

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

**1999 LAKE GLENDALE**  
 80 ACRES  
 REGION 5, DISTRICT 20

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: 306/693 = 44.2%

NUMBER OF INTERVIEWS: 866

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	1536	1183-1889 ( 23%)	19	15-24 ( 23%)	24%
	HOLIDAY	1223	983-1463 ( 20%)	15	12-18 ( 20%)	56%
	TOTAL	2759	2332-3186 ( 15%)	34	29-40 ( 15%)	38%
SHORE	WEEKDAY	2772	2410-3135 ( 13%)	35	30-39 ( 13%)	23%
	HOLIDAY	2053	1676-2430 ( 18%)	26	21-30 ( 18%)	54%
	TOTAL	4825	4317-5334 ( 11%)	60	54-67 ( 11%)	36%
BOAT & SHORE	WEEKDAY	4308	3803-4814 ( 12%)	54	48-60 ( 12%)	24%
	HOLIDAY	3276	2846-3706 ( 13%)	41	36-46 ( 13%)	55%
	TOTAL	7584	6920-8248 ( 9%)	95	87-103 ( 9%)	37%

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

# HARVESTED	95% CI		#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
4916	4011-5820	( 18%)	.510	.317-.702 ( 38%)	151.83	61.45	All species
322	68-576	( 79%)	.060	.000-.129 (114%)	9.94	4.02	Black crappie
2953	2331-3574	( 21%)	.308	.199-.416 ( 35%)	91.20	36.91	Bluegill
897	639-1154	( 29%)	.072	.051-.094 ( 29%)	27.69	11.21	Channel catfish
314	202-426	( 36%)	.031	.010-.053 ( 68%)	9.69	3.92	Green sunfish
71	30-112	( 57%)	.009	.001-.018 ( 94%)	2.19	0.89	Largemouth bass
82	41-122	( 50%)	.007	.003-.010 ( 56%)	2.52	1.02	Redear sunfish
225	141-309	( 37%)	.020	.010-.029 ( 48%)	6.95	2.81	Warmouth
53	14-92	( 73%)	.003	.001-.005 ( 78%)	1.64	0.66	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
1021	784-1258	( 23%)	.094	.070-.119 ( 25%)	31.54	0.208	All species
65	0-137	(111%)	.012	.000-.026 (109%)	2.00	0.202	Black crappie
256	201-312	( 22%)	.024	.018-.031 ( 27%)	7.92	0.087	Bluegill
569	382-755	( 33%)	.047	.032-.062 ( 32%)	17.56	0.634	Channel catfish
26	17-36	( 37%)	.002	.001-.004 ( 53%)	0.81	0.084	Green sunfish
34	16-52	( 53%)	.003	.001-.005 ( 71%)	1.05	0.477	Largemouth bass
11	5-16	( 48%)	.001	.000-.001 ( 58%)	0.33	0.131	Redear sunfish
32	20-43	( 36%)	.003	.001-.004 ( 48%)	0.98	0.141	Warmouth
29	7-50	( 76%)	.001	.000-.003 ( 87%)	0.88	0.540	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
2251	1729-2773	( 23%)	.208	.155-.261 ( 25%)	28.14	0.458	All species
143	0-302	(111%)	.027	.000-.057 (109%)	1.79	0.446	Black crappie
565	443-688	( 22%)	.053	.039-.067 ( 27%)	7.07	0.192	Bluegill
1253	842-1665	( 33%)	.104	.071-.138 ( 32%)	15.67	1.399	Channel catfish
58	36-80	( 37%)	.005	.002-.008 ( 53%)	0.73	0.185	Green sunfish
75	35-114	( 53%)	.007	.002-.012 ( 71%)	0.93	1.052	Largemouth bass
23	12-35	( 48%)	.002	.001-.003 ( 58%)	0.29	0.289	Redear sunfish
70	45-95	( 36%)	.006	.003-.009 ( 48%)	0.87	0.311	Warmouth
63	15-111	( 76%)	.003	.000-.006 ( 87%)	0.79	1.190	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
14568	11981-17155 ( 18%)	1.556	1.073-2.039 ( 31%)	449.98	182.10	All species
382	119-646 ( 69%)	.066	.002-.131 ( 97%)	11.81	4.78	Black crappie
8306	6484-10128 ( 22%)	.828	.571-1.086 ( 31%)	256.54	103.82	Bluegill
1377	976-1778 ( 29%)	.116	.080-.152 ( 31%)	42.53	17.21	Channel catfish
997	704-1289 ( 29%)	.100	.065-.135 ( 35%)	30.78	12.46	Green sunfish
2900	2370-3429 ( 18%)	.381	.247-.515 ( 35%)	89.57	36.25	Largemouth bass
94	48-140 ( 49%)	.008	.004-.013 ( 55%)	2.91	1.18	Redear sunfish
442	312-572 ( 29%)	.052	.026-.078 ( 51%)	13.66	5.53	Warmouth
71	28-113 ( 60%)	.004	.002-.006 ( 57%)	2.19	0.89	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
1994	1655-2333 ( 17%)	.212	.171-.253 ( 19%)	61.58	0.137	All species
68	0-140 (106%)	.013	.000-.026 (107%)	2.10	0.178	Black crappie
400	321-478 ( 20%)	.038	.029-.047 ( 23%)	12.35	0.048	Bluegill
662	456-869 ( 31%)	.056	.039-.073 ( 30%)	20.46	0.481	Channel catfish
41	30-53 ( 29%)	.004	.003-.005 ( 35%)	1.28	0.042	Green sunfish
724	556-892 ( 23%)	.092	.066-.119 ( 29%)	22.37	0.250	Largemouth bass
12	6-18 ( 47%)	.001	.001-.002 ( 55%)	0.37	0.128	Redear sunfish
51	37-65 ( 28%)	.005	.004-.007 ( 35%)	1.58	0.116	Warmouth
35	11-58 ( 68%)	.002	.001-.003 ( 73%)	1.07	0.495	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
4395	3648-5142 ( 17%)	.467	.378-.557 ( 19%)	54.94	0.302	All species
150	0-310 (106%)	.028	.000-.058 (107%)	1.87	0.393	Black crappie
881	708-1055 ( 20%)	.084	.065-.103 ( 23%)	11.02	0.106	Bluegill
1460	1005-1916 ( 31%)	.124	.087-.162 ( 30%)	18.26	1.061	Channel catfish
91	65-118 ( 29%)	.009	.006-.012 ( 35%)	1.14	0.092	Green sunfish
1596	1226-1967 ( 23%)	.204	.145-.263 ( 29%)	19.96	0.551	Largemouth bass
27	14-39 ( 47%)	.003	.001-.004 ( 55%)	0.33	0.282	Redear sunfish
113	82-144 ( 28%)	.012	.008-.016 ( 35%)	1.41	0.255	Warmouth
76	24-129 ( 68%)	.004	.001-.007 ( 73%)	0.96	1.092	Yellow bullhead

