

ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 2005 CREEL SURVEY RESULTS

2005 SPRING LAKE SOUTH
 610 ACRES
 REGION 1, DISTRICT 5

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 03/15/2005 through 10/31/2005
 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: 301/693 = 43.4%

NUMBER OF INTERVIEWS: 2818

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	4312	3418-5206 (21%)	7	6-9 (21%)	18%
	HOLIDAY	5796	4673-6919 (19%)	10	8-11 (19%)	39%
	TOTAL	10108	8673-11544 (14%)	17	14-19 (14%)	30%
SHORE	WEEKDAY	12315	10909-13721 (11%)	20	18-22 (11%)	15%
	HOLIDAY	9862	8830-10895 (10%)	16	14-18 (10%)	33%
	TOTAL	22178	20433-23922 (8%)	36	33-39 (8%)	23%
BOAT & SHORE	WEEKDAY	16627	14961-18294 (10%)	27	25-30 (10%)	16%
	HOLIDAY	15659	14133-17184 (10%)	26	23-28 (10%)	35%
	TOTAL	32286	30027-34545 (7%)	53	49-57 (7%)	25%

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

# HARVESTED	95% CI		#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
37989	32348-43630	(15%)	.789	.656-.922 (17%)	153.89	62.28	All species
2	0-6	(231%)	.000	.000-.000 (231%)	0.01	0.00	Blue catfish
22	0-45	(105%)	.000	.000-.001 (137%)	0.09	0.04	Black bullhead
715	423-1008	(41%)	.028	.013-.042 (52%)	2.90	1.17	Black crappie
31567	26291-36843	(17%)	.614	.492-.735 (20%)	127.87	51.75	Bluegill
67	20-115	(71%)	.001	.000-.002 (72%)	0.27	0.11	Brown bullhead
3	0-11	(220%)	.000	.000-.000 (220%)	0.01	0.01	Bluegill x Redear Carp
			****	NOT RECORDED ****			
3912	3342-4483	(15%)	.102	.083-.120 (18%)	15.85	6.41	Channel catfish
6	0-19	(236%)	.000	.000-.000 (231%)	0.02	0.01	Freshwater drum
36	0-192	(430%)	.003	.000-.015 (318%)	0.15	0.06	Golden shiner
48	6-91	(88%)	.001	.000-.001 (97%)	0.20	0.08	Green sunfish
153	84-223	(45%)	.005	.002-.008 (63%)	0.62	0.25	Largemouth bass
4	0-15	(245%)	.000	.000-.001 (236%)	0.02	0.01	Northern pike Pumpkinseed
			****	NOT RECORDED ****			
1087	677-1497	(38%)	.027	.011-.042 (58%)	4.40	1.78	Redear sunfish
2	0-6	(236%)	.000	.000-.000 (236%)	0.01	0.00	Warmouth White crappie
			****	NOT RECORDED ****			
125	51-200	(59%)	.002	.001-.003 (62%)	0.51	0.21	Yellow bullhead
238	2-474	(99%)	.006	.000-.014 (123%)	0.97	0.39	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
6795	5985-7606	(12%)	.164	.142-.187 (14%)	27.53	0.179	All species
2	0-5	(236%)	.000	.000-.000 (231%)	0.01	0.973	Blue catfish
7	0-17	(130%)	.000	.000-.000 (157%)	0.03	0.337	Black bullhead
174	104-244	(40%)	.007	.004-.010 (48%)	0.70	0.243	Black crappie
3020	2508-3531	(17%)	.059	.047-.072 (21%)	12.23	0.096	Bluegill
22	8-35	(62%)	.000	.000-.001 (71%)	0.09	0.326	Brown bullhead
1	0-2	(220%)	.000	.000-.000 (223%)	0.00	0.191	Bluegill x Redear Carp
			****	NOT RECORDED ****			
3186	2692-3679	(15%)	.087	.068-.105 (21%)	12.90	0.814	Channel catfish
25	0-85	(236%)	.000	.000-.000 (236%)	0.10	4.400	Freshwater drum
4	0-19	(430%)	.000	.000-.001 (318%)	0.01	0.098	Golden shiner
3	0-6	(84%)	.000	.000-.000 (91%)	0.01	0.063	Green sunfish
