

ILLINOIS NATURAL HISTORY SURVEY  
 CENTER FOR AQUATIC ECOLOGY  
 1999 CREEL SURVEY RESULTS

**1999 LAKE MINGO**  
 172 ACRES  
 REGION 3, DISTRICT 10

STRATIFICATION SUMMARY:

Day creel only.  
 Results cover 03/15/1999 through 10/31/1999  
 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: 308/693 = 44.4%

NUMBER OF INTERVIEWS: 2201

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	10748	7985-13510 ( 26%)	62	46-79 ( 26%)	19%
	HOLIDAY	10531	9555-11507 ( 9%)	61	56-67 ( 9%)	50%
	TOTAL	21278	18370-24187 ( 14%)	124	107-141 ( 14%)	34%
SHORE	WEEKDAY	7631	6963-8299 ( 9%)	44	40-48 ( 9%)	15%
	HOLIDAY	5286	4772-5800 ( 10%)	31	28-34 ( 10%)	31%
	TOTAL	12917	12074-13760 ( 7%)	75	70-80 ( 7%)	22%
BOAT & SHORE	WEEKDAY	18379	15545-21212 ( 15%)	107	90-123 ( 15%)	17%
	HOLIDAY	15817	14713-16920 ( 7%)	92	86-98 ( 7%)	43%
	TOTAL	34195	31184-37207 ( 9%)	199	181-216 ( 9%)	29%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
12651	11432-13871 ( 10%)	.346	.309-.383 ( 11%)	181.75	73.56	All species
4	0-11 (220%)	.000	.000-.000 (220%)	0.05	0.02	Black bullhead
84	18-151 ( 79%)	.001	.000-.002 ( 93%)	1.21	0.49	Black crappie
6132	5446-6817 ( 11%)	.151	.133-.170 ( 12%)	88.09	35.65	Bluegill
		****	NOT RECORDED ****			Carp
1931	1630-2232 ( 16%)	.050	.041-.060 ( 19%)	27.74	11.23	Channel catfish
2	0-5 (226%)	.000	.000-.000 (223%)	0.02	0.01	Golden shiner
135	70-200 ( 48%)	.006	.002-.010 ( 74%)	1.94	0.78	Green sunfish
856	646-1067 ( 25%)	.026	.019-.033 ( 27%)	12.30	4.98	Largemouth bass
		****	NOT RECORDED ****			Logperch
784	583-985 ( 26%)	.013	.010-.017 ( 25%)	11.27	4.56	Redear sunfish
2253	1868-2639 ( 17%)	.079	.057-.101 ( 28%)	32.37	13.10	White crappie
16	0-32 (102%)	.000	.000-.000 (113%)	0.23	0.09	Yellow perch
455	360-549 ( 21%)	.019	.013-.025 ( 32%)	6.53	2.64	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
2560	2281-2838 ( 11%)	.067	.060-.075 ( 11%)	36.77	0.202	All species
1	0-2 (220%)	.000	.000-.000 (220%)	0.01	0.208	Black bullhead
13	3-23 ( 80%)	.000	.000-.000 ( 95%)	0.18	0.151	Black crappie
408	362-455 ( 11%)	.010	.009-.011 ( 13%)	5.87	0.067	Bluegill
		****	NOT RECORDED ****			Carp
1222	1009-1435 ( 17%)	.029	.024-.034 ( 18%)	17.56	0.633	Channel catfish
0	0-0 (223%)	.000	.000-.000 (223%)	0.00	0.124	Golden shiner
7	4-10 ( 47%)	.000	.000-.001 ( 75%)	0.10	0.051	Green sunfish
407	324-490 ( 20%)	.013	.008-.017 ( 34%)	5.84	0.475	Largemouth bass
		****	NOT RECORDED ****			Logperch
134	95-172 ( 29%)	.002	.002-.003 ( 27%)	1.92	0.170	Redear sunfish
311	258-365 ( 17%)	.010	.008-.013 ( 28%)	4.47	0.138	White crappie
1	0-3 (103%)	.000	.000-.000 (110%)	0.02	0.086	Yellow perch
56	44-67 ( 21%)	.002	.002-.003 ( 31%)	0.80	0.123	Yellow bass

1999 LAKE MINGO

DAY CREEL

03/15/1999 - 10/31/1999

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

LB HARVESTED	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
5643	5029-6258 ( 11%)	.148	.131-.165 ( 11%)	32.81	0.446	All species
1	0-4 (218%)	.000	.000-.000 (218%)	0.01	0.458	Black bullhead
28	6-50 ( 80%)	.000	.000-.001 ( 95%)	0.16	0.332	Black crappie
900	798-1003 ( 11%)	.022	.019-.025 ( 13%)	5.24	0.147	Bluegill
		****	NOT RECORDED ****			Carp
2695	2225-3164 ( 17%)	.064	.052-.076 ( 18%)	15.67	1.396	Channel catfish
0	0-1 (226%)	.000	.000-.000 (226%)	0.00	0.274	Golden shiner
15	8-22 ( 47%)	.001	.000-.001 ( 75%)	0.09	0.112	Green sunfish
897	714-1079 ( 20%)	.028	.018-.037 ( 34%)	5.21	1.047	Largemouth bass
		****	NOT RECORDED ****			Logperch
295	210-380 ( 29%)	.005	.004-.006 ( 27%)	1.71	0.376	Redear sunfish
687	568-805 ( 17%)	.023	.017-.029 ( 28%)	3.99	0.305	White crappie
3	0-6 (103%)	.000	.000-.000 (110%)	0.02	0.190	Yellow perch
123	97-148 ( 21%)	.005	.004-.007 ( 31%)	0.71	0.270	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
41285	37779-44791	( 8%)	1.047	.970-1.125	( 7%)	593.11	240.03 All species
284	208-359	( 27%)	.009	.005-.013	( 44%)	4.07	1.65 Black bullhead
160	34-286	( 79%)	.002	.000-.004	( 89%)	2.30	0.93 Black crappie
16020	14445-17596	( 10%)	.393	.356-.429	( 9%)	230.15	93.14 Bluegill
22	4-41	( 83%)	.000	.000-.001	(107%)	0.32	0.13 Carp
2501	2092-2909	( 16%)	.062	.049-.076	( 21%)	35.93	14.54 Channel catfish
77	38-117	( 51%)	.002	.001-.003	( 62%)	1.11	0.45 Golden shiner
648	511-784	( 21%)	.018	.013-.023	( 29%)	9.31	3.77 Green sunfish
14187	12647-15728	( 11%)	.334	.308-.360	( 8%)	203.82	82.49 Largemouth bass
40	0-95	(141%)	.001	.000-.002	(134%)	0.57	0.23 Logperch
829	621-1037	( 25%)	.014	.010-.017	( 24%)	11.91	4.82 Redear sunfish
5627	4722-6531	( 16%)	.181	.137-.225	( 24%)	80.83	32.71 White crappie
86	18-153	( 78%)	.002	.000-.005	( 96%)	1.23	0.50 Yellow perch
805	596-1014	( 26%)	.029	.021-.037	( 27%)	11.57	4.68 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
7473	6578-8368	( 12%)	.170	.158-.182	( 7%)	107.36	0.181 All species
48	35-62	( 28%)	.002	.001-.002	( 53%)	0.69	0.170 Black bullhead
20	4-36	( 79%)	.000	.000-.000	( 90%)	0.29	0.126 Black crappie
847	765-929	( 10%)	.021	.019-.023	( 9%)	12.17	0.053 Bluegill
12	1-24	( 92%)	.000	.000-.000	(129%)	0.18	0.561 Carp
1338	1106-1570	( 17%)	.031	.025-.037	( 19%)	19.22	0.535 Channel catfish
5	2-8	( 53%)	.000	.000-.000	( 66%)	0.07	0.066 Golden shiner
30	24-37	( 21%)	.001	.001-.001	( 30%)	0.43	0.047 Green sunfish
4341	3619-5063	( 17%)	.090	.080-.100	( 11%)	62.36	0.306 Largemouth bass
4	0-9	(128%)	.000	.000-.000	(131%)	0.06	0.102 Logperch
137	98-176	( 28%)	.002	.002-.003	( 27%)	1.97	0.166 Redear sunfish
594	497-690	( 16%)	.019	.014-.023	( 24%)	8.53	0.106 White crappie
5	1-9	( 82%)	.000	.000-.000	( 84%)	0.07	0.060 Yellow perch
91	67-115	( 26%)	.003	.002-.004	( 27%)	1.31	0.113 Yellow bass

