

ILLINOIS NATURAL HISTORY SURVEY  
 CENTER FOR AQUATIC ECOLOGY  
 1991 CREEL SURVEY RESULTS

1991 SPRINGFIELD  
 3826 ACRES  
 REGION 4, DISTRICT 11

STRATIFICATION SUMMARY:

Day creel only.  
 Results cover 03/15/1991 through 11/15/1991  
 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: 469/738 = 63.6%

NUMBER OF INTERVIEWS: 1743

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	11628	9760-13497 ( 16%)	3	3-4 ( 16%)	7%
	HOLIDAY	11385	9375-13394 ( 18%)	3	2-4 ( 18%)	12%
	TOTAL	23013	20269-25757 ( 12%)	6	5-7 ( 12%)	10%
SHORE	WEEKDAY	16462	14078-18846 ( 14%)	4	4-5 ( 14%)	4%
	HOLIDAY	12808	10068-15547 ( 21%)	3	3-4 ( 21%)	7%
	TOTAL	29269	25638-32901 ( 12%)	8	7-9 ( 12%)	5%
BOAT & SHORE	WEEKDAY	28090	25061-31119 ( 11%)	7	7-8 ( 11%)	6%
	HOLIDAY	24192	20795-27590 ( 14%)	6	5-7 ( 14%)	9%
	TOTAL	52282	47731-56834 ( 9%)	14	12-15 ( 9%)	7%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
41358	33012-49704 ( 20%)	.517	.341-.693 ( 34%)	26.71	10.81	All species
		**** NOT RECORDED ****				Bluegill x
Green su						
18	0-46 (155%)	.001	.000-.002 (174%)	0.01	0.00	Black bullhead
		**** NOT RECORDED ****				Black crappie
6230	2337-10124 ( 62%)	.055	.024-.086 ( 56%)	4.02	1.63	Bluegill
764	354-1174 ( 54%)	.017	.004-.029 ( 74%)	0.49	0.20	Carp
13421	11241-15601 ( 16%)	.185	.149-.221 ( 20%)	8.67	3.51	Channel catfish
8	0-20 (146%)	.000	.000-.001 (167%)	0.01	0.00	Flathead
catfish						
141	8-274 ( 94%)	.002	.000-.007 (203%)	0.09	0.04	Freshwater drum
506	0-1585 (213%)	.076	.000-.240 (214%)	0.33	0.13	Gizzard shad
1192	805-1580 ( 33%)	.019	.011-.027 ( 43%)	0.77	0.31	Largemouth bass
24	0-74 (214%)	.002	.000-.005 (213%)	0.02	0.01	Walleye
7583	1199-13967 ( 84%)	.035	.012-.059 ( 65%)	4.90	1.98	White bass
10391	7683-13098 ( 26%)	.098	.074-.121 ( 24%)	6.71	2.72	White crappie
1053	128-1978 ( 88%)	.027	.000-.059 (120%)	0.68	0.28	Yellow bullhead
26	0-68 (163%)	.000	.000-.000 (175%)	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
10998	9237-12759 ( 16%)	.145	.117-.174 ( 20%)	7.10	0.266	All species
		**** NOT RECORDED ****				Bluegill x
Green su						
3	0-8 (139%)	.000	.000-.000 (156%)	0.00	0.181	Black bullhead
		**** NOT RECORDED ****				Black crappie
158	67-249 ( 58%)	.001	.001-.002 ( 53%)	0.10	0.025	Bluegill
284	92-477 ( 68%)	.006	.000-.013 (105%)	0.18	0.372	Carp
5631	4619-6642 ( 18%)	.079	.060-.097 ( 23%)	3.64	0.420	Channel catfish
14	0-43 (201%)	.000	.000-.001 (165%)	0.01	1.769	Flathead
catfish						
162	0-504 (212%)	.007	.000-.025 (251%)	0.10	1.146	Freshwater drum
3	0-9 (213%)	.000	.000-.001 (213%)	0.00	0.006	Gizzard shad
1397	901-1893 ( 36%)	.023	.012-.033 ( 45%)	0.90	1.172	Largemouth bass
16	0-49 (214%)	.001	.000-.003 (214%)	0.01	0.675	Walleye
1328	199-2458 ( 85%)	.006	.002-.010 ( 67%)	0.86	0.175	White bass
1866	1380-2353 ( 26%)	.018	.013-.022 ( 24%)	1.21	0.180	White crappie
131	11-251 ( 91%)	.004	.000-.008 (119%)	0.08	0.125	Yellow bullhead
5	0-14 (193%)	.000	.000-.000 (215%)	0.00	0.186	Yellow bass

