish
1714	965-2464 ( 44%)	.009	.004-.013 ( 52%)	8.51	2.182	Muskellunge
434	152-716 ( 65%)	.005	.000-.011 (138%)	2.15	1.253	Northern pike
54	19-90 ( 65%)	.001	.000-.002 (125%)	0.27	0.122	Pumpkinseed
7	0-18 (139%)	.000	.000-.000 (202%)	0.04	0.093	Rock bass
16	0-41 (164%)	.000	.000-.000 (205%)	0.08	0.591	Smallmouth bass
49	0-173 (250%)	.000	.000-.001 (196%)	0.25	1.392	Tiger muskie
493	141-846 ( 71%)	.003	.001-.005 ( 60%)	2.45	0.341	Walleye
4	0-18 (318%)	.000	.000-.001 (278%)	0.02	0.195	Warmouth
151	0-395 (161%)	.001	.000-.004 (197%)	0.75	0.115	White bass
3	0-17 (430%)	.000	.000-.000 (1271%)	0.02	0.182	White crappie
9	0-22 (153%)	.000	.000-.001 (175%)	0.04	0.147	Yellow bullhead
182	109-255 ( 40%)	.002	.001-.004 ( 58%)	0.90	0.072	Yellow perch
18	0-51 (186%)	.000	.000-.001 (224%)	0.09	0.141	Yellow bass

2001 FOX CHAIN DAY CREEL SECTION 1 04/01/2001 - 10/15/2001  
 CHANNEL LAKE & CATHERINE LAKE

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

LB CAUGHT	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
52786	46260-59311 ( 12%)	.591	.496-.686 ( 16%)	106.00	0.400	All species
71	0-152 (114%)	.001	.000-.002 (114%)	0.14	0.967	Black bullhead
7861	5936-9786 ( 24%)	.095	.066-.124 ( 30%)	15.78	0.339	Black crappie
12015	9384-14646 ( 22%)	.192	.114-.271 ( 41%)	24.13	0.153	Bluegill
27	0-73 (166%)	.000	.000-.000 (172%)	0.06	0.252	Bowfin
693	31-1355 ( 96%)	.019	.000-.045 (143%)	1.39	1.273	Carp
3241	2382-4100 ( 26%)	.044	.029-.059 ( 34%)	6.51	1.148	Channel catfish
2090	1283-2896 ( 39%)	.039	.015-.062 ( 61%)	4.20	1.075	Freshwater drum
23	2-43 ( 90%)	.000	.000-.001 (123%)	0.05	0.173	Green sunfish
19839	15338-24340 ( 23%)	.153	.122-.183 ( 20%)	39.84	1.123	Largemouth bass
12	0-43 (257%)	.000	.000-.000 (278%)	0.02	0.286	Longear sunfish
3779	2127-5432 ( 44%)	.019	.009-.029 ( 52%)	7.59	4.811	Muskellunge
957	335-1578 ( 65%)	.010	.000-.024 (138%)	1.92	2.762	Northern pike
120	42-198 ( 65%)	.002	.000-.004 (125%)	0.24	0.269	Pumpkinseed
16	0-39 (139%)	.000	.000-.001 (202%)	0.03	0.204	Rock bass
35	0-91 (164%)	.000	.000-.000 (205%)	0.07	1.303	Smallmouth bass
109	0-381 (250%)	.001	.000-.003 (196%)	0.22	3.068	Tiger muskie
1088	310-1865 ( 71%)	.006	.003-.010 ( 60%)	2.18	0.753	Walleye
9	0-35 (278%)	.000	.000-.001 (318%)	0.02	0.431	Warmouth
334	0-871 (161%)	.003	.000-.010 (197%)	0.67	0.253	White bass
7	0-100 (1271%)	.000	.000-.000 (430%)	0.01	0.401	White crappie
19	0-48 (153%)	.001	.000-.001 (175%)	0.04	0.324	Yellow bullhead
402	241-562 ( 40%)	.005	.002-.008 ( 58%)	0.81	0.158	Yellow perch
39	0-113 (186%)	.000	.000-.001 (224%)	0.08	0.312	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	2.9	2.1-3.7 ( 28%)	0.6	8.0	9
SHORE	1.0	0.0-6.1 (524%)	0.6	1.4	2
BOAT & SHORE	2.5	1.7-3.4 ( 33%)	0.6	8.0	11
MILES TRAVELED	37.2	33.6-40.8 ( 10%)	1	1100	1183
SUCCESS RATING (1-10)	3.0	2.9-3.1 ( 4%)	1	10	1163

\*2 samples were from split interviews of completed trips.  
 0.7% of all 1501 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 1 out of 1501 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	411	747	122	19	3	1				
SHORE INTERVIEWS	99	89	10							

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

111 ( 7.4%)	ANY	All species
121 ( 8.1%)	BLG	Bluegill
1 ( 0.1%)	CAP	Carp
1 ( 0.1%)	CAT	Unidentified catfish
52 ( 3.5%)	CCF	Channel catfish
255 ( 17.0%)	CRP	Crappie spp.
365 ( 24.3%)	LMB	Largemouth bass
447 ( 29.8%)	MUE	Muskellunge
1 ( 0.1%)	NOP	Northern pike
9 ( 0.6%)	SUN	Sunfish spp. excluding Crappie and Black Bass
128 ( 8.5%)	WAE	Walleye
7 ( 0.5%)	WHB	White bass
3 ( 0.2%)	YEP	Yellow perch

