

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

**1990 ARGYLE**  
 95 ACRES  
 REGION 1, DISTRICT 3

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: 351/738 = 47.6%

NUMBER OF INTERVIEWS: 2499

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	11088	9387-12789 ( 15%)	117	99-134 ( 15%)	15%
	HOLIDAY	10825	8848-12802 ( 18%)	114	93-135 ( 18%)	25%
	TOTAL	21913	19409-24417 ( 11%)	230	204-257 ( 11%)	20%
SHORE	WEEKDAY	9647	8186-11108 ( 15%)	101	86-117 ( 15%)	11%
	HOLIDAY	9814	8026-11601 ( 18%)	103	84-122 ( 18%)	20%
	TOTAL	19461	17278-21644 ( 11%)	205	182-228 ( 11%)	16%
BOAT & SHORE	WEEKDAY	20735	18493-22978 ( 11%)	218	194-242 ( 11%)	13%
	HOLIDAY	20639	18188-23089 ( 12%)	217	191-243 ( 12%)	23%
	TOTAL	41374	38052-44696 ( 8%)	435	400-470 ( 8%)	18%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
33233	28830-37637 ( 13%)	.775	.664-.887 ( 14%)	863.51	349.46	All species
91	0-210 (132%)	.004	.000-.008 (116%)	2.36	0.95	Bluegill x Green su
55	0-125 (129%)	.001	.000-.002 (108%)	1.42	0.58	Black bullhead
1090	620-1559 ( 43%)	.029	.014-.044 ( 51%)	28.32	11.46	Black crappie
24624	20769-28479 ( 16%)	.548	.446-.650 ( 19%)	639.81	258.93	Bluegill
100	19-182 ( 81%)	.002	.000-.005 (105%)	2.61	1.06	Bluegill x Redear s
1207	892-1523 ( 26%)	.048	.031-.065 ( 36%)	31.37	12.70	Channel catfish
		****	NOT RECORDED ****			Golden shiner
101	38-163 ( 62%)	.003	.000-.005 ( 98%)	2.61	1.06	Green sunfish
672	498-845 ( 26%)	.012	.008-.016 ( 33%)	17.45	7.06	Largemouth bass
25	0-52 (107%)	.000	.000-.001 (123%)	0.65	0.26	Pumpkinseed x Blueg
25	0-71 (183%)	.000	.000-.001 (227%)	0.65	0.26	Pumpkinseed
4190	3342-5038 ( 20%)	.110	.082-.137 ( 25%)	108.87	44.06	Rainbow trout
		****	NOT RECORDED ****			Rock bass
700	210-1190 ( 70%)	.011	.003-.020 ( 73%)	18.19	7.36	Redear sunfish
298	41-556 ( 86%)	.005	.001-.009 ( 71%)	7.75	3.14	Unidentified Sunfis
		****	NOT RECORDED ****			Tiger muskie
		****	NOT RECORDED ****			Warmouth
50	0-100 (101%)	.002	.000-.004 (110%)	1.29	0.52	White crappie
6	0-34 (430%)	.000	.000-.001 (430%)	0.17	0.07	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
4989	4267-5712 ( 14%)	.117	.102-.132 ( 13%)	129.64	0.150	All species
12	0-29 (134%)	.001	.000-.001 (117%)	0.32	0.136	Bluegill x Green su
24	0-50 (111%)	.001	.000-.002 (156%)	0.62	0.441	Black bullhead
151	87-214 ( 42%)	.004	.002-.006 ( 50%)	3.91	0.138	Black crappie
2660	2136-3184 ( 20%)	.056	.045-.066 ( 19%)	69.12	0.108	Bluegill
16	4-28 ( 75%)	.000	.000-.001 (116%)	0.41	0.158	Bluegill x Redear s
432	294-569 ( 32%)	.018	.011-.025 ( 40%)	11.22	0.358	Channel catfish
		****	NOT RECORDED ****			Golden shiner
9	4-14 ( 56%)	.000	.000-.000 ( 94%)	0.23	0.090	Green sunfish
453	313-594 ( 31%)	.008	.005-.012 ( 40%)	11.78	0.676	Largemouth bass
3	0-5 (104%)	.000	.000-.000 (111%)	0.07	0.109	Pumpkinseed x Blueg
10	0-35 (248%)	.000	.000-.000 (256%)	0.26	0.398	Pumpkinseed
1066	845-1287 ( 21%)	.027	.020-.034 ( 25%)	27.71	0.255	Rainbow trout
		****	NOT RECORDED ****			Rock bass
147	9-285 ( 94%)	.002	.001-.004 ( 74%)	3.81	0.210	Redear sunfish
		****	NOT RECORDED ****			Unidentified Sunfis
		****	NOT RECORDED ****			Tiger muskie
		****	NOT RECORDED ****			Warmouth
6	0-11 ( 96%)	.000	.000-.000 (112%)	0.14	0.114	White crappie
2	0-6 (318%)	.000	.000-.000 (318%)	0.04	0.254	Yellow bullhead