1999 LAKE MINGO

DAY CREEL

03/15/1999 - 10/31/1999

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

LB CAUGHT	95% CI		LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
16475	14502-18449	( 12%)	.375	.348-.402 ( 7%)	95.79	0.399	All species
106	76-136	( 28%)	.003	.002-.005 ( 53%)	0.62	0.375	Black bullhead
44	9-79	( 79%)	.001	.000-.001 ( 90%)	0.26	0.278	Black crappie
1867	1686-2048	( 10%)	.047	.042-.051 ( 9%)	10.85	0.117	Bluegill
27	2-52	( 92%)	.000	.000-.001 (129%)	0.16	1.237	Carp
2950	2438-3462	( 17%)	.069	.056-.082 ( 19%)	17.15	1.180	Channel catfish
11	5-17	( 53%)	.000	.000-.000 ( 66%)	0.07	0.146	Golden shiner
67	53-81	( 21%)	.002	.001-.002 ( 30%)	0.39	0.103	Green sunfish
9570	7979-11162	( 17%)	.199	.177-.220 ( 11%)	55.64	0.675	Largemouth bass
9	0-20	(128%)	.000	.000-.000 (131%)	0.05	0.226	Logperch
302	216-389	( 28%)	.005	.004-.006 ( 27%)	1.76	0.365	Redear sunfish
1309	1095-1522	( 16%)	.041	.031-.052 ( 24%)	7.61	0.233	White crappie
11	2-20	( 82%)	.000	.000-.000 ( 84%)	0.07	0.132	Yellow perch
201	149-254	( 26%)	.007	.005-.009 ( 27%)	1.17	0.250	Yellow bass

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

	MEAN	95% CI	MIN	MAX	#SAMPLES
HOURS PER COMPLETED TRIP*					
BOAT	4.4	4.3-4.5 ( 3%)	1.0	11.8	747
SHORE	1.8	1.3-2.2 ( 27%)	0.8	4.0	21
BOAT & SHORE	4.3	4.2-4.5 ( 3%)	0.8	11.8	768
MILES TRAVELED	15.0	13.8-16.2 ( 8%)	1	685	1741
SUCCESS RATING (1-10)	3.5	3.4-3.6 ( 3%)	1	10	1741

\*364 samples were from split interviews of completed trips.  
41.9% of all 1831 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 53 out of 1831 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	231	587	130	13		1				
SHORE INTERVIEWS	261	500	70	36	1	1				

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

580 ( 31.7%)	ANY	All species
172 ( 9.4%)	BLG	Bluegill
474 ( 25.9%)	CCF	Channel catfish
80 ( 4.4%)	CRP	Crappie spp.
509 ( 27.8%)	LMB	Largemouth bass
16 ( 0.9%)	WHC	White crappie

1999 LAKE MINGO

DAY CREEL

03/15/1999 - 10/31/1999

Table 11. Number of anglers with a given harvest &amp; release for completed trips

# OF FISH:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
Black bullhead																
HARVEST	1441	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1374	66	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Black crappie																
HARVEST	1430	-	6	2	2	-	1	-	-	-	-	-	-	-	-	-
RELEASE	1431	5	2	2	-	1	-	-	-	-	-	-	-	-	-	-
Bluegill																
HARVEST	1079	63	94	98	70	23	5	3	1	2	-	2	1	-	-	-
RELEASE	969	93	67	121	56	56	33	23	14	1	5	2	-	-	-	1
Carp																
HARVEST	1441	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1434	6	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Channel catfish																
HARVEST	1193	166	58	15	7	1	1	-	-	-	-	-	-	-	-	-
RELEASE	1334	64	27	10	5	1	-	-	-	-	-	-	-	-	-	-
Golden shiner																
HARVEST	1441	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1402	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Green sunfish																
HARVEST	1439	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1326	108	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Largemouth bass																
HARVEST	1350	72	18	1	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	297	294	340	226	130	89	31	10	12	-	6	-	2	1	1	2
Logperch																
HARVEST	1441	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1433	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern pike																
HARVEST	1441	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1441	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Redear sunfish																
HARVEST	1263	132	44	1	-	1	-	-	-	-	-	-	-	-	-	-
RELEASE	1439	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
White crappie																
HARVEST	1225	61	56	59	25	3	1	-	7	-	1	2	1	-	-	-
RELEASE	1147	60	68	53	56	36	8	2	5	2	4	-	-	-	-	-

