

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

**2000-2001 LAKE SANGCHRIS**  
 2165 ACRES  
 REGION 4, DISTRICT 15

STRATIFICATION SUMMARY:

Day creel only.  
 Results cover **03/15/2000 through 02/15/2001**  
 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: 517/1014 = 51.0%

NUMBER OF INTERVIEWS: 5007

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	46241	40477-52005 ( 12%)	21	19-24 ( 12%)	10%
	HOLIDAY	57749	49373-66126 ( 15%)	27	23-31 ( 15%)	27%
	TOTAL	103991	93822-114159 ( 10%)	48	43-53 ( 10%)	19%
SHORE	WEEKDAY	11562	9656-13467 ( 16%)	5	4-6 ( 16%)	7%
	HOLIDAY	16864	13279-20450 ( 21%)	8	6-9 ( 21%)	18%
	TOTAL	28426	24366-32486 ( 14%)	13	11-15 ( 14%)	13%
BOAT & SHORE	WEEKDAY	57803	51732-63874 ( 11%)	27	24-30 ( 11%)	10%
	HOLIDAY	74614	65502-83726 ( 12%)	34	30-39 ( 12%)	24%
	TOTAL	132416	121467-143366 ( 8%)	61	56-66 ( 8%)	18%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
52902	45843-59961 ( 13%)	.369	.312-.426 ( 15%)	60.38	24.44	All species
264	137-391 ( 48%)	.002	.000-.003 ( 78%)	0.30	0.12	Bluegill x Green sun
		****	NOT RECORDED			Black bullhead
2373	1485-3261 ( 37%)	.012	.008-.017 ( 39%)	2.71	1.10	Black crappie
7763	6036-9491 ( 22%)	.062	.046-.078 ( 26%)	8.86	3.59	Bluegill
392	129-655 ( 67%)	.002	.001-.004 ( 76%)	0.45	0.18	Carp
8063	6788-9339 ( 16%)	.053	.041-.065 ( 23%)	9.20	3.72	Channel catfish
330	207-454 ( 37%)	.001	.000-.003 (123%)	0.38	0.15	Flathead catfish
129	39-219 ( 69%)	.000	.000-.001 ( 78%)	0.15	0.06	Freshwater drum
422	109-736 ( 74%)	.007	.000-.014 (109%)	0.48	0.20	Green sunfish
773	82-1465 ( 89%)	.003	.000-.006 (109%)	0.88	0.36	Gizzard shad
2294	1692-2896 ( 26%)	.015	.008-.021 ( 44%)	2.62	1.06	Largemouth bass
1604	817-2392 ( 49%)	.019	.007-.031 ( 64%)	1.83	0.74	Striped bass
1747	610-2884 ( 65%)	.007	.001-.014 ( 92%)	1.99	0.81	Threadfin shad
6	0-18 (216%)	.000	.000-.000 (216%)	0.01	0.00	Warmouth
2360	1199-3521 ( 49%)	.026	.007-.045 ( 73%)	2.69	1.09	White bass
22907	17578-28237 ( 23%)	.147	.111-.183 ( 25%)	26.14	10.58	White crappie
153	28-277 ( 81%)	.001	.000-.001 ( 89%)	0.17	0.07	Yellow bullhead
1320	856-1784 ( 35%)	.011	.007-.015 ( 40%)	1.51	0.61	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
15235	12104-18367 ( 21%)	.111	.078-.143 ( 30%)	17.39	0.288	All species
44	21-66 ( 51%)	.000	.000-.001 (101%)	0.05	0.166	Bluegill x Green sun
		****	NOT RECORDED			Black bullhead
535	305-765 ( 43%)	.003	.002-.004 ( 37%)	0.61	0.225	Black crappie
438	330-547 ( 25%)	.004	.003-.005 ( 27%)	0.50	0.056	Bluegill
334	74-593 ( 78%)	.002	.000-.004 ( 87%)	0.38	0.851	Carp
2089	1728-2451 ( 17%)	.012	.009-.014 ( 21%)	2.38	0.259	Channel catfish
415	241-588 ( 42%)	.001	.000-.002 ( 83%)	0.47	1.255	Flathead catfish
26	6-46 ( 75%)	.000	.000-.000 ( 97%)	0.03	0.203	Freshwater drum
15	3-26 ( 78%)	.000	.000-.001 (115%)	0.02	0.035	Green sunfish
24	0-48 (100%)	.000	.000-.000 (108%)	0.03	0.031	Gizzard shad
1549	1078-2020 ( 30%)	.008	.002-.015 ( 79%)	1.77	0.675	Largemouth bass
3129	1168-5089 ( 63%)	.037	.009-.065 ( 76%)	3.57	1.950	Striped bass
		****	NOT RECORDED			Threadfin shad
1	0-4 (214%)	.000	.000-.000 (216%)	0.00	0.197	Warmouth
754	384-1124 ( 49%)	.008	.002-.014 ( 79%)	0.86	0.320	White bass
5767	3910-7623 ( 32%)	.034	.025-.044 ( 27%)	6.58	0.252	White crappie
42	9-75 ( 78%)	.000	.000-.000 ( 86%)	0.05	0.277	Yellow bullhead
74	47-101 ( 36%)	.001	.000-.001 ( 41%)	0.08	0.056	Yellow bass

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

LB HARVESTED	95% CI		LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
33588	26684-40492	( 21%)	.244	.171-.316 ( 30%)	15.51	0.635	All species
97	47-146	( 51%)	.001	.000-.002 (101%)	0.04	0.366	Bluegill x Green sun
			****	NOT RECORDED	****		Black bullhead
1179	672-1686	( 43%)	.006	.004-.008 ( 37%)	0.54	0.497	Black crappie
967	727-1206	( 25%)	.008	.006-.010 ( 27%)	0.45	0.125	Bluegill
735	164-1307	( 78%)	.005	.001-.009 ( 87%)	0.34	1.876	Carp
4606	3809-5403	( 17%)	.026	.021-.032 ( 21%)	2.13	0.571	Channel catfish
914	532-1297	( 42%)	.003	.000-.005 ( 83%)	0.42	2.767	Flathead catfish
58	14-101	( 75%)	.000	.000-.000 ( 97%)	0.03	0.447	Freshwater drum
33	7-58	( 78%)	.001	.000-.001 (115%)	0.02	0.077	Green sunfish
53	0-105	(100%)	.000	.000-.000 (108%)	0.02	0.068	Gizzard shad
3414	2377-4452	( 30%)	.018	.004-.032 ( 79%)	1.58	1.488	Largemouth bass
6897	2575-11220	( 63%)	.082	.020-.144 ( 76%)	3.19	4.300	Striped bass
			****	NOT RECORDED	****		Threadfin shad
3	0-8	(214%)	.000	.000-.000 (216%)	0.00	0.434	Warmouth
1663	847-2479	( 49%)	.017	.004-.030 ( 79%)	0.77	0.705	White bass
12713	8620-16806	( 32%)	.076	.055-.096 ( 27%)	5.87	0.555	White crappie
93	20-166	( 78%)	.000	.000-.001 ( 86%)	0.04	0.610	Yellow bullhead
164	104-223	( 36%)	.001	.001-.002 ( 41%)	0.08	0.124	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
298544	270663-326424 ( 9%)	1.963	1.742-2.185 ( 11%)	340.74	137.90	All species
948	385-1510 ( 59%)	.004	.002-.007 ( 58%)	1.08	0.44	Bluegill x Green sun
36	0-82 (127%)	.000	.000-.000 (126%)	0.04	0.02	Black bullhead
9636	6831-12441 ( 29%)	.071	.000-.162 (127%)	11.00	4.45	Black crappie
67523	59686-75359 ( 12%)	.521	.450-.593 ( 14%)	77.07	31.19	Bluegill
646	361-930 ( 44%)	.003	.001-.005 ( 58%)	0.74	0.30	Carp
29757	26163-33352 ( 12%)	.188	.163-.214 ( 13%)	33.96	13.74	Channel catfish
611	400-822 ( 35%)	.003	.001-.005 ( 65%)	0.70	0.28	Flathead catfish
3031	2239-3822 ( 26%)	.020	.014-.026 ( 30%)	3.46	1.40	Freshwater drum
1796	1066-2526 ( 41%)	.017	.007-.026 ( 57%)	2.05	0.83	Green sunfish
780	89-1472 ( 89%)	.003	.000-.006 (109%)	0.89	0.36	Gizzard shad
69096	61258-76934 ( 11%)	.315	.280-.351 ( 11%)	78.86	31.91	Largemouth bass
4803	2629-6977 ( 45%)	.051	.026-.076 ( 50%)	5.48	2.22	Striped bass
1747	610-2884 ( 65%)	.007	.001-.014 ( 92%)	1.99	0.81	Threadfin shad
493	356-631 ( 28%)	.002	.001-.003 ( 46%)	0.56	0.23	Warmouth
6319	4516-8123 ( 29%)	.055	.028-.082 ( 50%)	7.21	2.92	White bass
85941	69184-102699 ( 19%)	.561	.415-.707 ( 26%)	98.09	39.70	White crappie
1179	778-1580 ( 34%)	.006	.003-.009 ( 47%)	1.35	0.54	Yellow bullhead
14202	10691-17712 ( 25%)	.134	.067-.202 ( 50%)	16.21	6.56	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
56265	49773-62758 ( 12%)	.323	.269-.376 ( 17%)	64.22	0.188	All species
80	40-120 ( 50%)	.000	.000-.001 ( 80%)	0.09	0.085	Bluegill x Green sun
6	0-14 (127%)	.000	.000-.000 (105%)	0.01	0.169	Black bullhead
1096	744-1448 ( 32%)	.007	.001-.013 ( 79%)	1.25	0.114	Black crappie
3337	1633-5042 ( 51%)	.032	.002-.061 ( 94%)	3.81	0.049	Bluegill
455	187-723 ( 59%)	.002	.001-.004 ( 73%)	0.52	0.704	Carp
3541	3040-4041 ( 14%)	.021	.017-.024 ( 16%)	4.04	0.119	Channel catfish
519	311-727 ( 40%)	.002	.001-.003 ( 65%)	0.59	0.850	Flathead catfish
574	437-711 ( 24%)	.004	.002-.005 ( 52%)	0.66	0.189	Freshwater drum
46	27-65 ( 41%)	.001	.000-.001 ( 63%)	0.05	0.026	Green sunfish
25	1-49 ( 97%)	.000	.000-.000 (107%)	0.03	0.032	Gizzard shad
28600	24918-32281 ( 13%)	.112	.096-.128 ( 15%)	32.64	0.414	Largemouth bass
5485	2227-8743 ( 59%)	.060	.022-.098 ( 63%)	6.26	1.142	Striped bass
		****	NOT RECORDED	****		Threadfin shad
122	88-157 ( 28%)	.000	.000-.001 ( 40%)	0.14	0.248	Warmouth
1620	1108-2132 ( 32%)	.012	.006-.019 ( 54%)	1.85	0.256	White bass
9915	7348-12482 ( 26%)	.061	.046-.076 ( 24%)	11.32	0.115	White crappie
203	132-274 ( 35%)	.001	.001-.002 ( 57%)	0.23	0.172	Yellow bullhead
641	406-876 ( 37%)	.006	.002-.011 ( 63%)	0.73	0.045	Yellow bass

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

LB CAUGHT	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
124044	109730-138359 ( 12%)	.711	.593-.830 ( 17%)	57.30	0.415	All species
177	89-265 ( 50%)	.001	.000-.002 ( 80%)	0.08	0.187	Bluegill x Green sun
13	0-31 (127%)	.000	.000-.000 (105%)	0.01	0.372	Black bullhead
2416	1641-3191 ( 32%)	.016	.003-.028 ( 79%)	1.12	0.251	Black crappie
7358	3600-11115 ( 51%)	.070	.004-.135 ( 94%)	3.40	0.109	Bluegill
1002	412-1593 ( 59%)	.005	.001-.010 ( 73%)	0.46	1.553	Carp
7806	6702-8910 ( 14%)	.046	.038-.053 ( 16%)	3.61	0.262	Channel catfish
1145	687-1602 ( 40%)	.004	.001-.006 ( 65%)	0.53	1.873	Flathead catfish
1266	964-1568 ( 24%)	.008	.004-.012 ( 52%)	0.58	0.418	Freshwater drum
102	60-144 ( 41%)	.001	.000-.002 ( 63%)	0.05	0.057	Green sunfish
54	2-107 ( 97%)	.000	.000-.000 (107%)	0.03	0.070	Gizzard shad
63052	54935-71168 ( 13%)	.247	.211-.283 ( 15%)	29.12	0.913	Largemouth bass
12093	4910-19275 ( 59%)	.133	.048-.217 ( 63%)	5.59	2.518	Striped bass
		****	NOT RECORDED ****			Threadfin shad
269	194-345 ( 28%)	.001	.001-.001 ( 40%)	0.12	0.546	Warmouth
3572	2443-4700 ( 32%)	.027	.013-.042 ( 54%)	1.65	0.565	White bass
21859	16200-27518 ( 26%)	.135	.102-.168 ( 24%)	10.10	0.254	White crappie
448	292-603 ( 35%)	.003	.001-.004 ( 57%)	0.21	0.380	Yellow bullhead
1413	895-1930 ( 37%)	.014	.005-.023 ( 63%)	0.65	0.099	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	5.5	5.3-5.6	( 3%)	0.2	19.5	1248
SHORE	2.4	2.1-2.8	( 15%)	0.7	9.2	70
BOAT & SHORE	5.3	5.2-5.5	( 3%)	0.2	19.5	1318
MILES TRAVELED	21.9	21.2-22.6	( 3%)	1	265	3203
SUCCESS RATING (1-10)	4.7	4.6-4.8	( 2%)	1	10	3175

\*859 samples were from split interviews of completed trips.  
32.6% of all 4046 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 73 out of 4046 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	1110	1870	219	48	21		1	1		5
SHORE INTERVIEWS	204	243	157	105	34	12	2	10	1	2

