

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

2000 CRAB ORCHARD LAKE
 6036 ACRES
 REGION 5, DISTRICT 22

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: 425/693 = 61.3%

NUMBER OF INTERVIEWS: 3568

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	27756	24325-31188 (12%)	5	4-5 (12%)	13%
	HOLIDAY	28727	20551-36903 (28%)	5	3-6 (28%)	27%
	TOTAL	56483	47870-65097 (15%)	9	8-11 (15%)	20%
SHORE	WEEKDAY	14686	12680-16692 (14%)	2	2-3 (14%)	11%
	HOLIDAY	7284	6099-8468 (16%)	1	1-1 (16%)	24%
	TOTAL	21970	19640-24299 (11%)	4	3-4 (11%)	15%
BOAT & SHORE	WEEKDAY	42442	38467-46417 (9%)	7	6-8 (9%)	12%
	HOLIDAY	36011	27721-44300 (23%)	6	5-7 (23%)	26%
	TOTAL	78453	69575-87331 (11%)	13	12-14 (11%)	19%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
57562	50843-64281 (12%)	.681	.587-.775 (14%)	23.56	9.54	All species
11	0-38 (257%)	.000	.000-.000 (278%)	0.00	0.00	Bigmouth buffalo
5	0-17 (236%)	.000	.000-.000 (231%)	0.00	0.00	Black bullhead
15295	12451-18138 (19%)	.149	.122-.176 (18%)	6.26	2.53	Black crappie
17099	14221-19978 (17%)	.198	.159-.237 (20%)	7.00	2.83	Bluegill
11	0-29 (164%)	.000	.000-.000 (157%)	0.00	0.00	Brown bullhead
181	69-293 (62%)	.001	.001-.002 (55%)	0.07	0.03	Carp
3590	2651-4530 (26%)	.038	.029-.046 (22%)	1.47	0.59	Channel catfish
7	0-22 (236%)	.000	.000-.001 (236%)	0.00	0.00	Crappie spp.
502	298-707 (41%)	.004	.003-.006 (37%)	0.21	0.08	Flathead catfish
319	185-453 (42%)	.003	.002-.004 (45%)	0.13	0.05	Freshwater drum
2075	1481-2669 (29%)	.019	.014-.025 (29%)	0.85	0.34	Green sunfish
2259	1759-2760 (22%)	.014	.010-.018 (27%)	0.92	0.37	Largemouth bass
17	0-38 (123%)	.000	.000-.000 (130%)	0.01	0.00	Longear sunfish
304	147-460 (52%)	.005	.001-.009 (74%)	0.12	0.05	Orangespotted sunfis
19	0-39 (103%)	.000	.000-.001 (226%)	0.01	0.00	Redear sunfish
24	0-53 (126%)	.000	.000-.000 (110%)	0.01	0.00	Striped bass x White
20	0-55 (173%)	.000	.000-.000 (176%)	0.01	0.00	Unidentified Sunfish
		**** NOT RECORDED ****				Striped bass
11	0-35 (220%)	.000	.000-.000 (223%)	0.00	0.00	Walleye
841	553-1130 (34%)	.008	.004-.013 (50%)	0.34	0.14	Warmouth
3163	2156-4170 (32%)	.036	.022-.050 (38%)	1.29	0.52	White bass
11253	9224-13283 (18%)	.199	.115-.282 (42%)	4.61	1.86	White crappie
418	223-614 (47%)	.003	.002-.005 (43%)	0.17	0.07	Yellow bullhead
32	0-65 (105%)	.000	.000-.001 (140%)	0.01	0.01	Yellow perch
107	45-168 (57%)	.001	.000-.002 (69%)	0.04	0.02	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
13383	11829-14937 (12%)	.143	.125-.161 (13%)	5.48	0.232	All species
16	0-61 (278%)	.000	.000-.000 (278%)	0.01	1.533	Bigmouth buffalo
0	0-1 (231%)	.000	.000-.000 (231%)	0.00	0.060	Black bullhead
3382	2750-4014 (19%)	.032	.026-.038 (19%)	1.38	0.221	Black crappie
1274	1041-1506 (18%)	.015	.012-.018 (22%)	0.52	0.074	Bluegill
5	0-13 (171%)	.000	.000-.000 (164%)	0.00	0.438	Brown bullhead
99	38-160 (62%)	.001	.000-.001 (60%)	0.04	0.547	Carp
2434	1780-3088 (27%)	.026	.019-.032 (25%)	1.00	0.678	Channel catfish
1	0-5 (236%)	.000	.000-.000 (231%)	0.00	0.204	Crappie spp.
516	312-720 (39%)	.005	.003-.007 (46%)	0.21	1.027	Flathead catfish
100	61-140 (40%)	.001	.000-.001 (44%)	0.04	0.314	Freshwater drum
134	93-174 (30%)	.001	.001-.002 (33%)	0.05	0.065	Green sunfish
2104	1606-2601 (24%)	.012	.009-.016 (29%)	0.86	0.931	Largemouth bass
2	0-5 (139%)	.000	.000-.000 (200%)	0.00	0.115	Longear sunfish
19	9-28 (50%)	.000	.000-.000 (65%)	0.01	0.061	Orangespotted sunfis
2	0-4 (96%)	.000	.000-.000 (215%)	0.00	0.100	Redear sunfish
9	0-21 (133%)	.000	.000-.000 (107%)	0.00	0.383	Striped bass x White
		****	NOT RECORDED ****			Unidentified Sunfish
		****	NOT RECORDED ****			Striped bass
5	0-15 (220%)	.000	.000-.000 (220%)	0.00	0.439	Walleye
82	53-112 (36%)	.001	.000-.001 (54%)	0.03	0.098	Warmouth
752	510-994 (32%)	.009	.005-.012 (38%)	0.31	0.238	White bass
2251	1842-2659 (18%)	.039	.024-.053 (38%)	0.92	0.200	White crappie
186	86-287 (54%)	.002	.001-.002 (49%)	0.08	0.445	Yellow bullhead
2	0-4 (111%)	.000	.000-.000 (129%)	0.00	0.056	Yellow perch
8	3-13 (59%)	.000	.000-.000 (80%)	0.00	0.074	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
29505	26080-32930	(12%)	.315	.275-.355 (13%)	4.89	0.513	All species
36	0-135	(278%)	.000	.000-.000 (257%)	0.01	3.380	Bigmouth buffalo
1	0-2	(236%)	.000	.000-.000 (231%)	0.00	0.132	Black bullhead
7456	6063-8849	(19%)	.071	.057-.084 (19%)	1.24	0.488	Black crappie
2808	2295-3320	(18%)	.033	.025-.040 (22%)	0.47	0.164	Bluegill
11	0-29	(171%)	.000	.000-.000 (164%)	0.00	0.966	Brown bullhead
218	83-353	(62%)	.002	.001-.003 (60%)	0.04	1.207	Carp
5366	3924-6808	(27%)	.057	.042-.071 (25%)	0.89	1.495	Channel catfish
3	0-10	(231%)	.000	.000-.001 (231%)	0.00	0.449	Crappie spp.
1138	689-1587	(39%)	.010	.006-.015 (46%)	0.19	2.265	Flathead catfish
221	134-309	(40%)	.002	.001-.003 (44%)	0.04	0.693	Freshwater drum
295	206-384	(30%)	.003	.002-.004 (33%)	0.05	0.142	Green sunfish
4638	3541-5734	(24%)	.027	.019-.035 (29%)	0.77	2.053	Largemouth bass
4	0-10	(139%)	.000	.000-.000 (200%)	0.00	0.254	Longear sunfish
41	21-62	(50%)	.001	.000-.001 (65%)	0.01	0.135	Orangespotted sunfis
4	0-8	(96%)	.000	.000-.000 (215%)	0.00	0.221	Redear sunfish
20	0-46	(133%)	.000	.000-.000 (107%)	0.00	0.845	Striped bass x White
			****	NOT RECORDED ****			Unidentified Sunfish
			****	NOT RECORDED ****			Striped bass
11	0-34	(220%)	.000	.000-.000 (223%)	0.00	0.968	Walleye
182	116-247	(36%)	.002	.001-.003 (54%)	0.03	0.216	Warmouth
1658	1125-2191	(32%)	.019	.012-.026 (38%)	0.27	0.524	White bass
4962	4062-5862	(18%)	.085	.053-.118 (38%)	0.82	0.441	White crappie
