

ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 2000 CREEL SURVEY RESULTS

2000 LAKE MURPHYSBORO
 140 ACRES
 REGION 5, DISTRICT 21

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 03/15/2000 through 10/31/2000
 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: 304/693 = 43.9%

NUMBER OF INTERVIEWS: 1806

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	6105	5047-7162 (17%)	44	36-51 (17%)	25%
	HOLIDAY	4540	3863-5217 (15%)	33	28-37 (15%)	57%
	TOTAL	10645	9389-11900 (12%)	76	67-85 (12%)	38%
SHORE	WEEKDAY	3305	2740-3871 (17%)	24	20-28 (17%)	18%
	HOLIDAY	1961	1695-2228 (14%)	14	12-16 (14%)	46%
	TOTAL	5267	4642-5892 (12%)	38	33-42 (12%)	28%
BOAT & SHORE	WEEKDAY	9410	8211-10609 (13%)	67	59-76 (13%)	22%
	HOLIDAY	6501	5774-7229 (11%)	47	41-52 (11%)	54%
	TOTAL	15911	14509-17314 (9%)	114	104-124 (9%)	35%

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

# HARVESTED	95% CI		#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
9661	7364-11958	(24%)	.600	.438-.763 (27%)	171.13	69.26	All species
115	0-290	(152%)	.008	.000-.022 (163%)	2.03	0.82	Black crappie
3475	2397-4554	(31%)	.182	.108-.255 (40%)	61.56	24.91	Bluegill
302	163-440	(46%)	.021	.004-.039 (81%)	5.34	2.16	Channel catfish
339	184-494	(46%)	.012	.005-.019 (57%)	6.01	2.43	Largemouth bass
8	0-30	(278%)	.000	.000-.001 (318%)	0.14	0.06	Redear sunfish
5422	3416-7428	(37%)	.377	.230-.524 (39%)	96.05	38.87	White crappie

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

KG HARVESTED	95% CI		KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
1303	1007-1599	(23%)	.077	.057-.098 (26%)	23.08	0.135	All species
15	0-34	(125%)	.001	.000-.005 (224%)	0.27	0.132	Black crappie
265	183-347	(31%)	.014	.008-.020 (42%)	4.69	0.076	Bluegill
123	66-180	(47%)	.009	.002-.017 (79%)	2.17	0.407	Channel catfish
230	123-336	(47%)	.008	.003-.012 (57%)	4.07	0.677	Largemouth bass
1	0-3	(278%)	.000	.000-.000 (318%)	0.02	0.115	Redear sunfish
670	419-921	(37%)	.045	.027-.063 (40%)	11.86	0.124	White crappie

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

LB HARVESTED	95% CI		LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
2872	2220-3524	(23%)	.170	.126-.215 (26%)	20.59	0.297	All species
33	0-75	(125%)	.003	.000-.011 (224%)	0.24	0.291	Black crappie
583	403-764	(31%)	.031	.018-.043 (42%)	4.18	0.168	Bluegill
271	145-397	(47%)	.021	.004-.037 (79%)	1.94	0.897	Channel catfish
506	271-742	(47%)	.017	.007-.027 (57%)	3.63	1.492	Largemouth bass
2	0-8	(318%)	.000	.000-.000 (318%)	0.01	0.253	Redear sunfish
1477	923-2030	(37%)	.099	.059-.138 (40%)	10.59	0.272	White crappie

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
29986	26335-33636 (12%)		1.688	1.447-1.930 (14%)	531.14	214.95	All species
466	145-786 (69%)		.051	.000-.106 (110%)	8.25	3.34	Black crappie
11628	9797-13460 (16%)		.642	.538-.745 (16%)	205.98	83.36	Bluegill
574	394-754 (31%)		.046	.023-.069 (51%)	10.17	4.12	Channel catfish
3652	2921-4383 (20%)		.138	.118-.159 (15%)	64.69	26.18	Largemouth bass
91	6-175 (93%)		.006	.000-.013 (123%)	1.61	0.65	Redear sunfish
13574	10514-16634 (23%)		.806	.583-1.030 (28%)	240.45	97.31	White crappie

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

KG CAUGHT	95% CI		KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
4186	3650-4722 (13%)		.204	.179-.229 (12%)	74.15	0.140	All species
34	8-60 (76%)		.004	.000-.009 (145%)	0.60	0.073	Black crappie
806	677-936 (16%)		.043	.036-.051 (18%)	14.28	0.069	Bluegill
211	142-280 (33%)		.016	.007-.024 (53%)	3.74	0.367	Channel catfish
1850	1455-2244 (21%)		.068	.057-.079 (16%)	32.77	0.506	Largemouth bass
12	2-22 (86%)		.001	.000-.001 (112%)	0.21	0.129	Redear sunfish
1274	963-1584 (24%)		.073	.051-.095 (30%)	22.56	0.094	White crappie

