

ILLINOIS NATURAL HISTORY SURVEY
 DIVISION OF ECOLOGY & CONSERVATION SCIENCE
 2006 CREEL SURVEY RESULTS

2006 CRAB ORCHARD LAKE
 6036 ACRES
 REGION 5, DISTRICT 22

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 03/15/2006 through 10/31/2006
 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: 425/693 = 61.3%

NUMBER OF INTERVIEWS: 3316

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	23966	20748-27184 (13%)	4	3-5 (13%)	11%
	HOLIDAY	24272	19804-28740 (18%)	4	3-5 (18%)	19%
	TOTAL	48238	42732-53744 (11%)	8	7-9 (11%)	15%
SHORE	WEEKDAY	18627	16570-20684 (11%)	3	3-3 (11%)	12%
	HOLIDAY	11373	9472-13273 (17%)	2	2-2 (17%)	24%
	TOTAL	30000	27199-32801 (9%)	5	5-5 (9%)	16%
BOAT & SHORE	WEEKDAY	42593	38774-46412 (9%)	7	6-8 (9%)	12%
	HOLIDAY	35645	30789-40500 (14%)	6	5-7 (14%)	20%
	TOTAL	78238	72060-84415 (8%)	13	12-14 (8%)	16%

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

# HARVESTED	95% CI		#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
47602	41232-53971	(13%)	.454	.393-.515 (13%)	19.49	7.89	All species
6	0-19	(223%)	.000	.000-.000 (220%)	0.00	0.00	Blue catfish
5826	4101-7551	(30%)	.047	.031-.063 (35%)	2.39	0.97	Black crappie
5197	3785-6609	(27%)	.049	.033-.066 (34%)	2.13	0.86	Bluegill
3	0-9	(212%)	.000	.000-.000 (212%)	0.00	0.00	Carp
21	0-61	(186%)	.001	.000-.002 (170%)	0.01	0.00	Unidentified catfis
5620	4736-6504	(16%)	.064	.052-.076 (19%)	2.30	0.93	Channel catfish
5	0-17	(212%)	.000	.000-.000 (212%)	0.00	0.00	Crappie spp.
42	6-78	(85%)	.000	.000-.001 (105%)	0.02	0.01	Flathead catfish
63	15-111	(76%)	.001	.000-.002 (100%)	0.03	0.01	Freshwater drum
231	123-340	(47%)	.002	.001-.004 (68%)	0.09	0.04	Green sunfish
49	0-148	(205%)	.000	.000-.001 (212%)	0.02	0.01	Gizzard shad
218	122-314	(44%)	.002	.001-.003 (58%)	0.09	0.04	Largemouth bass
154	46-263	(71%)	.001	.000-.002 (79%)	0.06	0.03	Longear sunfish
470	260-680	(45%)	.005	.002-.007 (50%)	0.19	0.08	Orangespotted sunfi
			****	NOT RECORDED ****			Redear sunfish
			****	NOT RECORDED ****			Striped bass x Whit
24	0-48	(104%)	.000	.000-.000 (121%)	0.01	0.00	Warmouth
2134	1450-2818	(32%)	.024	.015-.033 (36%)	0.87	0.35	White bass
26806	22384-31228	(16%)	.252	.209-.295 (17%)	10.97	4.44	White crappie
154	73-234	(53%)	.001	.001-.002 (51%)	0.06	0.03	Yellow bullhead
26	0-70	(173%)	.000	.000-.000 (200%)	0.01	0.00	Yellow perch
552	124-981	(78%)	.004	.001-.008 (86%)	0.23	0.09	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
14950	13302-16598 (11%)	.158	.138-.178 (12%)	6.12	0.314	All species
5	0-17 (220%)	.000	.000-.000 (223%)	0.00	0.909	Blue catfish
1503	1142-1864 (24%)	.013	.009-.017 (32%)	0.62	0.258	Black crappie
595	434-757 (27%)	.006	.004-.008 (34%)	0.24	0.115	Bluegill
5	0-16 (213%)	.000	.000-.000 (212%)	0.00	1.705	Carp
		****	NOT RECORDED ****			Unidentified catfis
6537	5485-7590 (16%)	.078	.062-.094 (20%)	2.68	1.163	Channel catfish
1	0-3 (212%)	.000	.000-.000 (212%)	0.00	0.204	Crappie spp.
85	13-157 (85%)	.001	.000-.001 (103%)	0.03	2.021	Flathead catfish
18	6-31 (70%)	.000	.000-.000 (97%)	0.01	0.293	Freshwater drum
28	15-41 (48%)	.000	.000-.000 (66%)	0.01	0.121	Green sunfish
1	0-4 (151%)	.000	.000-.000 (151%)	0.00	0.029	Gizzard shad
280	132-429 (53%)	.003	.001-.004 (69%)	0.11	1.286	Largemouth bass
24	7-41 (72%)	.000	.000-.000 (83%)	0.01	0.153	Longear sunfish
61	32-90 (47%)	.001	.000-.001 (53%)	0.02	0.130	Orangespotted sunfi
