

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

2004 LAKE JACKSONVILLE
 442 ACRES
 REGION 4, DISTRICT 12

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.
 Yearperiod 3 coalesced with yearperiod 4.

SAMPLING RATIO: 282/693 = 40.7%

NUMBER OF INTERVIEWS: 1145

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	7645	6549-8741 (14%)	17	15-20 (14%)	14%
	HOLIDAY	10374	8268-12480 (20%)	23	19-28 (20%)	23%
	TOTAL	18019	15644-20393 (13%)	41	35-46 (13%)	19%
SHORE	WEEKDAY	1197	862-1532 (28%)	3	2-3 (28%)	12%
	HOLIDAY	951	652-1250 (31%)	2	1-3 (31%)	14%
	TOTAL	2148	1719-2578 (20%)	5	4-6 (20%)	13%
BOAT & SHORE	WEEKDAY	8842	7696-9988 (13%)	20	17-23 (13%)	14%
	HOLIDAY	11325	9202-13449 (19%)	26	21-30 (19%)	22%
	TOTAL	20167	17754-22580 (12%)	46	40-51 (12%)	18%

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

# HARVESTED	95% CI		#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
2849	1773-3925	(38%)	.140	.090-.190 (36%)	15.93	6.45	All species
18	0-60	(236%)	.000	.000-.001 (231%)	0.10	0.04	Bluegill
15	0-47	(218%)	.001	.000-.002 (218%)	0.08	0.03	Bullhead spp.
			****	NOT RECORDED ****			Carp
416	221-610	(47%)	.034	.013-.056 (62%)	2.32	0.94	Channel catfish
			****	NOT RECORDED ****			Crappie spp.
			****	NOT RECORDED ****			Golden shiner
			****	NOT RECORDED ****			Green sunfish
20	0-46	(131%)	.000	.000-.001 (171%)	0.11	0.04	Largemouth bass
			****	NOT RECORDED ****			Redear sunfish
4	0-15	(236%)	.000	.000-.000 (236%)	0.02	0.01	Striped bass x Whit
			****	NOT RECORDED ****			Smallmouth bass
2372	1328-3417	(44%)	.104	.058-.151 (45%)	13.26	5.37	White crappie
5	0-15	(223%)	.000	.000-.000 (223%)	0.03	0.01	Yellow bullhead

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

KG HARVESTED	95% CI		KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
1115	548-1683	(51%)	.056	.035-.077 (37%)	6.24	0.392	All species
1	0-4	(231%)	.000	.000-.000 (236%)	0.01	0.068	Bluegill
1	0-4	(218%)	.000	.000-.000 (220%)	0.01	0.081	Bullhead spp.
			****	NOT RECORDED ****			Carp
274	129-419	(53%)	.026	.009-.043 (65%)	1.53	0.660	Channel catfish
			****	NOT RECORDED ****			Crappie spp.
			****	NOT RECORDED ****			Golden shiner
			****	NOT RECORDED ****			Green sunfish
23	0-50	(124%)	.000	.000-.001 (149%)	0.13	1.141	Largemouth bass
			****	NOT RECORDED ****			Redear sunfish
26	0-86	(231%)	.000	.000-.001 (236%)	0.15	5.884	Striped bass x Whit
			****	NOT RECORDED ****			Smallmouth bass
788	235-1341	(70%)	.029	.015-.043 (47%)	4.41	0.332	White crappie
2	0-6	(226%)	.000	.000-.000 (226%)	0.01	0.429	Yellow bullhead

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

LB HARVESTED	95% CI		LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
2459	1208-3711	(51%)	.123	.077-.169 (37%)	5.56	0.863	All species
3	0-9	(236%)	.000	.000-.000 (231%)	0.01	0.150	Bluegill
3	0-8	(220%)	.000	.000-.000 (218%)	0.01	0.179	Bullhead spp.
			****	NOT RECORDED	****		Carp
605	285-925	(53%)	.057	.020-.094 (65%)	1.37	1.455	Channel catfish
			****	NOT RECORDED	****		Crappie spp.
			****	NOT RECORDED	****		Golden shiner
			****	NOT RECORDED	****		Green sunfish
50	0-111	(124%)	.001	.000-.002 (149%)	0.11	2.515	Largemouth bass
			****	NOT RECORDED	****		Redear sunfish
58	0-191	(231%)	.001	.000-.002 (236%)	0.13	12.972	Striped bass x Whit
			****	NOT RECORDED	****		Smallmouth bass
1737	519-2956	(70%)	.064	.034-.095 (47%)	3.93	0.732	White crappie
4	0-14	(226%)	.000	.000-.000 (223%)	0.01	0.945	Yellow bullhead

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
19000	16418-21583 (14%)	.899	.782-1.016 (13%)	106.22	42.99	All species
502	242-762 (52%)	.061	.011-.111 (82%)	2.81	1.14	Bluegill
15	0-47 (218%)	.001	.000-.002 (218%)	0.08	0.03	Bullhead spp.
5	0-18 (236%)	.000	.000-.001 (236%)	0.03	0.01	Carp
1169	394-1944 (66%)	.101	.055-.147 (46%)	6.54	2.64	Channel catfish
9	0-23 (153%)	.000	.000-.001 (198%)	0.05	0.02	Crappie spp.
15	0-48 (231%)	.001	.000-.002 (231%)	0.08	0.03	Golden shiner
233	67-399 (71%)	.021	.000-.046 (120%)	1.30	0.53	Green sunfish
12254	10415-14093 (15%)	.493	.417-.570 (15%)	68.50	27.72	Largemouth bass
8	0-27 (236%)	.000	.000-.000 (236%)	0.04	0.02	Redear sunfish
129	68-190 (47%)	.013	.000-.026 (98%)	0.72	0.29	Striped bass x Whit
119	0-344 (188%)	.009	.000-.025 (173%)	0.67	0.27	Smallmouth bass
4538	3083-5992 (32%)	.199	.136-.261 (31%)	25.37	10.27	White crappie
5	0-15 (223%)	.000	.000-.000 (223%)	0.03	0.01	Yellow bullhead

Table 6. Total fishing catch and catch rates, in kilograms.

