

ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 1996 CREEL SURVEY RESULTS

1996 LAKE BLOOMINGTON
 635 ACRES
 REGION 3, DISTRICT 13

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 03/15/1996 through 10/31/1996

Year periods stratified.
 Fishing modes (boat vs. shore) stratified.
 Day types (weekday vs. weekend/holiday) stratified.
 Day periods (morning, midday, and afternoon) stratified.
 Yearperiod 8 coalesced with yearperiod 9.

SAMPLING RATIO: 256/693 = 36.9%

NUMBER OF INTERVIEWS: 1372

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	16255	11968-20542 (26%)	26	19-32 (26%)	8%
	HOLIDAY	12274	10115-14433 (18%)	19	16-23 (18%)	18%
	TOTAL	28529	23938-33120 (16%)	45	38-52 (16%)	12%
SHORE	WEEKDAY	6207	4832-7583 (22%)	10	8-12 (22%)	6%
	HOLIDAY	4912	3526-6299 (28%)	8	6-10 (28%)	12%
	TOTAL	11119	9166-13073 (18%)	18	14-21 (18%)	9%
BOAT & SHORE	WEEKDAY	22463	17984-26941 (20%)	35	28-42 (20%)	7%
	HOLIDAY	17186	14620-19752 (15%)	27	23-31 (15%)	16%
	TOTAL	39649	34660-44638 (13%)	62	55-70 (13%)	11%