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

	MEAN	95% CI		MIN	MAX	#SAMPLES
<b>HOURS PER COMPLETED TRIP*</b>						
BOAT	3.3	3.0-3.6 ( 10%)		0.7	9.2	149
SHORE	1.9	1.8-2.1 ( 7%)		0.1	9.6	402
BOAT & SHORE	2.3	2.2-2.4 ( 6%)		0.1	9.6	551
MILES TRAVELED	21.2	17.9-24.4 ( 15%)		1	380	624
SUCCESS RATING (1-10)	5.2	4.9-5.4 ( 6%)		1	10	620

\*198 samples were from split interviews of completed trips.  
 83.1% of all 663 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 4 out of 663 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	52	112	18	7						
SHORE INTERVIEWS	237	132	54	31	10	3	2	2		2

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

397 ( 59.9%)	ANY	All species
1 ( 0.2%)	BLC	Black crappie
16 ( 2.4%)	BLG	Bluegill
82 ( 12.4%)	CAT	Unidentified catfish
1 ( 0.2%)	CCF	Channel catfish
5 ( 0.8%)	CRP	Crappie spp.
159 ( 24.0%)	LMB	Largemouth bass
2 ( 0.3%)	SUN	Sunfish spp. excluding Crappie and Black Bass



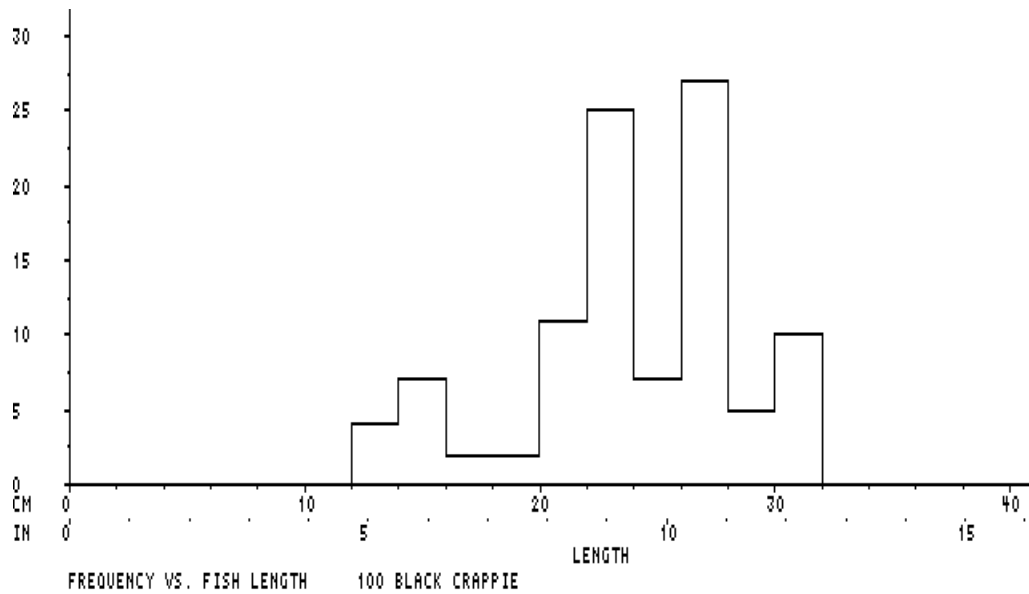


Figure 1. Lake Glendale 1999 day creel 3/15 through 10/31. Length-frequency histogram of black crappie harvested by all anglers.

