

ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 2002 CREEL SURVEY RESULTS

2002 MERMET
 439 ACRES
 REGION 5, DISTRICT 22

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 03/15/2002 through 10/31/2002
 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: 289/693 = 41.7%

NUMBER OF INTERVIEWS: 1826

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	7014	6027-8001 (14%)	16	14-18 (14%)	24%
	HOLIDAY	7874	6286-9463 (20%)	18	14-22 (20%)	53%
	TOTAL	14889	13083-16694 (12%)	34	30-38 (12%)	39%
SHORE	WEEKDAY	5533	4719-6347 (15%)	13	11-14 (15%)	18%
	HOLIDAY	3724	3254-4194 (13%)	8	7-10 (13%)	43%
	TOTAL	9257	8318-10197 (10%)	21	19-23 (10%)	28%
BOAT & SHORE	WEEKDAY	12547	11268-13826 (10%)	29	26-31 (10%)	21%
	HOLIDAY	11598	9949-13248 (14%)	26	23-30 (14%)	50%
	TOTAL	24146	22111-26181 (8%)	55	50-60 (8%)	35%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
15603	11299-19907 (28%)	.527	.454-.601 (14%)	87.83	35.54	All species
9	0-29 (220%)	.000	.000-.001 (220%)	0.05	0.02	Blue catfish
2	0-6 (154%)	.000	.000-.000 (164%)	0.01	0.01	Bigmouth buffalo
		****	NOT RECORDED ****			Black bullhead
1295	816-1775 (37%)	.041	.023-.060 (45%)	7.29	2.95	Black crappie
2235	1755-2716 (21%)	.095	.069-.122 (28%)	12.58	5.09	Bluegill
5	0-16 (236%)	.000	.000-.000 (236%)	0.03	0.01	Bowfin
15	0-49 (223%)	.000	.000-.000 (223%)	0.09	0.03	Brown bullhead
3734	3237-4231 (13%)	.169	.139-.198 (17%)	21.02	8.51	Channel catfish
7	0-24 (236%)	.000	.000-.000 (245%)	0.04	0.02	Crappie spp.
		****	NOT RECORDED ****			Grass carp
		****	NOT RECORDED ****			Green sunfish
435	210-659 (52%)	.022	.008-.036 (63%)	2.45	0.99	Largemouth bass
257	158-356 (39%)	.015	.006-.025 (63%)	1.45	0.59	Redear sunfish
		****	NOT RECORDED ****			Spotted gar
		****	NOT RECORDED ****			Warmouth
7584	3397-11772 (55%)	.183	.123-.243 (33%)	42.69	17.28	White crappie
24	0-50 (108%)	.001	.000-.001 (120%)	0.14	0.06	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
8535	7384-9686 (13%)	.360	.304-.417 (16%)	48.04	0.547	All species
36	0-117 (220%)	.002	.000-.005 (223%)	0.20	3.971	Blue catfish
23	0-59 (157%)	.001	.000-.003 (190%)	0.13	10.324	Bigmouth buffalo
		****	NOT RECORDED ****			Black bullhead
369	221-518 (40%)	.011	.006-.017 (49%)	2.08	0.285	Black crappie
412	320-504 (22%)	.018	.013-.022 (28%)	2.32	0.184	Bluegill
0	0-0 (231%)	.000	.000-.000 (236%)	0.00	0.013	Bowfin
12	0-39 (223%)	.000	.000-.000 (223%)	0.07	0.804	Brown bullhead
5660	4788-6532 (15%)	.254	.203-.305 (20%)	31.86	1.516	Channel catfish
2	0-6 (245%)	.000	.000-.000 (245%)	0.01	0.254	Crappie spp.
		****	NOT RECORDED ****			Grass carp
		****	NOT RECORDED ****			Green sunfish
511	210-813 (59%)	.025	.008-.043 (69%)	2.88	1.176	Largemouth bass
96	62-129 (35%)	.005	.002-.008 (56%)	0.54	0.373	Redear sunfish
		****	NOT RECORDED ****			Spotted gar
		****	NOT RECORDED ****			Warmouth
1396	831-1961 (40%)	.044	.028-.060 (36%)	7.86	0.184	White crappie
17	0-35 (110%)	.000	.000-.001 (118%)	0.09	0.694	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
18816	16278-21353 (13%)	.794	.670-.919 (16%)	42.86	1.206	All species
80	0-259 (223%)	.003	.000-.011 (223%)	0.18	8.755	Blue catfish
51	0-130 (157%)	.002	.000-.006 (190%)	0.12	22.761	Bigmouth buffalo