410	189-632	(54%)	.003	.002-.005 (49%)	0.07	0.982	Yellow bullhead
4	0-8	(111%)	.000	.000-.000 (129%)	0.00	0.124	Yellow perch
18	7-28	(59%)	.000	.000-.000 (80%)	0.00	0.164	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
148120	131083-165158 (12%)	1.574	1.388-1.760 (12%)	60.64	24.54	All species
11	0-38 (257%)	.000	.000-.000 (278%)	0.00	0.00	Bigmouth buffalo
5	0-17 (236%)	.000	.000-.000 (231%)	0.00	0.00	Black bullhead
34783	27932-41634 (20%)	.309	.252-.365 (18%)	14.24	5.76	Black crappie
46401	39285-53517 (15%)	.502	.416-.589 (17%)	19.00	7.69	Bluegill
11	0-29 (164%)	.000	.000-.000 (157%)	0.00	0.00	Brown bullhead
380	238-522 (37%)	.003	.002-.004 (42%)	0.16	0.06	Carp
4611	3399-5823 (26%)	.048	.038-.057 (20%)	1.89	0.76	Channel catfish
7	0-22 (236%)	.000	.000-.001 (236%)	0.00	0.00	Crappie spp.
513	307-720 (40%)	.004	.003-.006 (37%)	0.21	0.09	Flathead catfish
1152	827-1476 (28%)	.011	.008-.014 (26%)	0.47	0.19	Freshwater drum
5753	4313-7192 (25%)	.056	.039-.072 (30%)	2.36	0.95	Green sunfish
19003	14981-23024 (21%)	.134	.111-.157 (17%)	7.78	3.15	Largemouth bass
21	0-42 (106%)	.000	.000-.000 (108%)	0.01	0.00	Longear sunfish
793	416-1169 (48%)	.008	.004-.013 (55%)	0.32	0.13	Orangespotted sunfis
23	2-44 (91%)	.000	.000-.001 (217%)	0.01	0.00	Redear sunfish
100	0-209 (109%)	.001	.000-.003 (149%)	0.04	0.02	Striped bass x White
20	0-55 (173%)	.000	.000-.000 (176%)	0.01	0.00	Unidentified Sunfish
4	0-12 (223%)	.000	.000-.000 (223%)	0.00	0.00	Striped bass
11	0-35 (220%)	.000	.000-.000 (223%)	0.00	0.00	Walleye
1594	1109-2078 (30%)	.016	.009-.023 (42%)	0.65	0.26	Warmouth
8737	6331-11143 (28%)	.110	.072-.148 (34%)	3.58	1.45	White bass
22562	18340-26784 (19%)	.355	.220-.491 (38%)	9.24	3.74	White crappie
931	516-1346 (45%)	.007	.005-.009 (29%)	0.38	0.15	Yellow bullhead
48	7-89 (85%)	.000	.000-.001 (126%)	0.02	0.01	Yellow perch
649	382-917 (41%)	.007	.003-.010 (50%)	0.27	0.11	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
23024	20309-25739 (12%)	.221	.198-.245 (11%)	9.43	0.155	All species
16	0-61 (278%)	.000	.000-.000 (278%)	0.01	1.533	Bigmouth buffalo
0	0-1 (231%)	.000	.000-.000 (231%)	0.00	0.060	Black bullhead
4185	3419-4952 (18%)	.038	.032-.045 (17%)	1.71	0.120	Black crappie
1963	1651-2276 (16%)	.022	.018-.026 (19%)	0.80	0.042	Bluegill
5	0-13 (171%)	.000	.000-.000 (164%)	0.00	0.438	Brown bullhead
188	116-259 (38%)	.001	.001-.002 (40%)	0.08	0.493	Carp
2614	1927-3302 (26%)	.027	.021-.034 (24%)	1.07	0.567	Channel catfish
1	0-5 (236%)	.000	.000-.000 (231%)	0.00	0.204	Crappie spp.
520	316-724 (39%)	.005	.003-.007 (46%)	0.21	1.013	Flathead catfish
266	199-332 (25%)	.003	.002-.004 (30%)	0.11	0.231	Freshwater drum
220	163-277 (26%)	.002	.001-.003 (29%)	0.09	0.038	Green sunfish
8123	6189-10057 (24%)	.049	.040-.057 (17%)	3.33	0.427	Largemouth bass
2	0-5 (133%)	.000	.000-.000 (191%)	0.00	0.099	Longear sunfish
39	18-61 (55%)	.000	.000-.001 (58%)	0.02	0.050	Orangespotted sunfis
2	0-4 (93%)	.000	.000-.000 (212%)	0.00	0.088	Redear sunfish
49	0-118 (144%)	.001	.000-.002 (189%)	0.02	0.485	Striped bass x White Unidentified Sunfish
		**** NOT RECORDED ****				
1	0-2 (226%)	.000	.000-.000 (223%)	0.00	0.156	Striped bass
5	0-15 (220%)	.000	.000-.000 (220%)	0.00	0.439	Walleye
110	76-143 (30%)	.001	.001-.002 (47%)	0.04	0.069	Warmouth
1639	1195-2084 (27%)	.022	.014-.030 (36%)	0.67	0.188	White bass
2792	2291-3292 (18%)	.047	.030-.065 (37%)	1.14	0.124	White crappie
251	110-391 (56%)	.002	.001-.003 (38%)	0.10	0.269	Yellow bullhead
2	0-4 (98%)	.000	.000-.000 (125%)	0.00	0.043	Yellow perch
30	15-45 (49%)	.000	.000-.001 (62%)	0.01	0.047	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
50759	44773-56744 (12%)	.488	.436-.540 (11%)	8.41	0.343	All species
36	0-135 (278%)	.000	.000-.000 (257%)	0.01	3.380	Bigmouth buffalo
1	0-2 (236%)	.000	.000-.000 (231%)	0.00	0.132	Black bullhead
9227	7537-10917 (18%)	.084	.070-.099 (17%)	1.53	0.265	Black crappie
4329	3639-5018 (16%)	.048	.039-.057 (19%)	0.72	0.093	Bluegill
11	0-29 (171%)	.000	.000-.000 (164%)	0.00	0.966	Brown bullhead
413	256-571 (38%)	.003	.002-.004 (40%)	0.07	1.087	Carp
5763	4247-7279 (26%)	.060	.046-.075 (24%)	0.95	1.250	Channel catfish
3	0-10 (231%)	.000	.000-.001 (231%)	0.00	0.449	Crappie spp.
1146	696-1596 (39%)	.010	.006-.015 (46%)	0.19	2.232	Flathead catfish
586	439-733 (25%)	.006	.004-.008 (30%)	0.10	0.509	Freshwater drum
485	359-611 (26%)	.005	.003-.006 (29%)	0.08	0.084	Green sunfish
17909	13645-22173 (24%)	.107	.089-.126 (17%)	2.97	0.942	Largemouth bass
4	0-10 (133%)	.000	.000-.000 (191%)	0.00	0.218	Longear sunfish
87	39-134 (55%)	.001	.000-.001 (58%)	0.01	0.109	Orangespotted sunfis
4	0-9 (93%)	.000	.000-.000 (212%)	0.00	0.195	Redear sunfish
107	0-261 (144%)	.001	.000-.004 (189%)	0.02	1.070	Striped bass x White Unidentified Sunfish
			**** NOT RECORDED ****			
1	0-4 (223%)	.000	.000-.000 (226%)	0.00	0.343	Striped bass
11	0-34 (220%)	.000	.000-.000 (223%)	0.00	0.968	Walleye
242	168-315 (30%)	.002	.001-.004 (47%)	0.04	0.152	Warmouth
3614	2634-4595 (27%)	.048	.031-.065 (36%)	0.60	0.414	White bass
6155	5052-7259 (18%)	.104	.066-.143 (37%)	1.02	0.273	White crappie
552	243-862 (56%)	.004	.003-.006 (38%)	0.09	0.593	Yellow bullhead
5	0-9 (98%)	.000	.000-.000 (125%)	0.00	0.095	Yellow perch
67	34-100 (49%)	.001	.000-.001 (62%)	0.01	0.103	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	3.7	3.5-3.9	(4%)	0.0	15.0	943
SHORE	2.3	2.1-2.4	(6%)	0.2	10.8	416
BOAT & SHORE	3.3	3.1-3.4	(4%)	0.0	15.0	1359
MILES TRAVELED	35.5	32.9-38.2	(7%)	1	1400	2587
SUCCESS RATING (1-10)	5.8	5.7-5.9	(3%)	1	10	2573