1991 SPRINGFIELD

DAY CREEL

03/15/1991 - 11/15/1991

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

LB HARVESTED	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
24246	20364-28129 ( 16%)	.320	.257-.383 ( 20%)	6.34	0.586	All species
		****	NOT RECORDED	****		Bluegill x
Green su						
7	0-17 (139%)	.000	.000-.001 (156%)	0.00	0.399	Black bullhead
		****	NOT RECORDED	****		Black crappie
348	147-549 ( 58%)	.003	.001-.004 ( 53%)	0.09	0.056	Bluegill
627	204-1051 ( 68%)	.013	.000-.028 (105%)	0.16	0.821	Carp
12414	10183-14644 ( 18%)	.173	.133-.214 ( 23%)	3.24	0.925	Channel catfish
31	0-94 (201%)	.001	.000-.001 (165%)	0.01	3.900	Flathead
catfish						
356	0-1112 (212%)	.016	.000-.056 (251%)	0.09	2.527	Freshwater drum
6	0-20 (214%)	.001	.000-.003 (214%)	0.00	0.013	Gizzard shad
3079	1986-4173 ( 36%)	.050	.027-.072 ( 45%)	0.80	2.583	Largemouth bass
34	0-108 (214%)	.002	.000-.007 (214%)	0.01	1.487	Walleye
2928	438-5419 ( 85%)	.014	.005-.023 ( 67%)	0.77	0.386	White bass
4115	3042-5188 ( 26%)	.039	.030-.048 ( 24%)	1.08	0.396	White crappie
289	25-554 ( 91%)	.008	.000-.017 (119%)	0.08	0.275	Yellow bullhead
10	0-30 (193%)	.000	.000-.000 (215%)	0.00	0.410	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
88654	72462-104846 ( 18%)	.996	.807-1.185 ( 19%)	57.26	23.17	All species
46	0-141 (210%)	.000	.000-.001 (210%)	0.03	0.01	Bluegill x
Green su						
41	0-106 (157%)	.001	.000-.003 (139%)	0.03	0.01	Black bullhead
166	0-526 (216%)	.001	.000-.002 (216%)	0.11	0.04	Black crappie
13357	9024-17689 ( 32%)	.162	.117-.208 ( 28%)	8.63	3.49	Bluegill
831	412-1249 ( 50%)	.019	.005-.033 ( 73%)	0.54	0.22	Carp
13907	11604-16209 ( 17%)	.187	.151-.223 ( 19%)	8.98	3.63	Channel catfish
8	0-20 (146%)	.000	.000-.001 (167%)	0.01	0.00	Flathead
catfish						
1433	786-2079 ( 45%)	.022	.012-.032 ( 45%)	0.93	0.37	Freshwater drum
506	0-1585 (213%)	.076	.000-.240 (214%)	0.33	0.13	Gizzard shad
7908	6061-9754 ( 23%)	.100	.072-.128 ( 28%)	5.11	2.07	Largemouth bass
78	1-155 ( 99%)	.003	.000-.006 (137%)	0.05	0.02	Walleye
18383	4764-32001 ( 74%)	.094	.042-.145 ( 55%)	11.87	4.80	White bass
27024	20159-33888 ( 25%)	.276	.214-.338 ( 22%)	17.45	7.06	White crappie
4833	2632-7033 ( 46%)	.049	.015-.083 ( 69%)	3.12	1.26	Yellow bullhead
135	0-269 (100%)	.005	.000-.011 (115%)	0.09	0.04	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
16408	13344-19472 ( 19%)	.204	.166-.242 ( 18%)	10.60	0.185	All species
1	0-2 (210%)	.000	.000-.000 (209%)	0.00	0.014	Bluegill x
Green su						
5	0-12 (152%)	.000	.000-.000 (139%)	0.00	0.121	Black bullhead
12	0-38 (216%)	.000	.000-.000 (218%)	0.01	0.073	Black crappie
304	204-404 ( 33%)	.004	.002-.005 ( 33%)	0.20	0.023	Bluegill
290	98-482 ( 66%)	.006	.000-.013 (102%)	0.19	0.349	Carp
5658	4645-6672 ( 18%)	.079	.060-.097 ( 23%)	3.65	0.407	Channel catfish
14	0-43 (201%)	.000	.000-.001 (165%)	0.01	1.769	Flathead
catfish						
259	0-607 (134%)	.009	.000-.027 (207%)	0.17	0.181	Freshwater drum
3	0-9 (213%)	.000	.000-.001 (213%)	0.00	0.006	Gizzard shad
3687	2746-4629 ( 26%)	.056	.034-.079 ( 41%)	2.38	0.466	Largemouth bass
25	0-59 (138%)	.001	.000-.003 (189%)	0.02	0.323	Walleye
1820	380-3260 ( 79%)	.009	.004-.014 ( 60%)	1.18	0.099	White bass
2821	2124-3518 ( 25%)	.029	.022-.036 ( 23%)	1.82	0.104	White crappie
1494	0-3852 (158%)	.010	.000-.021 (112%)	0.96	0.309	Yellow bullhead
15	0-29 ( 97%)	.001	.000-.001 (108%)	0.01	0.109	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
36174	29419-42928 ( 19%)	.450	.367-.533 ( 18%)	9.45	0.408	All species
1	0-4 (209%)	.000	.000-.000 (209%)	0.00	0.031	Bluegill x
Green su						
11	0-27 (152%)	.000	.000-.001 (139%)	0.00	0.266	Black bullhead
27	0-85 (216%)	.000	.000-.000 (216%)	0.01	0.161	Black crappie
669	449-890 ( 33%)	.008	.005-.010 ( 33%)	0.17	0.050	Bluegill
639	216-1063 ( 66%)	.014	.000-.028 (102%)	0.17	0.770	Carp
12474	10241-14708 ( 18%)	.174	.133-.214 ( 23%)	3.26	0.897	Channel catfish
31	0-94 (201%)	.001	.000-.001 (165%)	0.01	3.900	Flathead
catfish						
572	0-1338 (134%)	.019	.000-.059 (207%)	0.15	0.399	Freshwater drum
6	0-20 (214%)	.001	.000-.003 (214%)	0.00	0.013	Gizzard shad
8130	6054-10205 ( 26%)	.124	.074-.175 ( 41%)	2.12	1.028	Largemouth bass
55	0-130 (138%)	.002	.000-.007 (189%)	0.01	0.712	Walleye
4012	837-7187 ( 79%)	.020	.008-.031 ( 60%)	1.05	0.218	White bass
6220	4683-7757 ( 25%)	.064	.049-.078 ( 23%)	1.63	0.230	White crappie
3293	0-8492 (158%)	.022	.000-.047 (112%)	0.86	0.682	Yellow bullhead
32	1-63 ( 97%)	.001	.000-.003 (108%)	0.01	0.240	Yellow bass