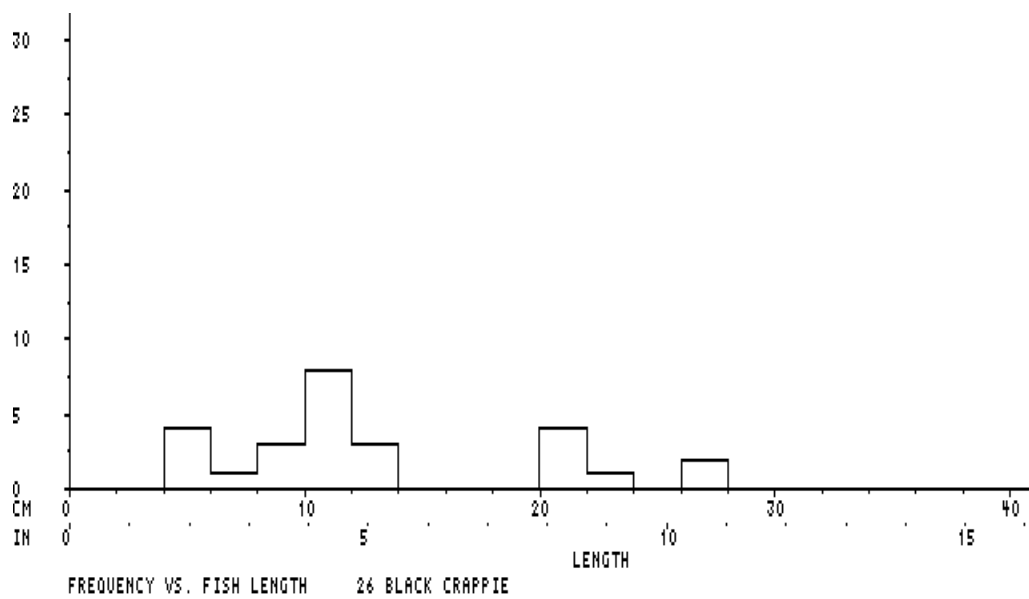


Figure 2. Lake Glendale 1999 day creel 3/15 through 10/31. Length-frequency histogram of black crappie released by all anglers.

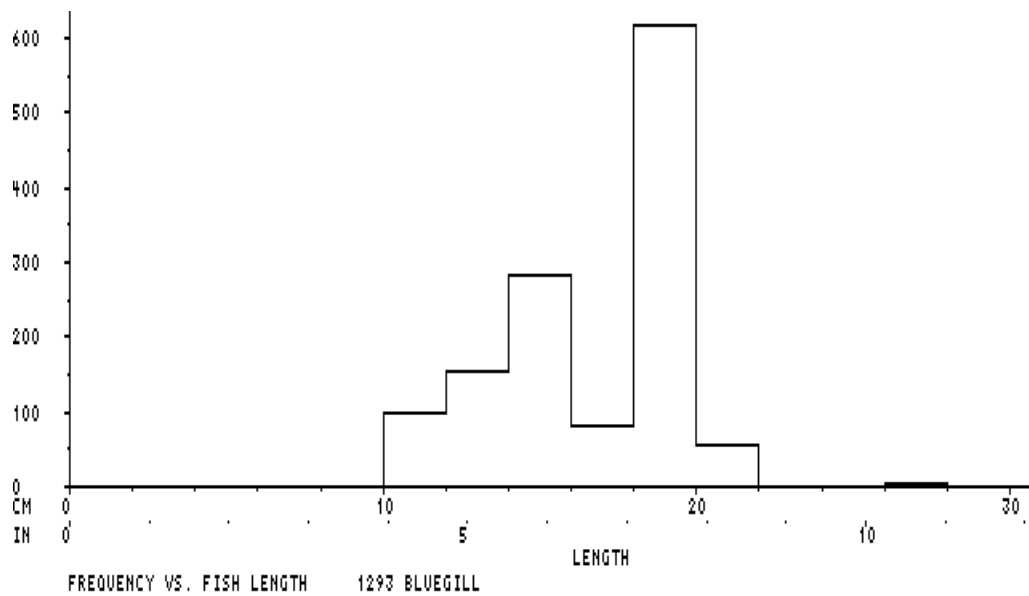


Figure 3. Lake Glendale 1999 day creel 3/15 through 10/31. Length-frequency histogram of bluegill harvested by all anglers.