*475 samples were from split interviews of completed trips.
44.3% of all 3071 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 19 out of 3071 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	585	1557	84	20	5	3	3			
SHORE INTERVIEWS	312	362	87	37	11	2	1		1	1

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

923 (30.1%)	ANY	All species
17 (0.6%)	BLC	Black crappie
6 (0.2%)	BLG	Bluegill
75 (2.4%)	BSS	Black bass spp.
4 (0.1%)	CAP	Carp
1 (0.0%)	CCF	Channel catfish
351 (11.4%)	CRP	Crappie spp.
1456 (47.4%)	LMB	Largemouth bass
1 (0.0%)	WAE	Walleye
9 (0.3%)	WHB	White bass

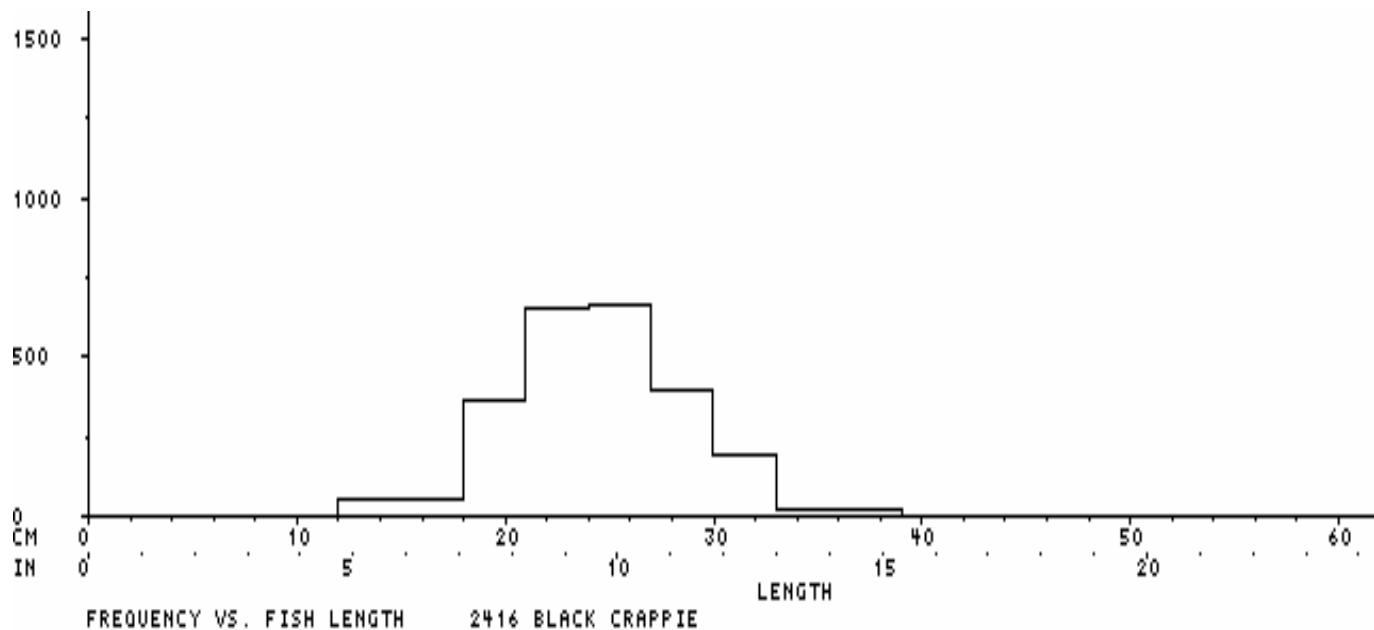


Figure 1. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of black crappie harvested by all anglers.

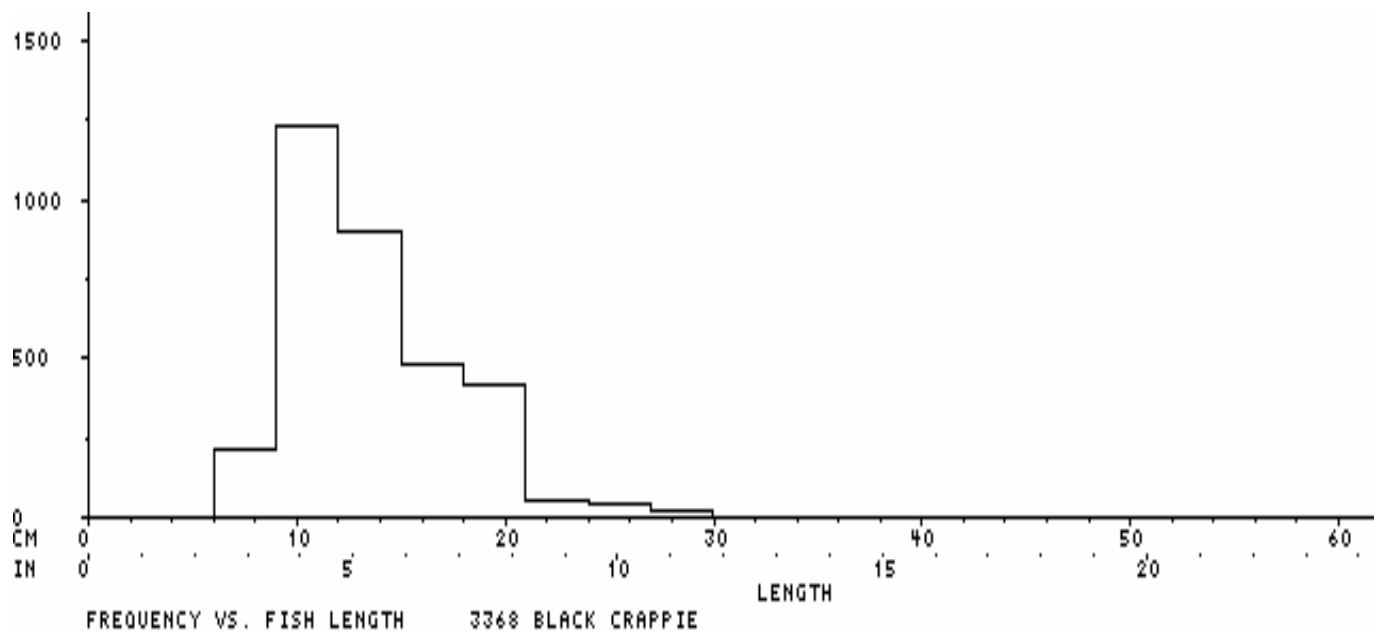


Figure 2. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of black crappie released by all anglers.