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

1074 ( 26.5%)	ANY	All species
2 ( 0.0%)	BGH	Bluegill x Green sunfish hybrid
18 ( 0.4%)	BLG	Bluegill
9 ( 0.2%)	BSS	Black bass spp.
20 ( 0.5%)	CAP	Carp
406 ( 10.0%)	CCF	Channel catfish
437 ( 10.8%)	CRP	Crappie spp.
9 ( 0.2%)	FCF	Flathead catfish
1706 ( 42.2%)	LMB	Largemouth bass
99 ( 2.4%)	STB	Striped bass
21 ( 0.5%)	WHB	White bass
243 ( 6.0%)	WHC	White crappie



Table 11 (continued). 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+
White bass																
HARVEST	2342	21	4	6	1	2	2	-	-	2	-	-	-	-	-	-
RELEASE	2203	105	43	7	5	6	4	-	2	-	2	1	-	-	-	2
White crappie																
HARVEST	2098	62	51	33	32	35	15	14	12	14	10	1	-	2	-	1
RELEASE	1972	71	51	35	18	30	10	5	43	10	22	5	9	14	3	82
Yellow bullhead																
HARVEST	2380	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	2367	8	-	-	3	2	-	-	-	-	-	-	-	-	-	-
Yellow bass																
HARVEST	2373	4	2	1	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	2205	56	59	36	9	6	2	2	1	-	-	-	1	-	1	2

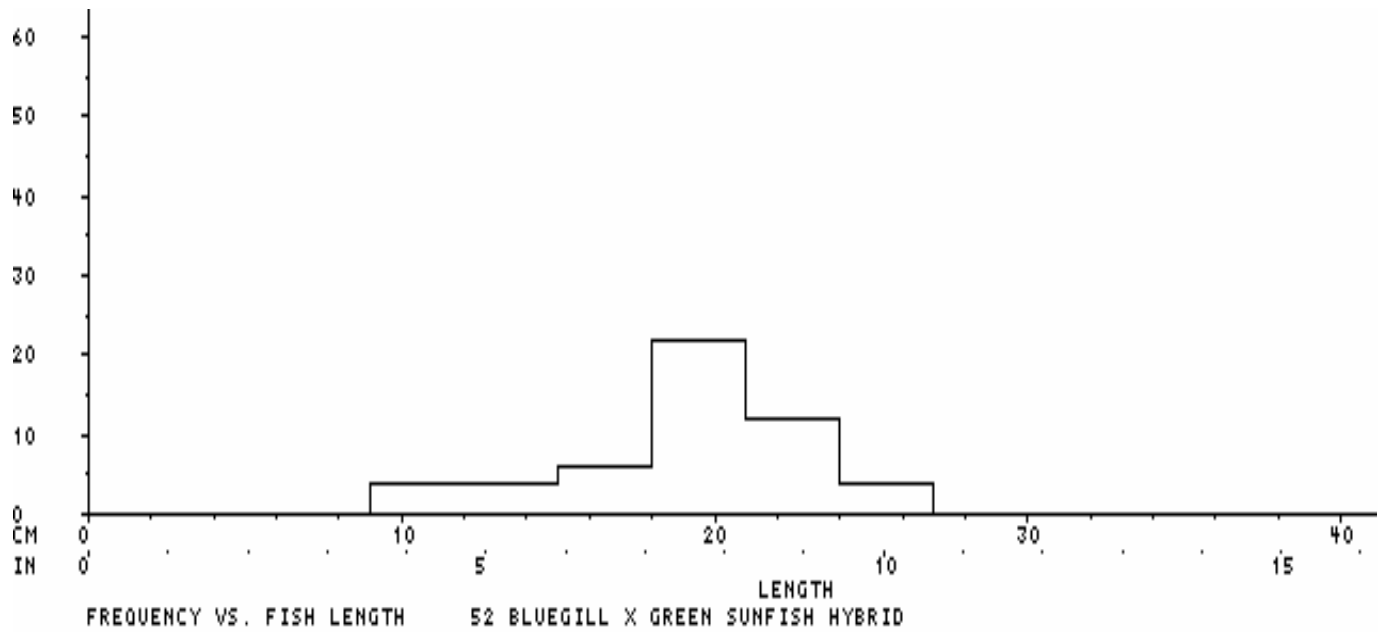


Figure 1. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of sunfish hybrid harvested by all anglers.

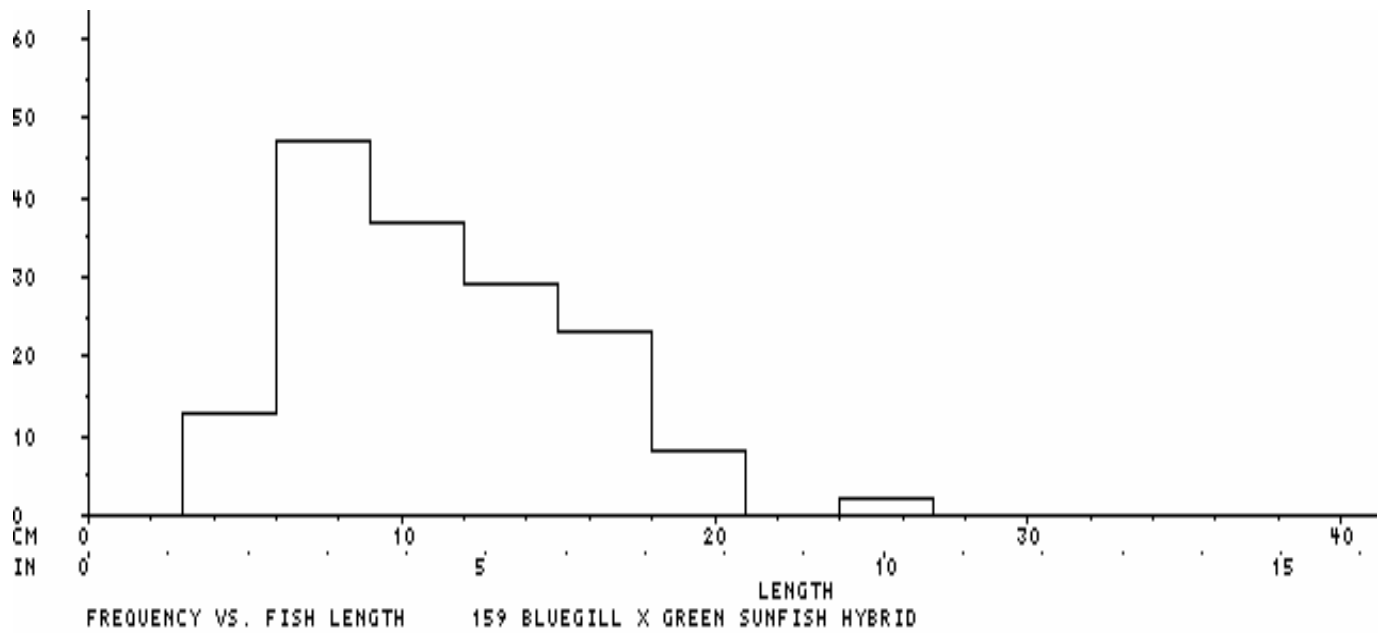


Figure 2. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of sunfish hybrid released by all anglers.

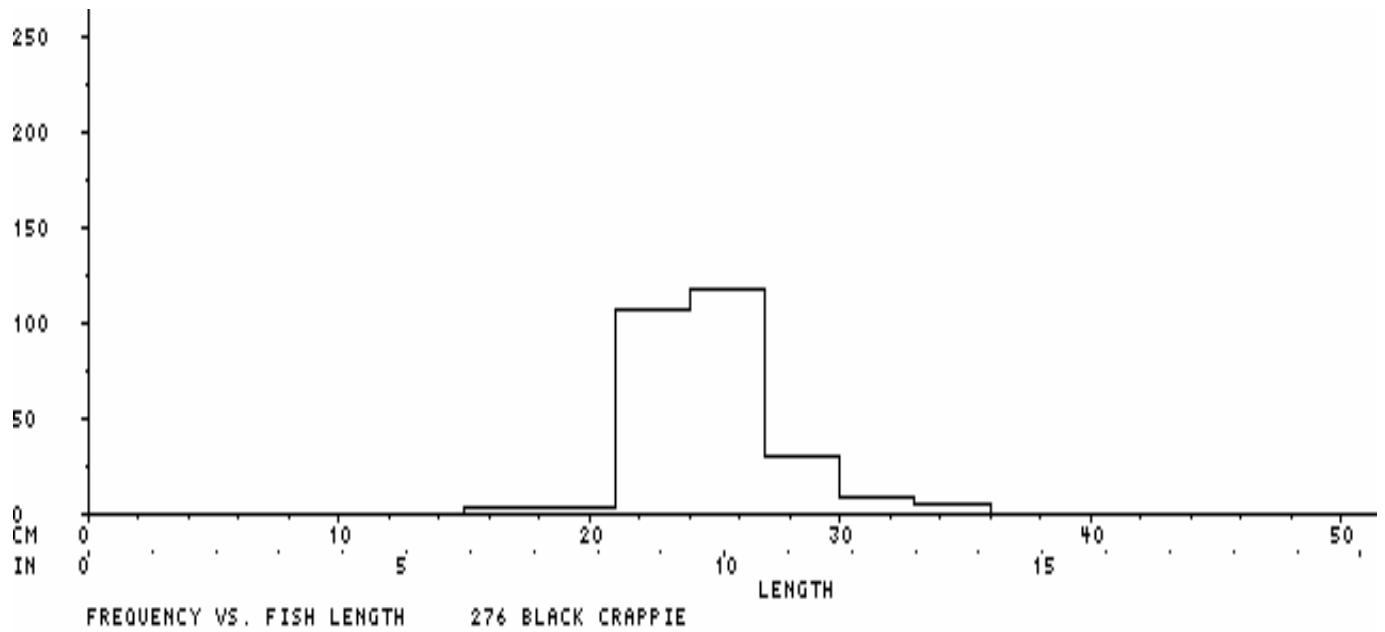


Figure 3. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of black crappie harvested by all anglers.

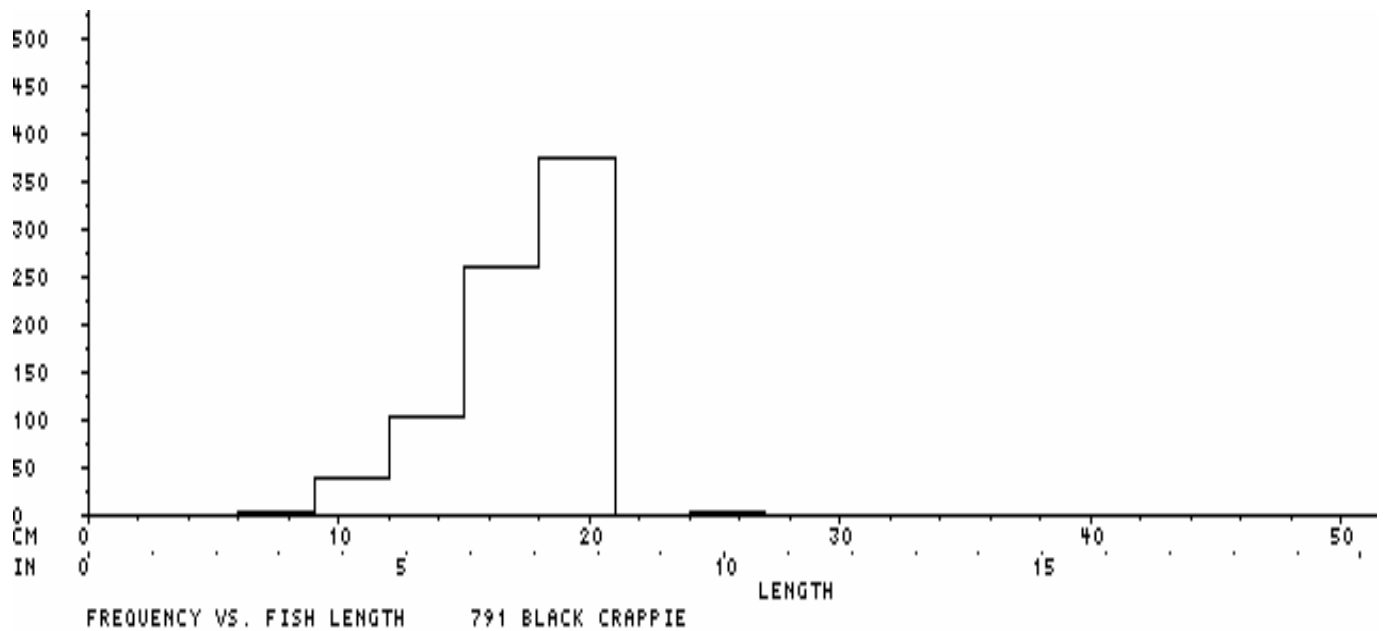


Figure 4. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of black crappie released by all anglers. Note the difference in scale from Figure 3.