166	82-250	(51%)	.006	.002-.010 (74%)	0.67	1.085	Largemouth bass
8	0-26	(236%)	.000	.000-.002 (236%)	0.03	1.823	Northern pike Pumpkinseed
			****	NOT RECORDED ****			
112	71-153	(37%)	.003	.001-.004 (56%)	0.45	0.103	Redear sunfish
0	0-1	(236%)	.000	.000-.000 (236%)	0.00	0.167	Warmouth White crappie
			****	NOT RECORDED ****			
37	12-62	(68%)	.001	.000-.001 (60%)	0.15	0.295	Yellow bullhead
30	2-58	(95%)	.001	.000-.002 (98%)	0.12	0.126	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
14981	13194-16769 (12%)	.362	.312-.413 (14%)	24.56	0.394	All species
4	0-12 (231%)	.000	.000-.000 (231%)	0.01	2.145	Blue catfish
16	0-37 (130%)	.000	.000-.001 (157%)	0.03	0.742	Black bullhead
383	228-538 (40%)	.015	.008-.022 (48%)	0.63	0.535	Black crappie
6657	5530-7785 (17%)	.131	.104-.158 (21%)	10.91	0.211	Bluegill
48	18-78 (62%)	.001	.000-.001 (71%)	0.08	0.719	Brown bullhead
1	0-5 (220%)	.000	.000-.000 (223%)	0.00	0.420	Bluegill x Redear Carp
		****	NOT RECORDED ****			
7023	5935-8111 (15%)	.191	.150-.233 (21%)	11.51	1.795	Channel catfish
55	0-186 (236%)	.000	.000-.001 (236%)	0.09	9.699	Freshwater drum
8	0-33 (318%)	.001	.000-.003 (318%)	0.01	0.217	Golden shiner
7	1-12 (84%)	.000	.000-.000 (91%)	0.01	0.139	Green sunfish
366	181-551 (51%)	.013	.003-.022 (74%)	0.60	2.392	Largemouth bass
17	0-58 (245%)	.001	.000-.004 (236%)	0.03	4.020	Northern pike Pumpkinseed
		****	NOT RECORDED ****			
247	156-338 (37%)	.006	.003-.009 (56%)	0.41	0.227	Redear sunfish
1	0-2 (236%)	.000	.000-.000 (236%)	0.00	0.368	Warmouth White crappie
		****	NOT RECORDED ****			
82	26-137 (68%)	.001	.000-.002 (60%)	0.13	0.651	Yellow bullhead
66	4-129 (95%)	.002	.000-.003 (98%)	0.11	0.277	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	
78604	67262-89946	(14%)	1.779	1.522-2.036	(14%)	318.41	128.86	All species
2	0-6	(231%)	.000	.000-.000	(231%)	0.01	0.00	Blue catfish
28	2-54	(93%)	.001	.000-.001	(113%)	0.11	0.05	Black bullhead
4194	2796-5592	(33%)	.143	.069-.217	(52%)	16.99	6.88	Black crappie
65240	54390-76089	(17%)	1.369	1.128-1.609	(18%)	264.27	106.95	Bluegill
69	22-117	(69%)	.001	.000-.002	(71%)	0.28	0.11	Brown bullhead
3	0-11	(220%)	.000	.000-.000	(220%)	0.01	0.01	Bluegill x Redear
20	0-49	(149%)	.000	.000-.000	(124%)	0.08	0.03	Carp
4274	3677-4871	(14%)	.119	.096-.142	(19%)	17.31	7.01	Channel catfish
19	0-44	(130%)	.002	.000-.004	(151%)	0.08	0.03	Freshwater drum
36	0-192	(430%)	.003	.000-.015	(318%)	0.15	0.06	Golden shiner
107	0-216	(103%)	.001	.000-.003	(99%)	0.43	0.17	Green sunfish
2154	1759-2548	(18%)	.068	.053-.083	(22%)	8.72	3.53	Largemouth bass
81	0-164	(101%)	.003	.000-.006	(102%)	0.33	0.13	Northern pike
9	0-29	(223%)	.000	.000-.001	(220%)	0.04	0.01	Pumpkinseed
1312	802-1821	(39%)	.037	.017-.056	(52%)	5.31	2.15	Redear sunfish
2	0-6	(236%)	.000	.000-.000	(236%)	0.01	0.00	Warmouth
54	0-288	(430%)	.005	.000-.028	(430%)	0.22	0.09	White crappie
142	65-218	(54%)	.002	.001-.004	(56%)	0.57	0.23	Yellow bullhead