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

LB CAUGHT	95% CI		LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
9229	8048-10411 (13%)		.450	.395-.506 (12%)	66.16	0.308	All species
75	18-132 (76%)		.008	.000-.020 (145%)	0.54	0.161	Black crappie
1777	1492-2063 (16%)		.095	.078-.112 (18%)	12.74	0.153	Bluegill
465	313-618 (33%)		.035	.016-.053 (53%)	3.33	0.810	Channel catfish
4078	3208-4948 (21%)		.150	.127-.173 (16%)	29.23	1.117	Largemouth bass
26	4-48 (86%)		.002	.000-.003 (112%)	0.18	0.284	Redear sunfish
2808	2124-3492 (24%)		.161	.113-.209 (30%)	20.13	0.207	White crappie

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

	MEAN	95% CI		MIN	MAX	#SAMPLES
HOURS PER COMPLETED TRIP*						
BOAT	3.5	3.3-3.6	(4%)	0.5	11.2	548
SHORE	1.7	1.6-1.8	(6%)	0.2	4.8	301
BOAT & SHORE	2.8	2.7-3.0	(4%)	0.2	11.2	849
MILES TRAVELED	17.9	15.7-20.2	(13%)	1	450	1298
SUCCESS RATING (1-10)	3.8	3.6-3.9	(4%)	1	10	1286

*354 samples were from split interviews of completed trips.
58.6% of all 1449 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 0 out of 1449 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	368	466	43	4						
SHORE INTERVIEWS	305	206	47	8		2				

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

127 (8.8%)	ANY	All species
6 (0.4%)	BLC	Black crappie
346 (23.9%)	BLG	Bluegill
55 (3.8%)	CCF	Channel catfish
1 (0.1%)	CRP	Crappie spp.
546 (37.7%)	LMB	Largemouth bass
367 (25.3%)	WHC	White crappie

2000 Lake Murphysboro

DAY CREEL

03/15/2000 - 10/31/2000

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+
Black crappie																
HARVEST	1320	3	-	-	-	-	-	-	1	-	-	-	-	-	-	-
RELEASE	1303	12	4	1	1	-	2	-	-	-	-	-	-	-	-	1
Bluegill																
HARVEST	1247	3	3	7	10	5	5	4	2	2	4	7	4	-	3	18
RELEASE	1006	47	62	59	49	16	18	10	10	3	15	2	4	4	1	18
Channel catfish																
HARVEST	1288	21	11	1	-	2	1	-	-	-	-	-	-	-	-	-
RELEASE	1296	15	11	1	1	-	-	-	-	-	-	-	-	-	-	-
Largemouth bass																
HARVEST	1270	18	12	14	4	4	2	-	-	-	-	-	-	-	-	-
RELEASE	874	138	150	72	49	22	9	3	6	-	1	-	-	-	-	-
Redear sunfish																
HARVEST	1322	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1319	-	4	-	-	-	1	-	-	-	-	-	-	-	-	-
White crappie																
HARVEST	1233	5	16	8	8	8	6	3	-	2	4	3	4	4	3	17
RELEASE	1044	32	49	43	28	36	16	11	13	1	22	-	3	4	3	19

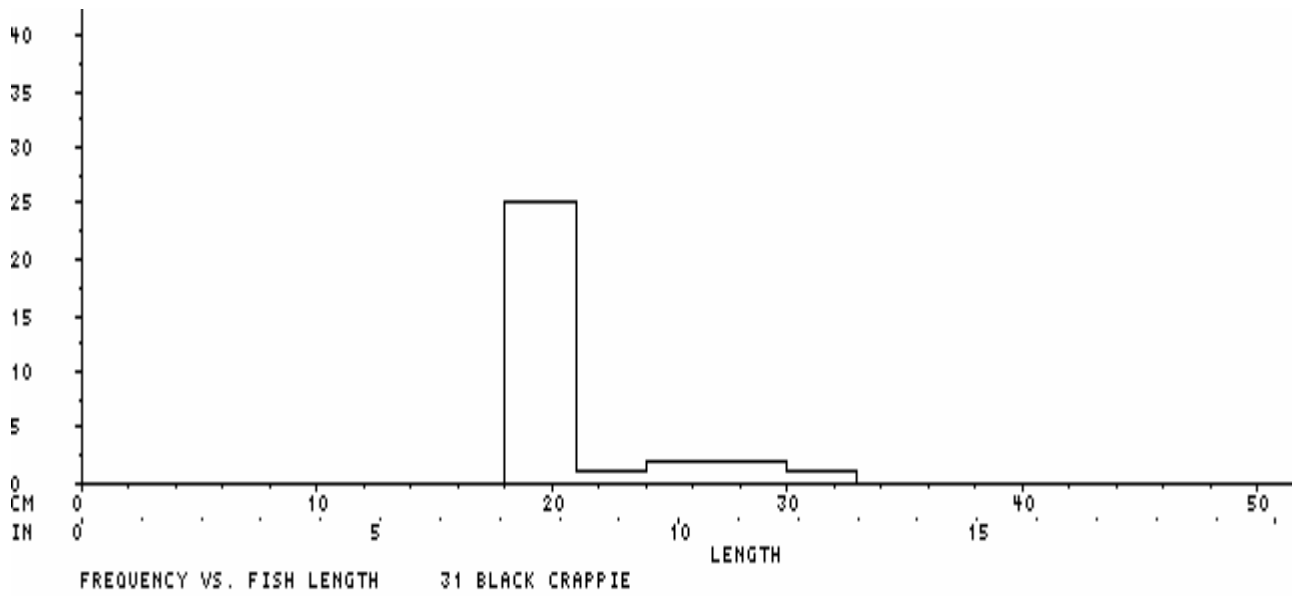


Figure 1. Lake Murphysboro 2000 day creel 3/15 through 10/31. Length-frequency histogram of black crappie harvested by all anglers.