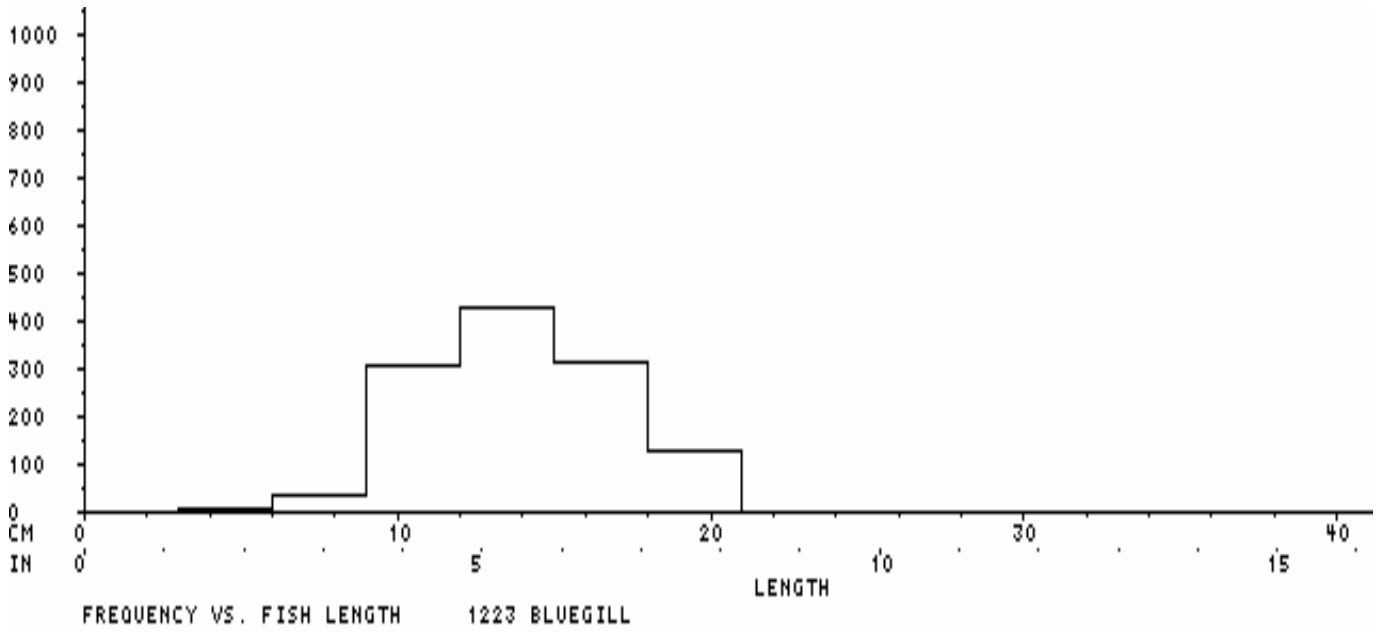


Figure 5. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of bluegill harvested by all anglers.

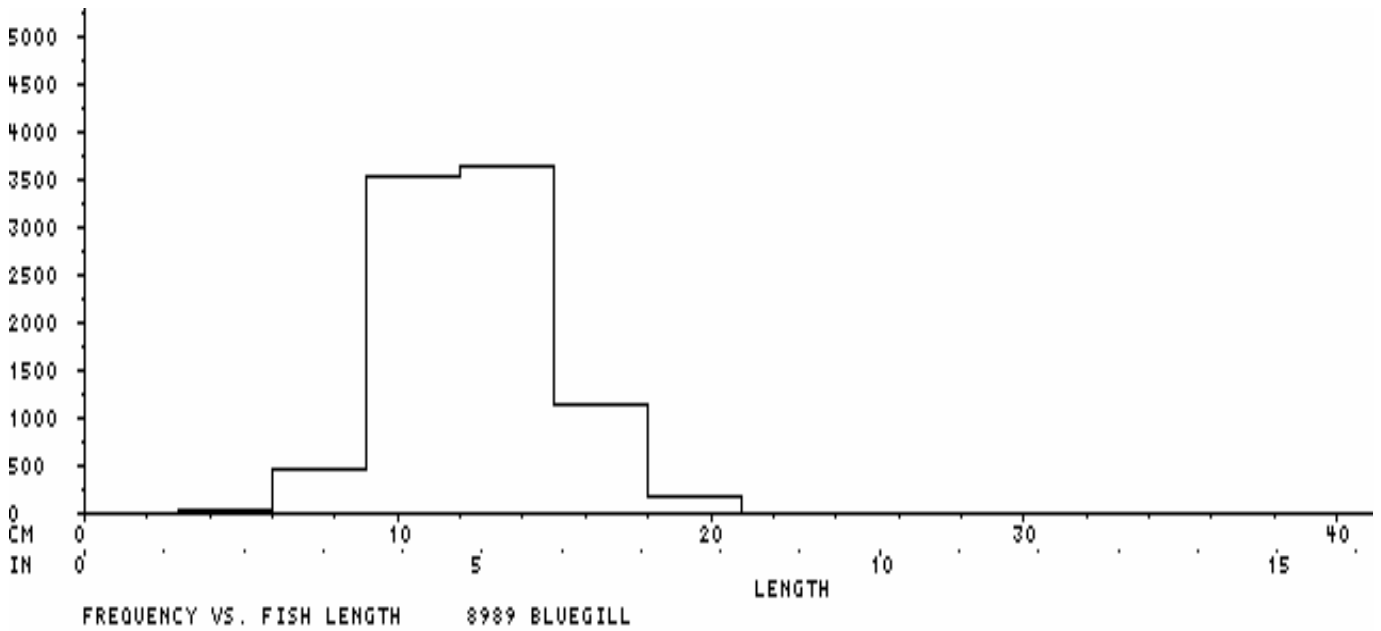


Figure 6. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of bluegill released by all anglers. Note the difference in scale from Figure 5.

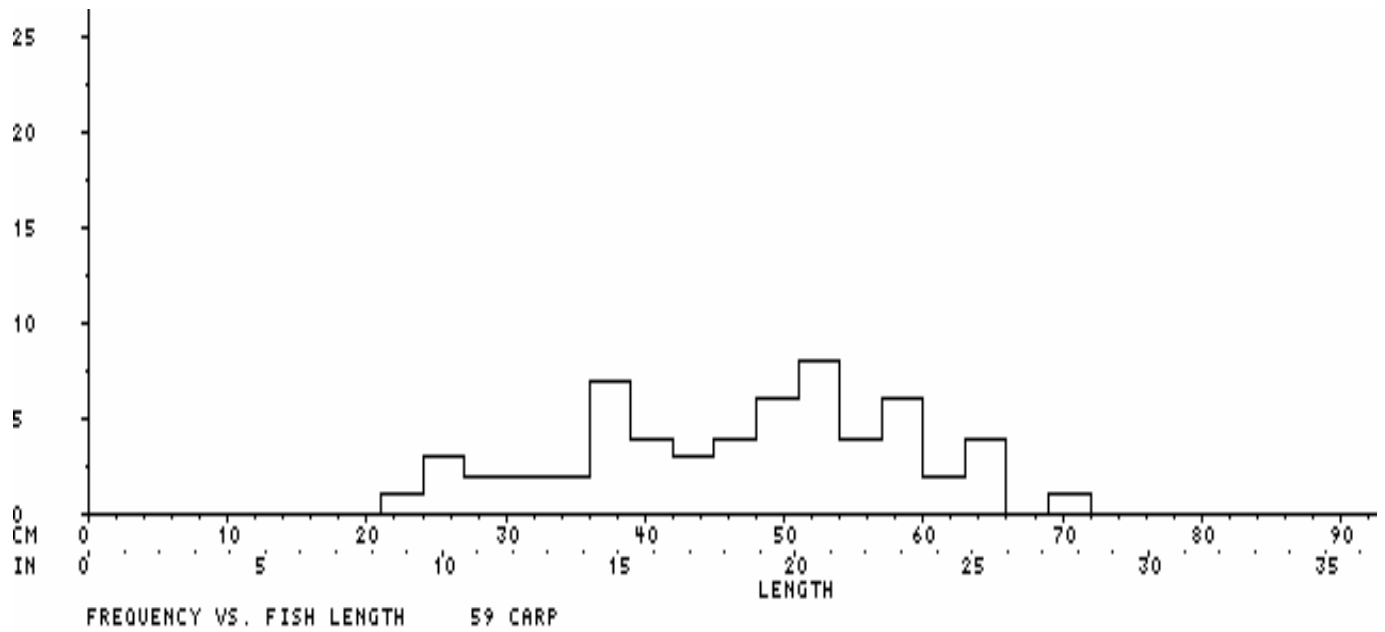


Figure 7. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of carp harvested by all anglers.

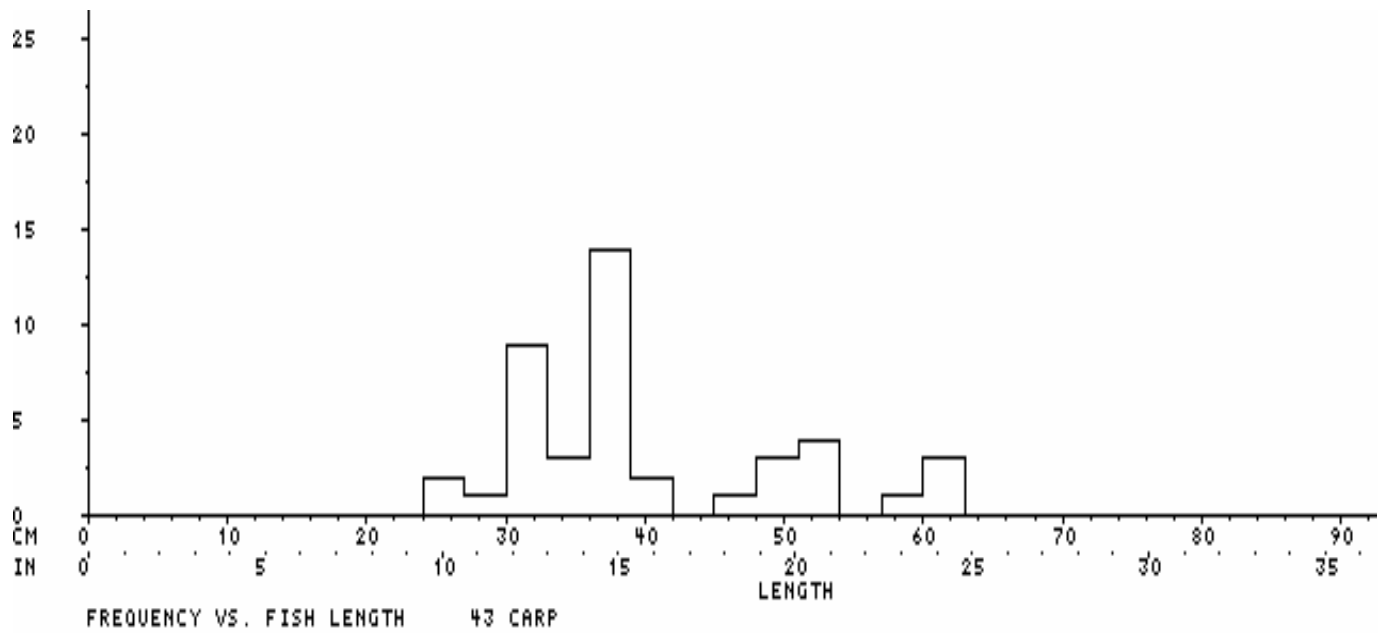


Figure 8. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of carp released by all anglers.

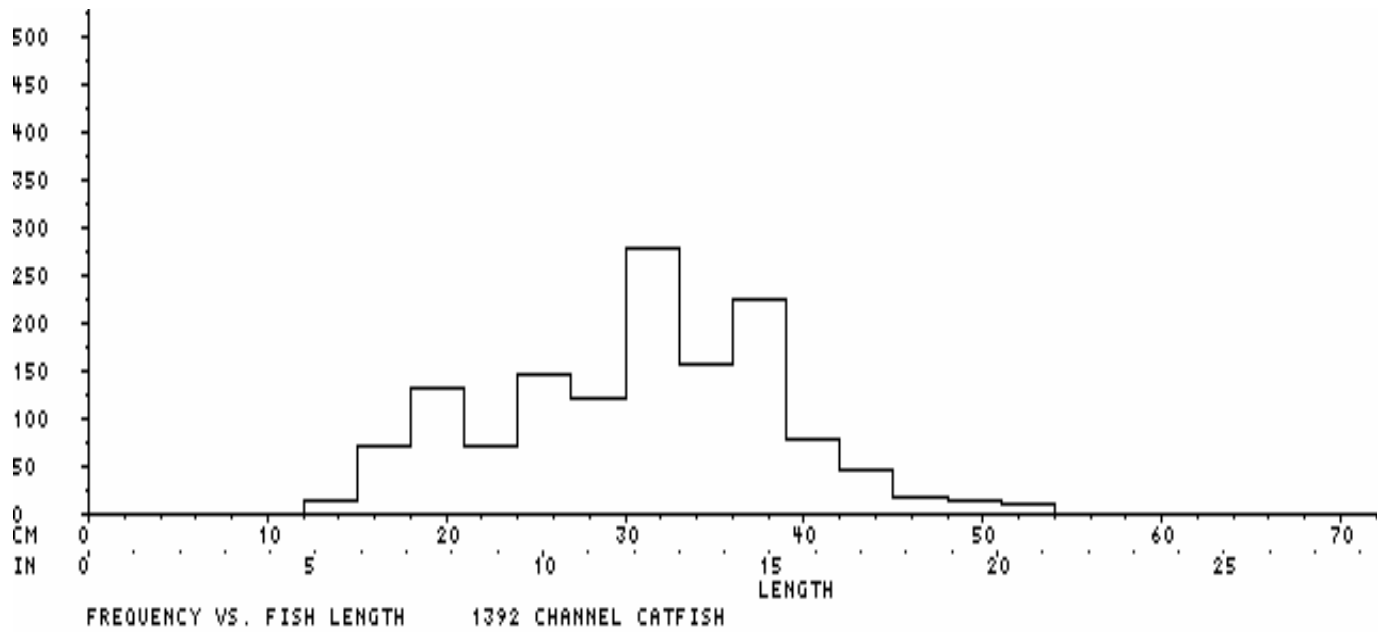


Figure 9. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of channel catfish harvested by all anglers.

