

ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 1990 CREEL SURVEY RESULTS

1990 WELDON SPRINGS
 30 ACRES
 REGION 3, DISTRICT 8

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 03/15/1990 through 11/15/1990
 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: 358/738 = 48.5%

NUMBER OF INTERVIEWS: 3151

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	4083	3498-4669 (14%)	138	119-158 (14%)	20%
	HOLIDAY	5294	4616-5972 (13%)	179	156-202 (13%)	49%
	TOTAL	9377	8482-10273 (10%)	318	288-348 (10%)	37%
SHORE	WEEKDAY	8827	7793-9861 (12%)	299	264-334 (12%)	17%
	HOLIDAY	9435	8102-10767 (14%)	320	275-365 (14%)	34%
	TOTAL	18261	16575-19948 (9%)	619	562-676 (9%)	26%
BOAT & SHORE	WEEKDAY	12910	11722-14098 (9%)	438	397-478 (9%)	18%
	HOLIDAY	14729	13233-16224 (10%)	499	449-550 (10%)	39%
	TOTAL	27639	25729-29549 (7%)	937	872-1002 (7%)	29%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
10579	8877-12280 (16%)	.382	.309-.454 (19%)	886.09	358.59	All species
11	0-34 (209%)	.000	.000-.000 (209%)	0.92	0.37	Black bullhead
916	604-1228 (34%)	.041	.024-.058 (41%)	76.76	31.06	Black crappie
5295	3900-6691 (26%)	.160	.098-.222 (39%)	443.56	179.50	Bluegill
14	0-37 (171%)	.000	.000-.000 (134%)	1.15	0.47	Brown bullhead
7	0-23 (231%)	.000	.000-.000 (231%)	0.58	0.24	Bluegill x Redear s
2283	1869-2697 (18%)	.083	.064-.103 (23%)	191.25	77.40	Channel catfish
2	0-6 (278%)	.000	.000-.000 (278%)	0.14	0.06	Freshwater drum
		****	NOT RECORDED ****			Golden shiner
49	18-80 (63%)	.001	.000-.002 (89%)	4.12	1.67	Green sunfish
		****	NOT RECORDED ****			Gizzard shad
1625	1135-2115 (30%)	.087	.049-.126 (44%)	136.12	55.09	Largemouth bass
376	224-528 (40%)	.009	.005-.013 (43%)	31.48	12.74	Redear sunfish
		****	NOT RECORDED ****			Yellow bullhead

Table 3. Total fishing harvest and harvest rates, in kilograms.

KG HARVESTED	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
2993	2485-3502 (17%)	.129	.092-.167 (29%)	250.73	0.283	All species
5	0-16 (209%)	.000	.000-.000 (208%)	0.44	0.478	Black bullhead
133	89-177 (33%)	.006	.004-.008 (40%)	11.14	0.145	Black crappie
572	418-726 (27%)	.017	.010-.024 (40%)	47.93	0.108	Bluegill
11	0-28 (155%)	.000	.000-.000 (129%)	0.94	0.860	Brown bullhead
1	0-3 (231%)	.000	.000-.000 (236%)	0.08	0.158	Bluegill x Redear s
781	642-920 (18%)	.027	.021-.034 (24%)	65.43	0.342	Channel catfish
4	0-16 (318%)	.000	.000-.000 (278%)	0.32	3.790	Freshwater drum
		****	NOT RECORDED ****			Golden shiner
4	1-7 (75%)	.000	.000-.000 (79%)	0.36	0.087	Green sunfish
		****	NOT RECORDED ****			Gizzard shad
1417	973-1862 (31%)	.077	.040-.114 (48%)	118.70	0.872	Largemouth bass
64	39-90 (40%)	.002	.001-.002 (42%)	5.39	0.172	Redear sunfish
		****	NOT RECORDED ****			Yellow bullhead

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Table 4. Total fishing harvest and harvest rates, in pounds.

LB HARVESTED	95% CI		LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
6599	5479-7720	(17%)	.285	.202-.368 (29%)	223.70	0.624	All species
12	0-36	(208%)	.000	.000-.000 (208%)	0.39	1.055	Black bullhead
293	196-391	(33%)	.013	.008-.019 (40%)	9.94	0.320	Black crappie
1262	922-1601	(27%)	.038	.023-.053 (40%)	42.77	0.238	Bluegill
25	0-63	(155%)	.000	.000-.001 (129%)	0.84	1.895	Brown bullhead
2	0-7	(231%)	.000	.000-.000 (236%)	0.07	0.348	Bluegill x Redear s
1722	1415-2029	(18%)	.060	.046-.075 (24%)	58.38	0.754	Channel catfish
8	0-35	(318%)	.000	.000-.001 (318%)	0.28	8.356	Freshwater drum
			****	NOT RECORDED ****			Golden shiner
9	2-16	(75%)	.000	.000-.000 (79%)	0.32	0.191	Green sunfish
			****	NOT RECORDED ****			Gizzard shad
3124	2144-4105	(31%)	.170	.088-.251 (48%)	105.91	1.923	Largemouth bass
142	85-198	(40%)	.004	.002-.005 (42%)	4.81	0.378	Redear sunfish
			****	NOT RECORDED ****			Yellow bullhead