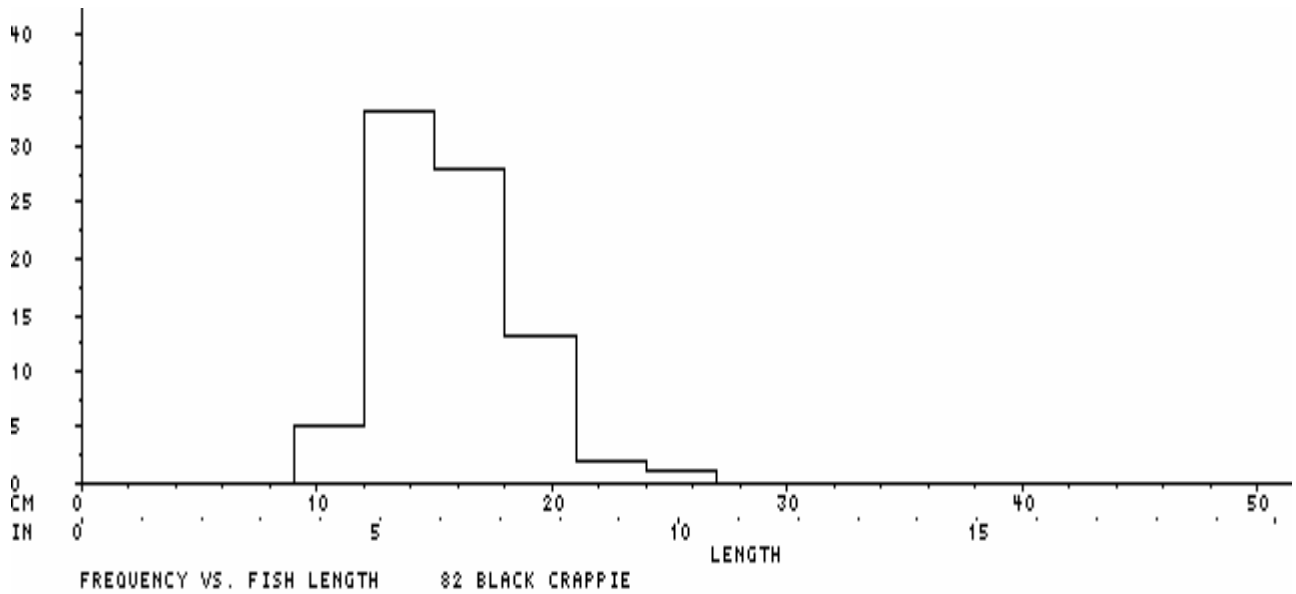


Figure 2. Lake Murphysboro 2000 day creel 3/15 through 10/31. Length-frequency histogram of black crappie released by all anglers.