1999 LAKE MINGO

DAY CREEL

03/15/1999 - 10/31/1999

Table 11 (continued). 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+
Yellow perch																
HARVEST	1433	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1426	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellow bass																
HARVEST	1357	78	5	1	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1398	37	1	4	-	-	-	-	1	-	-	-	-	-	-	-

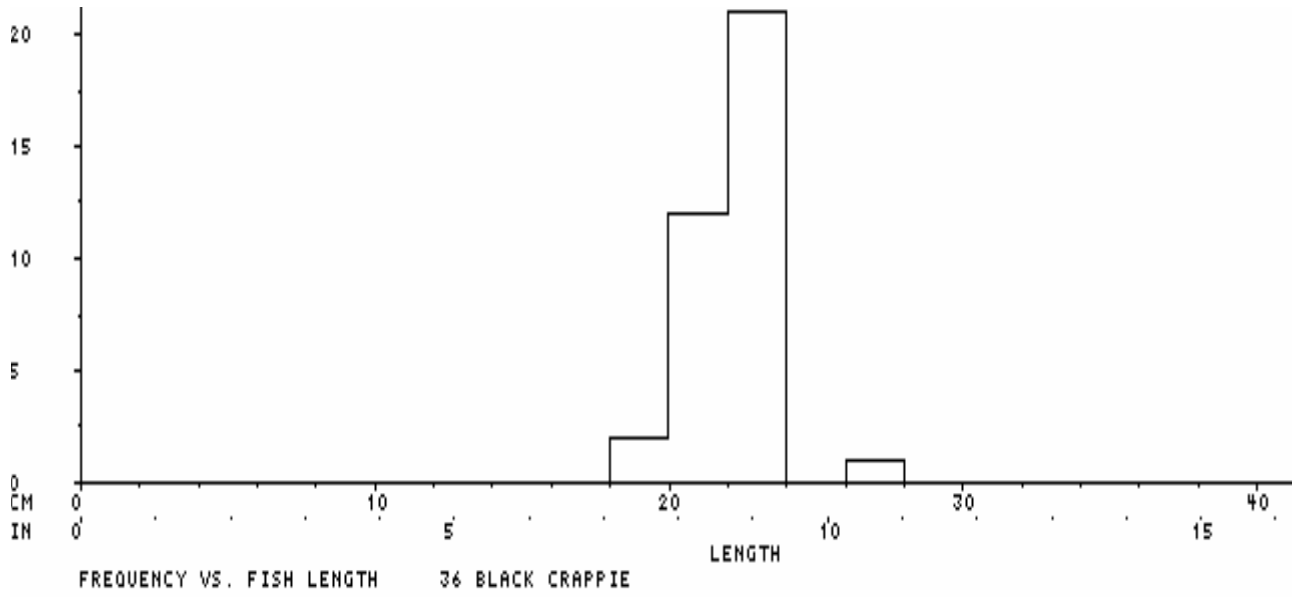


Figure 1. Lake Mingo 1999 day creel 3/15 through 10/31. Length-frequency histogram of black crappie harvested by all anglers.

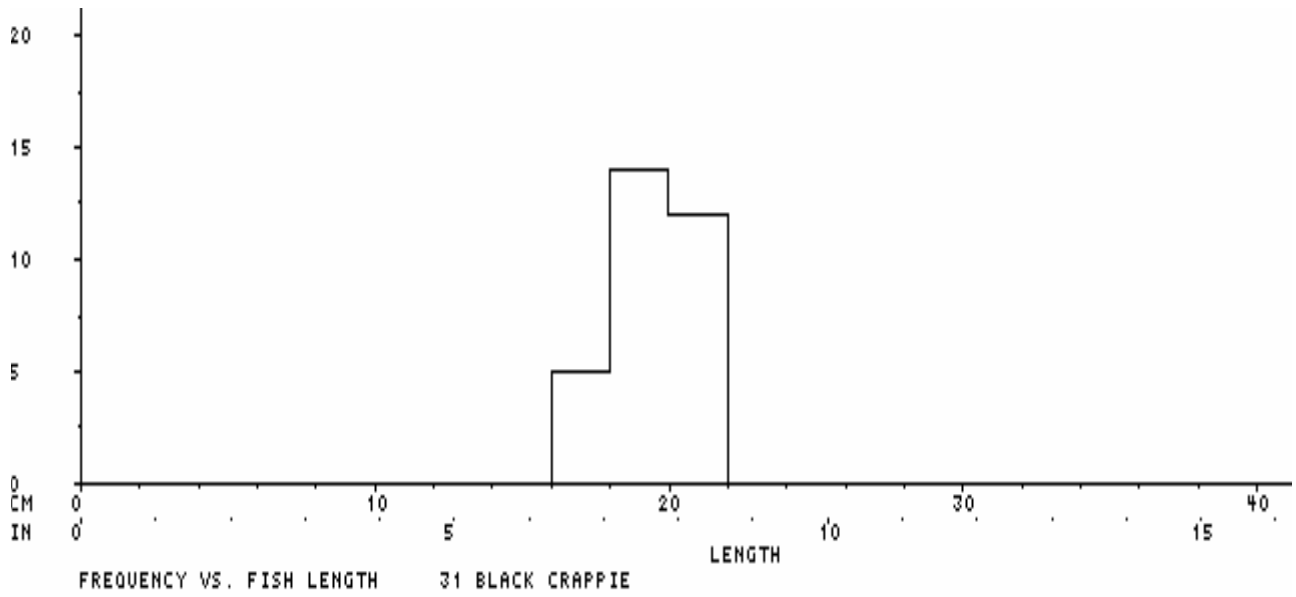


Figure 2. Lake Mingo 1999 day creel 3/15 through 10/31. Length-frequency histogram of black crappie released by all anglers.