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
23206	20644-25768 (11%)	.791	.680-.902 (14%)	1943.80	786.64	All species
23	0-50 (120%)	.000	.000-.000 (144%)	1.91	0.77	Black bullhead
1556	1149-1964 (26%)	.072	.048-.096 (34%)	130.34	52.75	Black crappie
10971	8962-12980 (18%)	.257	.193-.322 (25%)	918.97	371.90	Bluegill
18	0-43 (132%)	.000	.000-.000 (111%)	1.54	0.62	Brown bullhead
13	0-32 (154%)	.000	.000-.001 (157%)	1.06	0.43	Bluegill x Redear s
2943	2444-3441 (17%)	.101	.081-.121 (20%)	246.49	99.75	Channel catfish
2	0-6 (278%)	.000	.000-.000 (278%)	0.14	0.06	Freshwater drum
2	0-6 (226%)	.000	.000-.000 (226%)	0.15	0.06	Golden shiner
142	73-212 (49%)	.002	.001-.003 (60%)	11.93	4.83	Green sunfish
13	0-33 (163%)	.000	.000-.001 (189%)	1.05	0.43	Gizzard shad
7124	5931-8316 (17%)	.347	.254-.440 (27%)	596.69	241.48	Largemouth bass
398	241-556 (39%)	.010	.006-.014 (42%)	33.37	13.50	Redear sunfish
2	0-6 (236%)	.000	.000-.000 (245%)	0.15	0.06	Yellow bullhead

Table 6. Total fishing catch and catch rates, in kilograms.

KG CAUGHT	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
6121	5324-6918 (13%)	.275	.211-.339 (23%)	512.68	0.264	All species
6	0-17 (191%)	.000	.000-.000 (169%)	0.48	0.262	Black bullhead
188	137-240 (27%)	.009	.006-.012 (35%)	15.78	0.121	Black crappie
768	605-931 (21%)	.021	.014-.028 (34%)	64.36	0.070	Bluegill
14	0-31 (126%)	.000	.000-.000 (108%)	1.16	0.770	Brown bullhead
1	0-4 (173%)	.000	.000-.000 (163%)	0.11	0.107	Bluegill x Redear s
878	738-1018 (16%)	.030	.024-.037 (22%)	73.52	0.298	Channel catfish
4	0-16 (318%)	.000	.000-.000 (278%)	0.32	3.790	Freshwater drum
0	0-1 (231%)	.000	.000-.000 (226%)	0.03	0.352	Golden shiner
8	4-13 (51%)	.000	.000-.000 (76%)	0.71	0.060	Green sunfish
0	0-1 (212%)	.000	.000-.000 (226%)	0.02	0.024	Gizzard shad
4186	3430-4942 (18%)	.213	.149-.277 (30%)	350.62	0.588	Largemouth bass
66	41-92 (39%)	.002	.001-.002 (42%)	5.56	0.167	Redear sunfish
0	0-0 (236%)	.000	.000-.000 (236%)	0.01	0.137	Yellow bullhead

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Table 7. Total fishing catch and catch rates, in pounds.

LB CAUGHT	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
13494	11737-15251 (13%)	.606	.465-.748 (23%)	457.41	0.581	All species
13	0-37 (191%)	.000	.000-.000 (169%)	0.43	0.577	Black bullhead
415	303-528 (27%)	.020	.013-.026 (35%)	14.08	0.267	Black crappie
1694	1335-2053 (21%)	.045	.030-.061 (34%)	57.42	0.154	Bluegill
31	0-69 (126%)	.000	.000-.001 (108%)	1.04	1.698	Brown bullhead
3	0-8 (177%)	.000	.000-.000 (167%)	0.10	0.237	Bluegill x Redear s
1935	1626-2244 (16%)	.067	.052-.081 (22%)	65.60	0.658	Channel catfish
8	0-35 (318%)	.000	.000-.001 (318%)	0.28	8.356	Freshwater drum
1	0-3 (226%)	.000	.000-.000 (231%)	0.03	0.776	Golden shiner
19	9-28 (51%)	.000	.000-.001 (76%)	0.63	0.131	Green sunfish
1	0-2 (212%)	.000	.000-.000 (226%)	0.02	0.053	Gizzard shad
9228	7561-10895 (18%)	.470	.329-.611 (30%)	312.82	1.296	Largemouth bass
146	90-203 (39%)	.004	.002-.005 (42%)	4.96	0.367	Redear sunfish
0	0-1 (236%)	.000	.000-.000 (245%)	0.01	0.303	Yellow bullhead