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

LB HARVESTED	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
11000	9408-12592 ( 14%)	.258	.225-.291 ( 13%)	115.67	0.331	All species
27	0-63 (134%)	.001	.000-.002 (117%)	0.28	0.300	Bluegill x Green su
53	0-111 (111%)	.001	.000-.004 (156%)	0.55	0.973	Black bullhead
332	193-472 ( 42%)	.009	.004-.013 ( 50%)	3.49	0.305	Black crappie
5865	4710-7020 ( 20%)	.122	.100-.145 ( 19%)	61.67	0.238	Bluegill
35	9-61 ( 75%)	.001	.000-.002 (116%)	0.37	0.348	Bluegill x Redear s
952	649-1255 ( 32%)	.040	.024-.056 ( 40%)	10.01	0.789	Channel catfish
		****	NOT RECORDED ****			Golden shiner
20	9-31 ( 56%)	.000	.000-.001 ( 94%)	0.21	0.199	Green sunfish
999	689-1310 ( 31%)	.018	.011-.026 ( 40%)	10.51	1.489	Largemouth bass
6	0-12 (104%)	.000	.000-.000 (111%)	0.06	0.240	Pumpkinseed x Blueg
22	0-76 (248%)	.000	.000-.001 (256%)	0.23	0.877	Pumpkinseed
2351	1864-2838 ( 21%)	.060	.045-.075 ( 25%)	24.72	0.561	Rainbow trout
		****	NOT RECORDED ****			Rock bass
323	20-627 ( 94%)	.005	.001-.008 ( 74%)	3.40	0.463	Redear sunfish
		****	NOT RECORDED ****			Unidentified Sunfis
		****	NOT RECORDED ****			Tiger muskie
		****	NOT RECORDED ****			Warmouth
12	1-24 ( 96%)	.000	.000-.001 (112%)	0.13	0.251	White crappie
3	0-14 (318%)	.000	.000-.000 (318%)	0.04	0.559	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
68847	61086-76608 ( 11%)	1.618	1.414-1.822 ( 13%)	1788.87	723.95	All species
91	0-210 (132%)	.004	.000-.008 (116%)	2.36	0.95	Bluegill x Green su
55	0-125 (129%)	.001	.000-.002 (108%)	1.42	0.58	Black bullhead
1835	1089-2580 ( 41%)	.047	.026-.069 ( 45%)	47.67	19.29	Black crappie
53484	46475-60493 ( 13%)	1.225	1.032-1.419 ( 16%)	1389.69	562.40	Bluegill
100	19-182 ( 81%)	.002	.000-.005 (105%)	2.61	1.06	Bluegill x Redear s
1695	1269-2121 ( 25%)	.069	.025-.112 ( 64%)	44.05	17.83	Channel catfish
19	0-58 (209%)	.000	.000-.000 (214%)	0.48	0.20	Golden shiner
145	63-226 ( 56%)	.003	.000-.006 ( 85%)	3.76	1.52	Green sunfish
5187	4127-6246 ( 20%)	.119	.096-.143 ( 20%)	134.76	54.54	Largemouth bass
25	0-52 (107%)	.000	.000-.001 (123%)	0.65	0.26	Pumpkinseed x Blueg
27	0-73 (172%)	.000	.000-.001 (172%)	0.70	0.28	Pumpkinseed
4817	3893-5742 ( 19%)	.124	.096-.152 ( 22%)	125.17	50.66	Rainbow trout
2	0-7 (245%)	.000	.000-.000 (245%)	0.05	0.02	Rock bass
974	420-1529 ( 57%)	.015	.007-.023 ( 55%)	25.32	10.25	Redear sunfish
298	41-556 ( 86%)	.005	.001-.009 ( 71%)	7.75	3.14	Unidentified Sunfis
14	0-40 (187%)	.000	.000-.001 (158%)	0.37	0.15	Tiger muskie
1	0-4 (245%)	.000	.000-.000 (236%)	0.03	0.01	Warmouth
66	11-120 ( 83%)	.002	.000-.004 (101%)	1.70	0.69	White crappie
13	0-69 (430%)	.000	.000-.001 (430%)	0.34	0.14	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
8189	7193-9185 ( 12%)	.197	.172-.222 ( 13%)	212.78	0.119	All species
12	0-29 (134%)	.001	.000-.001 (117%)	0.32	0.136	Bluegill x Green su
24	0-50 (111%)	.001	.000-.002 (156%)	0.62	0.441	Black bullhead
184	114-253 ( 38%)	.005	.003-.007 ( 44%)	4.78	0.100	Black crappie
3561	2954-4167 ( 17%)	.076	.064-.089 ( 16%)	92.52	0.067	Bluegill
16	4-28 ( 75%)	.000	.000-.001 (116%)	0.41	0.158	Bluegill x Redear s
524	338-709 ( 35%)	.025	.004-.046 ( 85%)	13.61	0.309	Channel catfish
2	0-5 (242%)	.000	.000-.000 (244%)	0.04	0.088	Golden shiner
11	5-16 ( 52%)	.000	.000-.000 ( 86%)	0.28	0.074	Green sunfish
2392	1825-2958 ( 24%)	.054	.042-.066 ( 23%)	62.14	0.461	Largemouth bass
3	0-5 (104%)	.000	.000-.000 (111%)	0.07	0.109	Pumpkinseed x Blueg
10	0-35 (243%)	.000	.000-.000 (240%)	0.26	0.390	Pumpkinseed
1242	993-1491 ( 20%)	.031	.024-.038 ( 23%)	32.27	0.258	Rainbow trout
0	0-1 (245%)	.000	.000-.000 (236%)	0.00	0.185	Rock bass
160	20-300 ( 87%)	.002	.001-.004 ( 64%)	4.16	0.164	Redear sunfish
		****	NOT RECORDED ****			Unidentified Sunfis
42	0-111 (163%)	.002	.000-.004 (160%)	1.10	3.020	Tiger muskie
0	0-0 (245%)	.000	.000-.000 (236%)	0.00	0.017	Warmouth
6	1-12 ( 85%)	.000	.000-.000 (108%)	0.17	0.098	White crappie
2	0-10 (430%)	.000	.000-.000 (318%)	0.05	0.155	Yellow bullhead