		****	NOT RECORDED ****			Black bullhead
814	487-1141 (40%)	.025	.013-.037 (49%)	1.85	0.629	Black crappie
909	706-1112 (22%)	.039	.028-.050 (28%)	2.07	0.407	Bluegill
0	0-0 (236%)	.000	.000-.000 (236%)	0.00	0.028	Bowfin
27	0-86 (220%)	.000	.000-.001 (220%)	0.06	1.773	Brown bullhead
12478	10555-14401 (15%)	.559	.447-.672 (20%)	28.42	3.342	Channel catfish
4	0-13 (236%)	.000	.000-.000 (236%)	0.01	0.560	Crappie spp.
		****	NOT RECORDED ****			Grass carp
		****	NOT RECORDED ****			Green sunfish
1127	463-1792 (59%)	.056	.017-.094 (69%)	2.57	2.592	Largemouth bass
211	137-285 (35%)	.011	.005-.018 (56%)	0.48	0.822	Redear sunfish
		****	NOT RECORDED ****			Spotted gar
		****	NOT RECORDED ****			Warmouth
3077	1833-4322 (40%)	.098	.063-.133 (36%)	7.01	0.406	White crappie
37	0-78 (110%)	.001	.000-.002 (118%)	0.08	1.529	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
26984	22182-31786 (18%)	.967	.847-1.088 (12%)	151.88	61.47	All species
9	0-29 (220%)	.000	.000-.001 (220%)	0.05	0.02	Blue catfish
2	0-6 (154%)	.000	.000-.000 (164%)	0.01	0.01	Bigmouth buffalo
14	0-36 (161%)	.000	.000-.001 (157%)	0.08	0.03	Black bullhead
1675	1093-2256 (35%)	.052	.031-.074 (40%)	9.43	3.81	Black crappie
7286	5845-8728 (20%)	.304	.237-.372 (22%)	41.01	16.60	Bluegill
73	34-113 (54%)	.003	.000-.006 (85%)	0.41	0.17	Bowfin
17	0-50 (195%)	.000	.000-.000 (186%)	0.10	0.04	Brown bullhead
4219	3674-4764 (13%)	.196	.163-.230 (17%)	23.75	9.61	Channel catfish
7	0-24 (236%)	.000	.000-.000 (245%)	0.04	0.02	Crappie spp.
6	0-20 (236%)	.000	.000-.000 (245%)	0.03	0.01	Grass carp
10	0-28 (179%)	.001	.000-.002 (198%)	0.06	0.02	Green sunfish
3378	2548-4208 (25%)	.120	.090-.150 (25%)	19.01	7.69	Largemouth bass
355	216-494 (39%)	.024	.009-.038 (60%)	2.00	0.81	Redear sunfish
68	4-131 (93%)	.004	.000-.010 (144%)	0.38	0.15	Spotted gar
2	0-6 (163%)	.000	.000-.000 (163%)	0.01	0.01	Warmouth
9796	5472-14121 (44%)	.256	.175-.338 (32%)	55.14	22.31	White crappie
67	12-122 (82%)	.005	.000-.012 (155%)	0.38	0.15	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
12091	10455-13727 (14%)	.509	.396-.622 (22%)	68.05	0.448	All species
36	0-117 (220%)	.002	.000-.005 (223%)	0.20	3.971	Blue catfish
23	0-59 (157%)	.001	.000-.003 (190%)	0.13	10.324	Bigmouth buffalo
4	0-10 (148%)	.000	.000-.000 (151%)	0.02	0.301	Black bullhead
404	253-556 (37%)	.012	.007-.018 (45%)	2.28	0.241	Black crappie
914	745-1084 (19%)	.039	.030-.047 (22%)	5.15	0.125	Bluegill
15	6-23 (58%)	.001	.000-.001 (91%)	0.08	0.201	Bowfin
13	0-40 (207%)	.000	.000-.000 (200%)	0.07	0.757	Brown bullhead
5793	4925-6661 (15%)	.260	.209-.311 (20%)	32.61	1.373	Channel catfish
2	0-6 (245%)	.000	.000-.000 (245%)	0.01	0.254	Crappie spp.
0	0-2 (245%)	.000	.000-.000 (245%)	0.00	0.079	Grass carp
1	0-2 (179%)	.000	.000-.000 (198%)	0.00	0.073	Green sunfish
2532	1907-3156 (25%)	.090	.065-.115 (28%)	14.25	0.750	Largemouth bass
122	84-161 (32%)	.007	.004-.011 (51%)	0.69	0.345	Redear sunfish
632	0-1483 (135%)	.046	.000-.124 (171%)	3.55	9.344	Spotted gar
1	0-3 (164%)	.000	.000-.000 (165%)	0.01	0.396	Warmouth
1565	985-2145 (37%)	.050	.033-.067 (35%)	8.81	0.160	White crappie
33	10-57 (70%)	.002	.000-.004 (112%)	0.19	0.499	Yellow bullhead