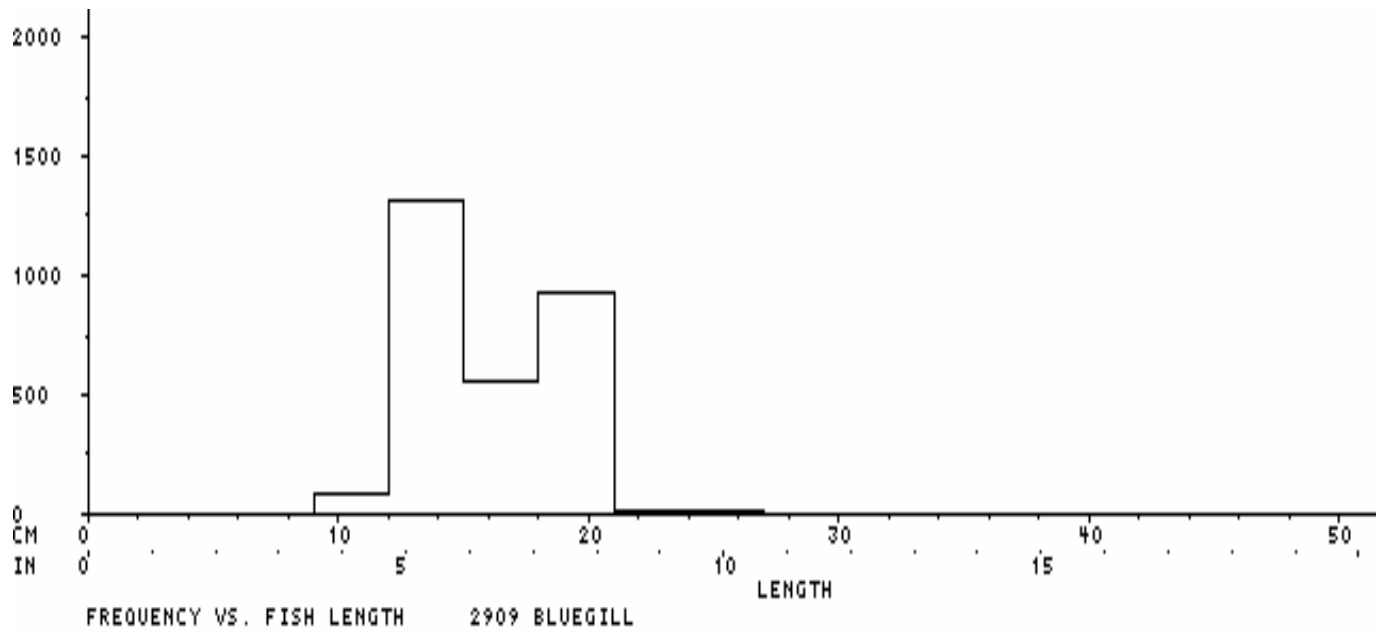


Figure 3. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of bluegill harvested by all anglers.

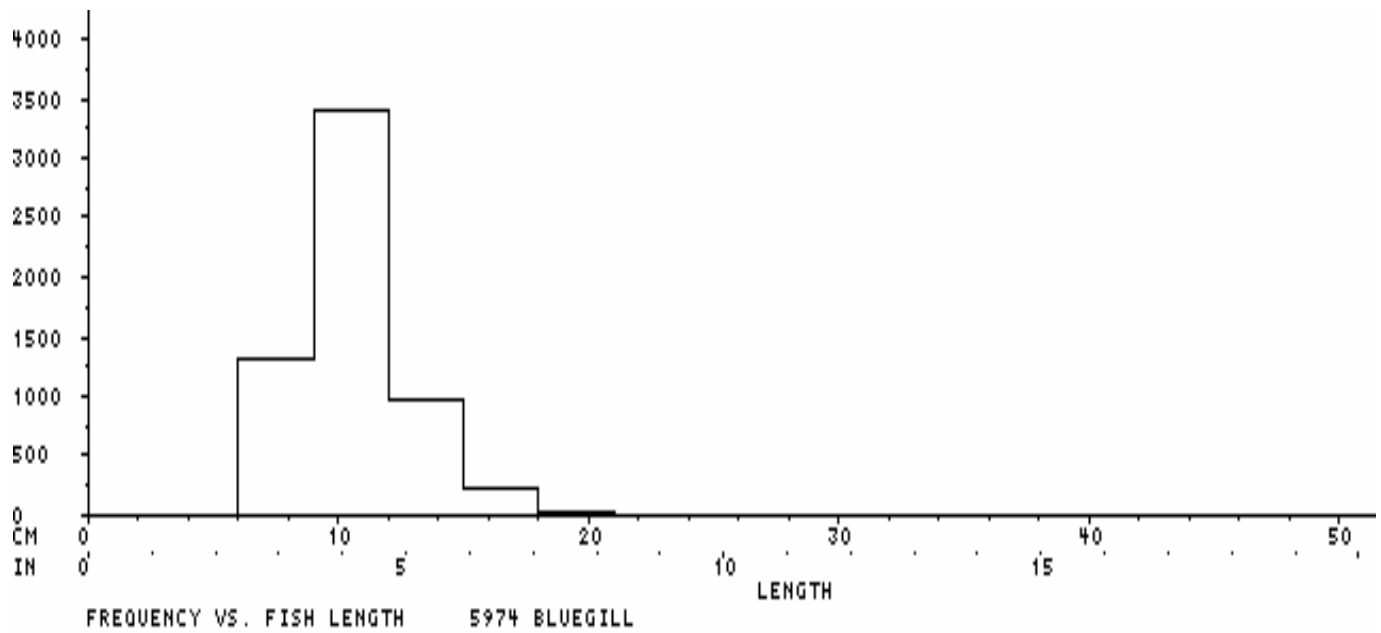


Figure 4. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of bluegill released by all anglers. Note the difference in scale from Figure 3.