		****	NOT RECORDED ****			Redear sunfish
		****	NOT RECORDED ****			Striped bass x Whit
4	0-8 (102%)	.000	.000-.000 (141%)	0.00	0.170	Warmouth
724	488-960 (33%)	.008	.005-.011 (36%)	0.30	0.339	White bass
4958	4123-5793 (17%)	.048	.039-.056 (18%)	2.03	0.185	White crappie
57	27-87 (53%)	.000	.000-.001 (53%)	0.02	0.371	Yellow bullhead
5	0-15 (171%)	.000	.000-.000 (200%)	0.00	0.212	Yellow perch
55	22-89 (61%)	.000	.000-.001 (68%)	0.02	0.100	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
32958	29326-36591 (11%)	.349	.305-.392 (12%)	5.46	0.692	All species
12	0-38 (223%)	.000	.000-.000 (223%)	0.00	2.004	Blue catfish
3314	2518-4110 (24%)	.029	.020-.039 (32%)	0.55	0.569	Black crappie
1313	956-1669 (27%)	.013	.008-.017 (34%)	0.22	0.253	Bluegill
11	0-35 (213%)	.000	.000-.000 (213%)	0.00	3.758	Carp
		****	NOT RECORDED ****			Unidentified catfis
14413	12092-16733 (16%)	.172	.138-.206 (20%)	2.39	2.564	Channel catfish
2	0-8 (212%)	.000	.000-.000 (213%)	0.00	0.449	Crappie spp.
188	29-347 (85%)	.001	.000-.003 (103%)	0.03	4.455	Flathead catfish
41	12-69 (70%)	.001	.000-.001 (97%)	0.01	0.645	Freshwater drum
62	32-91 (48%)	.001	.000-.001 (66%)	0.01	0.266	Green sunfish
3	0-8 (151%)	.000	.000-.000 (151%)	0.00	0.065	Gizzard shad
618	291-946 (53%)	.006	.002-.009 (69%)	0.10	2.836	Largemouth bass
52	15-90 (72%)	.000	.000-.001 (83%)	0.01	0.337	Longear sunfish
134	71-198 (47%)	.001	.001-.002 (53%)	0.02	0.286	Orangespotted sunfi
		****	NOT RECORDED ****			Redear sunfish
		****	NOT RECORDED ****			Striped bass x Whit
9	0-18 (102%)	.000	.000-.000 (141%)	0.00	0.375	Warmouth
1596	1076-2116 (33%)	.018	.012-.025 (36%)	0.26	0.748	White bass
10931	9090-12772 (17%)	.105	.086-.123 (18%)	1.81	0.408	White crappie
126	59-192 (53%)	.001	.001-.002 (53%)	0.02	0.818	Yellow bullhead
12	0-33 (171%)	.000	.000-.000 (200%)	0.00	0.468	Yellow perch
122	48-197 (61%)	.001	.000-.001 (68%)	0.02	0.221	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
213045	187173-238917 (12%)	1.962	1.772-2.153 (10%)	87.22	35.30	All species
6	0-19 (223%)	.000	.000-.000 (220%)	0.00	0.00	Blue catfish
19293	13636-24949 (29%)	.125	.094-.157 (25%)	7.90	3.20	Black crappie
20549	16265-24833 (21%)	.215	.168-.262 (22%)	8.41	3.40	Bluegill
28	1-54 (97%)	.000	.000-.000 (120%)	0.01	0.00	Carp
30	0-72 (141%)	.001	.000-.002 (159%)	0.01	0.00	Unidentified catfis
7081	5971-8192 (16%)	.078	.064-.092 (18%)	2.90	1.17	Channel catfish
5	0-17 (212%)	.000	.000-.000 (212%)	0.00	0.00	Crappie spp.
50	11-90 (78%)	.000	.000-.001 (88%)	0.02	0.01	Flathead catfish
468	314-623 (33%)	.004	.002-.006 (42%)	0.19	0.08	Freshwater drum
1497	1088-1906 (27%)	.031	.001-.061 (95%)	0.61	0.25	Green sunfish
76	0-183 (140%)	.001	.000-.002 (154%)	0.03	0.01	Gizzard shad
28351	23304-33398 (18%)	.229	.194-.265 (16%)	11.61	4.70	Largemouth bass
189	66-311 (65%)	.002	.001-.003 (66%)	0.08	0.03	Longear sunfish
2089	1273-2905 (39%)	.022	.014-.030 (38%)	0.86	0.35	Orangespotted sunfi
12	0-29 (150%)	.000	.000-.000 (147%)	0.00	0.00	Redear sunfish
16	0-52 (231%)	.000	.000-.002 (231%)	0.01	0.00	Striped bass x Whit
64	15-114 (77%)	.001	.000-.002 (93%)	0.03	0.01	Warmouth
5809	4269-7350 (27%)	.075	.055-.095 (27%)	2.38	0.96	White bass
121841	103495-140188 (15%)	1.108	.951-1.264 (14%)	49.88	20.19	White crappie
493	302-683 (39%)	.004	.003-.006 (39%)	0.20	0.08	Yellow bullhead
