

ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 2004 CREEL SURVEY RESULTS

2004 LAKE KAKUSHA
 53 ACRES
 REGION 1, DISTRICT 2

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 03/15/2004 through 10/31/2004
 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: 305/693 = 44.0%

NUMBER OF INTERVIEWS: 774

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	1120	791-1449 (29%)	21	15-27 (29%)	16%
	HOLIDAY	1397	1150-1645 (18%)	26	22-31 (18%)	37%
	TOTAL	2517	2106-2929 (16%)	47	40-55 (16%)	27%
SHORE	WEEKDAY	2402	1976-2827 (18%)	45	37-53 (18%)	17%
	HOLIDAY	2046	1745-2346 (15%)	39	33-44 (15%)	33%
	TOTAL	4447	3927-4968 (12%)	84	74-94 (12%)	24%
BOAT & SHORE	WEEKDAY	3522	2984-4060 (15%)	66	56-77 (15%)	17%
	HOLIDAY	3443	3054-3832 (11%)	65	58-72 (11%)	34%
	TOTAL	6965	6301-7629 (10%)	131	119-144 (10%)	25%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
3354	2034-4674 (39%)	.254	.164-.344 (35%)	156.39	63.29	All species
3	0-14 (318%)	.000	.000-.001 (318%)	0.15	0.06	Black bullhead
2219	1047-3390 (53%)	.157	.070-.243 (55%)	103.43	41.86	Black crappie
104	24-183 (77%)	.005	.001-.009 (82%)	4.85	1.96	Bluegill
737	482-992 (35%)	.078	.044-.111 (43%)	34.35	13.90	Channel catfish
200	10-389 (95%)	.010	.002-.018 (79%)	9.30	3.77	Golden shiner
		****	NOT RECORDED ****			Green sunfish
78	4-152 (94%)	.004	.002-.007 (65%)	3.63	1.47	Largemouth bass
13	0-36 (185%)	.001	.000-.002 (181%)	0.60	0.24	White crappie
2	0-5 (257%)	.000	.000-.000 (257%)	0.07	0.03	Yellow bullhead
		****	NOT RECORDED ****			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
881	629-1133 (29%)	.078	.053-.104 (33%)	41.07	0.263	All species
3	0-12 (318%)	.000	.000-.001 (430%)	0.13	0.859	Black bullhead
285	136-434 (52%)	.020	.009-.032 (56%)	13.30	0.129	Black crappie
16	3-29 (83%)	.001	.000-.001 (90%)	0.73	0.151	Bluegill
481	295-666 (39%)	.052	.028-.075 (46%)	22.41	0.652	Channel catfish
17	4-31 (78%)	.001	.000-.002 (90%)	0.81	0.087	Golden shiner
		****	NOT RECORDED ****			Green sunfish
77	0-157 (105%)	.004	.001-.007 (72%)	3.59	0.987	Largemouth bass
1	0-3 (181%)	.000	.000-.000 (178%)	0.05	0.092	White crappie
1	0-3 (278%)	.000	.000-.000 (278%)	0.04	0.585	Yellow bullhead
		****	NOT RECORDED ****			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
1942	1387-2497 (29%)	.173	.116-.229 (33%)	36.64	0.579	All species
6	0-33 (430%)	.000	.000-.001 (318%)	0.12	1.893	Black bullhead
629	301-957 (52%)	.045	.020-.070 (56%)	11.87	0.283	Black crappie
35	6-63 (83%)	.002	.000-.003 (90%)	0.65	0.333	Bluegill
1060	651-1468 (39%)	.114	.062-.166 (46%)	20.00	1.438	Channel catfish
38	9-68 (78%)	.002	.000-.004 (90%)	0.73	0.193	Golden shiner
		****	NOT RECORDED ****			Green sunfish
170	0-347 (105%)	.009	.003-.016 (72%)	3.20	2.176	Largemouth bass
3	0-7 (181%)	.000	.000-.000 (178%)	0.05	0.202	White crappie
2	0-7 (278%)	.000	.000-.000 (278%)	0.04	1.290	Yellow bullhead
		****	NOT RECORDED ****			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
14260	10737-17782 (25%)	1.056	.844-1.268 (20%)	664.83	269.05	All species