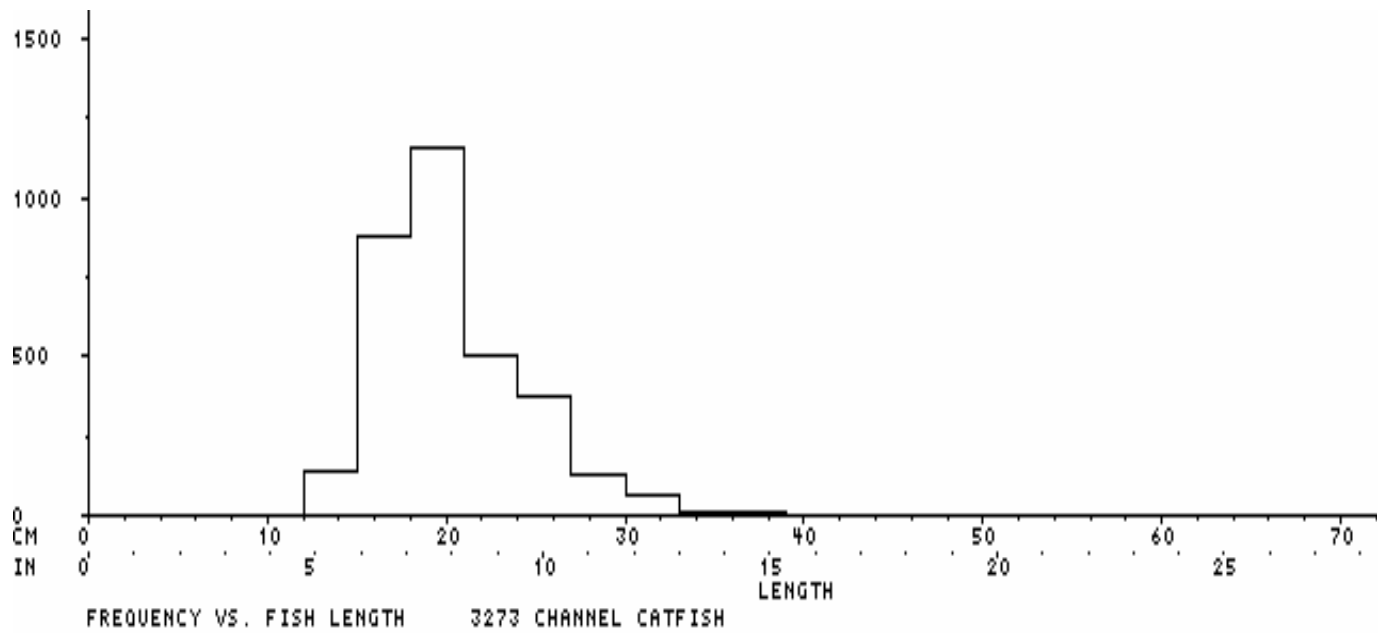


Figure 10. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of channel catfish released by all anglers. Note the difference in scale from Figure 9.

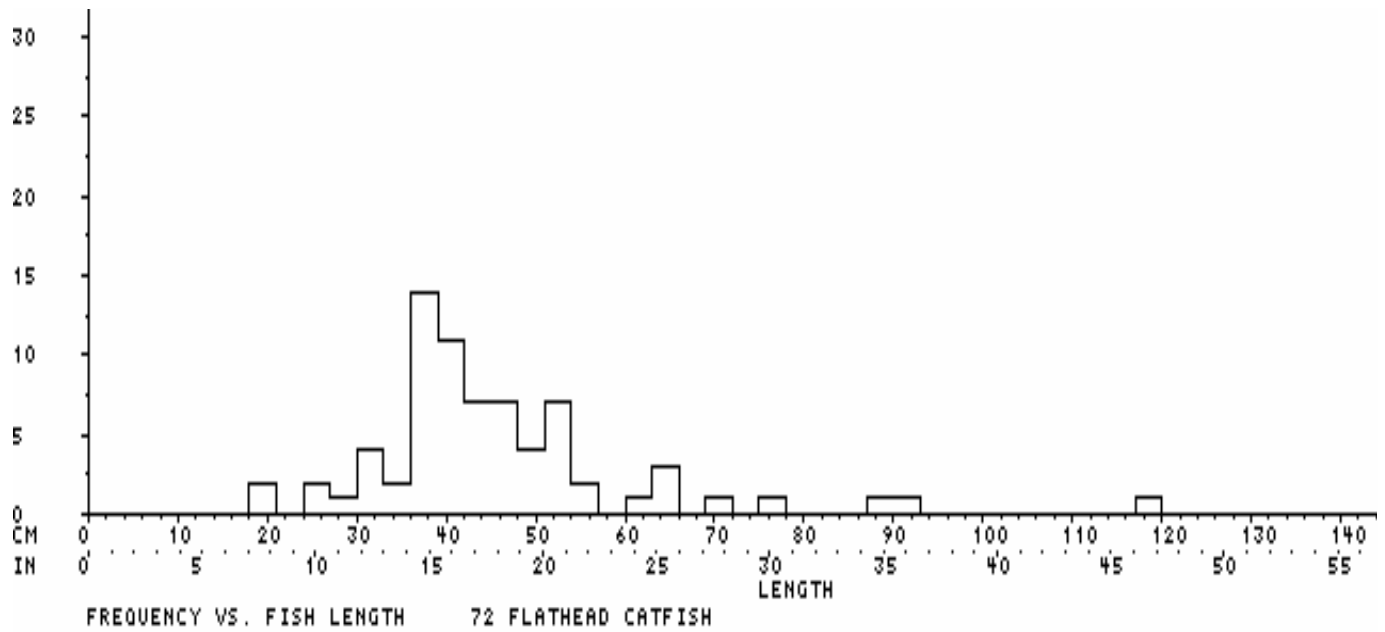


Figure 11. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of flathead catfish harvested by all anglers.

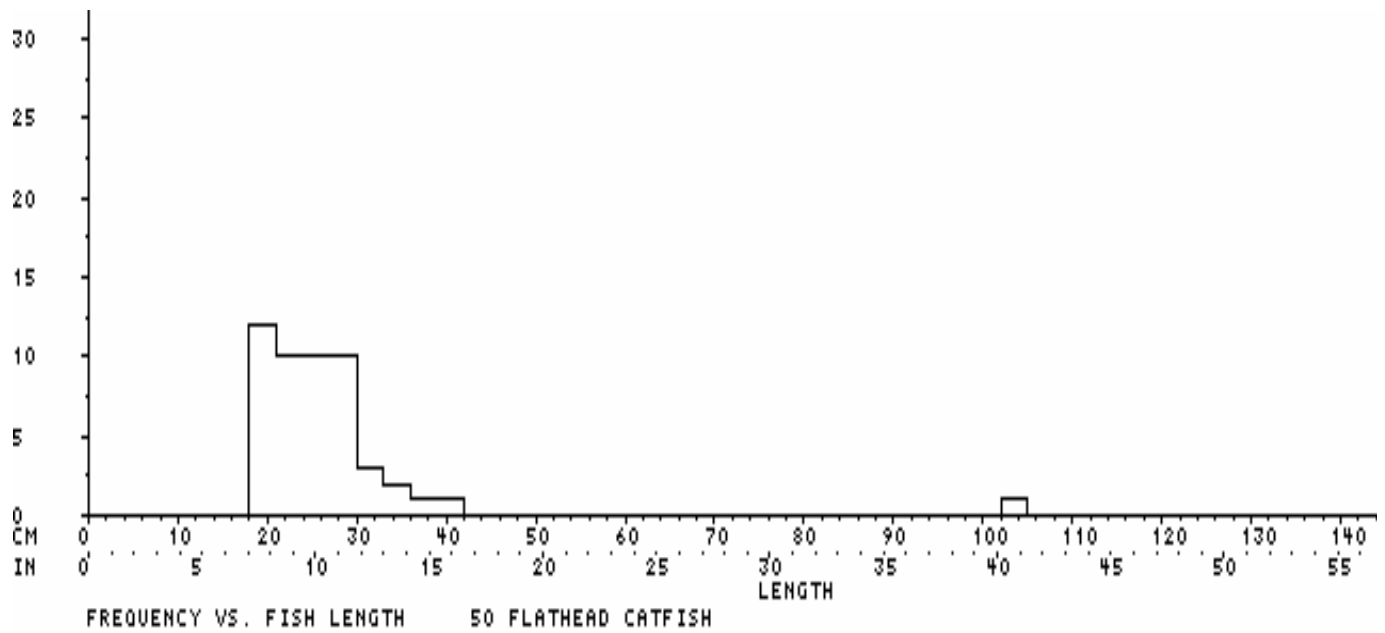


Figure 12. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of flathead catfish released by all anglers.

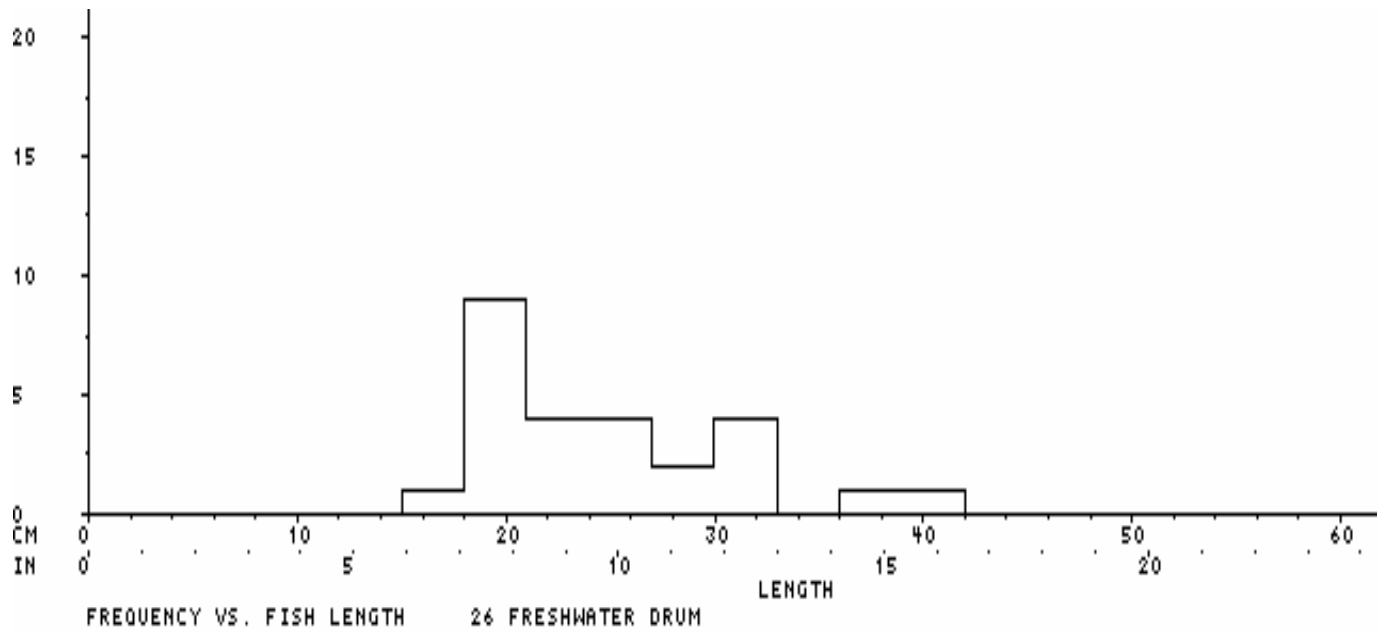


Figure 13. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of freshwater drum harvested by all anglers.

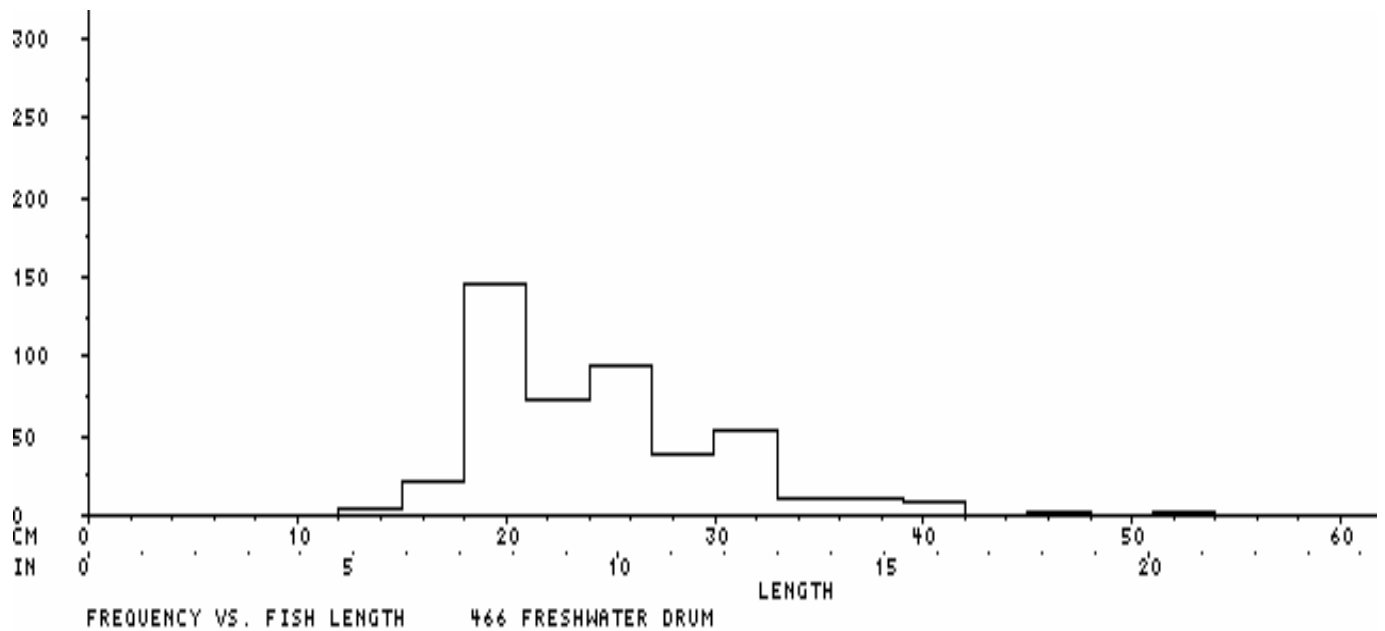


Figure 14. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of freshwater drum released by all anglers. Note the difference in scale from Figure 13.