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

# HARVESTED	95% CI		#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
24097	20006-28189 (17%)		.367	.295-.439 (20%)	93.77	37.95	All species
2917	1766-4069 (39%)		.041	.019-.062 (54%)	11.35	4.59	Black crappie
7536	5286-9785 (30%)		.125	.079-.171 (36%)	29.32	11.87	Bluegill
			****	NOT RECORDED ****			Carp
117	0-278 (137%)		.002	.000-.005 (107%)	0.46	0.18	Channel catfish
11	0-29 (174%)		.000	.000-.002 (223%)	0.04	0.02	Flathead catfish
144	0-306 (113%)		.001	.000-.003 (103%)	0.56	0.23	Freshwater drum
			****	NOT RECORDED ****			Grass pickerel
598	291-906 (51%)		.008	.002-.013 (73%)	2.33	0.94	Green sunfish
			****	NOT RECORDED ****			Gizzard shad
240	73-408 (70%)		.003	.000-.006 (87%)	0.94	0.38	Largemouth bass
46	0-150 (223%)		.001	.000-.002 (220%)	0.18	0.07	Northern pike
6	0-21 (226%)		.000	.000-.000 (226%)	0.02	0.01	Redear sunfish
73	9-138 (88%)		.001	.000-.002 (92%)	0.29	0.12	Striped bass x Whit
14	0-38 (163%)		.000	.000-.000 (160%)	0.06	0.02	Smallmouth bass
396	243-549 (39%)		.004	.002-.006 (46%)	1.54	0.62	Walleye
			****	NOT RECORDED ****			White bass
10128	7988-12267 (21%)		.134	.096-.172 (28%)	39.41	15.95	White crappie
240	132-348 (45%)		.005	.002-.008 (55%)	0.94	0.38	Yellow bullhead
16	0-49 (211%)		.000	.000-.000 (211%)	0.06	0.02	Yellow perch
1613	1018-2208 (37%)		.041	.014-.069 (65%)	6.28	2.54	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
4809	4020-5599 (16%)		.069	.057-.081 (17%)	18.71	0.200	All species
634	372-896 (41%)		.008	.004-.012 (47%)	2.47	0.217	Black crappie
844	596-1092 (29%)		.014	.009-.019 (36%)	3.28	0.112	Bluegill
			****	NOT RECORDED ****			Carp
110	0-253 (131%)		.002	.000-.004 (108%)	0.43	0.933	Channel catfish
6	0-15 (155%)		.000	.000-.001 (220%)	0.02	0.556	Flathead catfish
54	0-115 (114%)		.001	.000-.001 (102%)	0.21	0.373	Freshwater drum
			****	NOT RECORDED ****			Grass pickerel
72	35-109 (51%)		.001	.000-.002 (72%)	0.28	0.120	Green sunfish
			****	NOT RECORDED ****			Gizzard shad
268	41-495 (85%)		.003	.000-.007 (108%)	1.04	1.115	Largemouth bass
70	0-225 (223%)		.001	.000-.003 (220%)	0.27	1.502	Northern pike
1	0-2 (226%)		.000	.000-.000 (223%)	0.00	0.112	Redear sunfish
51	0-106 (109%)		.001	.000-.002 (112%)	0.20	0.689	Striped bass x Whit
36	0-108 (201%)		.000	.000-.000 (184%)	0.14	2.481	Smallmouth bass
296	170-422 (43%)		.004	.001-.006 (80%)	1.15	0.747	Walleye
			****	NOT RECORDED ****			White bass
2039	1620-2457 (21%)		.026	.019-.033 (26%)	7.93	0.201	White crappie
84	47-122 (44%)		.002	.001-.003 (54%)	0.33	0.351	Yellow bullhead
4	0-14 (211%)		.000	.000-.000 (211%)	0.02	0.279	Yellow perch
242	173-311 (29%)		.006	.003-.008 (47%)	0.94	0.150	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
10603	8862-12343 (16%)	.152	.126-.179 (17%)	16.70	0.440	All species
1398	821-1975 (41%)	.019	.010-.027 (47%)	2.20	0.479	Black crappie
1861	1314-2408 (29%)	.032	.020-.043 (36%)	2.93	0.247	Bluegill
		****	NOT RECORDED ****			Carp
242	0-559 (131%)	.004	.000-.009 (108%)	0.38	2.058	Channel catfish
13	0-33 (155%)	.000	.000-.002 (220%)	0.02	1.225	Flathead catfish
118	0-254 (114%)	.001	.000-.002 (102%)	0.19	0.823	Freshwater drum
		****	NOT RECORDED ****			Grass pickerel
159	77-241 (51%)	.002	.001-.003 (72%)	0.25	0.265	Green sunfish
		****	NOT RECORDED ****			Gizzard shad
591	90-1092 (85%)	.007	.000-.016 (108%)	0.93	2.459	Largemouth bass
153	0-491 (220%)	.002	.000-.007 (223%)	0.24	3.312	Northern pike
2	0-5 (223%)	.000	.000-.000 (223%)	0.00	0.247	Redear sunfish
111	0-233 (109%)	.002	.000-.004 (112%)	0.18	1.518	Striped bass x Whit
79	0-237 (201%)	.000	.000-.001 (184%)	0.12	5.470	Smallmouth bass
652	375-930 (43%)	.008	.002-.014 (80%)	1.03	1.646	Walleye
		****	NOT RECORDED ****			White bass
4494	3572-5417 (21%)	.058	.043-.072 (26%)	7.08	0.444	White crappie
186	104-268 (44%)	.004	.002-.006 (54%)	0.29	0.774	Yellow bullhead
10	0-30 (212%)	.000	.000-.000 (212%)	0.02	0.614	Yellow perch
533	381-686 (29%)	.013	.007-.019 (47%)	0.84	0.331	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
72503	61425-83580 (15%)	1.115	.928-1.301 (17%)	282.13	114.18	All species
5341	2313-8370 (57%)	.087	.016-.158 (82%)	20.78	8.41	Black crappie