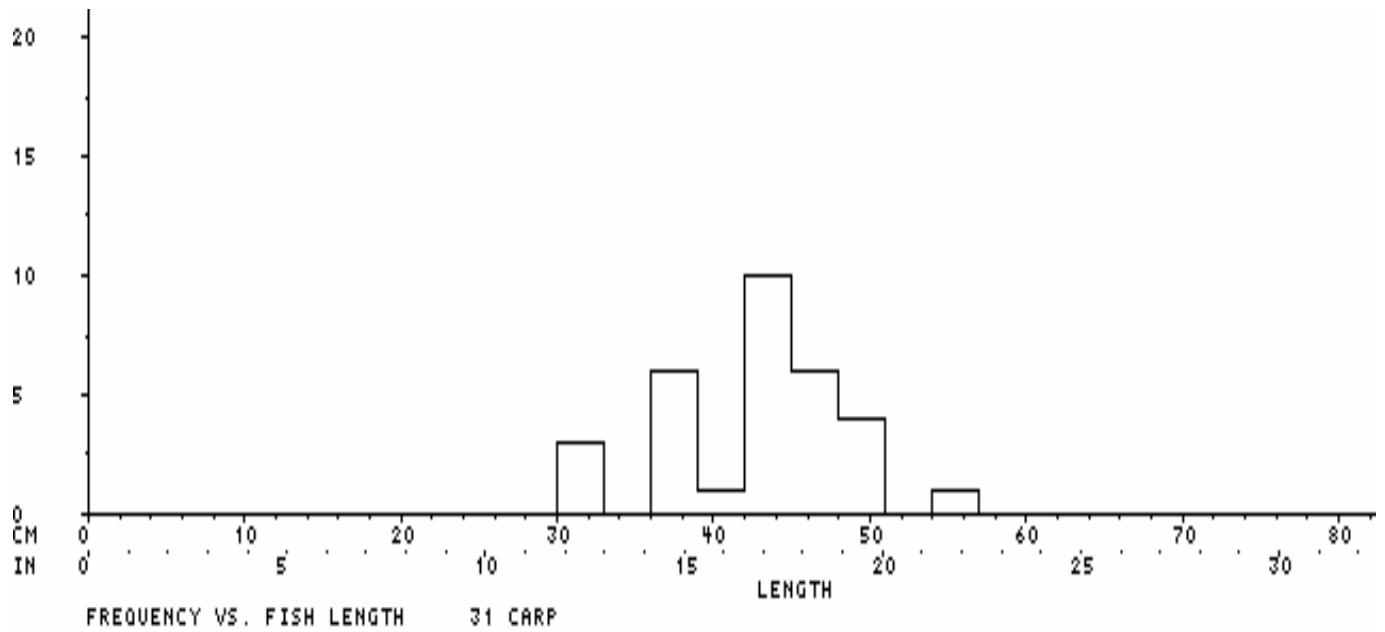


Figure 5. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of carp harvested by all anglers.

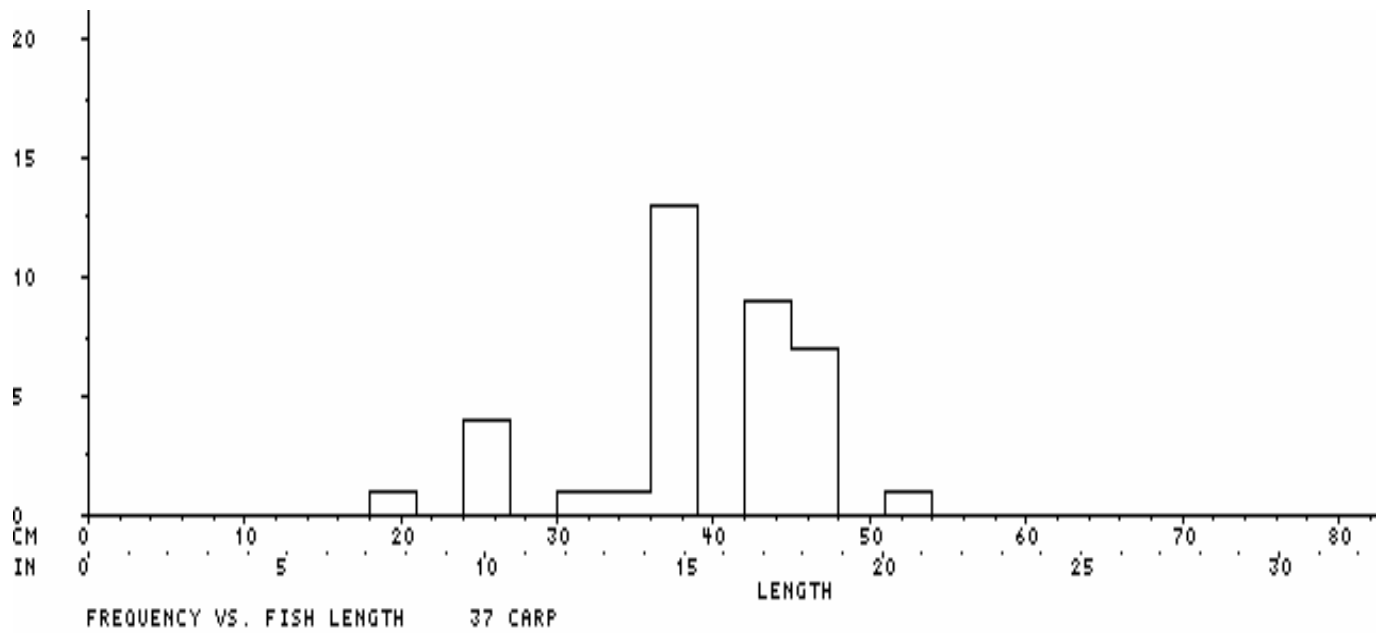


Figure 6. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of carp released by all anglers.

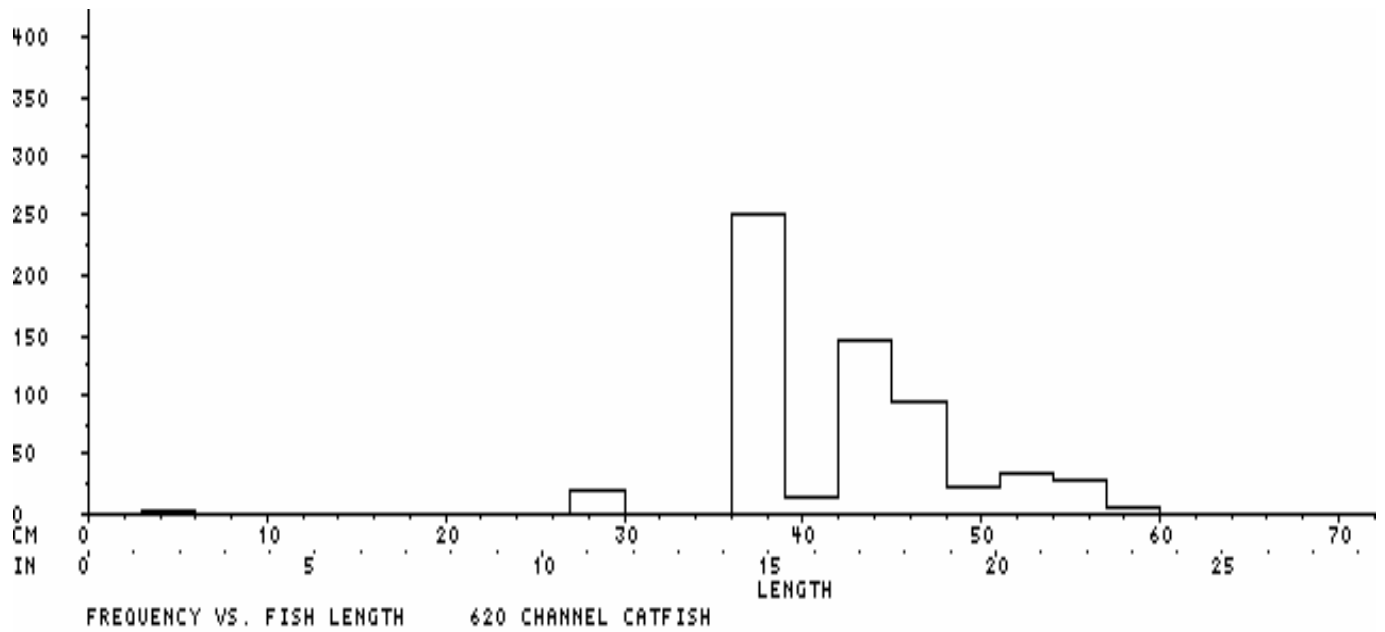


Figure 7. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of channel catfish harvested by all anglers.