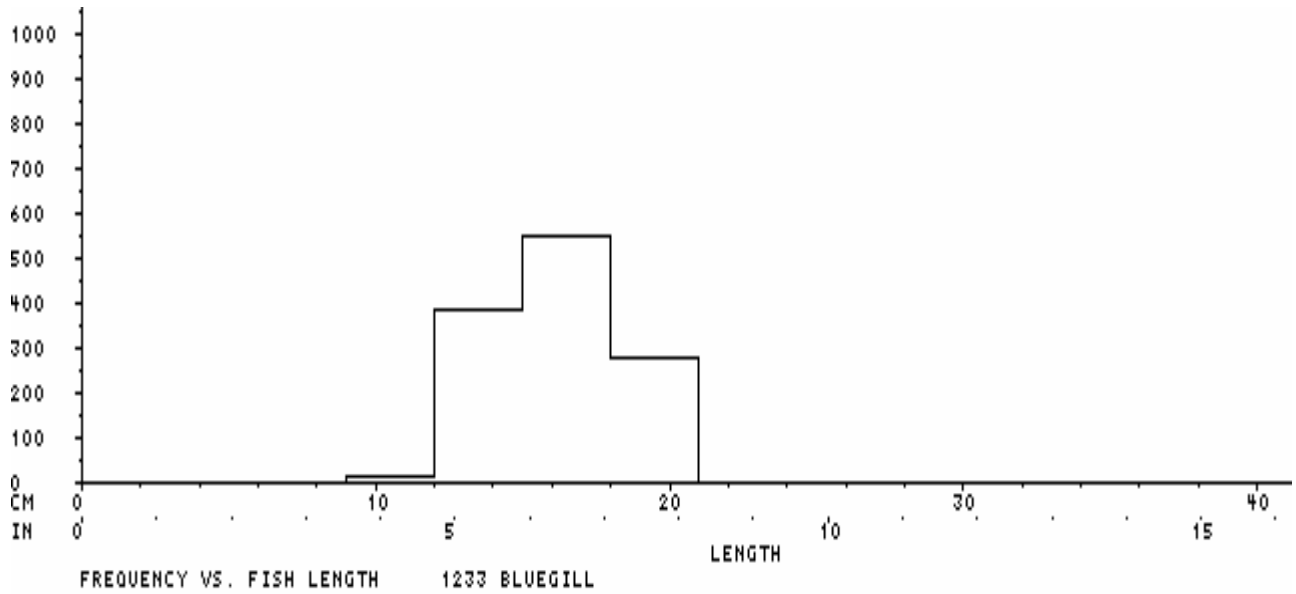


Figure 3. Lake Murphysboro 2000 day creel 3/15 through 10/31. Length-frequency histogram of bluegill harvested by all anglers.

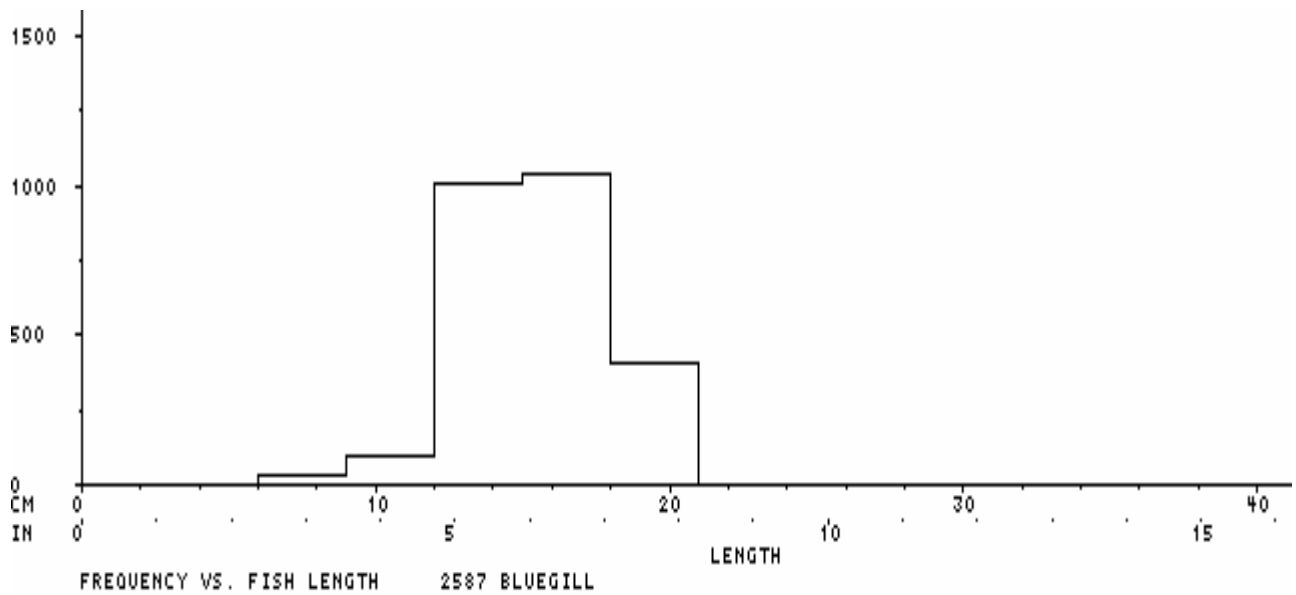


Figure 4. Lake Murphysboro 2000 day creel 3/15 through 10/31. Length-frequency histogram of bluegill released by all anglers. Note the difference in scale from Figure 3.