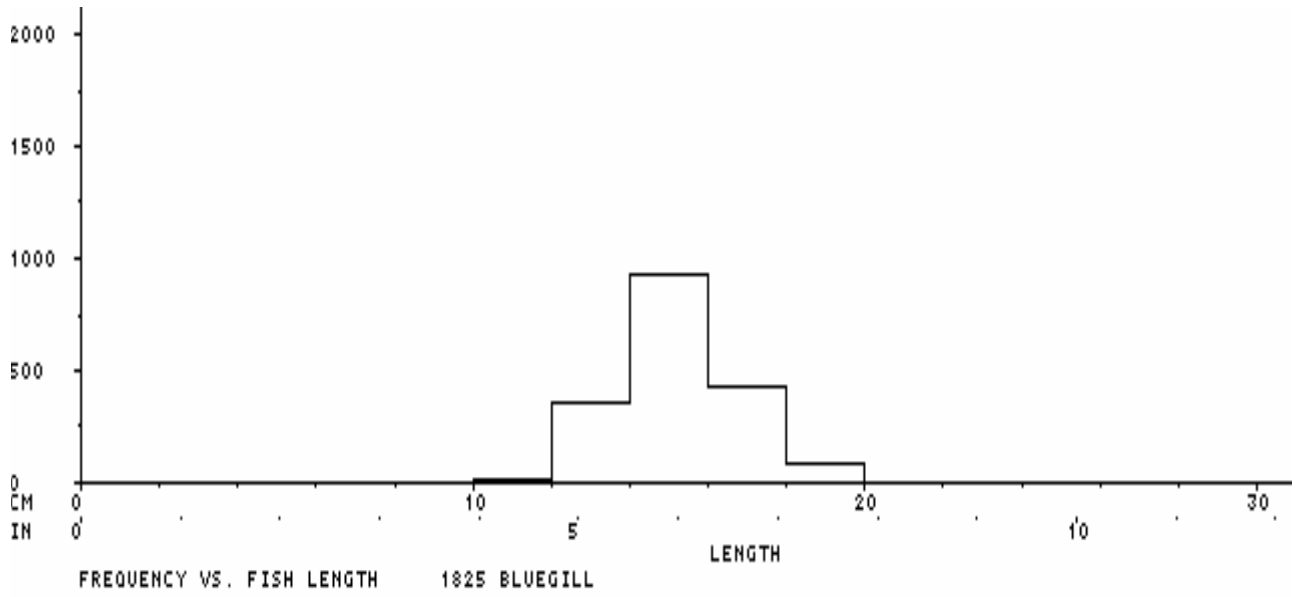


Figure 3. Lake Mingo 1999 day creel 3/15 through 10/31. Length-frequency histogram of bluegill harvested by all anglers.

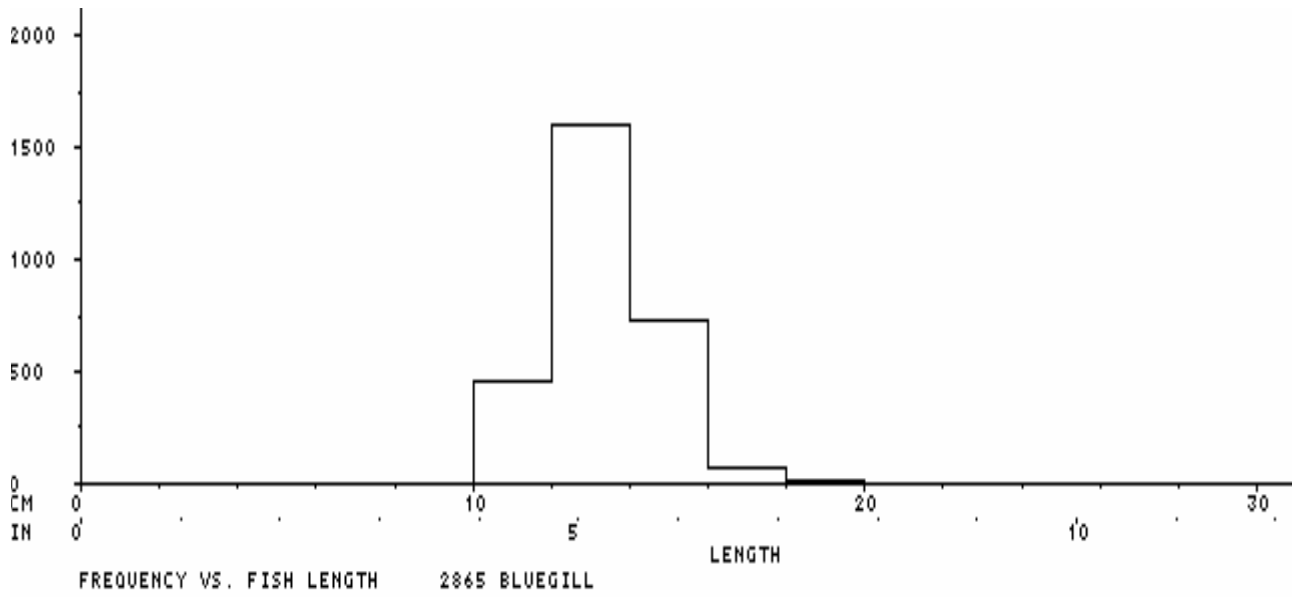


Figure 4. Lake Mingo 1999 day creel 3/15 through 10/31. Length-frequency histogram of bluegill released by all anglers.