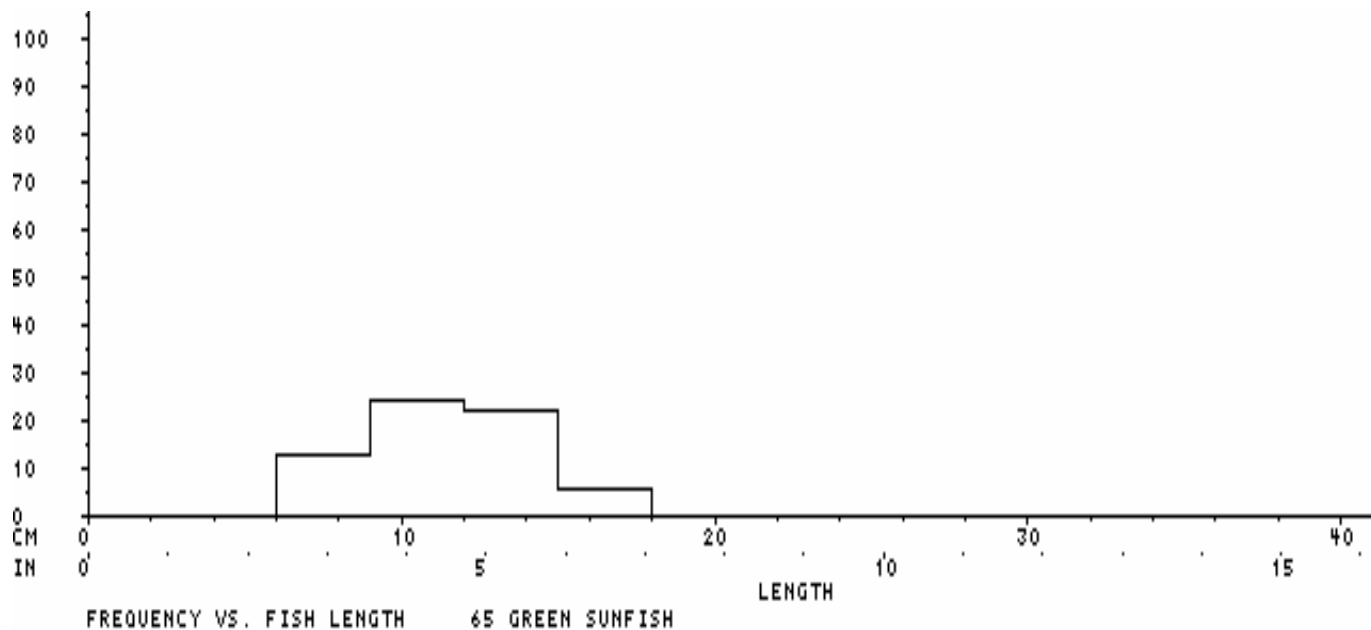


Figure 15. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of green sunfish harvested by all anglers.

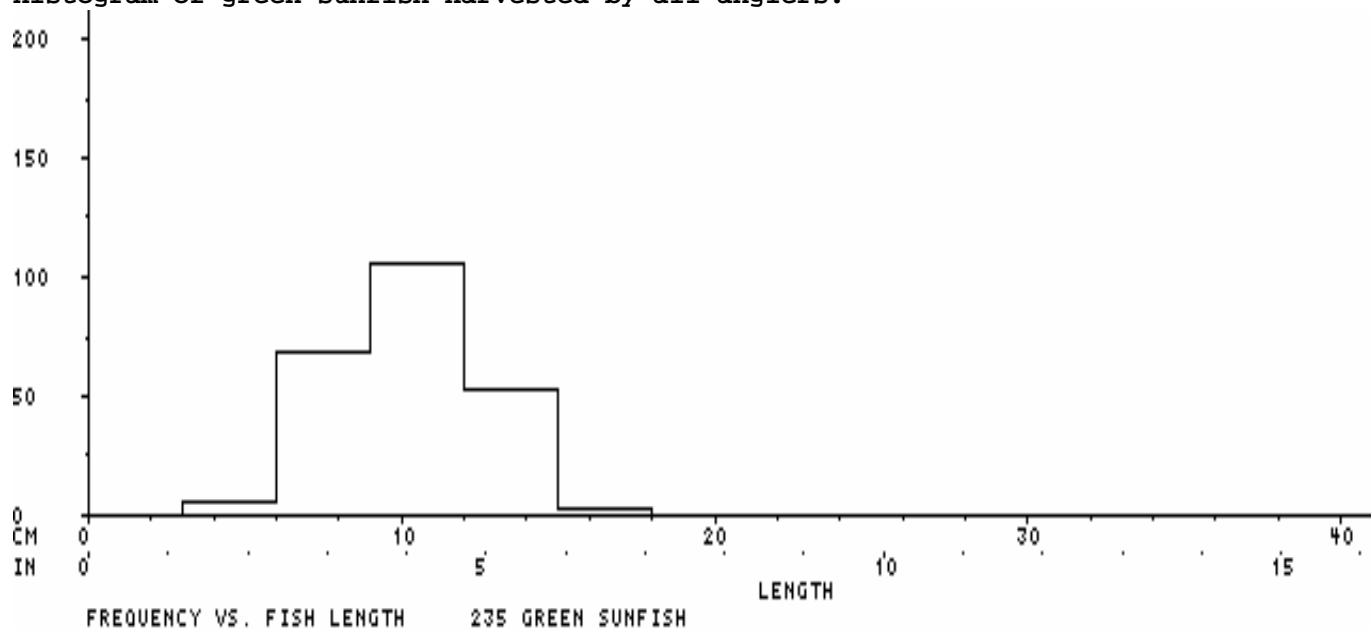


Figure 16. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of green sunfish released by all anglers. Note the difference in scale from Figure 15.

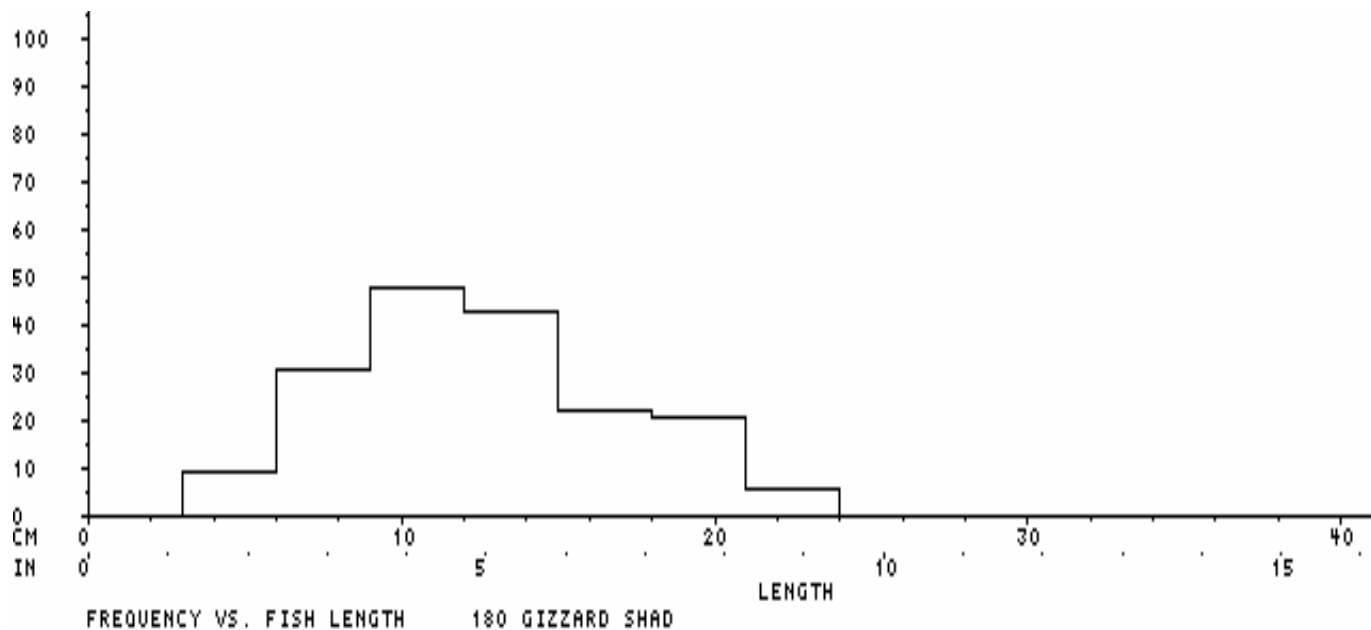


Figure 17. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of gizzard shad harvested by all anglers.

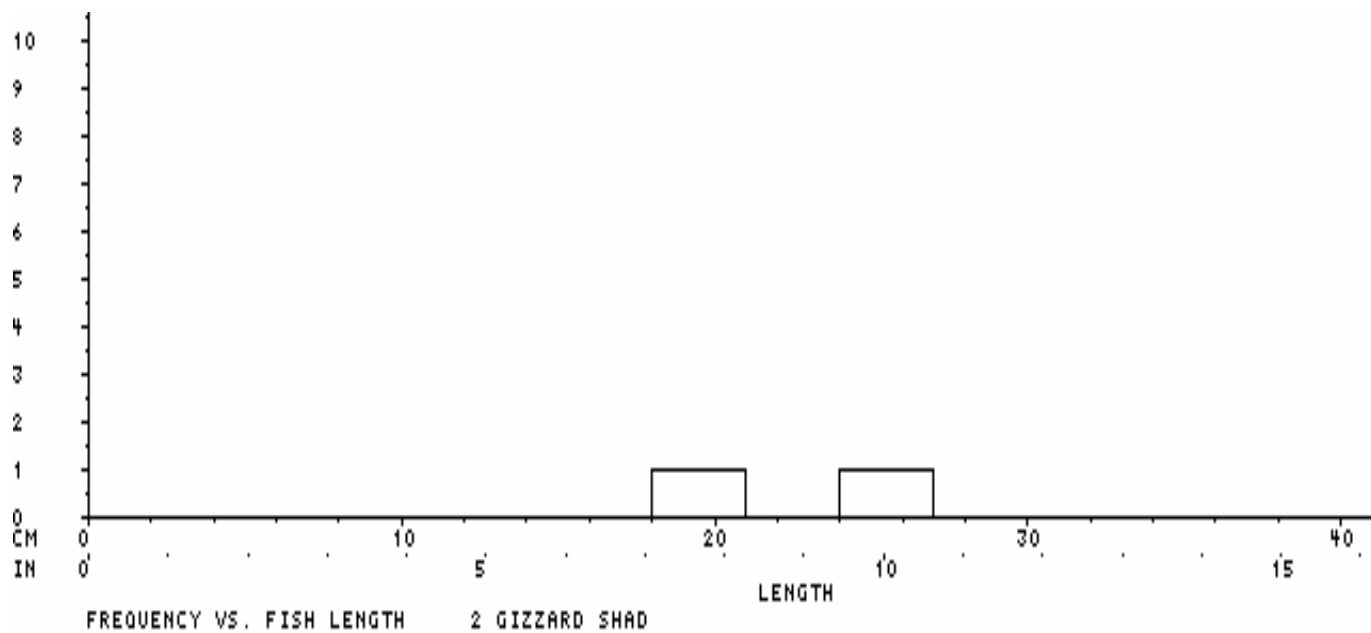


Figure 18. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of gizzard shad released by all anglers. Note the difference in scale from Figure 17.

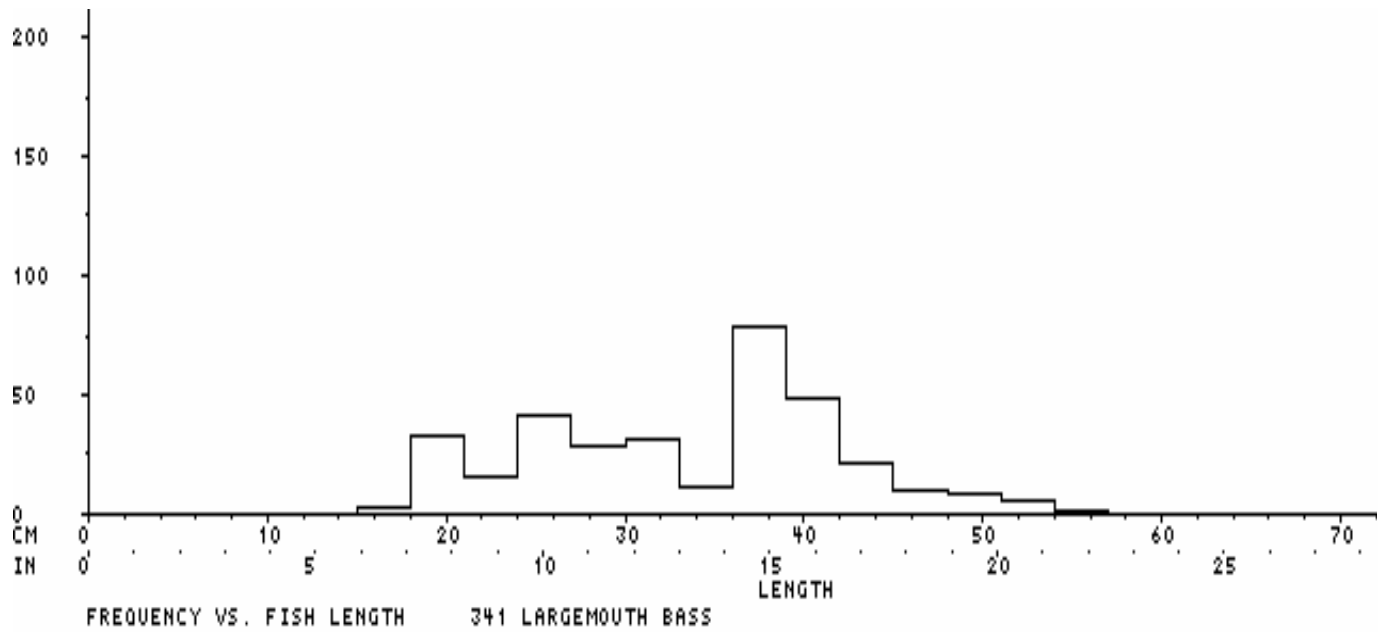


Figure 19. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of largemouth bass harvested by all anglers.