859	239-1479	(72%)	.024	.005-.043	(78%)	3.48	1.41	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	
10055	8808-11303	(12%)	.261	.228-.294	(13%)	40.73	0.128	All species
2	0-5	(236%)	.000	.000-.000	(231%)	0.01	0.973	Blue catfish
9	0-19	(110%)	.000	.000-.000	(134%)	0.04	0.318	Black bullhead
482	329-635	(32%)	.017	.009-.025	(49%)	1.95	0.115	Black crappie
4303	3342-5264	(22%)	.092	.069-.115	(25%)	17.43	0.066	Bluegill
23	9-37	(61%)	.000	.000-.001	(70%)	0.09	0.332	Brown bullhead
1	0-2	(220%)	.000	.000-.000	(223%)	0.00	0.191	Bluegill x Redear
75	0-192	(154%)	.000	.000-.001	(136%)	0.31	3.856	Carp
3298	2800-3795	(15%)	.093	.074-.112	(21%)	13.36	0.772	Channel catfish
49	0-123	(148%)	.003	.000-.008	(212%)	0.20	2.611	Freshwater drum
4	0-19	(430%)	.000	.000-.001	(318%)	0.01	0.098	Golden shiner
4	1-7	(73%)	.000	.000-.000	(80%)	0.02	0.037	Green sunfish
1375	1083-1668	(21%)	.041	.031-.051	(24%)	5.57	0.639	Largemouth bass
193	0-388	(101%)	.008	.000-.015	(105%)	0.78	2.370	Northern pike
1	0-3	(220%)	.000	.000-.000	(223%)	0.00	0.091	Pumpkinseed
122	77-166	(37%)	.003	.002-.005	(51%)	0.49	0.093	Redear sunfish
0	0-1	(236%)	.000	.000-.000	(236%)	0.00	0.167	Warmouth
5	0-21	(318%)	.000	.000-.003	(430%)	0.02	0.093	White crappie
40	15-65	(63%)	.001	.000-.001	(55%)	0.16	0.282	Yellow bullhead
70	28-113	(60%)	.002	.001-.003	(62%)	0.29	0.082	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
22168	19418-24918	(12%)	.576	.503-.649 (13%)	36.34	0.282	All species
4	0-12	(231%)	.000	.000-.000 (231%)	0.01	2.145	Blue catfish
20	0-41	(110%)	.000	.000-.001 (134%)	0.03	0.700	Black bullhead
1063	725-1400	(32%)	.037	.019-.055 (49%)	1.74	0.253	Black crappie
9486	7368-11604	(22%)	.203	.153-.253 (25%)	15.55	0.145	Bluegill
51	20-82	(61%)	.001	.000-.001 (70%)	0.08	0.731	Brown bullhead
1	0-5	(220%)	.000	.000-.000 (223%)	0.00	0.420	Bluegill x Redear
166	0-423	(154%)	.001	.000-.002 (136%)	0.27	8.501	Carp
7270	6173-8367	(15%)	.205	.163-.247 (21%)	11.92	1.701	Channel catfish
109	0-270	(148%)	.006	.000-.018 (212%)	0.18	5.757	Freshwater drum
8	0-33	(318%)	.001	.000-.003 (318%)	0.01	0.217	Golden shiner
9	2-15	(73%)	.000	.000-.000 (80%)	0.01	0.081	Green sunfish
3032	2387-3676	(21%)	.091	.069-.113 (24%)	4.97	1.408	Largemouth bass
426	0-856	(101%)	.017	.000-.034 (105%)	0.70	5.225	Northern pike
2	0-6	(220%)	.000	.000-.000 (220%)	0.00	0.202	Pumpkinseed
268	170-366	(37%)	.007	.004-.011 (51%)	0.44	0.205	Redear sunfish
1	0-2	(236%)	.000	.000-.000 (236%)	0.00	0.368	Warmouth
11	0-46	(318%)	.001	.000-.006 (430%)	0.02	0.204	White crappie
88	33-143	(63%)	.001	.001-.002 (55%)	0.14	0.621	Yellow bullhead
155	62-248	(60%)	.004	.002-.007 (62%)	0.25	0.181	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	4.2	4.0-4.4 (5%)	0.5	12.8	386
SHORE	1.9	1.6-2.1 (13%)	0.3	5.6	103
BOAT & SHORE	3.7	3.5-3.9 (5%)	0.3	12.8	489
MILES TRAVELED	22.0	21.3-22.8 (3%)	1	420	2240
SUCCESS RATING (1-10)	6.0	5.9-6.1 (2%)	1	10	2237