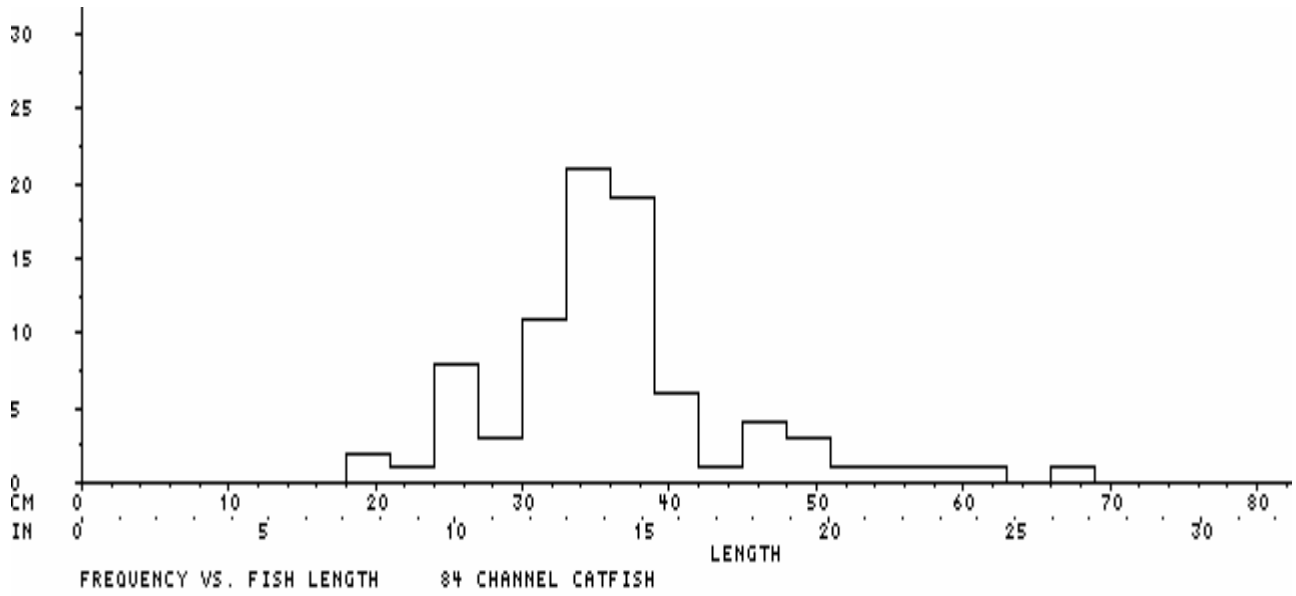


Figure 5. Lake Murphysboro 2000 day creel 3/15 through 10/31. Length-frequency histogram of channel catfish harvested by all anglers.

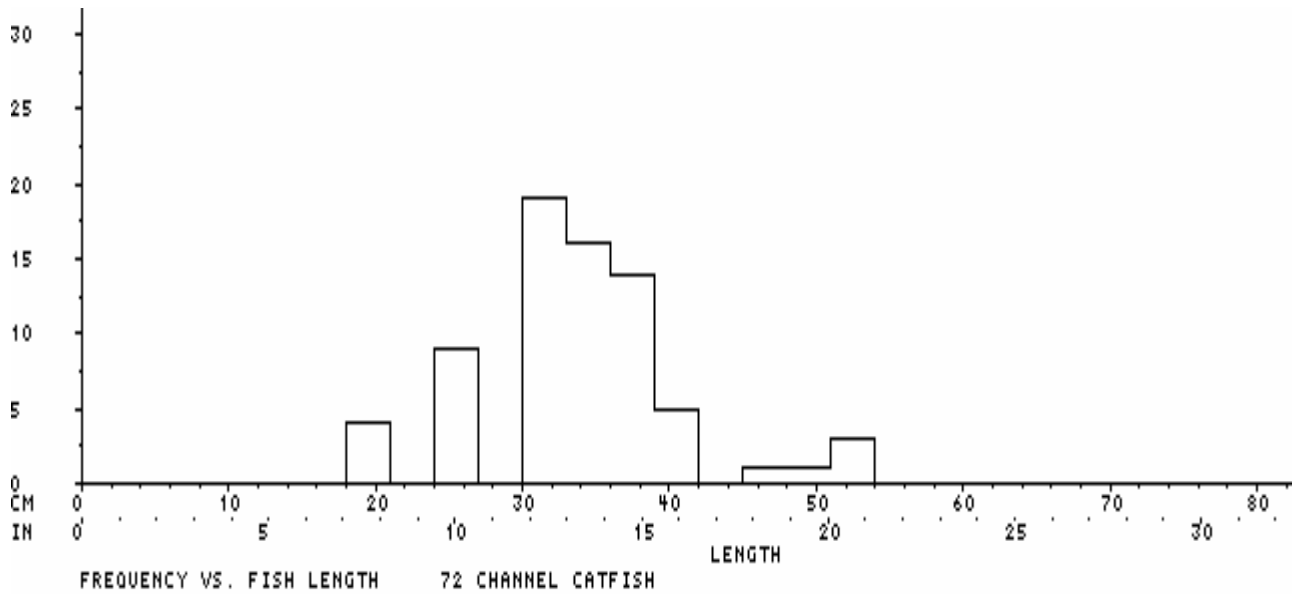


Figure 6. Lake Murphysboro 2000 day creel 3/15 through 10/31. Length-frequency histogram of channel catfish released by all anglers.