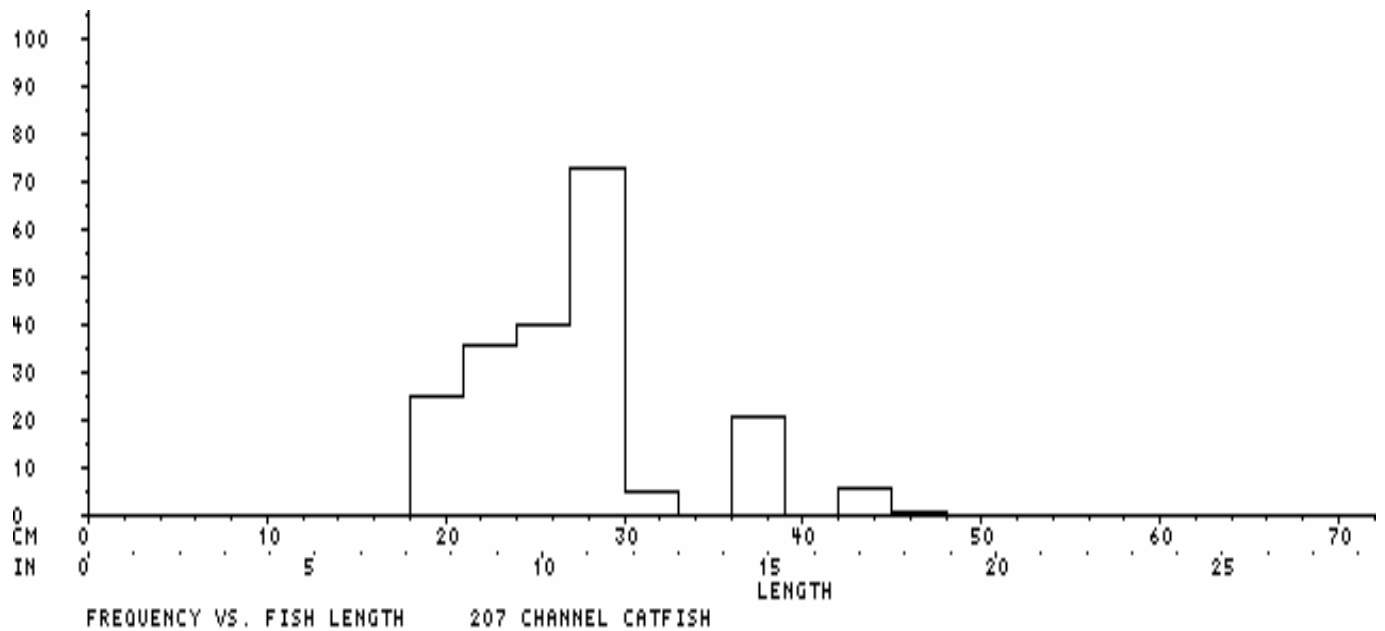


Figure 8. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of channel catfish released by all anglers. Note the difference in scale from Figure 7.

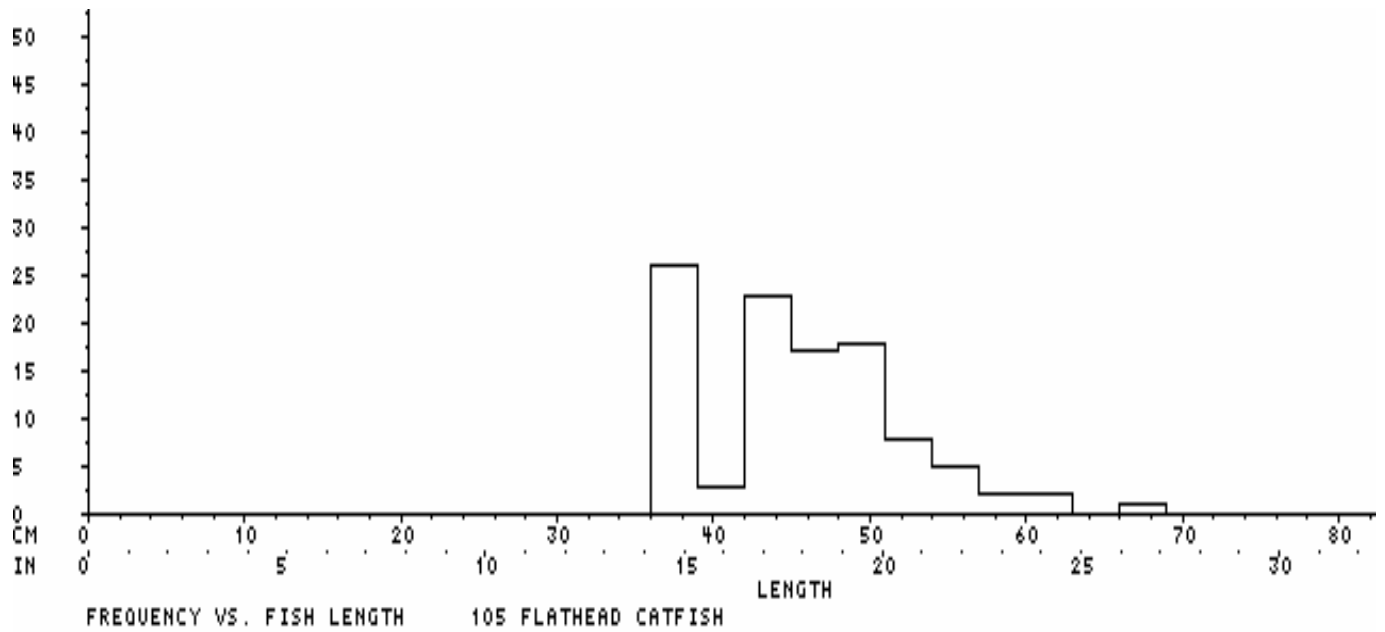


Figure 9. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of flathead catfish harvested by all anglers.

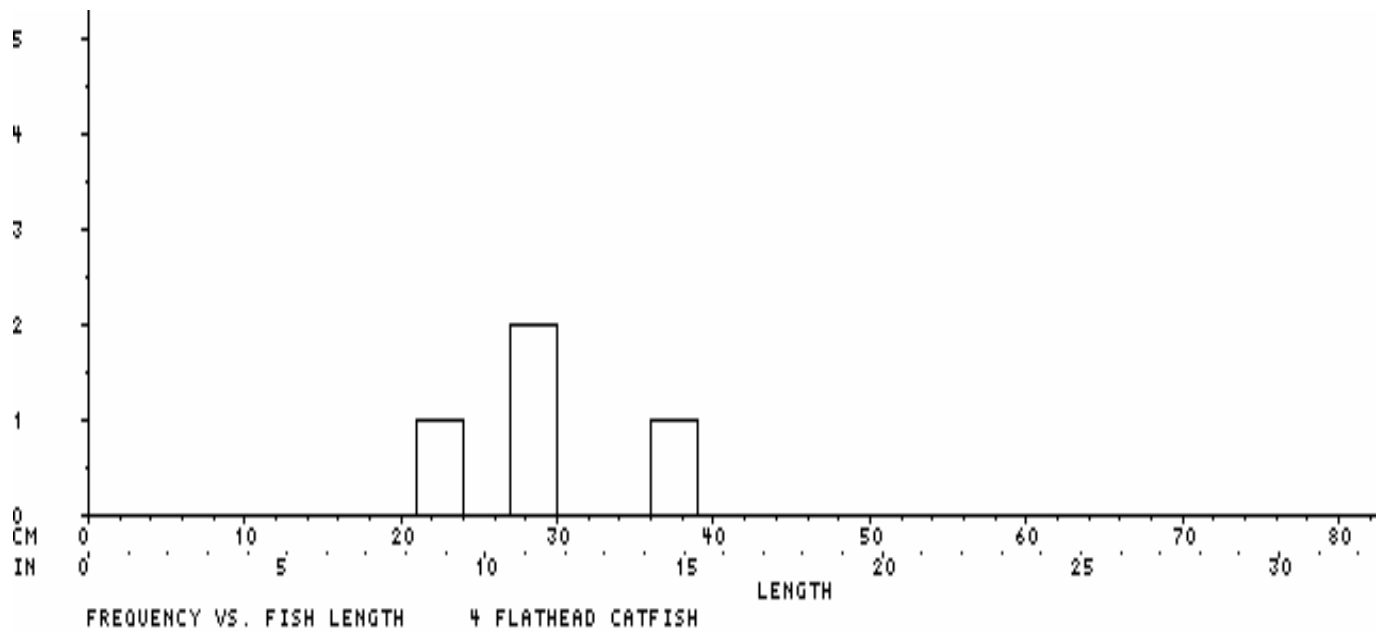


Figure 10. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of flathead catfish released by all anglers. Note the difference in scale from Figure 9.