KG CAUGHT	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
9893	8441-11345 (15%)	.421	.361-.482 (14%)	55.31	0.521	All species
39	13-64 (67%)	.004	.000-.008 (92%)	0.22	0.077	Bluegill
1	0-4 (218%)	.000	.000-.000 (220%)	0.01	0.081	Bullhead spp.
2	0-6 (231%)	.000	.000-.000 (231%)	0.01	0.341	Carp
429	265-593 (38%)	.043	.023-.063 (47%)	2.40	0.367	Channel catfish
1	0-3 (153%)	.000	.000-.000 (198%)	0.01	0.135	Crappie spp.
0	0-1 (236%)	.000	.000-.000 (231%)	0.00	0.023	Golden shiner
14	3-24 (75%)	.001	.000-.002 (99%)	0.08	0.059	Green sunfish
8228	6964-9492 (15%)	.324	.269-.380 (17%)	46.00	0.671	Largemouth bass
2	0-8 (236%)	.000	.000-.000 (236%)	0.01	0.288	Redear sunfish
108	31-185 (72%)	.009	.000-.024 (160%)	0.60	0.839	Striped bass x Whit
11	0-30 (167%)	.001	.000-.002 (163%)	0.06	0.095	Smallmouth bass
1056	491-1621 (54%)	.038	.024-.053 (38%)	5.90	0.233	White crappie
2	0-6 (226%)	.000	.000-.000 (226%)	0.01	0.429	Yellow bullhead

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

LB CAUGHT	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
21810	18610-25011 (15%)	.929	.795-1.063 (14%)	49.34	1.148	All species
85	28-142 (67%)	.010	.001-.019 (92%)	0.19	0.169	Bluegill
3	0-8 (220%)	.000	.000-.000 (218%)	0.01	0.179	Bullhead spp.
4	0-13 (236%)	.000	.000-.000 (236%)	0.01	0.751	Carp
945	583-1306 (38%)	.095	.050-.139 (47%)	2.14	0.808	Channel catfish
3	0-7 (153%)	.000	.000-.000 (198%)	0.01	0.297	Crappie spp.
1	0-2 (236%)	.000	.000-.000 (236%)	0.00	0.050	Golden shiner
30	8-53 (75%)	.002	.000-.005 (99%)	0.07	0.129	Green sunfish
18139	15353-20926 (15%)	.715	.594-.837 (17%)	41.04	1.480	Largemouth bass
5	0-17 (236%)	.000	.000-.000 (236%)	0.01	0.635	Redear sunfish
238	68-408 (72%)	.020	.000-.052 (160%)	0.54	1.849	Striped bass x Whit
25	0-67 (167%)	.002	.000-.005 (163%)	0.06	0.210	Smallmouth bass
2328	1082-3574 (54%)	.084	.052-.117 (38%)	5.27	0.513	White crappie
4	0-14 (226%)	.000	.000-.000 (223%)	0.01	0.945	Yellow bullhead

Table 8. Hours per completed trip and supplementary questions for all trips.

	MEAN	95% CI		MIN	MAX	#SAMPLES
HOURS PER COMPLETED TRIP*						
BOAT	4.3	4.0-4.6	(8%)	0.2	9.8	257
SHORE	1.6	1.2-2.0	(23%)	0.5	4.9	32
BOAT & SHORE	4.0	3.7-4.3	(8%)	0.2	9.8	289
MILES TRAVELED	19.5	16.8-22.1	(13%)	1	250	869
SUCCESS RATING (1-10)	4.2	4.0-4.4	(4%)	1	10	867

*160 samples were from split interviews of completed trips.
29.4% of all 984 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 0 out of 984 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	393	462	14							
SHORE INTERVIEWS	72	24	10	9						

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

1 (0.1%)	ANY	All species
8 (0.8%)	BLG	Bluegill
321 (32.6%)	BSS	Black bass spp.
100 (10.2%)	CCF	Channel catfish
16 (1.6%)	CRP	Crappie spp.
447 (45.4%)	LMB	Largemouth bass
91 (9.2%)	WHC	White crappie

Table 11. Number of anglers with a given harvest & release for completed trips

# OF FISH:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
Bluegill																
HARVEST	474	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	451	12	5	3	1	-	-	-	-	-	1	1	-	-	-	-
Bullhead spp.																
HARVEST	473	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	474	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Channel catfish																
HARVEST	458	12	4	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	465	8	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Crappie spp.																
HARVEST	474	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	472	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Golden shiner																
HARVEST	474	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	473	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Green sunfish																
HARVEST	474	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	459	9	6	-	-	-	-	-	-	-	-	-	-	-	-	-
Largemouth bass																
HARVEST	470	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	140	90	99	78	37	15	4	6	2	-	-	2	1	-	-	-
Redear sunfish																
HARVEST	474	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	472	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Striped bass x White bass hybrid (Wiper)																
HARVEST	472	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	466	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
White crappie																
HARVEST	442	2	6	2	2	6	2	4	2	1	1	-	-	1	-	3
RELEASE	428	8	18	5	6	6	2	-	-	-	1	-	-	-	-	-