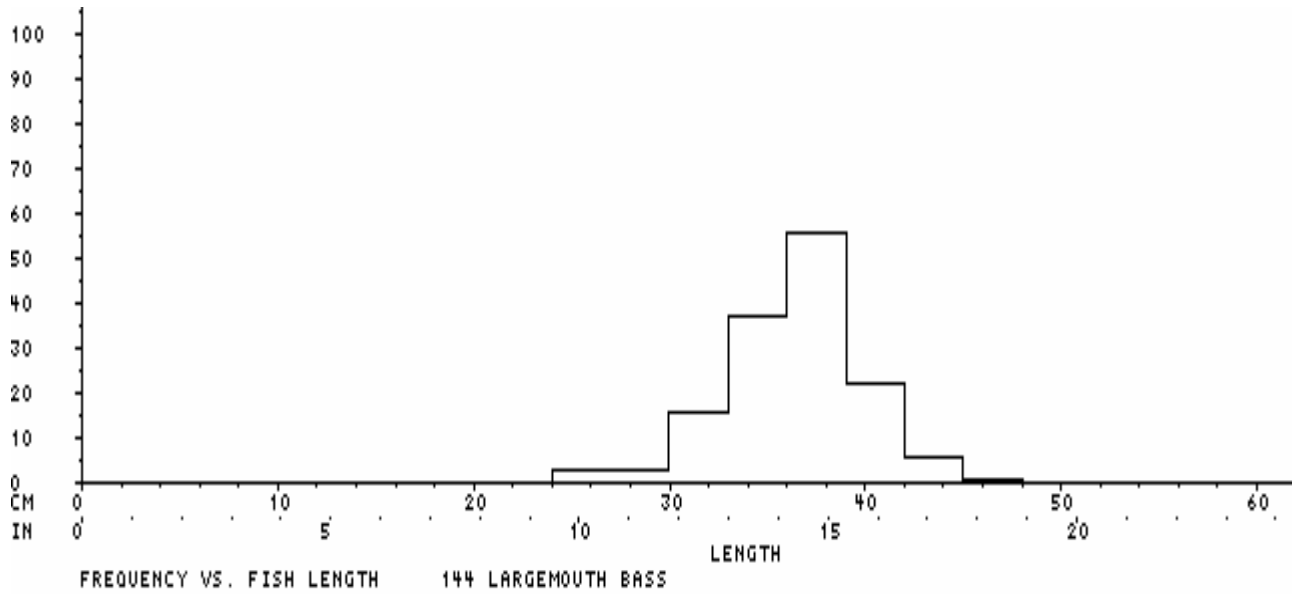


Figure 7. Lake Murphysboro 2000 day creel 3/15 through 10/31. Length-frequency histogram of largemouth bass harvested by all anglers.

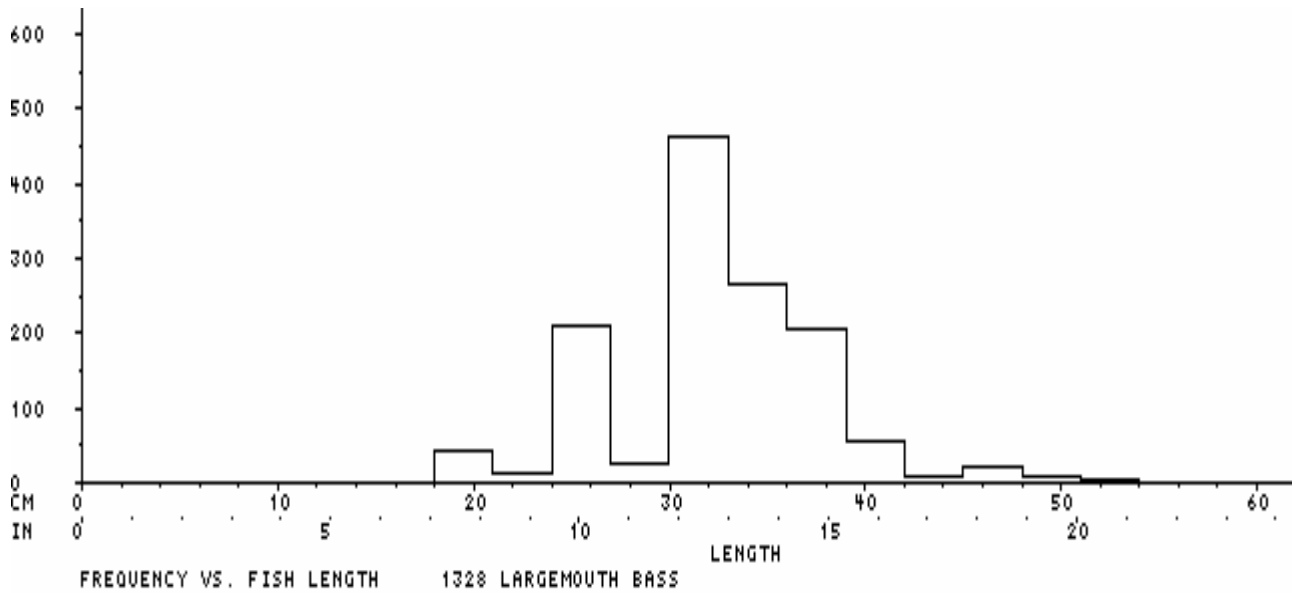


Figure 8. Lake Murphysboro 2000 day creel 3/15 through 10/31. Length-frequency histogram of largemouth bass released by all anglers. Note the difference in scale from Figure 7.