15694	11756-19633 (25%)	.286	.170-.403 (41%)	61.07	24.72	Bluegill
121	0-251 (108%)	.003	.000-.006 (114%)	0.47	0.19	Carp
234	42-426 (82%)	.006	.000-.012 (92%)	0.91	0.37	Channel catfish
22	0-50 (131%)	.001	.000-.003 (146%)	0.08	0.03	Flathead catfish
613	337-888 (45%)	.011	.006-.017 (51%)	2.38	0.96	Freshwater drum
19	0-68 (257%)	.000	.000-.001 (257%)	0.07	0.03	Grass pickerel
742	365-1119 (51%)	.009	.003-.015 (64%)	2.89	1.17	Green sunfish
44	0-132 (198%)	.001	.000-.003 (224%)	0.17	0.07	Gizzard shad
20895	15908-25883 (24%)	.284	.242-.326 (15%)	81.31	32.91	Largemouth bass
200	72-328 (64%)	.002	.001-.004 (76%)	0.78	0.31	Northern pike
6	0-21 (226%)	.000	.000-.000 (226%)	0.02	0.01	Redear sunfish
1636	926-2347 (43%)	.030	.015-.045 (51%)	6.37	2.58	Striped bass x Whit
293	116-470 (60%)	.004	.001-.007 (80%)	1.14	0.46	Smallmouth bass
3748	2849-4646 (24%)	.049	.037-.062 (25%)	14.58	5.90	Walleye
99	0-294 (197%)	.000	.000-.001 (193%)	0.39	0.16	White bass
15516	12189-18842 (21%)	.205	.152-.258 (26%)	60.38	24.43	White crappie
670	429-911 (36%)	.017	.009-.024 (44%)	2.61	1.06	Yellow bullhead
16	0-49 (211%)	.000	.000-.000 (211%)	0.06	0.02	Yellow perch
6593	5104-8082 (23%)	.118	.084-.152 (29%)	25.65	10.38	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
15873	13682-18063 (14%)	.247	.215-.278 (13%)	61.77	0.219	All species
801	439-1162 (45%)	.010	.005-.015 (48%)	3.12	0.150	Black crappie
1342	995-1689 (26%)	.024	.015-.032 (37%)	5.22	0.085	Bluegill
70	0-158 (127%)	.002	.000-.004 (135%)	0.27	0.575	Carp
127	0-271 (113%)	.003	.000-.005 (86%)	0.49	0.543	Channel catfish
18	0-43 (146%)	.001	.000-.002 (166%)	0.07	0.812	Flathead catfish
164	86-242 (48%)	.003	.001-.004 (55%)	0.64	0.267	Freshwater drum
1	0-3 (278%)	.000	.000-.000 (257%)	0.00	0.044	Grass pickerel
81	42-120 (49%)	.001	.000-.002 (67%)	0.32	0.109	Green sunfish
4	0-9 (163%)	.000	.000-.000 (209%)	0.01	0.080	Gizzard shad
7540	6050-9030 (20%)	.120	.097-.143 (19%)	29.34	0.361	Largemouth bass
140	0-297 (112%)	.002	.000-.004 (135%)	0.55	0.701	Northern pike
1	0-2 (226%)	.000	.000-.000 (223%)	0.00	0.112	Redear sunfish
579	323-834 (44%)	.011	.005-.018 (58%)	2.25	0.354	Striped bass x Whit
137	41-233 (70%)	.002	.000-.003 (83%)	0.53	0.467	Smallmouth bass
1278	976-1581 (24%)	.017	.012-.022 (28%)	4.97	0.341	Walleye
47	0-144 (208%)	.000	.000-.000 (207%)	0.18	0.471	White bass
2604	2116-3092 (19%)	.034	.026-.041 (22%)	10.13	0.168	White crappie
183	111-255 (39%)	.004	.002-.006 (44%)	0.71	0.273	Yellow bullhead
4	0-14 (211%)	.000	.000-.000 (211%)	0.02	0.279	Yellow perch
754	603-905 (20%)	.014	.010-.018 (27%)	2.93	0.114	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
34993	30163-39823 (14%)	.544	.474-.614 (13%)	55.11	0.483	All species
1765	969-2561 (45%)	.023	.012-.034 (48%)	2.78	0.330	Black crappie
2958	2193-3723 (26%)	.052	.033-.071 (37%)	4.66	0.188	Bluegill
154	0-349 (127%)	.004	.000-.009 (135%)	0.24	1.268	Carp
280	0-597 (113%)	.006	.001-.010 (86%)	0.44	1.197	Channel catfish
39	0-95 (146%)	.002	.000-.005 (166%)	0.06	1.791	Flathead catfish
361	189-534 (48%)	.006	.003-.009 (55%)	0.57	0.590	Freshwater drum
2	0-7 (278%)	.000	.000-.000 (278%)	0.00	0.098	Grass pickerel
179	92-266 (49%)	.002	.001-.004 (67%)	0.28	0.241	Green sunfish
8	0-21 (163%)	.000	.000-.000 (209%)	0.01	0.177	Gizzard shad
16622	13337-19907 (20%)	.265	.214-.316 (19%)	26.18	0.795	Largemouth bass
309	0-655 (112%)	.004	.000-.009 (135%)	0.49	1.546	Northern pike
2	0-5 (223%)	.000	.000-.000 (223%)	0.00	0.247	Redear sunfish
1276	712-1839 (44%)	.025	.010-.039 (58%)	2.01	0.780	Striped bass x Whit
301	90-513 (70%)	.004	.001-.007 (83%)	0.47	1.029	Smallmouth bass
2818	2151-3486 (24%)	.037	.027-.048 (28%)	4.44	0.752	Walleye
103	0-317 (208%)	.000	.000-.001 (207%)	0.16	1.039	White bass
5742	4666-6817 (19%)	.075	.058-.091 (22%)	9.04	0.370	White crappie
403	245-562 (39%)	.009	.005-.013 (44%)	0.64	0.602	Yellow bullhead
10	0-30 (212%)	.000	.000-.000 (212%)	0.02	0.614	Yellow perch
1662	1329-1995 (20%)	.031	.023-.039 (27%)	2.62	0.252	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	3.7	3.5-4.0 (7%)	0.3	8.7	279
SHORE	1.6	1.1-2.2 (35%)	0.6	3.8	13
BOAT & SHORE	3.6	3.4-3.9 (7%)	0.3	8.7	292
MILES TRAVELED	18.5	17.4-19.6 (6%)	1	240	1008
SUCCESS RATING (1-10)	3.9	3.8-4.1 (4%)	1	10	997