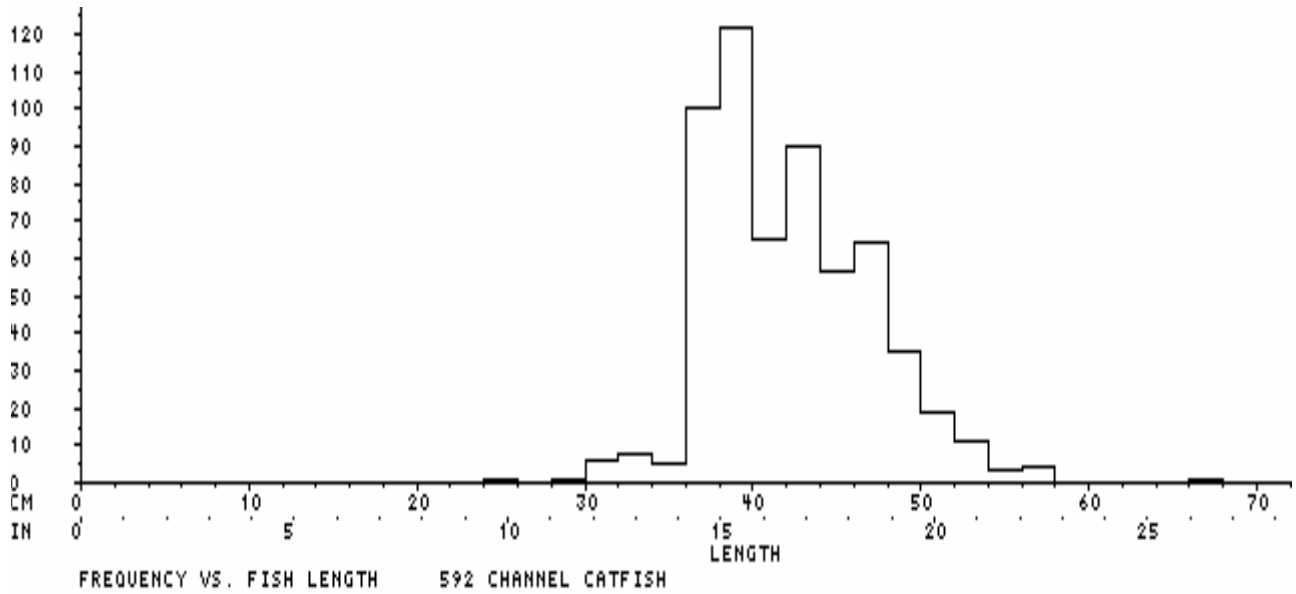


Figure 5. Lake Mingo 1999 day creel 3/15 through 10/31. Length-frequency histogram of channel catfish harvested by all anglers.

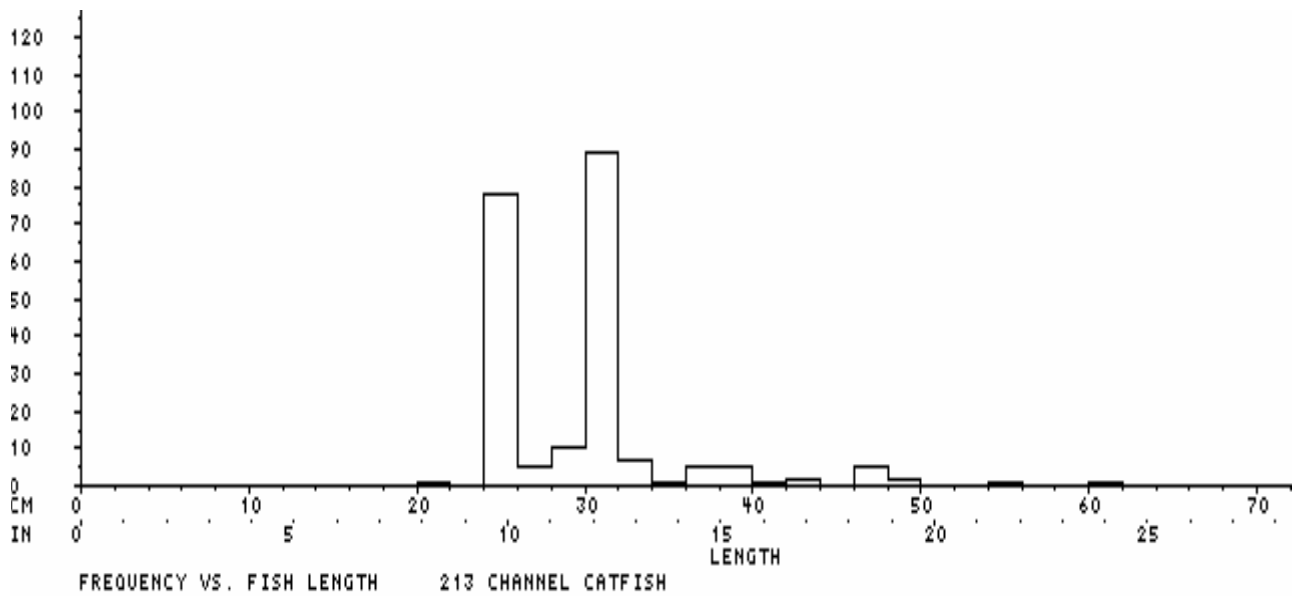


Figure 6. Lake Mingo 1999 day creel 3/15 through 10/31. Length-frequency histogram of channel catfish released by all anglers.

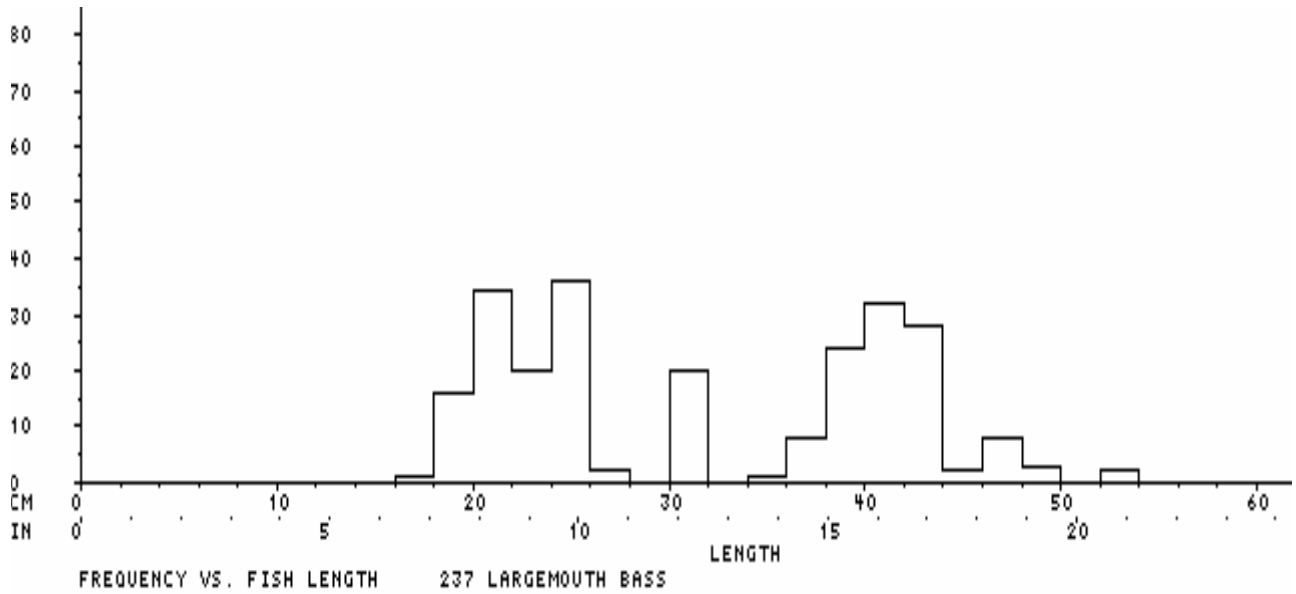


Figure 7. Lake Mingo 1999 day creel 3/15 through 10/31. Length-frequency histogram of largemouth bass harvested by all anglers.

