

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

2004 REND LAKE
 16135 ACRES
 REGION 0, DISTRICT 0

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.

SAMPLING RATIO: 466/693 = 67.2%

NUMBER OF INTERVIEWS: 2893

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	47979	40745-55213 (15%)	3	3-3	(15%) 6%
	HOLIDAY	47054	37103-57006 (21%)	3	2-4	(21%) 12%
	TOTAL	95033	82731-107336 (13%)	6	5-7	(13%) 9%
SHORE	WEEKDAY	12367	10345-14390 (16%)	1	1-1	(16%) 5%
	HOLIDAY	10484	8424-12543 (20%)	1	1-1	(20%) 9%
	TOTAL	22851	19964-25738 (13%)	1	1-2	(13%) 7%
BOAT & SHORE	WEEKDAY	60346	52835-67857 (12%)	4	3-4	(12%) 6%
	HOLIDAY	57538	47376-67700 (18%)	4	3-4	(18%) 11%
	TOTAL	117884	105247-130521 (11%)	7	7-8	(11%) 9%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
91089	78300-103878 (14%)	.452	.387-.518 (14%)	13.95	5.65	All species
10	0-33 (245%)	.000	.000-.000 (245%)	0.00	0.00	Blue catfish
8	0-28 (231%)	.000	.000-.000 (226%)	0.00	0.00	Bigmouth buffalo
291	37-544 (87%)	.001	.000-.003 (78%)	0.04	0.02	Black crappie
3935	1386-6484 (65%)	.013	.005-.021 (64%)	0.60	0.24	Bluegill
		****	NOT RECORDED ****			Bowfin
95	0-216 (129%)	.000	.000-.001 (125%)	0.01	0.01	Carp
33156	27216-39097 (18%)	.179	.141-.217 (21%)	5.08	2.05	Channel catfish
		****	NOT RECORDED ****			Crappie spp.
155	34-276 (78%)	.001	.000-.001 (81%)	0.02	0.01	Flathead catfish
141	37-244 (73%)	.000	.000-.001 (90%)	0.02	0.01	Freshwater drum
51	0-158 (207%)	.000	.000-.001 (208%)	0.01	0.00	Green sunfish
311	27-594 (91%)	.000	.000-.001 (122%)	0.05	0.02	Largemouth bass
145	0-461 (218%)	.000	.000-.001 (216%)	0.02	0.01	Longear sunfish
14	0-41 (196%)	.000	.000-.000 (196%)	0.00	0.00	Redear sunfish
		****	NOT RECORDED ****			Smallmouth buffalo
39	0-119 (207%)	.000	.000-.000 (208%)	0.01	0.00	Striped bass x Whit
		****	NOT RECORDED ****			Shortnose gar
18	0-39 (116%)	.000	.000-.000 (145%)	0.00	0.00	Warmouth
3735	1412-6057 (62%)	.008	.003-.013 (67%)	0.57	0.23	White bass
48882	39315-58448 (20%)	.246	.194-.299 (21%)	7.49	3.03	White crappie
		****	NOT RECORDED ****			Yellow bullhead
105	0-252 (141%)	.002	.000-.005 (206%)	0.02	0.01	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
40223	34474-45973 (14%)	.209	.175-.243 (16%)	6.16	0.442	All species
6	0-21 (245%)	.000	.000-.000 (245%)	0.00	0.633	Blue catfish
33	0-108 (226%)	.000	.000-.001 (226%)	0.01	3.929	Bigmouth buffalo
118	7-229 (94%)	.001	.000-.001 (91%)	0.02	0.406	Black crappie
369	119-619 (68%)	.001	.000-.002 (64%)	0.06	0.094	Bluegill
		****	NOT RECORDED ****			Bowfin
244	0-563 (131%)	.001	.000-.002 (136%)	0.04	2.581	Carp