1990 ARGYLE

DAY CREEL

03/15/1990 - 11/15/1990

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

LB CAUGHT	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
18054	15858-20250 ( 12%)	.434	.379-.488 ( 13%)	189.84	0.262	All species
27	0-63 (134%)	.001	.000-.002 (117%)	0.28	0.300	Bluegill x Green su
53	0-111 (111%)	.001	.000-.004 (156%)	0.55	0.973	Black bullhead
405	252-559 ( 38%)	.010	.006-.015 ( 44%)	4.26	0.221	Black crappie
7850	6512-9187 ( 17%)	.168	.141-.195 ( 16%)	82.54	0.147	Bluegill
35	9-61 ( 75%)	.001	.000-.002 (116%)	0.37	0.348	Bluegill x Redear s
1155	745-1564 ( 35%)	.054	.008-.101 ( 85%)	12.14	0.681	Channel catfish
3	0-12 (242%)	.000	.000-.000 (244%)	0.04	0.194	Golden shiner
23	11-35 ( 52%)	.001	.000-.001 ( 86%)	0.25	0.163	Green sunfish
5273	4023-6522 ( 24%)	.119	.092-.146 ( 23%)	55.44	1.017	Largemouth bass
6	0-12 (104%)	.000	.000-.000 (111%)	0.06	0.240	Pumpkinseed x Blueg
22	0-77 (243%)	.000	.000-.001 (240%)	0.24	0.860	Pumpkinseed
2738	2188-3287 ( 20%)	.068	.053-.084 ( 23%)	28.79	0.568	Rainbow trout
0	0-1 (245%)	.000	.000-.000 (236%)	0.00	0.407	Rock bass
353	44-662 ( 87%)	.005	.002-.008 ( 64%)	3.71	0.362	Redear sunfish
		****	NOT RECORDED ****			Unidentified Sunfis
93	0-246 (163%)	.003	.000-.009 (160%)	0.98	6.658	Tiger muskie
0	0-0 (236%)	.000	.000-.000 (236%)	0.00	0.038	Warmouth
14	2-26 ( 85%)	.000	.000-.001 (108%)	0.15	0.217	White crappie
4	0-17 (318%)	.000	.000-.000 (318%)	0.04	0.342	Yellow bullhead