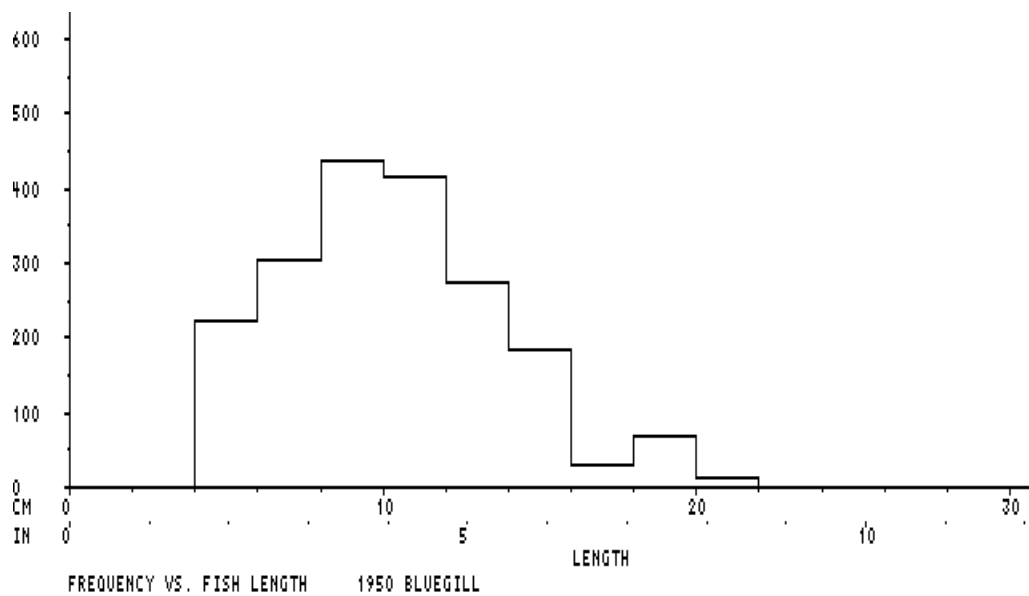


Figure 4. Lake Glendale 1999 day creel 3/15 through 10/31. Length-frequency histogram of bluegill released by all anglers.

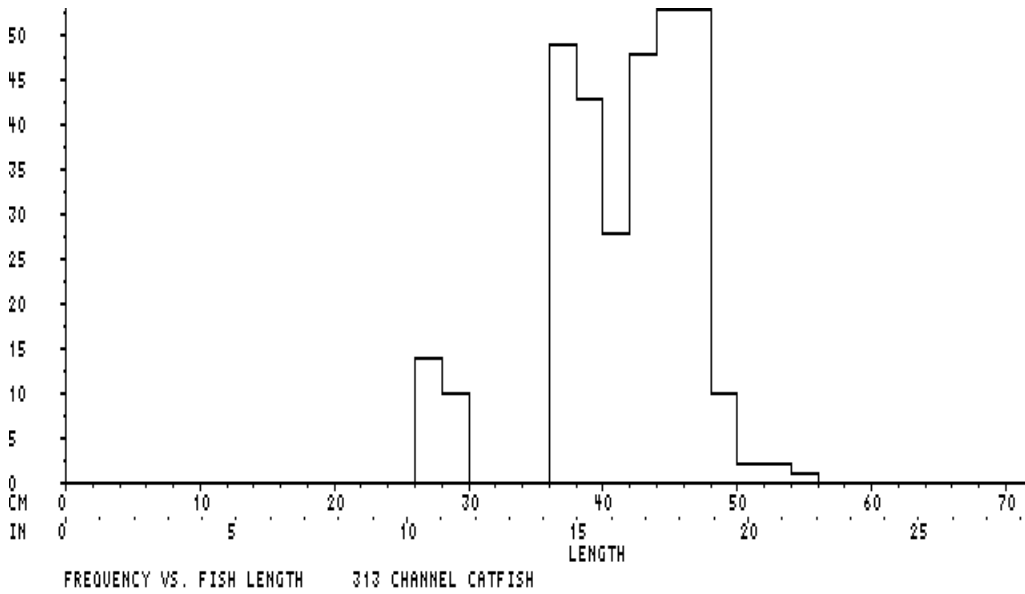


Figure 5. Lake Glendale 1999 day creel 3/15 through 10/31. Length-frequency histogram of channel catfish harvested by all anglers.