26061	21324-30797 (18%)	.146	.114-.179 (22%)	3.99	0.786	Channel catfish
		****	NOT RECORDED ****			Crappie spp.
642	5-1279 (99%)	.002	.000-.004 (103%)	0.10	4.135	Flathead catfish
73	16-130 (79%)	.000	.000-.001 (94%)	0.01	0.516	Freshwater drum
6	0-19 (208%)	.000	.000-.000 (207%)	0.00	0.120	Green sunfish
234	26-441 (89%)	.000	.000-.001 (116%)	0.04	0.753	Largemouth bass
4	0-12 (218%)	.000	.000-.000 (218%)	0.00	0.025	Longear sunfish
3	0-8 (196%)	.000	.000-.000 (196%)	0.00	0.186	Redear sunfish
		****	NOT RECORDED ****			Smallmouth buffalo
80	0-246 (207%)	.000	.000-.001 (208%)	0.01	2.073	Striped bass x Whit
		****	NOT RECORDED ****			Shortnose gar
2	0-6 (132%)	.000	.000-.000 (157%)	0.00	0.135	Warmouth
1381	467-2295 (66%)	.003	.001-.005 (73%)	0.21	0.370	White bass
10953	8840-13066 (19%)	.054	.042-.065 (22%)	1.68	0.224	White crappie
		****	NOT RECORDED ****			Yellow bullhead
15	0-39 (158%)	.000	.000-.001 (206%)	0.00	0.146	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
88678	76002-101353 (14%)	.461	.385-.537 (16%)	5.50	0.974	All species
13	0-45 (236%)	.000	.000-.000 (245%)	0.00	1.395	Blue catfish
73	0-237 (226%)	.000	.000-.002 (226%)	0.00	8.662	Bigmouth buffalo
260	15-505 (94%)	.001	.000-.002 (91%)	0.02	0.895	Black crappie
813	262-1365 (68%)	.003	.001-.004 (64%)	0.05	0.207	Bluegill
		****	NOT RECORDED ****			Bowfin
538	0-1241 (131%)	.002	.000-.005 (136%)	0.03	5.690	Carp
57454	47012-67896 (18%)	.322	.251-.394 (22%)	3.56	1.733	Channel catfish
		****	NOT RECORDED ****			Crappie spp.
1415	10-2820 (99%)	.005	.000-.010 (103%)	0.09	9.117	Flathead catfish
160	34-286 (79%)	.001	.000-.001 (94%)	0.01	1.137	Freshwater drum
14	0-42 (207%)	.000	.000-.000 (207%)	0.00	0.265	Green sunfish
515	58-973 (89%)	.001	.000-.002 (116%)	0.03	1.660	Largemouth bass
8	0-25 (216%)	.000	.000-.000 (218%)	0.00	0.055	Longear sunfish
6	0-17 (196%)	.000	.000-.000 (196%)	0.00	0.410	Redear sunfish
		****	NOT RECORDED ****			Smallmouth buffalo
176	0-542 (207%)	.001	.000-.002 (208%)	0.01	4.569	Striped bass x Whit
		****	NOT RECORDED ****			Shortnose gar
5	0-12 (132%)	.000	.000-.000 (157%)	0.00	0.297	Warmouth
3045	1030-5060 (66%)	.007	.002-.011 (73%)	0.19	0.815	White bass
24147	19489-28806 (19%)	.118	.093-.144 (22%)	1.50	0.494	White crappie
		****	NOT RECORDED ****			Yellow bullhead
34	0-87 (158%)	.000	.000-.001 (206%)	0.00	0.321	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
193791	165613-221968 (15%)	.976	.842-1.111 (14%)	29.68	12.01	All species
10	0-33 (245%)	.000	.000-.000 (245%)	0.00	0.00	Blue catfish
8	0-28 (231%)	.000	.000-.000 (226%)	0.00	0.00	Bigmouth buffalo