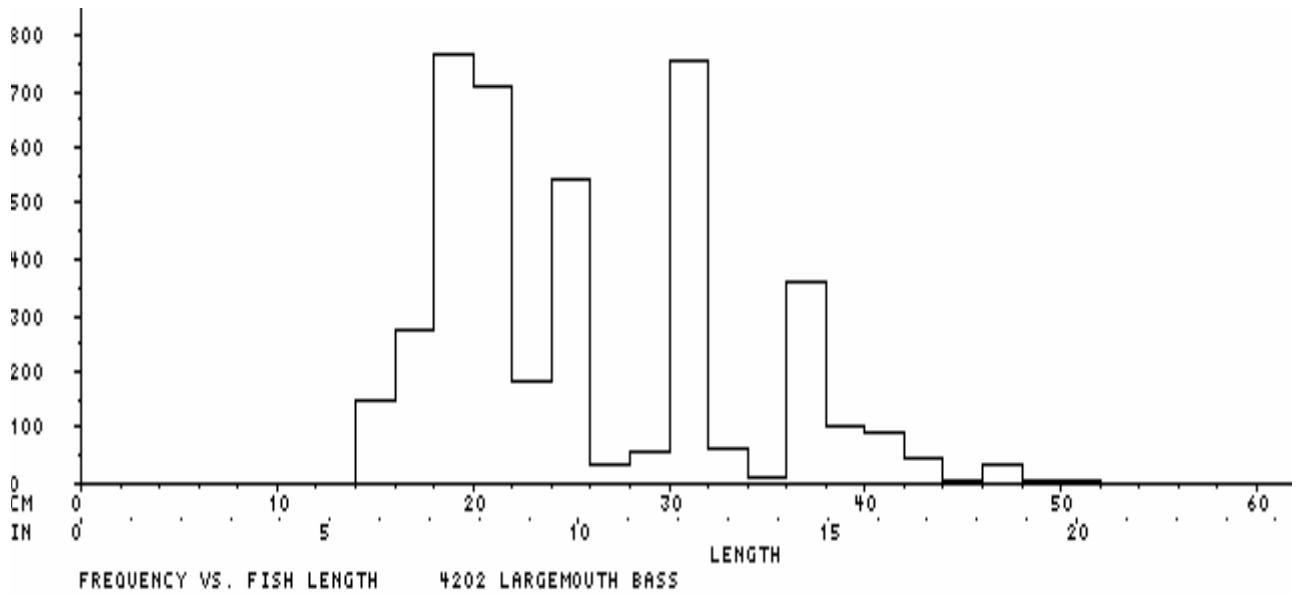


Figure 8. Lake Mingo 1999 day creel 3/15 through 10/31. Length-frequency histogram of largemouth bass released by all anglers. Note the difference in scale from Figure 7.

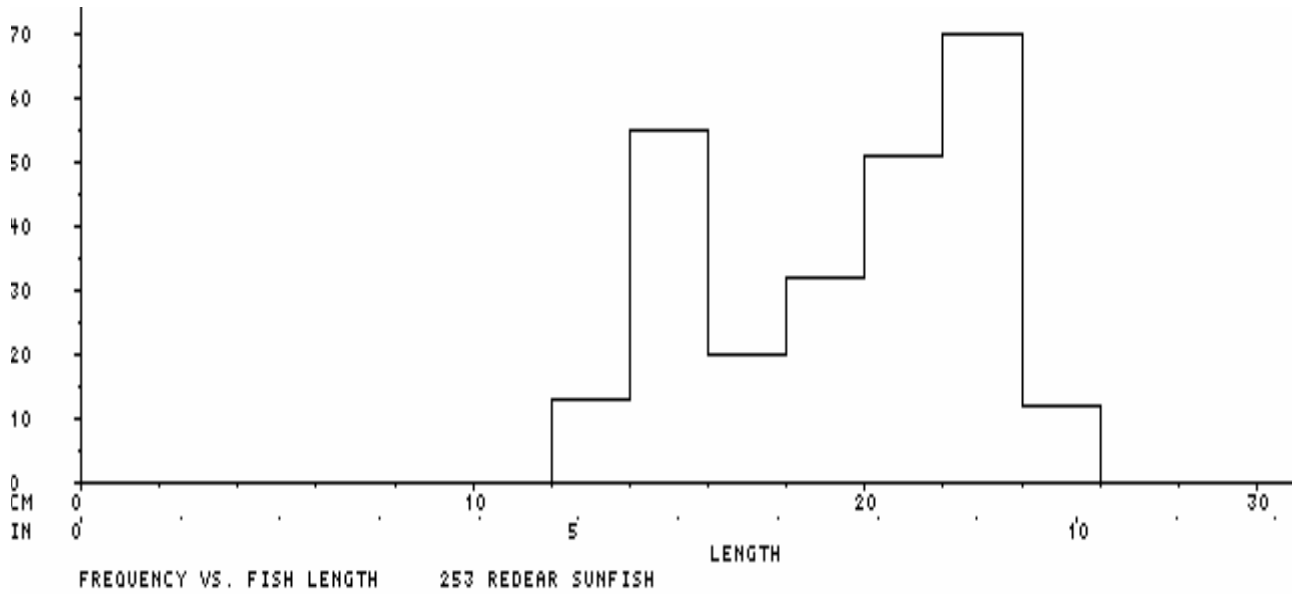


Figure 9. Lake Mingo 1999 day creel 3/15 through 10/31. Length-frequency histogram of reared sunfish harvested by all anglers.