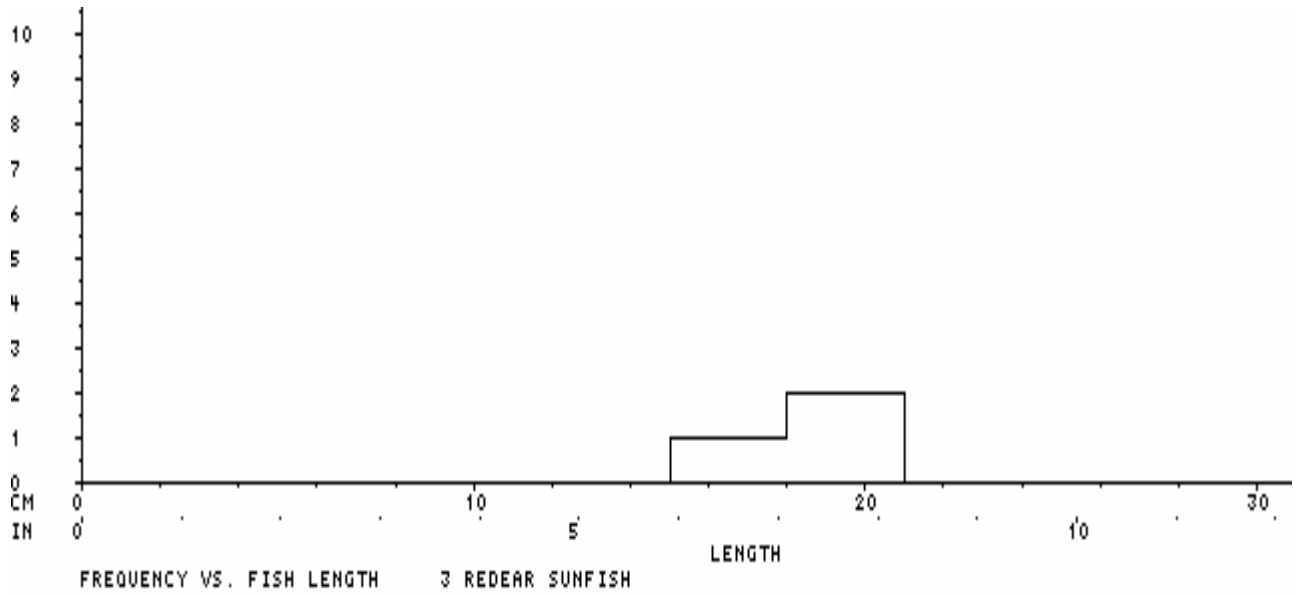


Figure 9. Lake Murphysboro 2000 day creel 3/15 through 10/31. Length-frequency histogram of reardear sunfish harvested by all anglers.

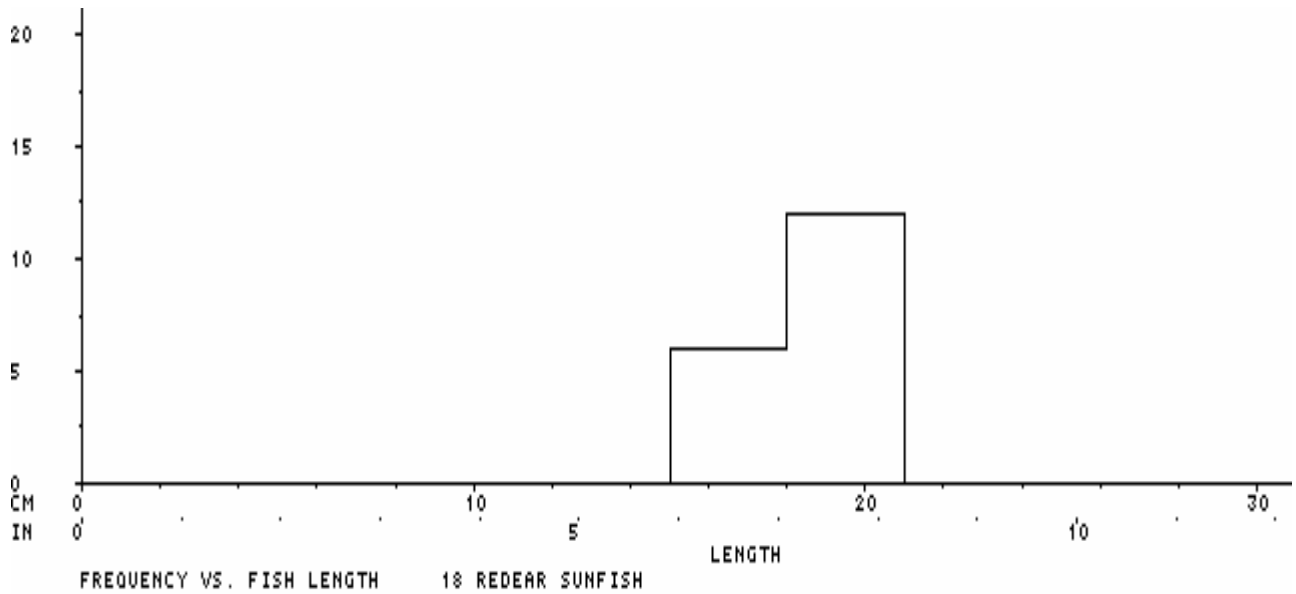


Figure 10. Lake Murphysboro 2000 day creel 3/15 through 10/31. Length-frequency histogram of reardear sunfish released by all anglers. Note the difference in scale from Figure 9.

