

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

**2005 BULLFROG LAKE**  
 16 ACRES  
 REGION 2, DISTRICT 8

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: 295/693 = 42.6%

NUMBER OF INTERVIEWS: 806

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					
	HOLIDAY					
	TOTAL					
SHORE	WEEKDAY	2705	2275-3134 ( 16%)	169	142-196 ( 16%)	22%
	HOLIDAY	2316	1940-2693 ( 16%)	145	121-168 ( 16%)	39%
	TOTAL	5021	4461-5581 ( 11%)	314	279-349 ( 11%)	30%
BOAT & SHORE	WEEKDAY	2705	2275-3134 ( 16%)	169	142-196 ( 16%)	22%
	HOLIDAY	2316	1940-2693 ( 16%)	145	121-168 ( 16%)	39%
	TOTAL	5021	4461-5581 ( 11%)	314	279-349 ( 11%)	30%

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

# HARVESTED	95% CI		#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
703	372-1033	( 47%)	.047	.026-.068 ( 46%)	108.50	43.91	All species
			****	NOT RECORDED	****		Bluegill x Green
14	0-29	(105%)	.001	.000-.002 (139%)	2.17	0.88	Black bullhead
86	8-163	( 91%)	.007	.000-.016 (125%)	13.22	5.35	Black crappie
548	297-798	( 46%)	.035	.017-.052 ( 51%)	84.56	34.22	Bluegill
11	0-37	(245%)	.000	.000-.001 (236%)	1.67	0.68	Golden shiner
			****	NOT RECORDED	****		Green sunfish
42	0-88	(111%)	.004	.000-.008 (107%)	6.43	2.60	Largemouth bass
3	0-10	(226%)	.000	.000-.001 (223%)	0.45	0.18	Pumpkinseed
			****	NOT RECORDED	****		Rock bass
			****	NOT RECORDED	****		Smallmouth bass
			****	NOT RECORDED	****		White crappie
			****	NOT RECORDED	****		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
81	31-132	( 62%)	.006	.001-.011 ( 79%)	12.55	0.116	All species
			****	NOT RECORDED	****		Bluegill x Green
5	0-11	(105%)	.000	.000-.001 (136%)	0.79	0.366	Black bullhead
8	2-14	( 76%)	.001	.000-.001 (119%)	1.21	0.092	Black crappie
32	16-48	( 51%)	.002	.001-.004 ( 74%)	4.94	0.058	Bluegill
1	0-3	(236%)	.000	.000-.000 (236%)	0.15	0.090	Golden shiner
			****	NOT RECORDED	****		Green sunfish
35	0-81	(130%)	.003	.000-.006 (118%)	5.45	0.847	Largemouth bass
0	0-0	(223%)	.000	.000-.000 (223%)	0.01	0.032	Pumpkinseed
			****	NOT RECORDED	****		Rock bass
			****	NOT RECORDED	****		Smallmouth bass
			****	NOT RECORDED	****		White crappie
			****	NOT RECORDED	****		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
179	68-290	( 62%)	.013	.003-.023 ( 79%)	11.20	0.255	All species
			****	NOT RECORDED	****		Bluegill x Green
11	0-23	(105%)	.001	.000-.001 (136%)	0.71	0.807	Black bullhead
17	4-30	( 76%)	.001	.000-.003 (119%)	1.08	0.202	Black crappie
70	34-106	( 51%)	.005	.001-.009 ( 74%)	4.40	0.129	Bluegill
2	0-7	(236%)	.000	.000-.000 (236%)	0.13	0.198	Golden shiner
			****	NOT RECORDED	****		Green sunfish
78	0-179	(130%)	.006	.000-.012 (118%)	4.86	1.868	Largemouth bass
0	0-1	(226%)	.000	.000-.000 (226%)	0.01	0.071	Pumpkinseed
			****	NOT RECORDED	****		Rock bass
			****	NOT RECORDED	****		Smallmouth bass
			****	NOT RECORDED	****		White crappie
			****	NOT RECORDED	****		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
11477	9739-13215	( 15%)	.954	.828-1.080 ( 13%)	1772.50	717.32	All species
26	0-72	(179%)	.003	.000-.008 (210%)	4.00	1.62	Bluegill x Green
33	10-55	( 69%)	.003	.000-.006 (111%)	5.07	2.05	Black bullhead
441	181-700	( 59%)	.028	.014-.042 ( 50%)	68.08	27.55	Black crappie
9171	7566-10775	( 18%)	.752	.626-.878 ( 17%)	1416.28	573.16	Bluegill
26	0-58	(117%)	.002	.000-.005 (124%)	4.09	1.65	Golden shiner
6	0-19	(226%)	.000	.000-.000 (231%)	0.92	0.37	Green sunfish
1722	1395-2049	( 19%)	.162	.128-.196 ( 21%)	265.92	107.62	Largemouth bass
3	0-10	(226%)	.000	.000-.001 (223%)	0.45	0.18	Pumpkinseed
7	0-24	(236%)	.001	.000-.003 (245%)	1.09	0.44	Rock bass
8	0-27	(214%)	.000	.000-.001 (216%)	1.31	0.53	Smallmouth bass
29	0-91	(208%)	.004	.000-.011 (208%)	4.55	1.84	White crappie
1	0-5	(278%)	.000	.000-.000 (278%)	0.22	0.09	Yellow bullhead
3	3-3	( 0%)	.000	.000-.000 ( 0%)	0.53	0.21	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
976	843-1110	( 14%)	.090	.078-.103 ( 14%)	150.78	0.085	All species
1	0-3	(194%)	.000	.000-.000 (215%)	0.15	0.038	Bluegill x Green