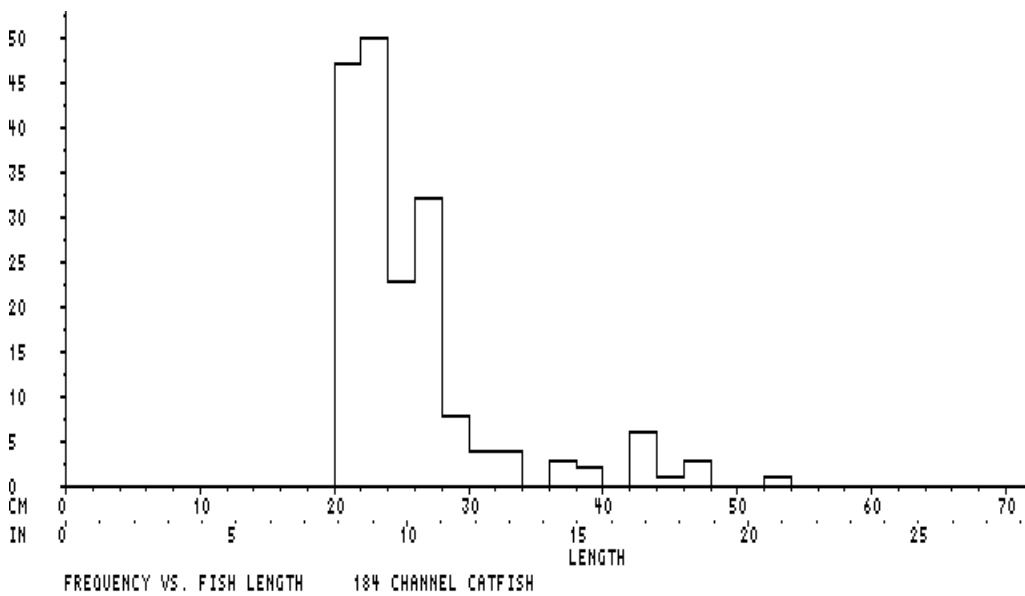


Figure 6. Lake Glendale 1999 day creel 3/15 through 10/31. Length-frequency histogram of channel catfish released by all anglers.

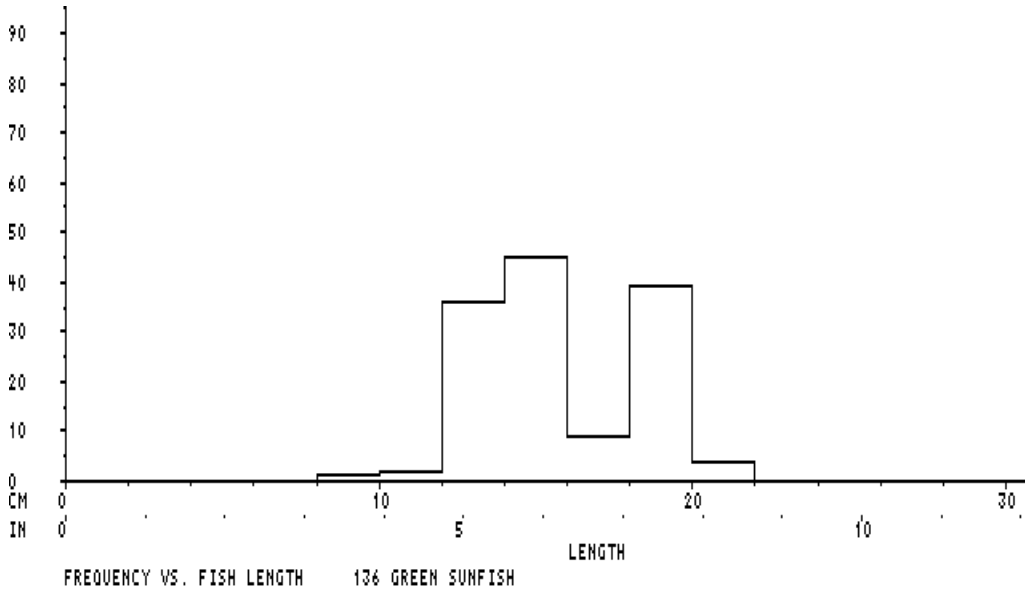


Figure 7. Lake Glendale 1999 day creel 3/15 through 10/31. Length-frequency histogram of green sunfish harvested by all anglers.