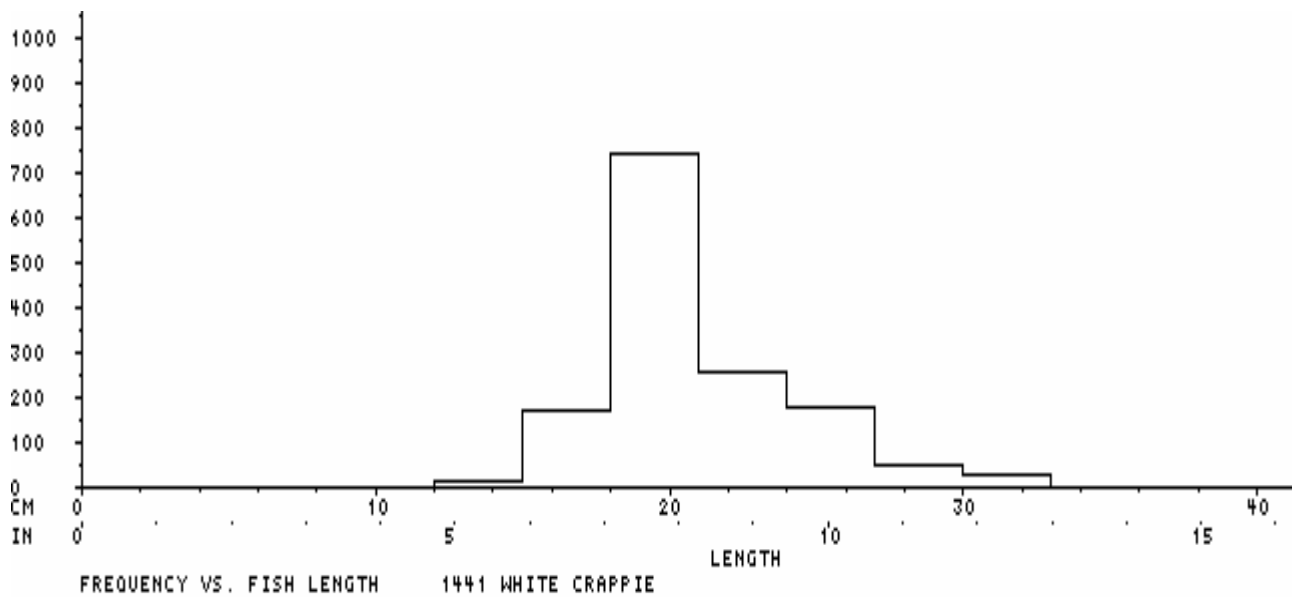


Figure 11. Lake Murphysboro 2000 day creel 3/15 through 10/31. Length-frequency histogram of white crappie harvested by all anglers.

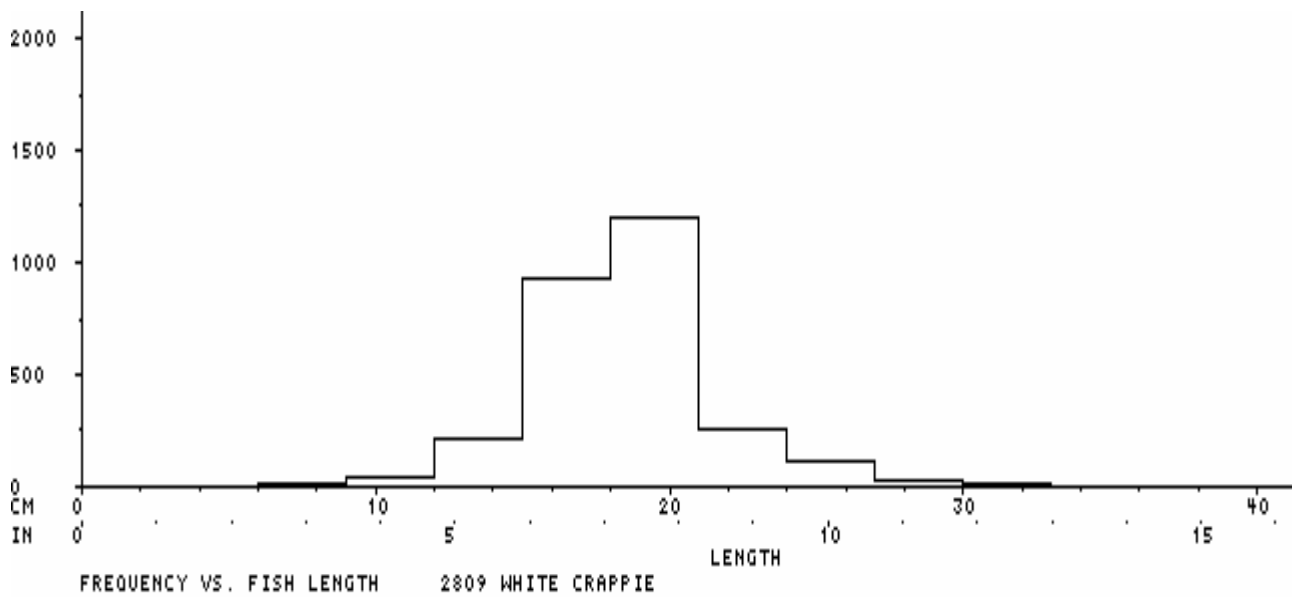


Figure 12. Lake Murphysboro 2000 day creel 3/15 through 10/31. Length-frequency histogram of white crappie released by all anglers. Note the difference in scale from Figure 11.