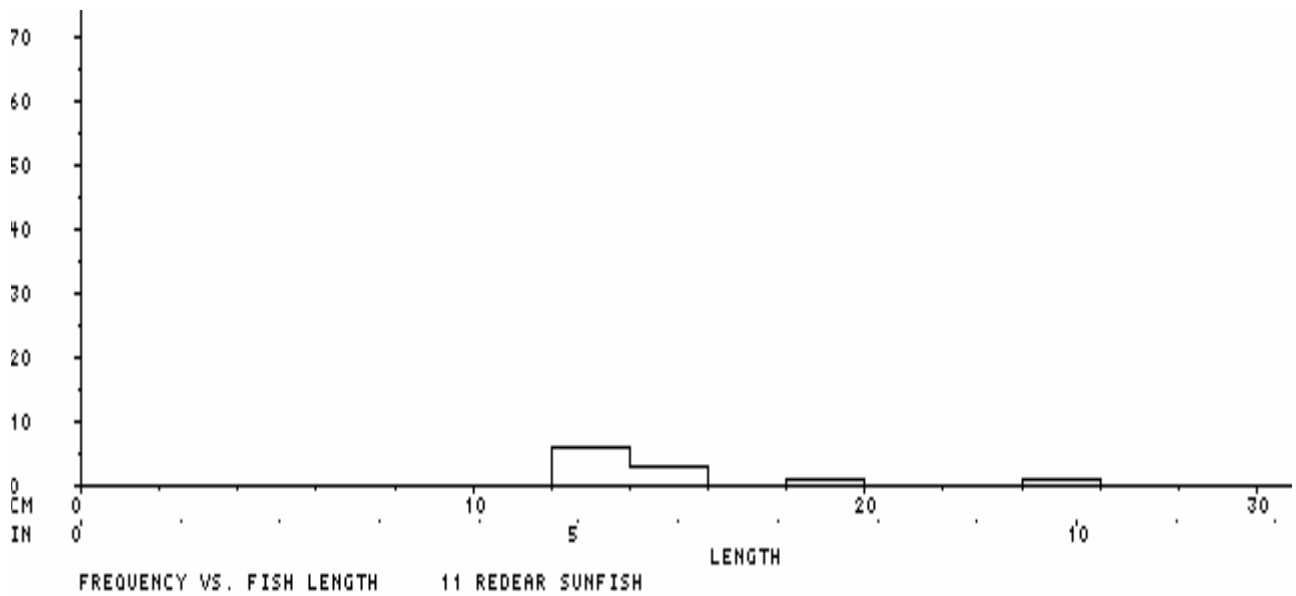


Figure 10. Lake Mingo 1999 day creel 3/15 through 10/31. Length-frequency histogram of reared sunfish released by all anglers.

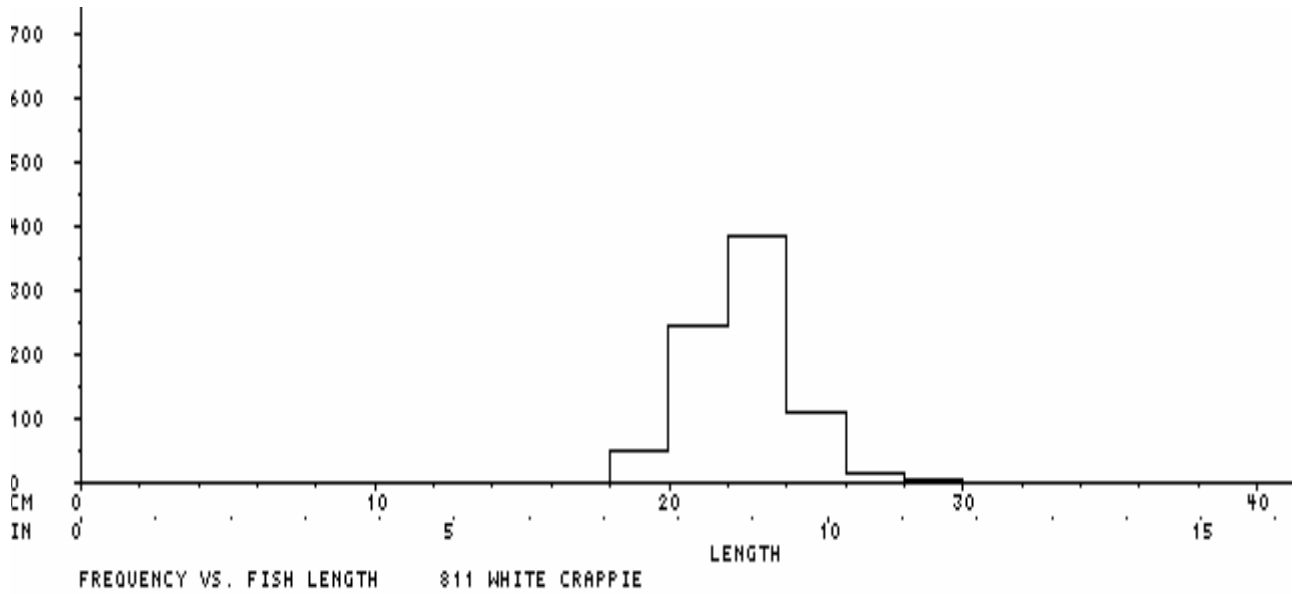


Figure 11. Lake Mingo 1999 day creel 3/15 through 10/31. Length-frequency histogram of white crappie harvested by all anglers.