3	0-14 (318%)	.000	.000-.001 (318%)	0.15	0.06	Black bullhead
2865	1560-4170 (46%)	.204	.113-.296 (45%)	133.57	54.05	Black crappie
7955	5577-10334 (30%)	.529	.372-.686 (30%)	370.89	150.10	Bluegill
1464	1096-1831 (25%)	.149	.097-.201 (35%)	68.24	27.62	Channel catfish
284	80-487 (72%)	.029	.007-.050 (75%)	13.23	5.35	Golden shiner
3	0-9 (210%)	.000	.000-.000 (209%)	0.13	0.05	Green sunfish
1614	1022-2207 (37%)	.140	.101-.179 (28%)	75.26	30.46	Largemouth bass
53	0-111 (110%)	.004	.000-.011 (138%)	2.46	1.00	White crappie
11	0-28 (150%)	.001	.000-.002 (162%)	0.52	0.21	Yellow bullhead
8	0-35 (318%)	.000	.000-.001 (318%)	0.39	0.16	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
2185	1705-2665 (22%)	.183	.147-.219 (20%)	101.87	0.153	All species
3	0-12 (318%)	.000	.000-.001 (430%)	0.13	0.859	Black bullhead
324	172-477 (47%)	.024	.012-.035 (49%)	15.11	0.113	Black crappie
476	322-629 (32%)	.034	.020-.048 (41%)	22.17	0.060	Bluegill
623	426-820 (32%)	.066	.040-.092 (39%)	29.02	0.425	Channel catfish
27	9-45 (66%)	.003	.001-.006 (81%)	1.27	0.096	Golden shiner
0	0-0 (209%)	.000	.000-.000 (210%)	0.00	0.011	Green sunfish
722	353-1092 (51%)	.056	.038-.074 (32%)	33.68	0.448	Largemouth bass
3	0-7 (102%)	.000	.000-.000 (100%)	0.15	0.062	White crappie
7	0-16 (135%)	.000	.000-.001 (169%)	0.31	0.607	Yellow bullhead
0	0-1 (318%)	.000	.000-.000 (430%)	0.01	0.019	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
4817	3758-5876 (22%)	.404	.325-.482 (20%)	90.89	0.338	All species
6	0-33 (430%)	.000	.000-.001 (318%)	0.12	1.893	Black bullhead
715	378-1051 (47%)	.052	.026-.077 (49%)	13.48	0.249	Black crappie
1049	710-1387 (32%)	.075	.044-.105 (41%)	19.78	0.132	Bluegill
1372	938-1807 (32%)	.145	.088-.203 (39%)	25.90	0.938	Channel catfish
60	20-99 (66%)	.007	.001-.013 (81%)	1.13	0.211	Golden shiner
0	0-0 (210%)	.000	.000-.000 (210%)	0.00	0.024	Green sunfish
1593	779-2406 (51%)	.123	.083-.163 (32%)	30.05	0.987	Largemouth bass
7	0-15 (102%)	.001	.000-.001 (100%)	0.14	0.137	White crappie
15	0-35 (135%)	.001	.000-.003 (169%)	0.28	1.339	Yellow bullhead
0	0-2 (430%)	.000	.000-.000 (318%)	0.01	0.043	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	2.6-3.2 (11%)		0.2	10.4	127
SHORE	1.7	1.5-1.9 (13%)		0.1	5.8	118
BOAT & SHORE	2.3	2.1-2.6 (9%)		0.1	10.4	245
MILES TRAVELED	11.8	9.9-13.8 (16%)		1	400	679
SUCCESS RATING (1-10)	4.1	3.8-4.3 (5%)		1	10	678

*50 samples were from split interviews of completed trips.
 33.9% of all 722 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 10 out of 722 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	40	81	14							
SHORE INTERVIEWS	335	181	47	19	3	1	1			

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

317 (43.9%)	ANY	All species
116 (16.1%)	BLC	Black crappie
19 (2.6%)	BLG	Bluegill
5 (0.7%)	CAT	Unidentified catfish
151 (20.9%)	CCF	Channel catfish
8 (1.1%)	CRP	Crappie spp.
96 (13.3%)	LMB	Largemouth bass
2 (0.3%)	MUE	Muskellunge
8 (1.1%)	WHC	White crappie