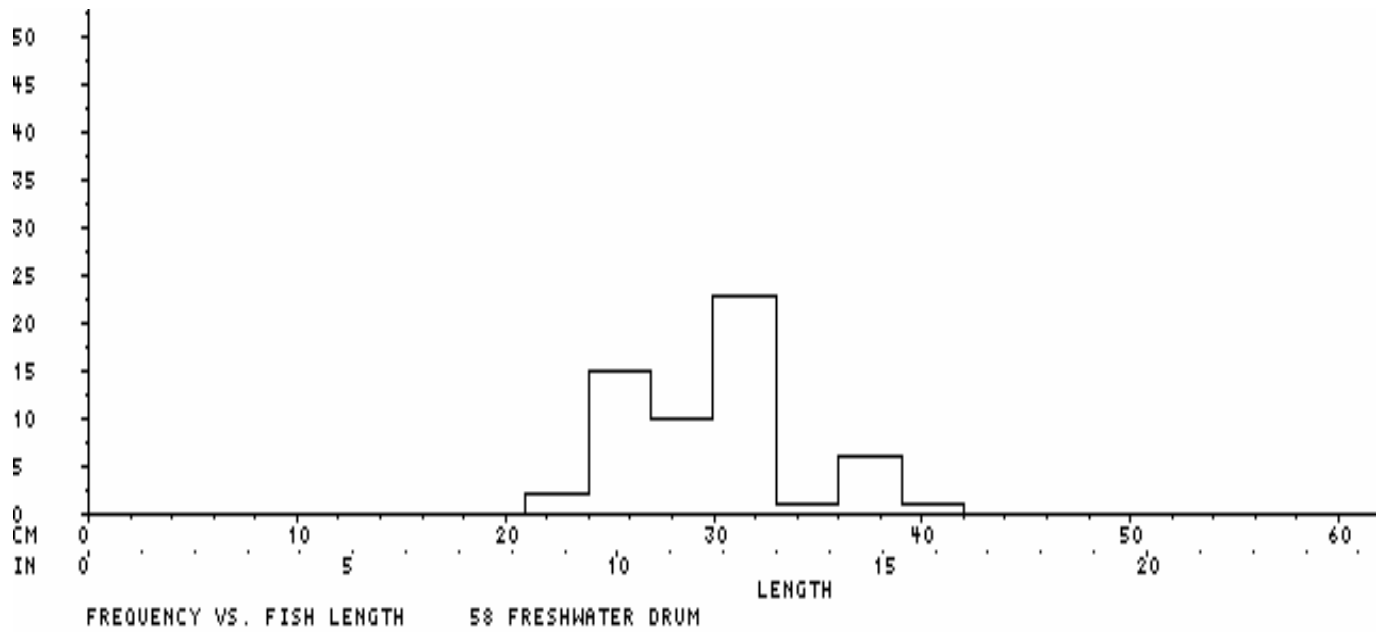


Figure 11. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of freshwater drum harvested by all anglers.

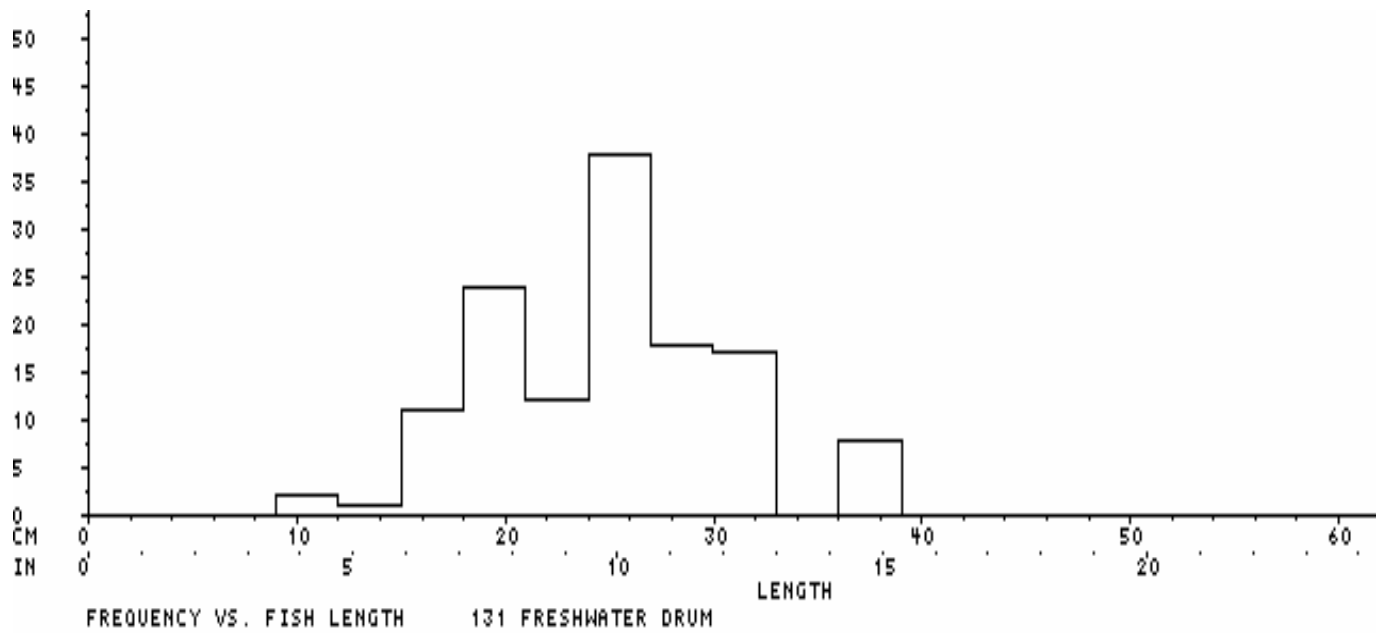


Figure 12. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of freshwater drum released by all anglers.