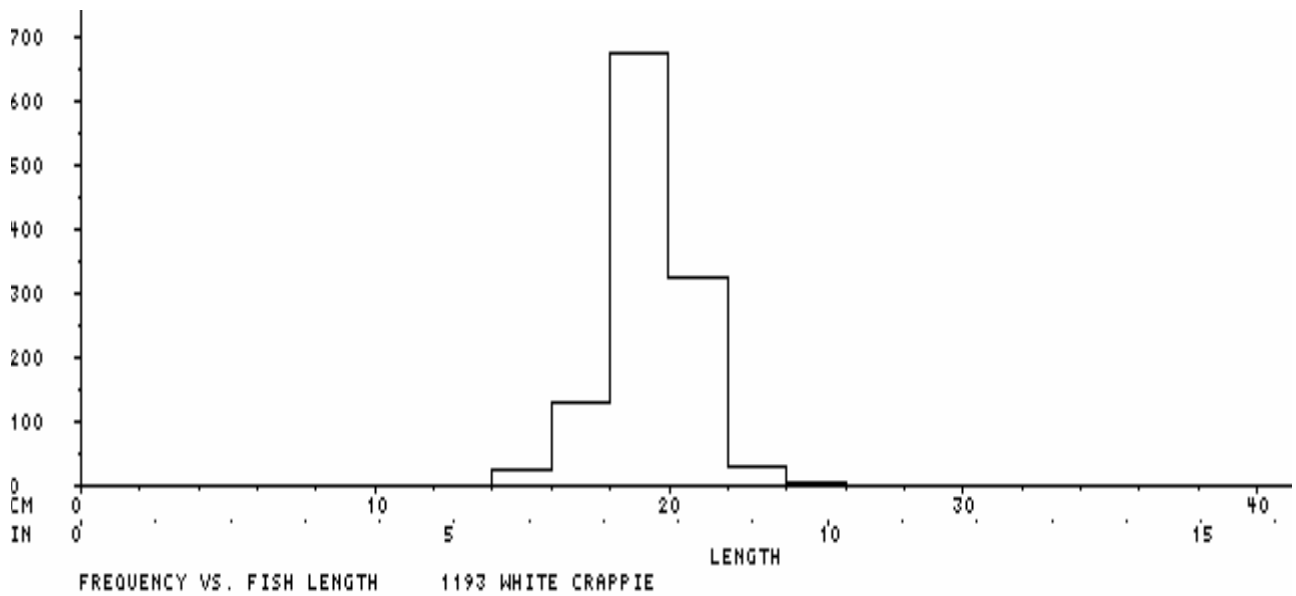


Figure 12. Lake Mingo 1999 day creel 3/15 through 10/31. Length-frequency histogram of white crappie released by all anglers.

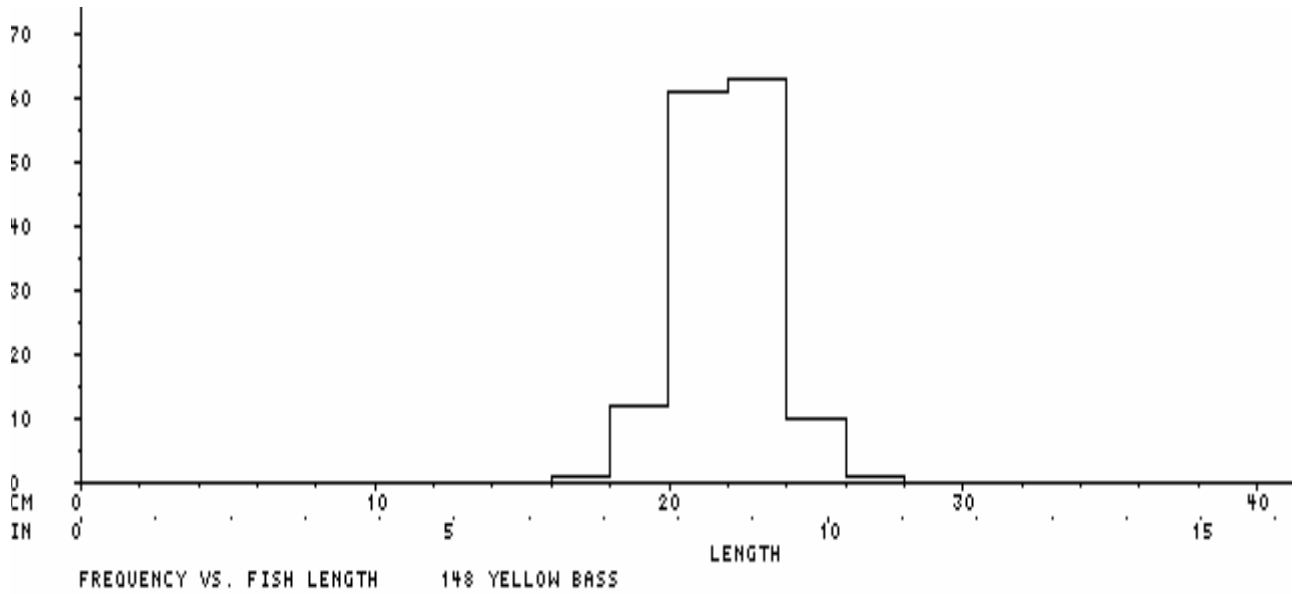


Figure 13. Lake Mingo 1999 day creel 3/15 through 10/31. Length-frequency histogram of yellow bass harvested by all anglers.

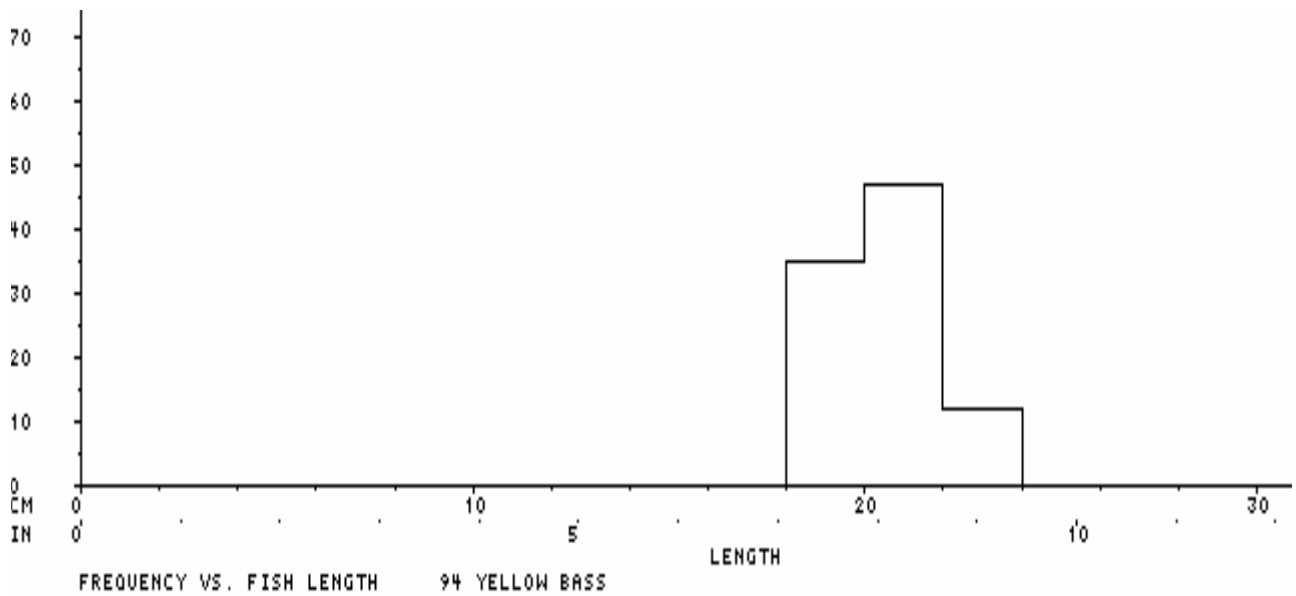


Figure 14. Lake Mingo 1999 day creel 3/15 through 10/31. Length-frequency histogram of yellow bass released by all anglers.