14	4-24	( 72%)	.001	.000-.003 (134%)	2.13	0.419	Black bullhead
32	18-45	( 42%)	.002	.001-.003 ( 47%)	4.89	0.072	Black crappie
443	369-516	( 17%)	.040	.033-.046 ( 17%)	68.38	0.048	Bluegill
2	0-5	(114%)	.000	.000-.000 (143%)	0.37	0.092	Golden shiner
0	0-1	(231%)	.000	.000-.000 (226%)	0.04	0.045	Green sunfish
479	371-587	( 23%)	.046	.034-.058 ( 26%)	74.00	0.278	Largemouth bass
0	0-0	(223%)	.000	.000-.000 (223%)	0.01	0.032	Pumpkinseed
0	0-1	(245%)	.000	.000-.000 (236%)	0.02	0.022	Rock bass
2	0-5	(216%)	.000	.000-.000 (216%)	0.24	0.182	Smallmouth bass
2	0-6	(208%)	.000	.000-.001 (209%)	0.31	0.067	White crappie
1	0-5	(278%)	.000	.000-.000 (318%)	0.21	0.968	Yellow bullhead
0	0-3	(1271%)	.000	.000-.000 (1271%)	0.03	0.065	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
2152	1857-2447	( 14%)	.199	.171-.227 ( 14%)	134.53	0.188	All species
2	0-6	(194%)	.000	.000-.001 (215%)	0.14	0.084	Bluegill x Green
30	8-52	( 72%)	.003	.000-.007 (134%)	1.90	0.924	Black bullhead
70	40-99	( 42%)	.005	.003-.007 ( 47%)	4.36	0.158	Black crappie
976	814-1138	( 17%)	.087	.072-.102 ( 17%)	61.01	0.106	Bluegill
5	0-11	(114%)	.000	.000-.001 (143%)	0.33	0.202	Golden shiner
1	0-2	(226%)	.000	.000-.000 (226%)	0.04	0.099	Green sunfish
1056	818-1295	( 23%)	.102	.076-.129 ( 26%)	66.02	0.613	Largemouth bass
0	0-1	(226%)	.000	.000-.000 (226%)	0.01	0.071	Pumpkinseed
0	0-1	(245%)	.000	.000-.000 (245%)	0.02	0.049	Rock bass
3	0-11	(216%)	.000	.000-.000 (214%)	0.21	0.401	Smallmouth bass
4	0-13	(208%)	.001	.000-.002 (209%)	0.27	0.148	White crappie
3	0-12	(318%)	.000	.000-.000 (278%)	0.19	2.134	Yellow bullhead
0	0-0	( 0%)	.000	.000-.000 (1271%)	0.03	0.142	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	0.0	*** undefined ***	100.0	0.0	0
SHORE	1.3	1.3-1.4 ( 6%)	0.1	7.0	523
BOAT & SHORE	1.3	1.3-1.4 ( 6%)	0.1	7.0	523
MILES TRAVELED	10.2	9.8-10.6 ( 4%)	1	40	736
SUCCESS RATING (1-10)	4.9	4.7-5.1 ( 4%)	1	10	733

\*46 samples were from split interviews of completed trips.  
68.8% of all 760 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 12 out of 760 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										
SHORE INTERVIEWS	468	214	64	11	1	2				

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

390 ( 51.3%)	ANY	All species
9 ( 1.2%)	BLC	Black crappie
86 ( 11.3%)	BLG	Bluegill
1 ( 0.1%)	CAP	Carp
5 ( 0.7%)	CAT	Unidentified catfish
1 ( 0.1%)	CCF	Channel catfish
268 ( 35.3%)	LMB	Largemouth bass

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+	
Bluegill x Green sunfish hybrid																											
HARVEST	747	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	746	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Black bullhead																											
HARVEST	747	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	742	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Black crappie																											
HARVEST	740	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	717	19	8	1	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bluegill																											
HARVEST	719	2	5	10	1	-	7	-	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	397	59	65	61	53	42	14	7	17	3	11	2	3	3	-	3	-	-	-	-	1	-	-	-	-	-	6
Golden shiner																											
HARVEST	747	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	745	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Largemouth bass																											
HARVEST	741	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	577	94	37	19	9	9	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rock bass																											
HARVEST	747	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	746	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
White crappie																											
HARVEST	747	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	746	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellow bullhead																											
HARVEST	747	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	745	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