26	0-70 (173%)	.000	.000-.000 (200%)	0.01	0.00	Yellow perch
5072	3792-6352 (25%)	.065	.042-.088 (35%)	2.08	0.84	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
42657	37489-47824 (12%)	.386	.353-.419 (9%)	17.46	0.200	All species
5	0-17 (220%)	.000	.000-.000 (223%)	0.00	0.909	Blue catfish
2358	1817-2898 (23%)	.019	.014-.023 (26%)	0.97	0.122	Black crappie
1709	1370-2047 (20%)	.020	.015-.024 (22%)	0.70	0.083	Bluegill
43	2-84 (96%)	.000	.000-.000 (103%)	0.02	1.549	Carp
		****	NOT RECORDED ****			Unidentified catfis
7987	6764-9210 (15%)	.097	.079-.114 (18%)	3.27	1.128	Channel catfish
1	0-3 (212%)	.000	.000-.000 (212%)	0.00	0.204	Crappie spp.
88	15-160 (83%)	.001	.000-.001 (99%)	0.04	1.737	Flathead catfish
146	36-256 (75%)	.001	.001-.002 (53%)	0.06	0.311	Freshwater drum
131	96-166 (26%)	.004	.000-.008 (114%)	0.05	0.088	Green sunfish
4	0-10 (168%)	.000	.000-.000 (135%)	0.00	0.050	Gizzard shad
17922	14033-21811 (22%)	.121	.100-.141 (17%)	7.34	0.632	Largemouth bass
27	9-44 (67%)	.000	.000-.000 (73%)	0.01	0.141	Longear sunfish
183	115-251 (37%)	.002	.001-.003 (43%)	0.08	0.088	Orangespotted sunfi
1	0-3 (144%)	.000	.000-.000 (147%)	0.00	0.107	Redear sunfish
3	0-12 (236%)	.000	.000-.000 (231%)	0.00	0.220	Striped bass x Whit
7	2-11 (73%)	.000	.000-.000 (89%)	0.00	0.101	Warmouth
1471	1097-1845 (25%)	.020	.014-.026 (30%)	0.60	0.253	White bass
10123	8686-11559 (14%)	.095	.081-.110 (15%)	4.14	0.083	White crappie
109	65-153 (40%)	.001	.001-.001 (41%)	0.04	0.221	Yellow bullhead
5	0-15 (171%)	.000	.000-.000 (200%)	0.00	0.212	Yellow perch
335	259-410 (23%)	.005	.003-.008 (47%)	0.14	0.066	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
94042	82649-105434 (12%)	.850	.777-.923 (9%)	15.58	0.441	All species
12	0-38 (223%)	.000	.000-.000 (223%)	0.00	2.004	Blue catfish
5198	4006-6390 (23%)	.041	.030-.051 (26%)	0.86	0.269	Black crappie
3767	3020-4514 (20%)	.043	.034-.053 (22%)	0.62	0.183	Bluegill
94	4-184 (96%)	.000	.000-.001 (103%)	0.02	3.415	Carp
		****	NOT RECORDED ****			Unidentified catfis
17609	14913-20304 (15%)	.213	.174-.252 (18%)	2.92	2.487	Channel catfish
2	0-8 (212%)	.000	.000-.000 (213%)	0.00	0.449	Crappie spp.
193	34-352 (83%)	.001	.000-.003 (99%)	0.03	3.828	Flathead catfish
321	79-564 (75%)	.002	.001-.004 (53%)	0.05	0.686	Freshwater drum
289	213-365 (26%)	.008	.000-.017 (114%)	0.05	0.193	Green sunfish
8	0-22 (168%)	.000	.000-.000 (135%)	0.00	0.110	Gizzard shad
39512	30939-48085 (22%)	.266	.221-.311 (17%)	6.55	1.394	Largemouth bass
58	19-98 (67%)	.001	.000-.001 (73%)	0.01	0.310	Longear sunfish
404	254-554 (37%)	.005	.003-.007 (43%)	0.07	0.193	Orangespotted sunfi
3	0-7 (144%)	.000	.000-.000 (147%)	0.00	0.236	Redear sunfish
8	0-25 (231%)	.000	.000-.001 (236%)	0.00	0.484	Striped bass x Whit
14	4-25 (73%)	.000	.000-.000 (89%)	0.00	0.223	Warmouth
3243	2419-4067 (25%)	.044	.031-.058 (30%)	0.54	0.558	White bass
22317	19150-25483 (14%)	.210	.179-.242 (15%)	3.70	0.183	White crappie
240	143-337 (40%)	.002	.001-.003 (41%)	0.04	0.487	Yellow bullhead
12	0-33 (171%)	.000	.000-.000 (200%)	0.00	0.468	Yellow perch
738	571-905 (23%)	.011	.006-.017 (47%)	0.12	0.145	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	3.4	3.2-3.6	(6%)	0.3	10.9	493
SHORE	2.2	2.0-2.3	(6%)	0.2	11.8	636
BOAT & SHORE	2.7	2.6-2.8	(4%)	0.2	11.8	1129
MILES TRAVELED	15.8	14.8-16.9	(7%)	1	255	2478
SUCCESS RATING (1-10)	5.8	5.6-5.9	(3%)	1	10	2475