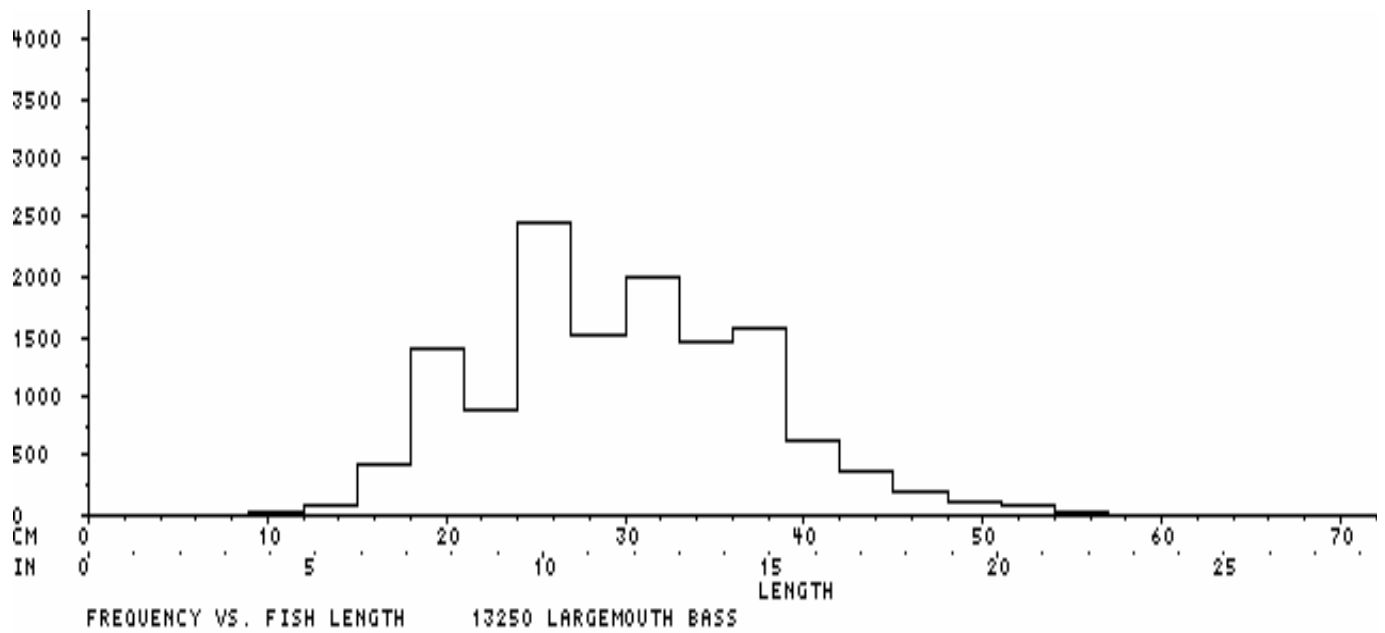


Figure 20. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of largemouth bass released by all anglers. Note the difference in scale from Figure 19.

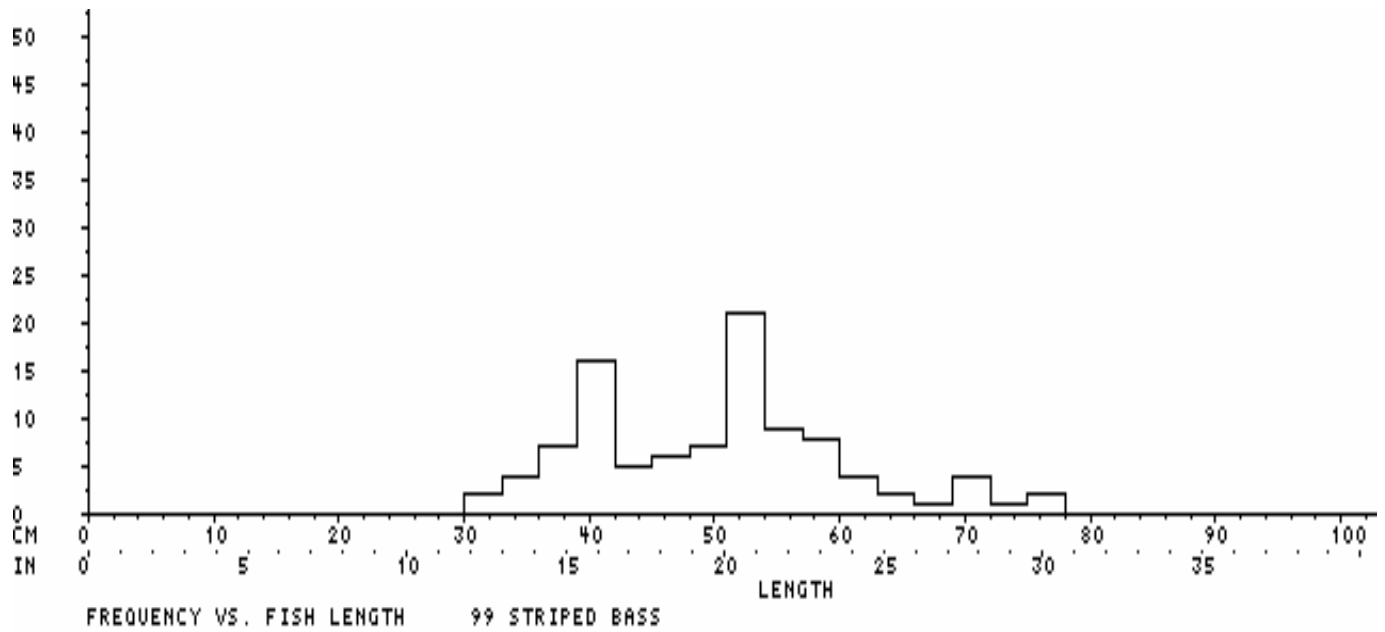


Figure 21. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of striped bass harvested by all anglers.

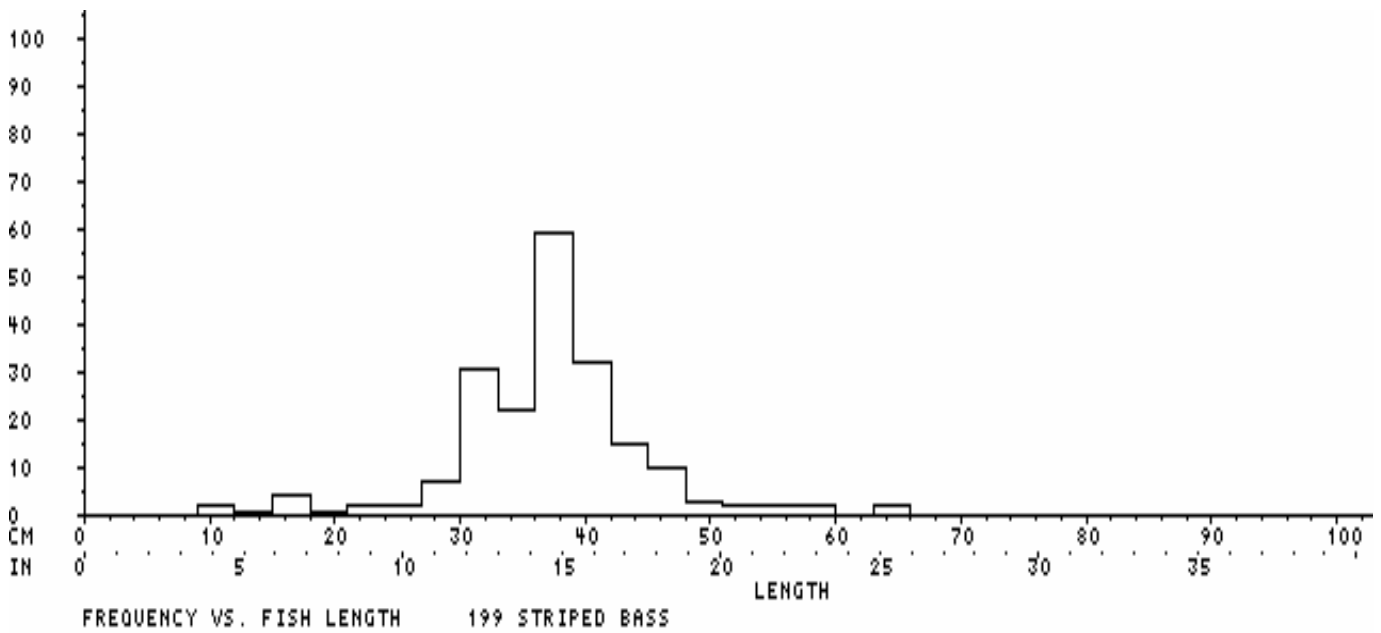


Figure 22. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of striped bass released by all anglers. Note the difference in scale from Figure 21.

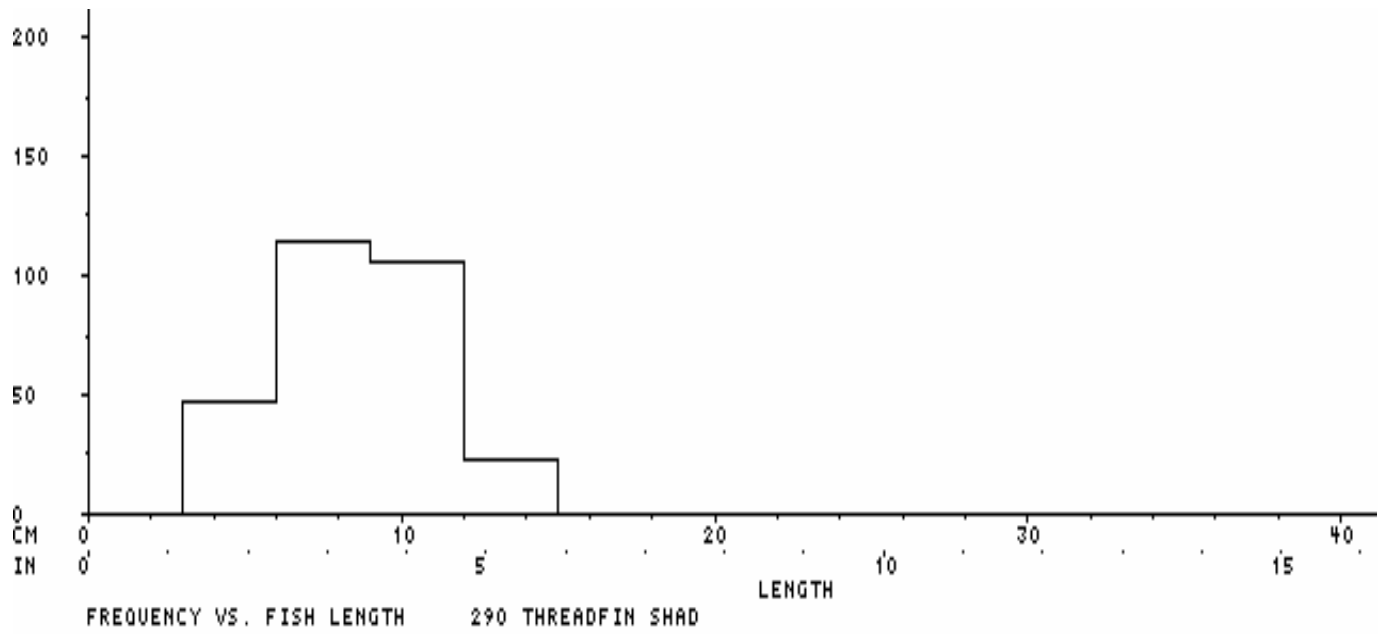


Figure 23. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of threadfin shad harvested by all anglers.

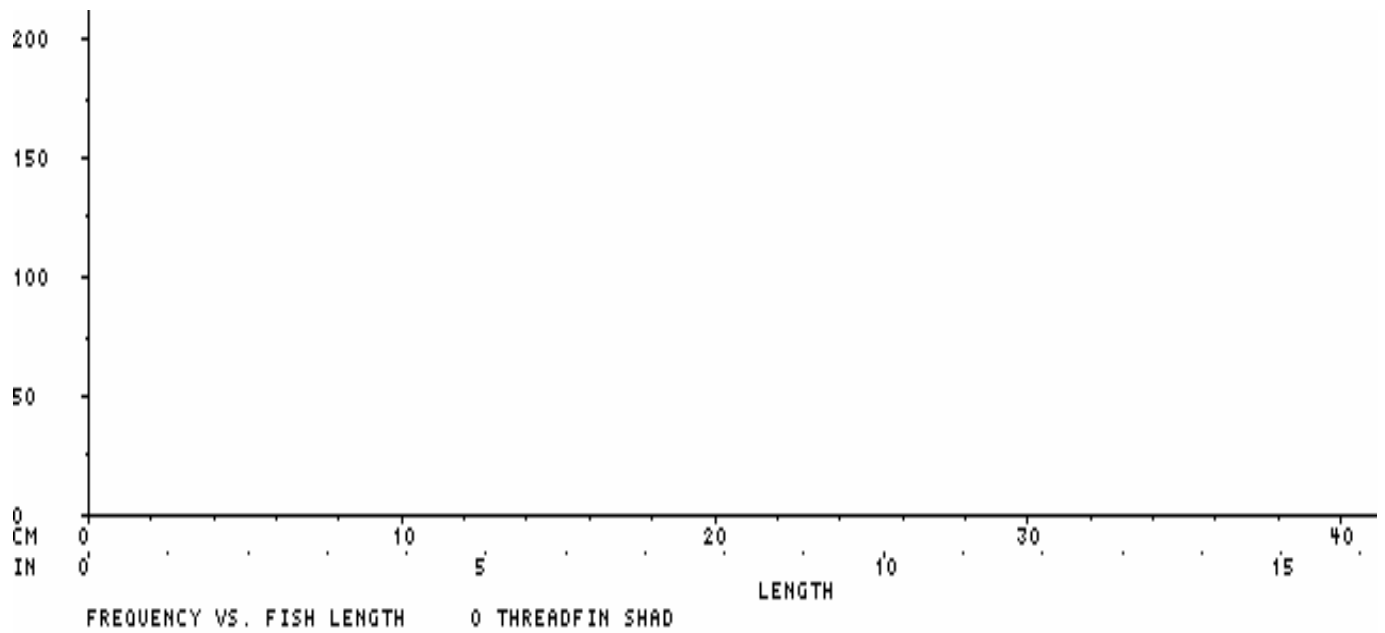


Figure 24. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of threadfin shad released by all anglers.