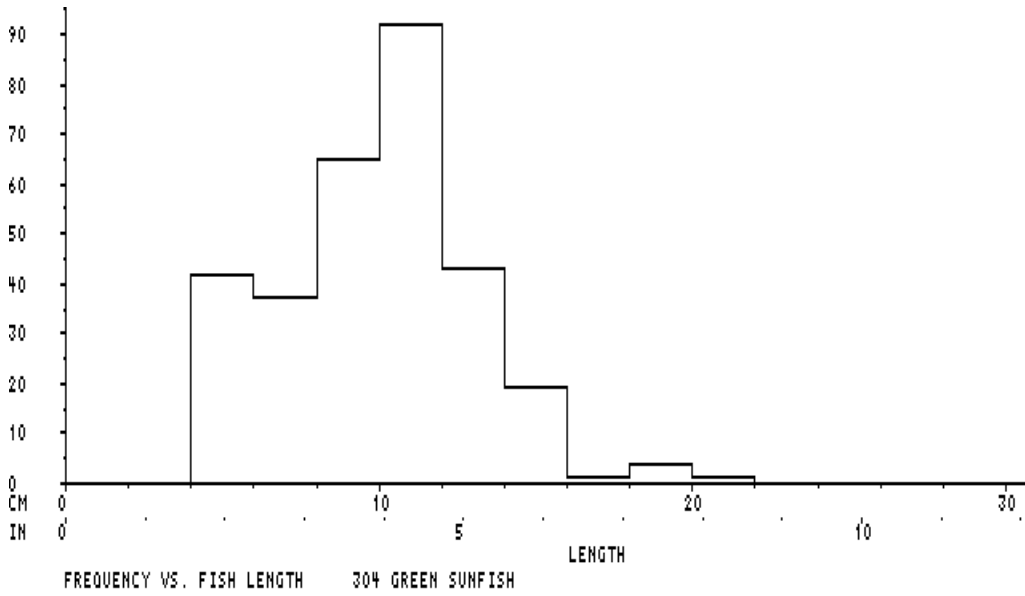


Figure 8. Lake Glendale 1999 day creel 3/15 through 10/31. Length-frequency histogram of green sunfish released by all anglers.

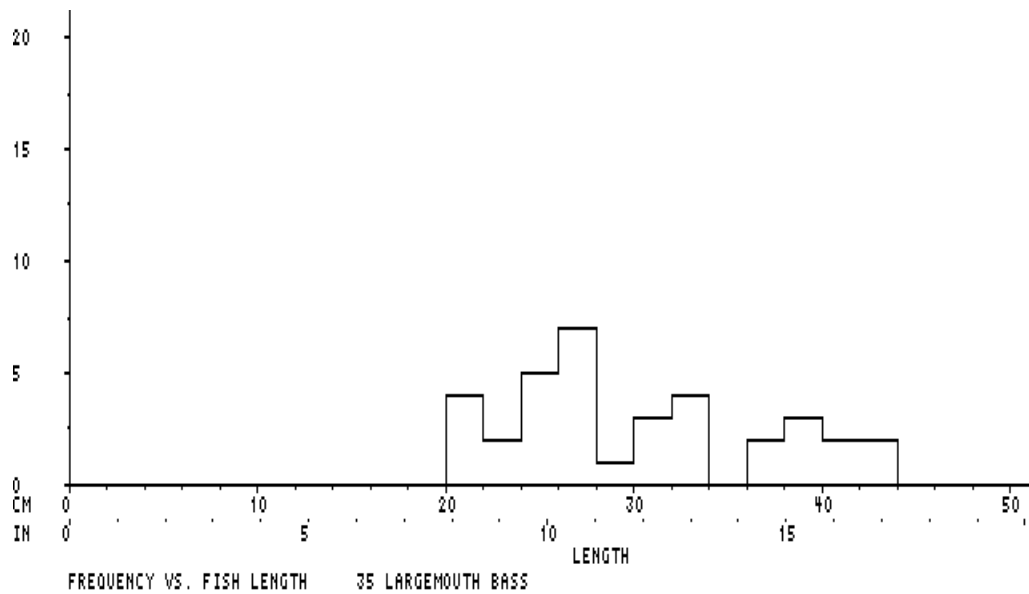


Figure 9. Lake Glendale 1999 day creel 3/15 through 10/31. Length-frequency histogram of largemouth bass harvested by all anglers.