312	57-568 (82%)	.001	.000-.003 (76%)	0.05	0.02	Black crappie
10117	5353-14880 (47%)	.060	.028-.092 (53%)	1.55	0.63	Bluegill
11	0-26 (139%)	.000	.000-.000 (141%)	0.00	0.00	Bowfin
260	31-488 (88%)	.002	.000-.005 (134%)	0.04	0.02	Carp
36733	30112-43354 (18%)	.211	.161-.261 (24%)	5.63	2.28	Channel catfish
109	0-338 (209%)	.001	.000-.002 (209%)	0.02	0.01	Crappie spp.
155	34-276 (78%)	.001	.000-.001 (81%)	0.02	0.01	Flathead catfish
1482	982-1982 (34%)	.006	.002-.010 (61%)	0.23	0.09	Freshwater drum
127	0-263 (107%)	.001	.000-.002 (105%)	0.02	0.01	Green sunfish
15128	12073-18182 (20%)	.041	.034-.048 (18%)	2.32	0.94	Largemouth bass
401	0-844 (111%)	.001	.000-.002 (130%)	0.06	0.02	Longear sunfish
14	0-41 (196%)	.000	.000-.000 (196%)	0.00	0.00	Redear sunfish
40	0-131 (226%)	.002	.000-.005 (226%)	0.01	0.00	Smallmouth buffalo
258	0-740 (187%)	.001	.000-.003 (169%)	0.04	0.02	Striped bass x Whit
4	0-13 (216%)	.000	.000-.000 (214%)	0.00	0.00	Shortnose gar
885	310-1460 (65%)	.002	.001-.004 (63%)	0.14	0.05	Warmouth
5152	1839-8466 (64%)	.014	.005-.022 (63%)	0.79	0.32	White bass
122298	96756-147840 (21%)	.631	.509-.752 (19%)	18.73	7.58	White crappie
8	0-22 (196%)	.000	.000-.000 (196%)	0.00	0.00	Yellow bullhead
280	42-517 (85%)	.002	.000-.006 (154%)	0.04	0.02	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
53936	47083-60788	(13%)	.272	.231-.313	(15%)	8.26	0.278	All species
6	0-21	(245%)	.000	.000-.000	(245%)	0.00	0.633	Blue catfish
33	0-108	(226%)	.000	.000-.001	(226%)	0.01	3.929	Bigmouth buffalo
119	7-230	(94%)	.001	.000-.001	(91%)	0.02	0.380	Black crappie
634	323-945	(49%)	.003	.002-.004	(47%)	0.10	0.063	Bluegill
1	0-2	(139%)	.000	.000-.000	(141%)	0.00	0.067	Bowfin
605	0-1236	(104%)	.006	.000-.014	(150%)	0.09	2.332	Carp
26852	22043-31661	(18%)	.151	.118-.185	(22%)	4.11	0.731	Channel catfish
1	0-4	(209%)	.000	.000-.000	(210%)	0.00	0.012	Crappie spp.
642	5-1279	(99%)	.002	.000-.004	(103%)	0.10	4.135	Flathead catfish
1588	777-2399	(51%)	.007	.000-.015	(102%)	0.24	1.072	Freshwater drum
12	0-27	(119%)	.000	.000-.000	(115%)	0.00	0.096	Green sunfish
8855	6974-10736	(21%)	.023	.019-.028	(20%)	1.36	0.585	Largemouth bass
13	0-27	(108%)	.000	.000-.000	(137%)	0.00	0.033	Longear sunfish
3	0-8	(196%)	.000	.000-.000	(196%)	0.00	0.186	Redear sunfish
156	0-510	(226%)	.006	.000-.021	(231%)	0.02	3.903	Smallmouth buffalo
147	0-379	(158%)	.001	.000-.002	(138%)	0.02	0.570	Striped bass x Whit
1	0-4	(216%)	.000	.000-.000	(216%)	0.00	0.305	Shortnose gar
85	24-146	(72%)	.000	.000-.000	(65%)	0.01	0.096	Warmouth
1556	566-2545	(64%)	.005	.002-.007	(64%)	0.24	0.302	White bass