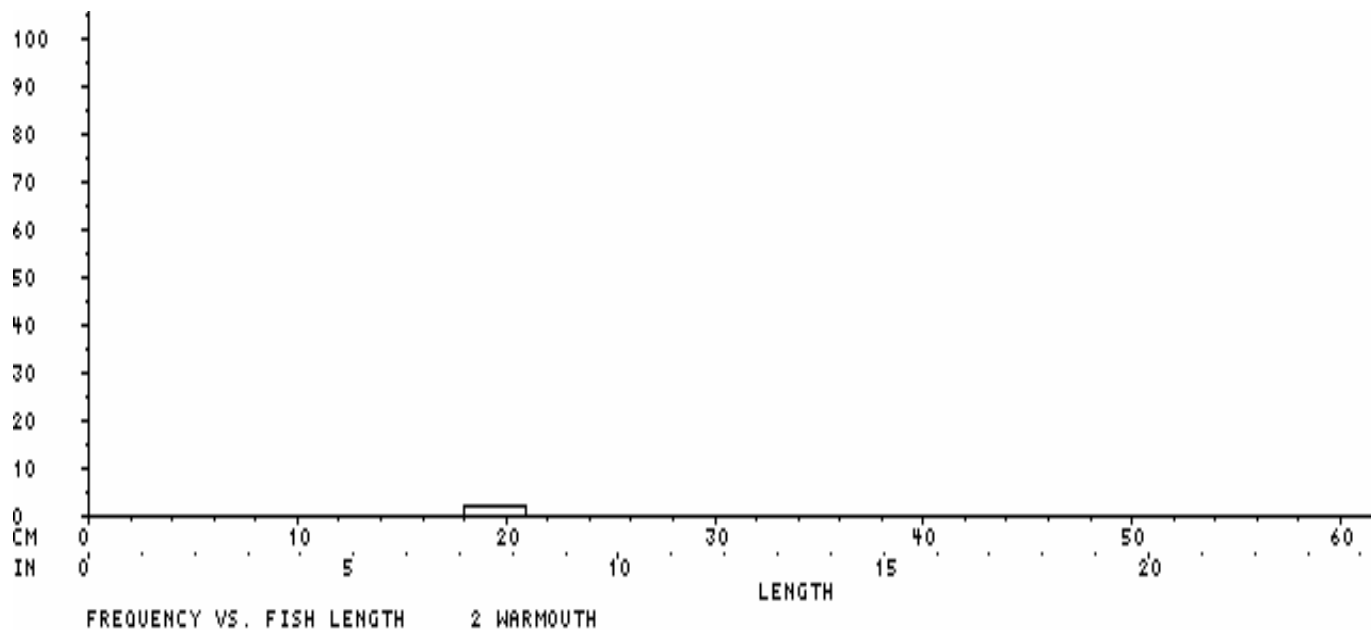


Figure 25. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of warmouth harvested by all anglers.

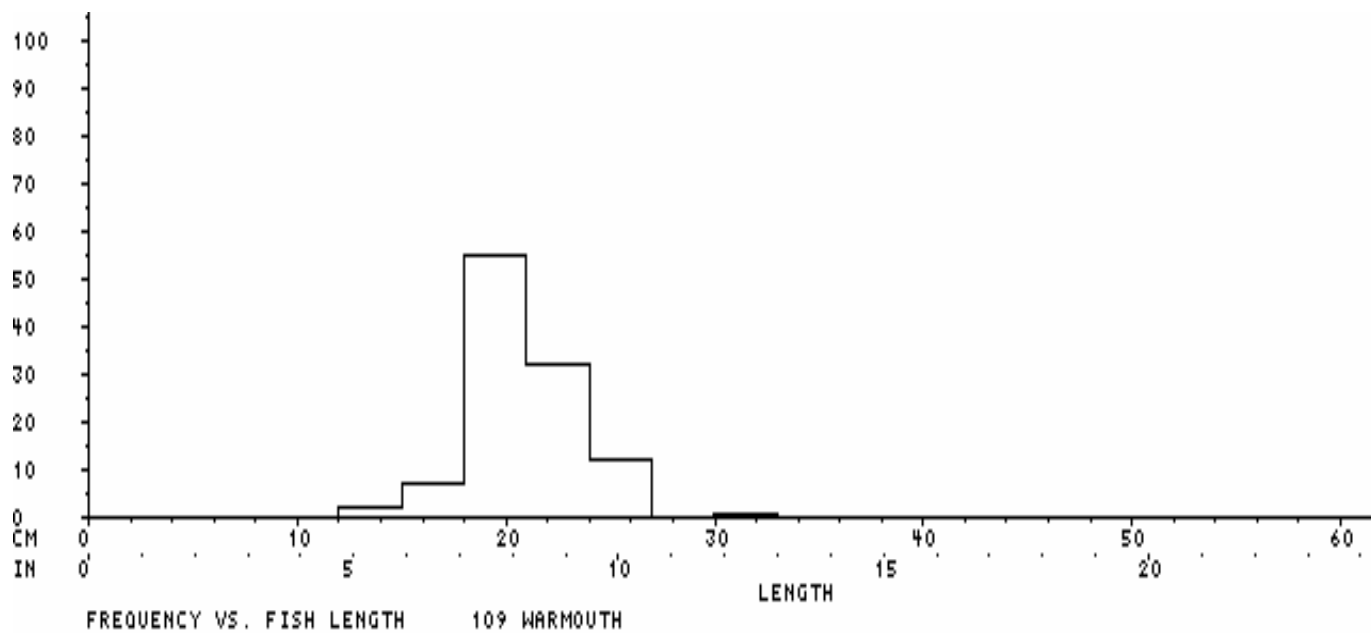


Figure 26. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of warmouth released by all anglers.

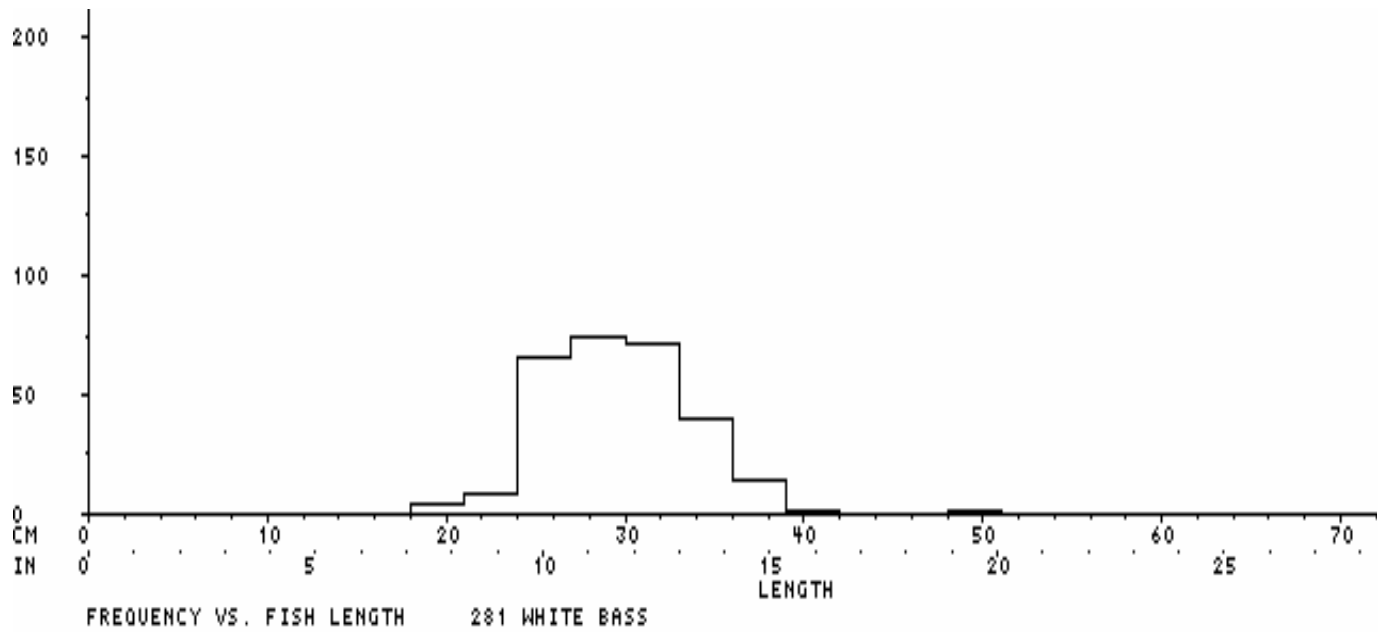


Figure 27. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of white bass harvested by all anglers.

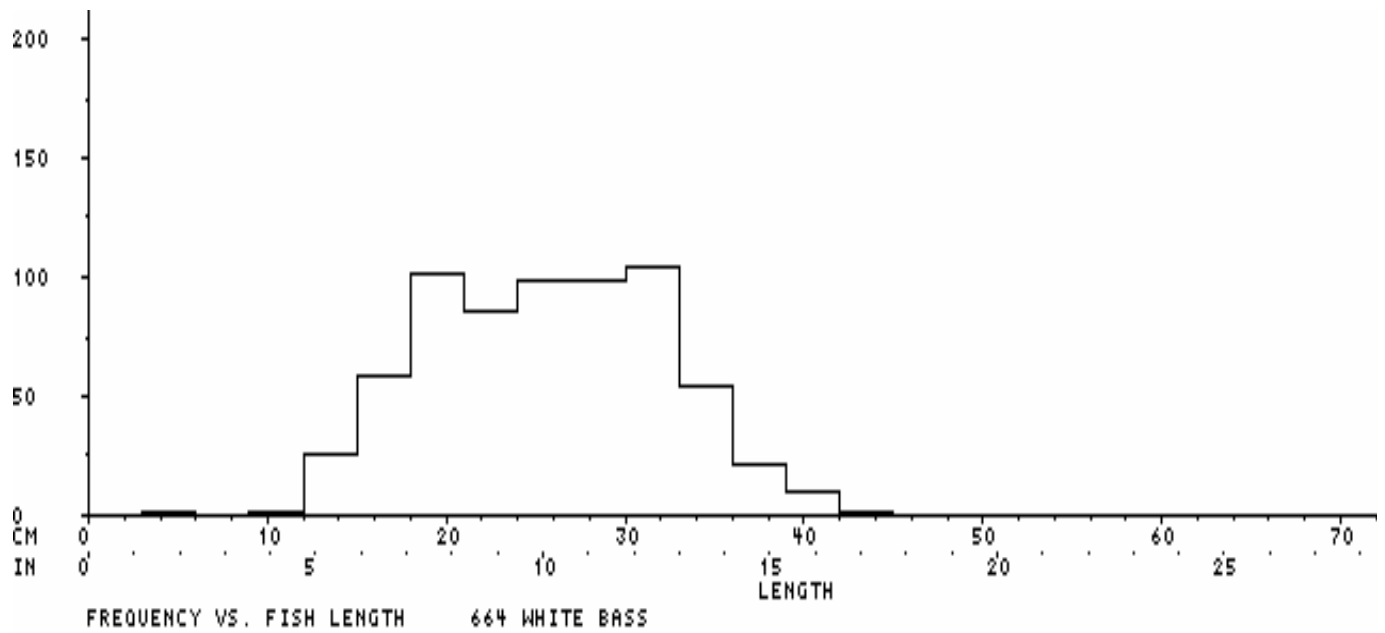


Figure 28. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of white bass released by all anglers.

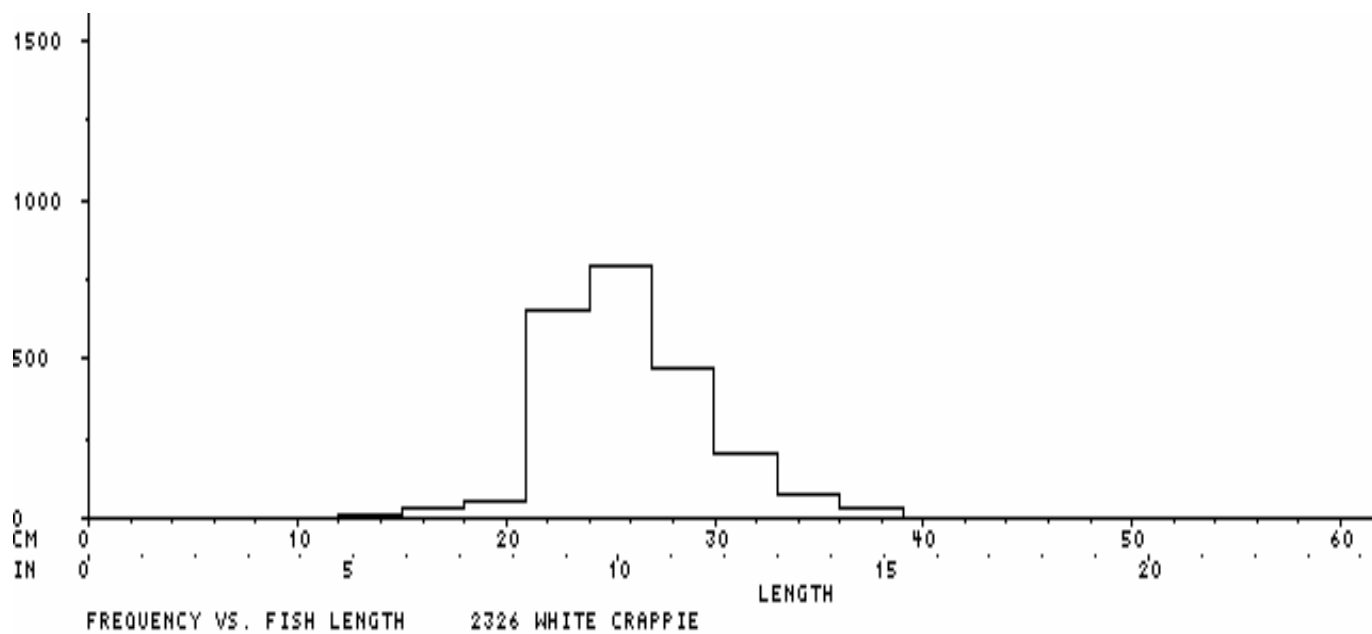


Figure 29. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of white crappie harvested by all anglers.