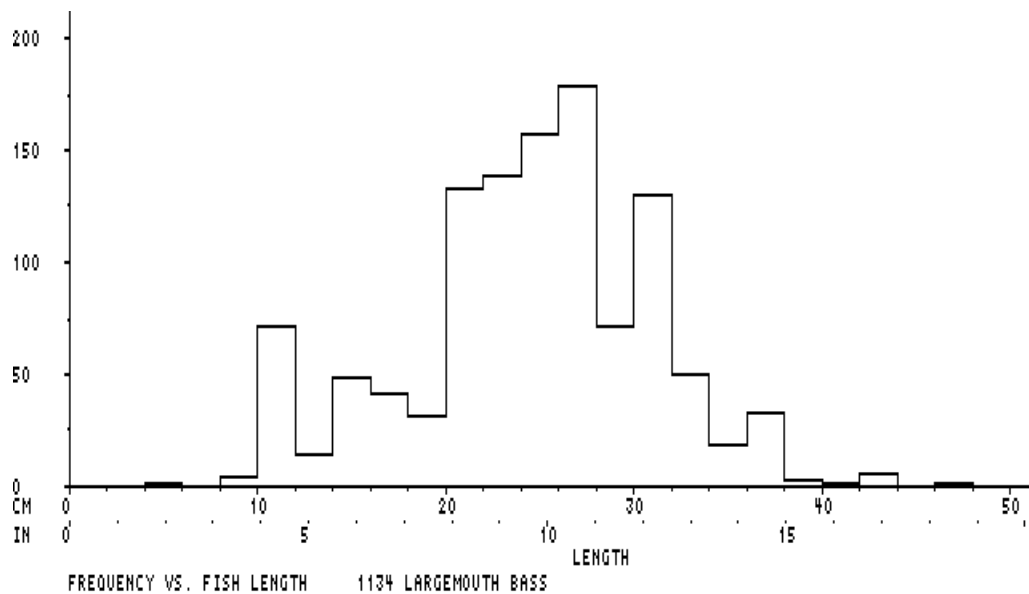


Figure 10. Lake Glendale 1999 day creel 3/15 through 10/31. Length-frequency histogram of largemouth bass released by all anglers. Note the difference in scale from Figure 9.

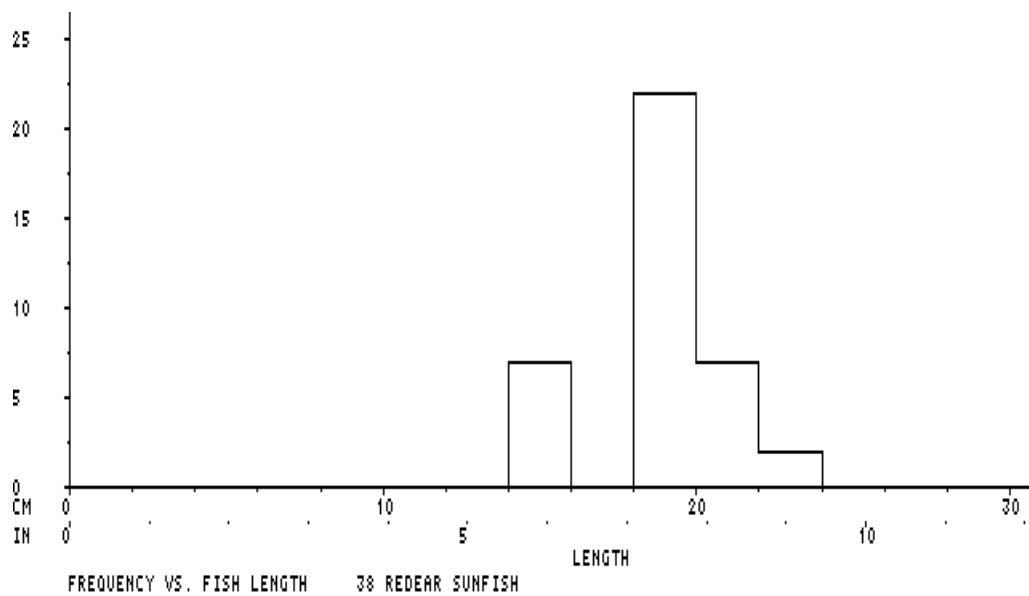


Figure 11. Lake Glendale 1999 day creel 3/15 through 10/31. Length-frequency histogram of redear sunfish harvested by all anglers.

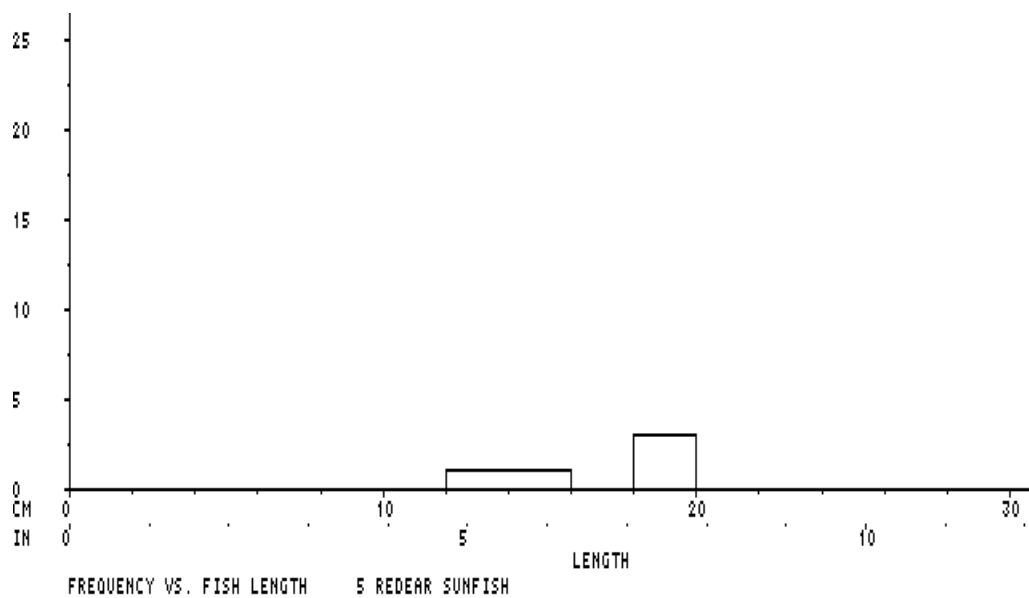


Figure 12. Lake Glendale 1999 day creel 3/15 through 10/31. Length-frequency histogram of redear sunfish released by all anglers.