*196 samples were from split interviews of completed trips.
24.9% of all 1172 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 9 out of 1172 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	295	414	84	14	2	1				
SHORE INTERVIEWS	144	179	30	4	3				2	

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

286 (24.4%)	ANY	All species
24 (2.0%)	BLG	Bluegill
2 (0.2%)	BSS	Black bass spp.
1 (0.1%)	CAP	Carp
15 (1.3%)	CAT	Unidentified catfish
28 (2.4%)	CCF	Channel catfish
425 (36.3%)	CRP	Crappie spp.
299 (25.5%)	LMB	Largemouth bass
1 (0.1%)	NOP	Northern pike
1 (0.1%)	SBH	Striped bass x White bass hybrid (Wiper)
4 (0.3%)	SUN	Sunfish spp. excluding Crappie and Black Bass
80 (6.8%)	WAE	Walleye
4 (0.3%)	WHC	White crappie
1 (0.1%)	YEB	Yellow bullhead
1 (0.1%)	YLB	Yellow bass

1996 LAKE BLOOMINGTON

DAY CREEL

03/15/1996 - 10/31/1996

Table 11, con't. 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+
Smallmouth bass																
HARVEST	517	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	511	5	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Walleye																
HARVEST	494	21	5	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	408	50	31	13	8	4	1	3	-	-	-	1	-	-	-	1
White crappie																
HARVEST	323	44	28	23	23	12	18	12	8	7	5	-	6	-	2	9
RELEASE	375	64	36	4	8	9	9	3	-	2	4	-	-	-	-	6
Yellow bullhead																
HARVEST	517	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	520	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellow bass																
HARVEST	498	11	5	3	2	-	1	-	-	-	-	-	-	-	-	-
RELEASE	429	41	12	21	4	4	4	-	1	3	1	-	-	-	-	-