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

LB CAUGHT	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
26655	23049-30262 (14%)	1.122	.873-1.371 (22%)	60.72	0.988	All species
80	0-259 (223%)	.003	.000-.011 (223%)	0.18	8.755	Blue catfish
51	0-130 (157%)	.002	.000-.006 (190%)	0.12	22.761	Bigmouth buffalo
9	0-23 (148%)	.000	.000-.001 (151%)	0.02	0.665	Black bullhead
892	558-1225 (37%)	.027	.015-.039 (45%)	2.03	0.532	Black crappie
2016	1643-2389 (19%)	.085	.066-.104 (22%)	4.59	0.277	Bluegill
32	14-51 (58%)	.001	.000-.002 (91%)	0.07	0.443	Bowfin
29	0-88 (209%)	.000	.000-.001 (200%)	0.06	1.669	Brown bullhead
12772	10857-14686 (15%)	.573	.460-.686 (20%)	29.09	3.027	Channel catfish
4	0-13 (236%)	.000	.000-.000 (236%)	0.01	0.560	Crappie spp.
1	0-4 (245%)	.000	.000-.000 (245%)	0.00	0.175	Grass carp
2	0-5 (179%)	.000	.000-.000 (198%)	0.00	0.160	Green sunfish
5581	4205-6957 (25%)	.198	.143-.253 (28%)	12.71	1.652	Largemouth bass
270	185-355 (32%)	.016	.008-.024 (51%)	0.61	0.761	Redear sunfish
1392	0-3269 (135%)	.101	.000-.274 (171%)	3.17	20.599	Spotted gar
2	0-6 (164%)	.000	.000-.000 (165%)	0.00	0.872	Warmouth
3450	2171-4729 (37%)	.110	.072-.149 (35%)	7.86	0.352	White crappie
73	22-125 (70%)	.004	.000-.009 (112%)	0.17	1.100	Yellow bullhead

Table 8. Hours per completed trip and supplementary questions for all trips.

	MEAN	95% CI	MIN	MAX	#SAMPLES
HOURS PER COMPLETED TRIP*					
BOAT	3.8	3.7-4.0 (5%)	0.5	12.2	671
SHORE	2.9	2.6-3.1 (8%)	0.2	7.2	203
BOAT & SHORE	3.6	3.5-3.7 (4%)	0.2	12.2	874
MILES TRAVELED	29.6	26.6-32.6 (10%)	1	500	1297
SUCCESS RATING (1-10)	3.0	2.9-3.2 (5%)	1	10	1285

*427 samples were from split interviews of completed trips.
63.2% of all 1383 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 22 out of 1383 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	364	60	3					1	9
SHORE INTERVIEWS	312	242	68	29	8	1				1

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

557 (40.3%)	ANY	All species
9 (0.7%)	BLC	Black crappie
13 (0.9%)	BLG	Bluegill
4 (0.3%)	CAP	Carp
441 (31.9%)	CCF	Channel catfish
132 (9.5%)	CRP	Crappie spp.
227 (16.4%)	LMB	Largemouth bass

2002 MERMET

DAY CREEL

03/15/2002 - 10/31/2002

Table 11. 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+
Blue catfish																
HARVEST 1605	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE 1605	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bigmouth buffalo																
HARVEST 1604	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE 1605	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Black bullhead																
HARVEST 1605	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE 1603	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Black crappie																
HARVEST 1531	29	18	6	4	9	-	1	2	-	-	-	1	-	-	-	4
RELEASE 1580	10	4	7	-	1	1	-	-	-	1	-	-	-	-	-	1
Bluegill																
HARVEST 1409	72	32	17	11	6	8	7	7	13	23	-	-	-	-	-	-
RELEASE 1337	85	52	27	18	22	9	2	19	2	10	-	4	1	-	-	17
Bowfin																
HARVEST 1605	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE 1589	15	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Brown bullhead																
HARVEST 1602	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE 1603	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Channel catfish																
HARVEST 1181	178	96	53	22	27	47	-	1	-	-	-	-	-	-	-	-
RELEASE 1546	38	15	1	2	-	-	-	-	-	-	-	-	-	-	2	1
Crappie spp.																
HARVEST 1604	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE 1605	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grass carp																
HARVEST 1605	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE 1604	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Green sunfish																
HARVEST 1605	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE 1603	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Largemouth bass																
HARVEST 1540	38	18	6	2	1	-	-	-	-	-	-	-	-	-	-	-
RELEASE 1215	160	93	84	12	11	6	2	3	1	13	1	1	2	-	-	1
Redear sunfish																