*387 samples were from split interviews of completed trips.
38.9% of all 2904 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 6 out of 2904 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	552	981	69	17	6	2	1			
SHORE INTERVIEWS	566	484	137	65	16	3	2	2	1	

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

234 (8.1%)	ANY	All species
31 (1.1%)	BLG	Bluegill
11 (0.4%)	BSS	Black bass spp.
1 (0.0%)	CAP	Carp
476 (16.4%)	CAT	Unidentified catfish
28 (1.0%)	CCF	Channel catfish
970 (33.4%)	CRP	Crappie spp.
1 (0.0%)	GZS	Gizzard shad
1117 (38.5%)	LMB	Largemouth bass
1 (0.0%)	SBH	Striped bass x White bass hybrid (Wiper)
2 (0.1%)	SUN	Sunfish spp. excluding Crappie and Black Bass
31 (1.1%)	WHB	White bass
1 (0.0%)	WHC	White crappie

2006 CRAB ORCHARD LAKE

DAY CREEL

03/15/2006 - 10/31/2006

Table 11. (Cont.) 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+	
Warmouth																	
HARVEST	1906	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1898	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
White bass																	
HARVEST	1899	3	-	3	1	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1774	95	5	6	5	2	3	4	3	1	-	-	1	2	1	4	
White crappie																	
HARVEST	1833	9	12	11	7	4	1	6	2	-	6	-	-	5	-	10	
RELEASE	1424	131	47	44	12	19	29	13	29	6	13	5	20	7	-	107	
Yellow bullhead																	
HARVEST	1902	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1880	17	8	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellow bass																	
HARVEST	1902	2	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-
RELEASE	1795	53	22	15	3	5	4	-	-	3	3	-	2	-	-	1	