*285 samples were from split interviews of completed trips.
19.4% of all 2516 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 8 out of 2516 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	118	268	42	6						
SHORE INTERVIEWS	935	898	180	51	14	2			1	1

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

75 (3.0%)	ANY	All species
169 (6.7%)	BLC	Black crappie
798 (31.7%)	BLG	Bluegill
4 (0.2%)	CAP	Carp
991 (39.4%)	CCF	Channel catfish
467 (18.6%)	LMB	Largemouth bass
5 (0.2%)	NOP	Northern pike
3 (0.1%)	WHC	White crappie
4 (0.2%)	YLB	Yellow bass

2005 SPRING LAKE SOUTH

DAY CREEL

03/15/2005 - 10/31/2005

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	16	17	18	19	20	21	22	23	24	25+	
Black bullhead																											
HARVEST	890	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	890	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Black crappie																											
HARVEST	867	11	7	1	4	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	827	18	18	2	6	8	1	1	7	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Bluegill																											
HARVEST	741	10	3	19	5	21	2	3	11	2	12	-	4	6	-	7	-	-	-	7	3	1	-	2	-	33	
RELEASE	650	32	25	17	14	17	5	3	11	8	25	-	3	11	-	13	-	6	3	-	12	-	-	2	-	35	
Brown bullhead																											
HARVEST	890	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	892	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bluegill x Redear sunfish hybrid																											
HARVEST	890	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	892	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Channel catfish																											
HARVEST	788	35	22	11	11	7	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	862	22	3	4	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Freshwater drum																											
HARVEST	892	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	892	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Golden shiner																											
HARVEST	890	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	892	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Green sunfish																											
HARVEST	890	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	892	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

2005 SPRING LAKE SOUTH

DAY CREEL

03/15/2005 - 10/31/2005

Table 11, continued. 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	16	17	18	19	20	21	22	23	24	25+	
Largemouth bass																											
HARVEST	862	28	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	613	141	66	40	18	7	2	1	2	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
Northern pike																											
HARVEST	892	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	879	8	2	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Redear sunfish																											
HARVEST	853	4	7	5	4	5	4	-	5	-	-	-	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	880	1	3	2	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellow bullhead																											
HARVEST	884	5	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	889	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellow bass																											
HARVEST	887	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	880	10	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-