12588	10214-14962	(19%)	.066	.050-.082	(24%)	1.93	0.103	White crappie
1	0-2	(196%)	.000	.000-.000	(196%)	0.00	0.112	Yellow bullhead
38	0-78	(108%)	.000	.000-.001	(144%)	0.01	0.135	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
118908	103800-134015 (13%)	.600	.510-.690 (15%)	7.37	0.614	All species
13	0-45 (236%)	.000	.000-.000 (245%)	0.00	1.395	Blue catfish
73	0-237 (226%)	.000	.000-.002 (226%)	0.00	8.662	Bigmouth buffalo
261	16-506 (94%)	.001	.000-.002 (91%)	0.02	0.837	Black crappie
1398	712-2084 (49%)	.007	.004-.010 (47%)	0.09	0.138	Bluegill
2	0-4 (139%)	.000	.000-.000 (141%)	0.00	0.148	Bowfin
1335	0-2725 (104%)	.012	.000-.031 (150%)	0.08	5.142	Carp
59198	48597-69800 (18%)	.334	.260-.408 (22%)	3.67	1.612	Channel catfish
3	0-9 (209%)	.000	.000-.000 (209%)	0.00	0.027	Crappie spp.
1415	10-2820 (99%)	.005	.000-.010 (103%)	0.09	9.117	Flathead catfish
3501	1714-5289 (51%)	.016	.000-.032 (102%)	0.22	2.363	Freshwater drum
27	0-59 (119%)	.000	.000-.000 (115%)	0.00	0.212	Green sunfish
19521	15374-23668 (21%)	.051	.041-.062 (20%)	1.21	1.290	Largemouth bass
29	0-60 (108%)	.000	.000-.000 (137%)	0.00	0.072	Longear sunfish
6	0-17 (196%)	.000	.000-.000 (196%)	0.00	0.410	Redear sunfish
345	0-1140 (231%)	.014	.000-.047 (231%)	0.02	8.605	Smallmouth buffalo
324	0-835 (158%)	.002	.000-.005 (138%)	0.02	1.257	Striped bass x Whit
3	0-9 (216%)	.000	.000-.000 (216%)	0.00	0.673	Shortnose gar
187	53-321 (72%)	.000	.000-.001 (65%)	0.01	0.211	Warmouth
3430	1248-5611 (64%)	.010	.004-.016 (64%)	0.21	0.666	White bass
27751	22518-32985 (19%)	.146	.111-.181 (24%)	1.72	0.227	White crappie
2	0-5 (196%)	.000	.000-.000 (196%)	0.00	0.247	Yellow bullhead
83	0-172 (108%)	.001	.000-.002 (144%)	0.01	0.297	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	3.5-3.9	(5%)	0.5	11.1	553
SHORE	1.9	1.6-2.1	(14%)	0.3	4.2	62
BOAT & SHORE	3.5	3.3-3.7	(5%)	0.3	11.1	615
MILES TRAVELED	43.2	40.6-45.8	(6%)	1	1000	2157
SUCCESS RATING (1-10)	3.3	3.2-3.4	(3%)	1	10	2151

*344 samples were from split interviews of completed trips.
 24.3% of all 2535 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 1 out of 2535 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	285	1522	85	28	1	1				
SHORE INTERVIEWS	210	293	74	35	1					

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

241 (9.5%)	ANY	All species
16 (0.6%)	BLG	Bluegill
1 (0.0%)	CAP	Carp
638 (25.2%)	CAT	Unidentified catfish
7 (0.3%)	CCF	Channel catfish
793 (31.3%)	CRP	Crappie spp.
766 (30.2%)	LMB	Largemouth bass
1 (0.0%)	SUN	Sunfish spp. excluding Crappie and Black Bass
70 (2.8%)	WHB	White bass
2 (0.1%)	WHC	White crappie