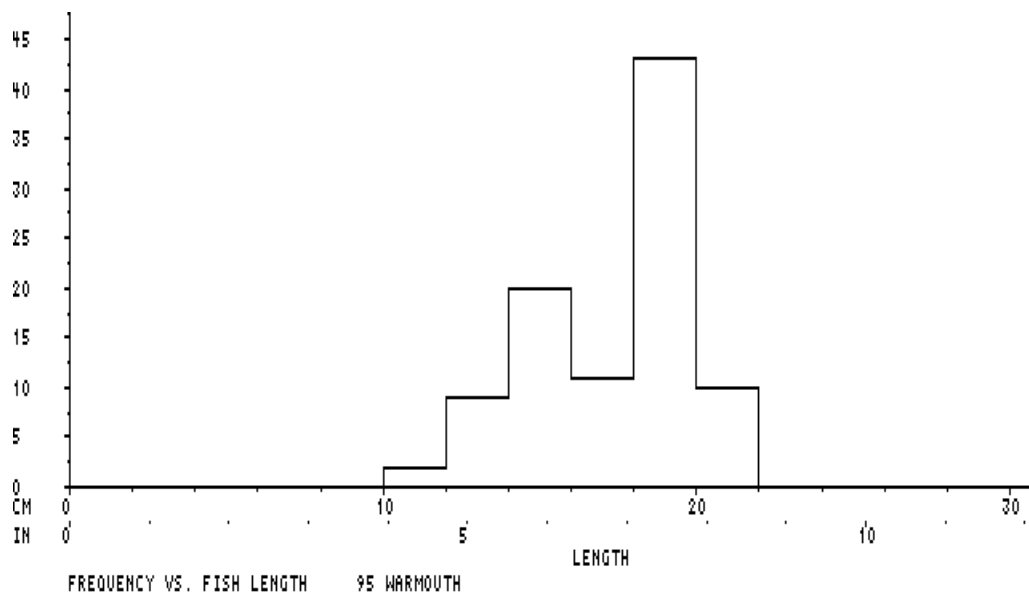


Figure 13. Lake Glendale 1999 day creel 3/15 through 10/31. Length-frequency histogram of warmouth harvested by all anglers.

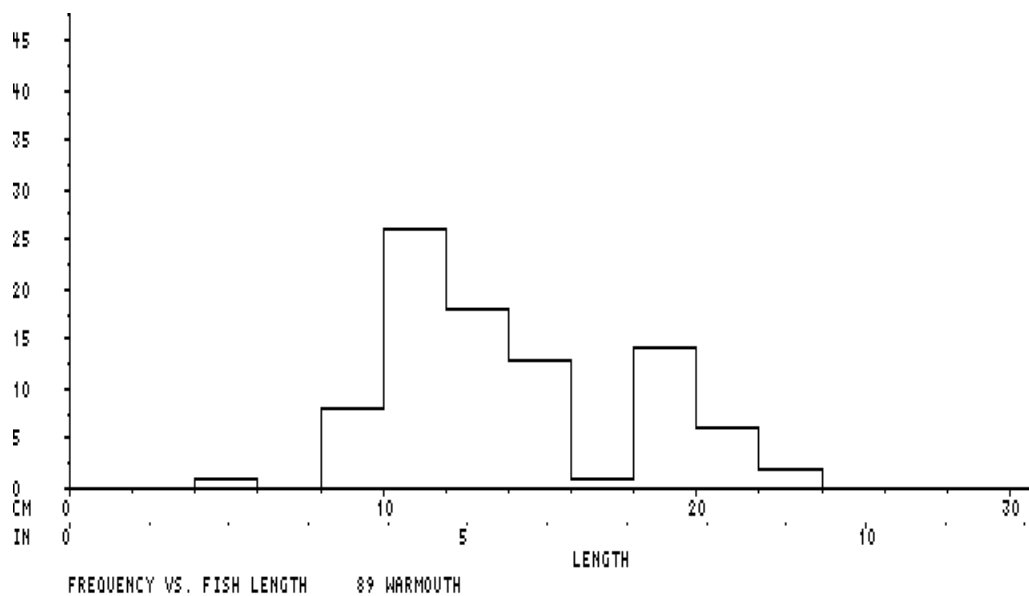


Figure 14. Lake Glendale 1999 day creel 3/15 through 10/31. Length-frequency histogram of warmouth released by all anglers.