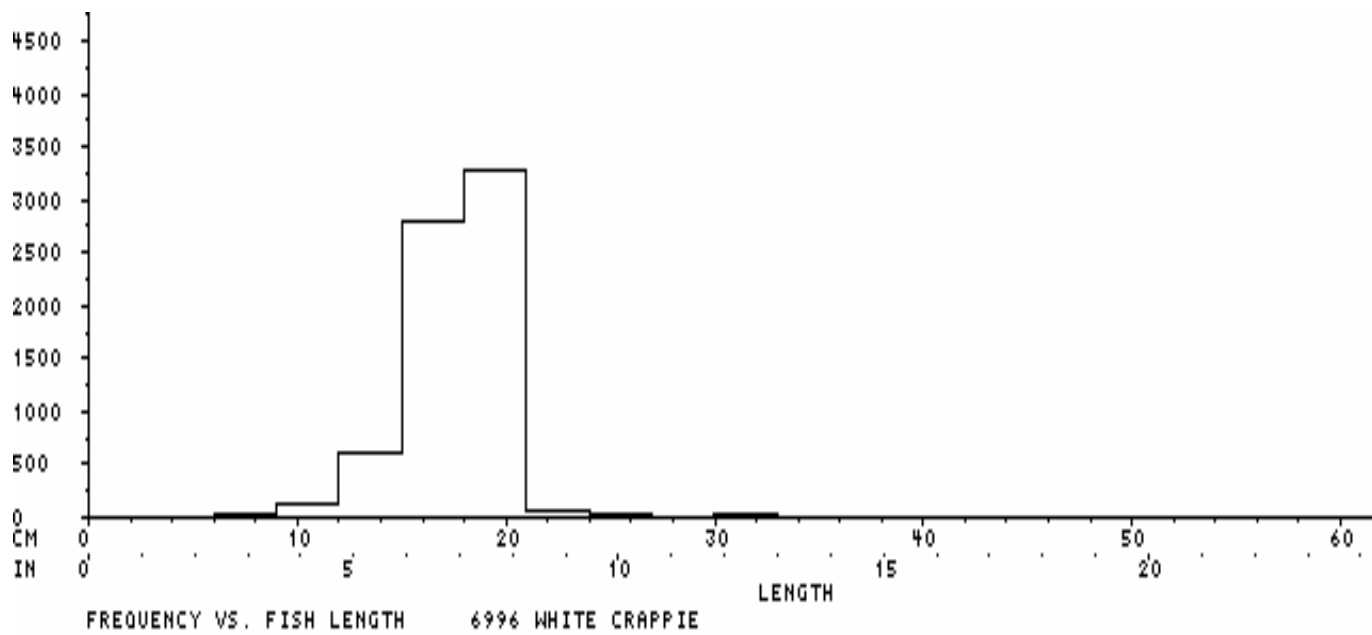


Figure 30. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of white crappie released by all anglers. Note the difference in scale from Figure 29.

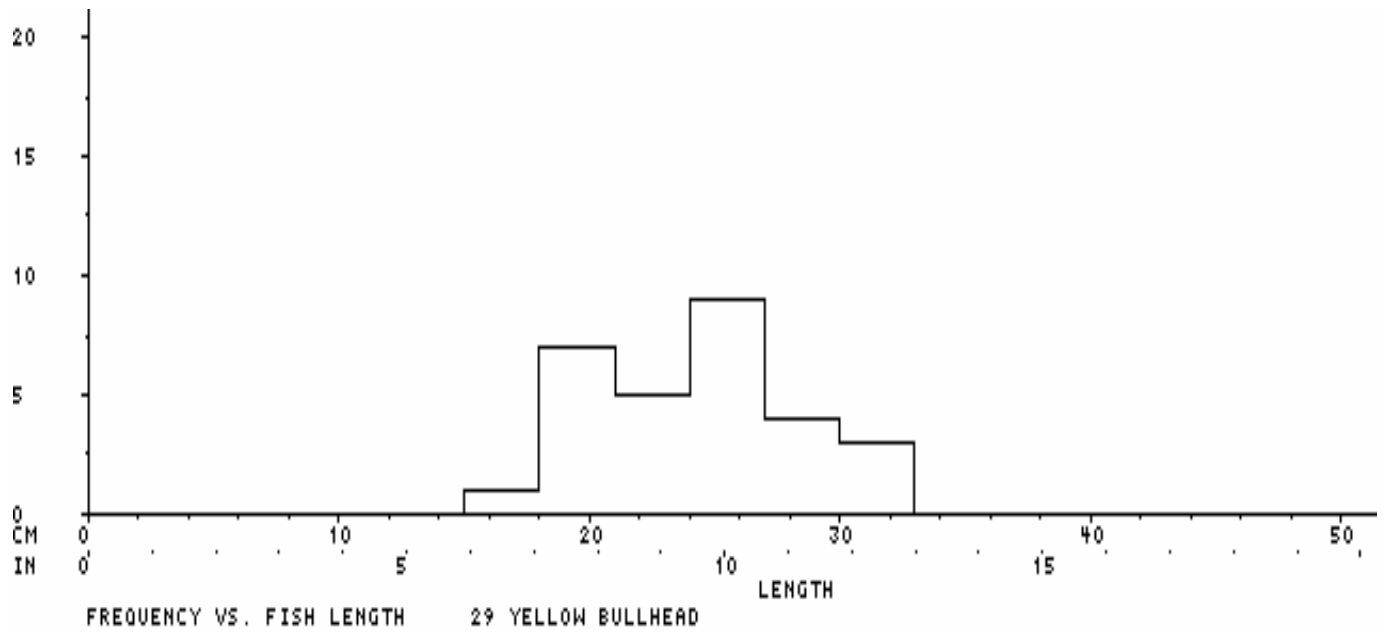


Figure 31. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of yellow bullhead harvested by all anglers.

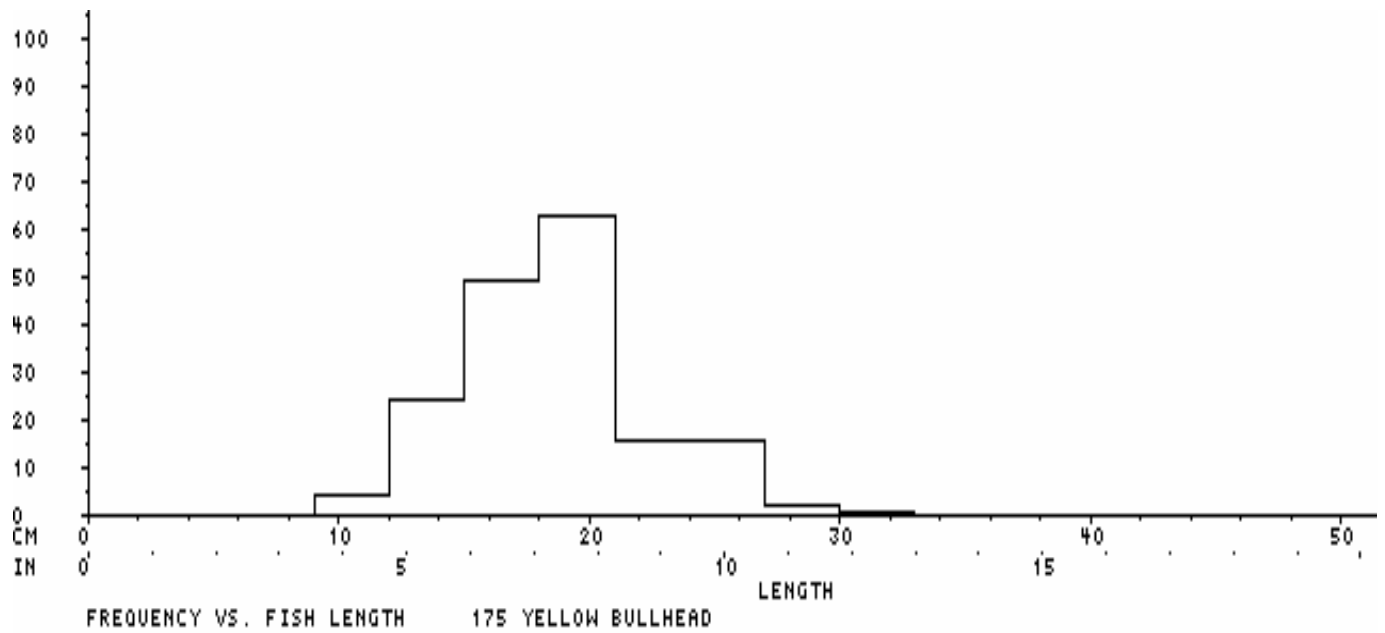


Figure 32. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of yellow bullhead released by all anglers. Note the difference in scale from Figure 31.

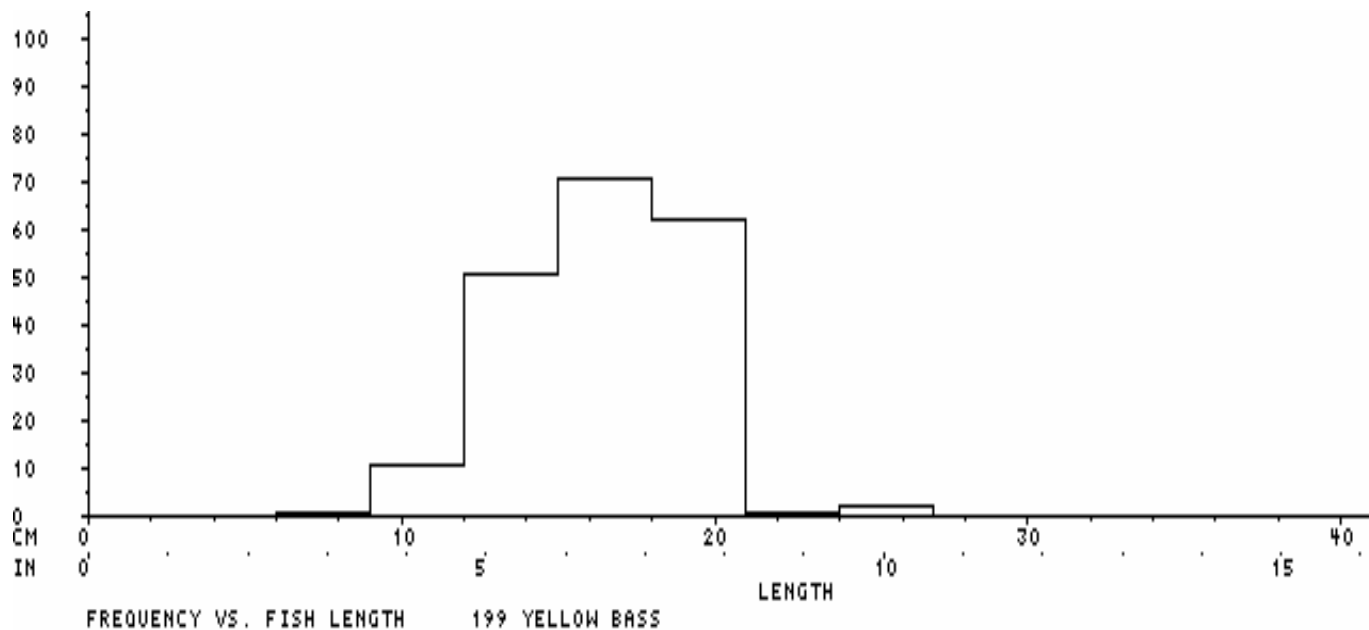


Figure 33. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of yellow bass harvested by all anglers.

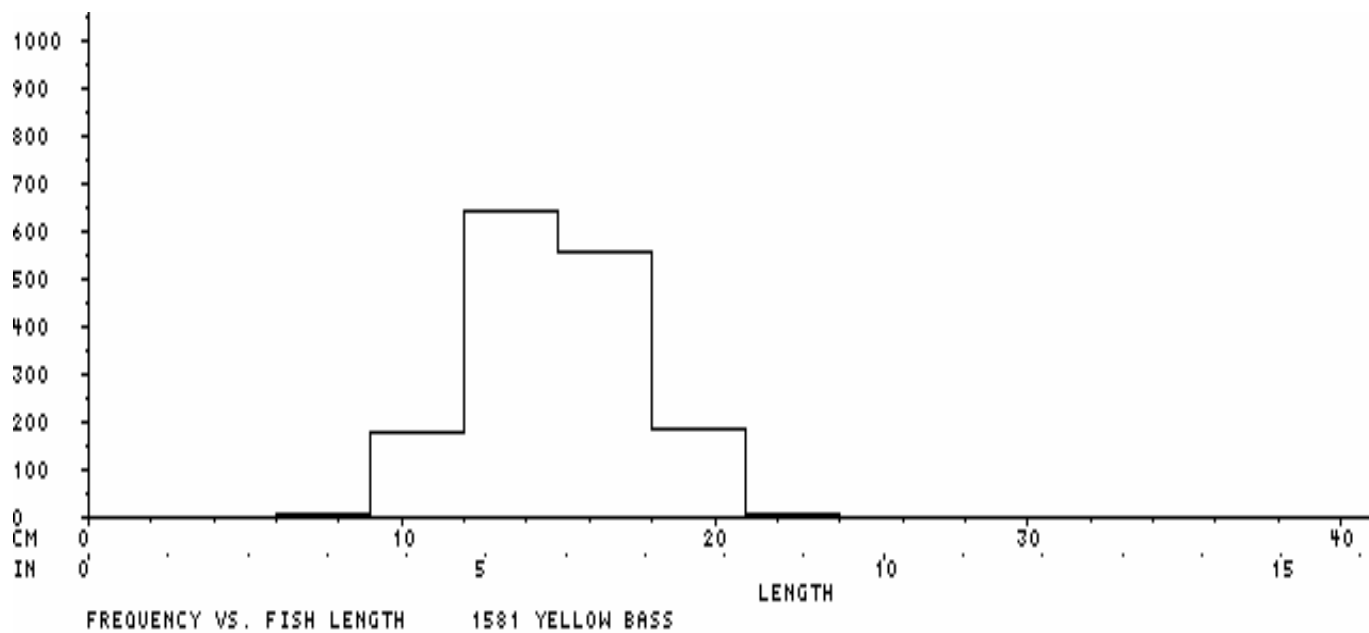


Figure 34. Lake Sangchris day creel 03/15/2000-02/15/2001. Length-frequency histogram of yellow bass released by all anglers. Note the difference in scale from Figure 33.