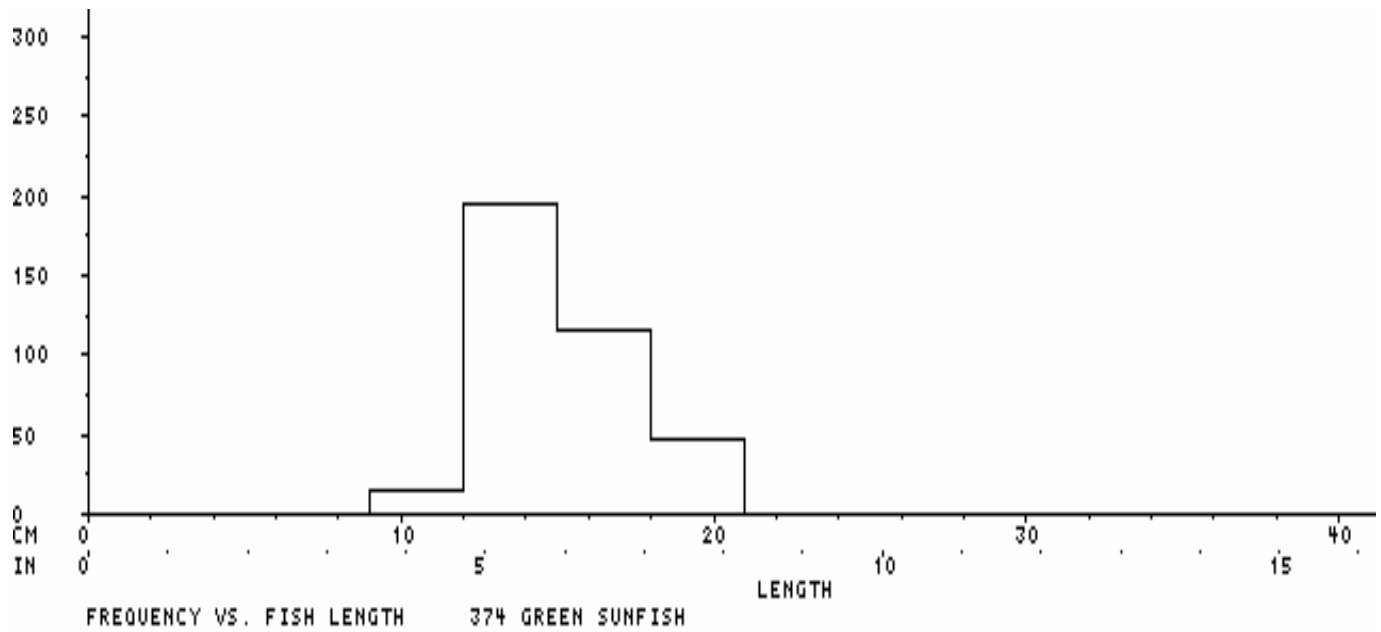


Figure 13. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of green sunfish harvested by all anglers.

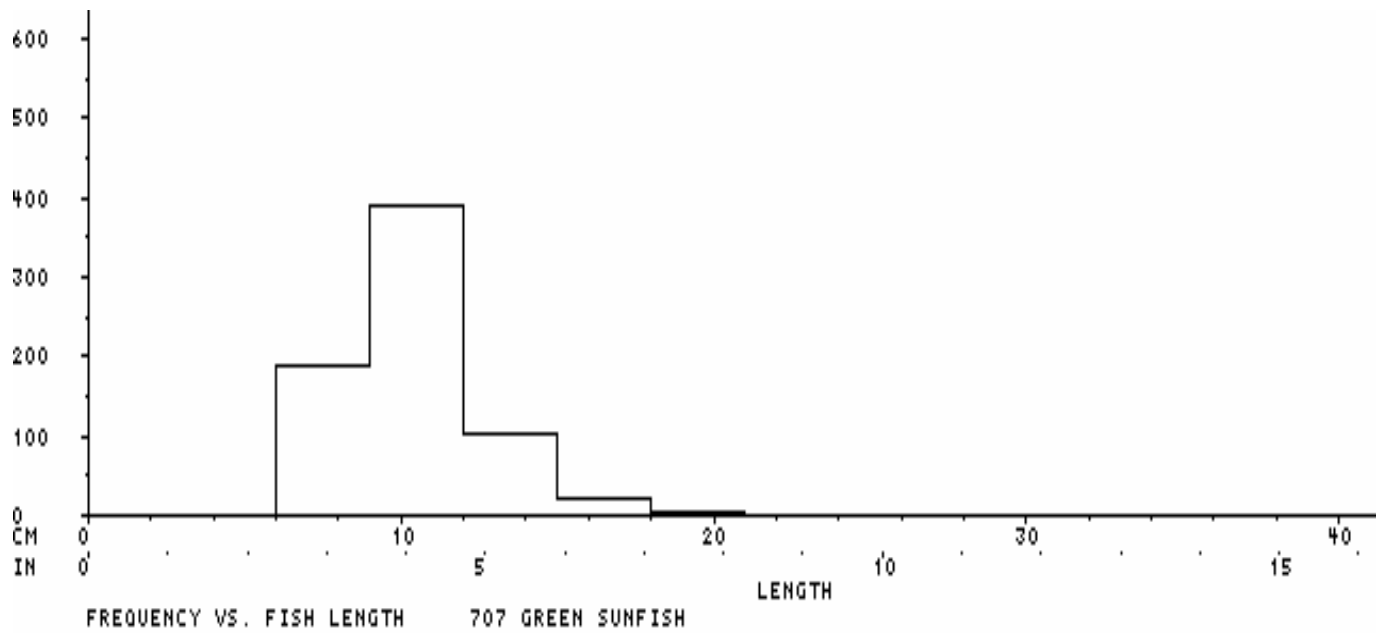


Figure 14. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of green sunfish released by all anglers. Note the difference in scale from Figure 13.

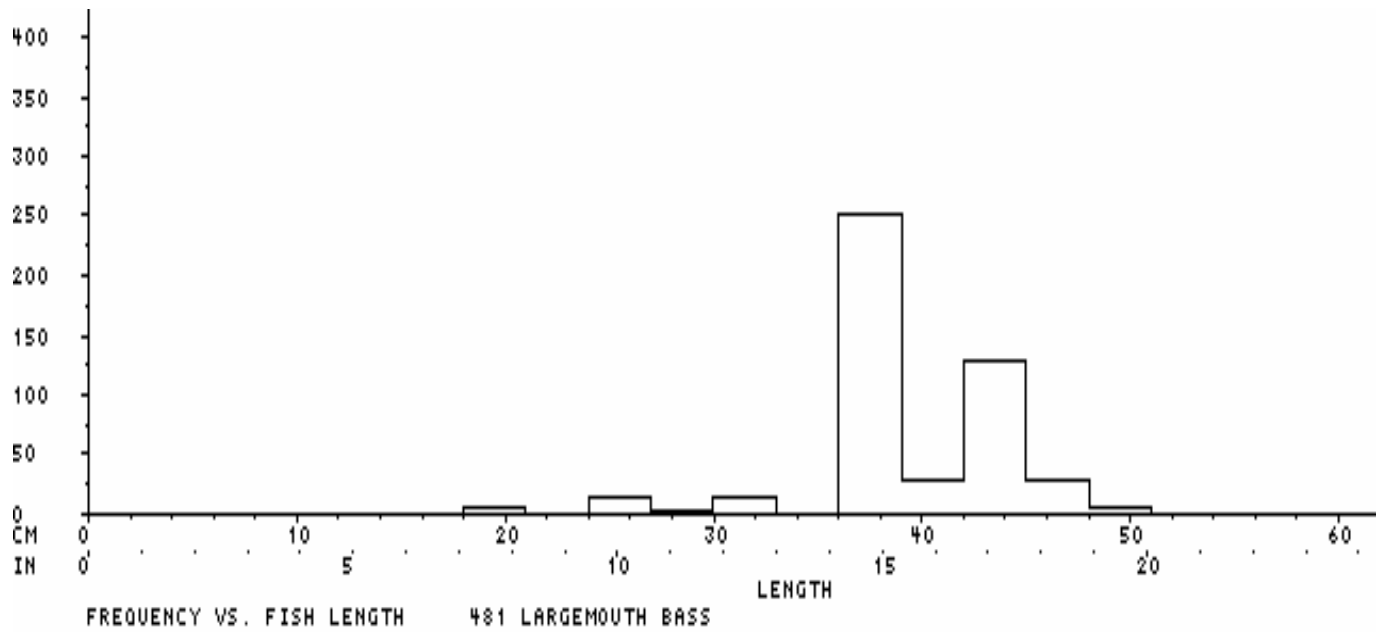


Figure 15. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of largemouth bass harvested by all anglers.

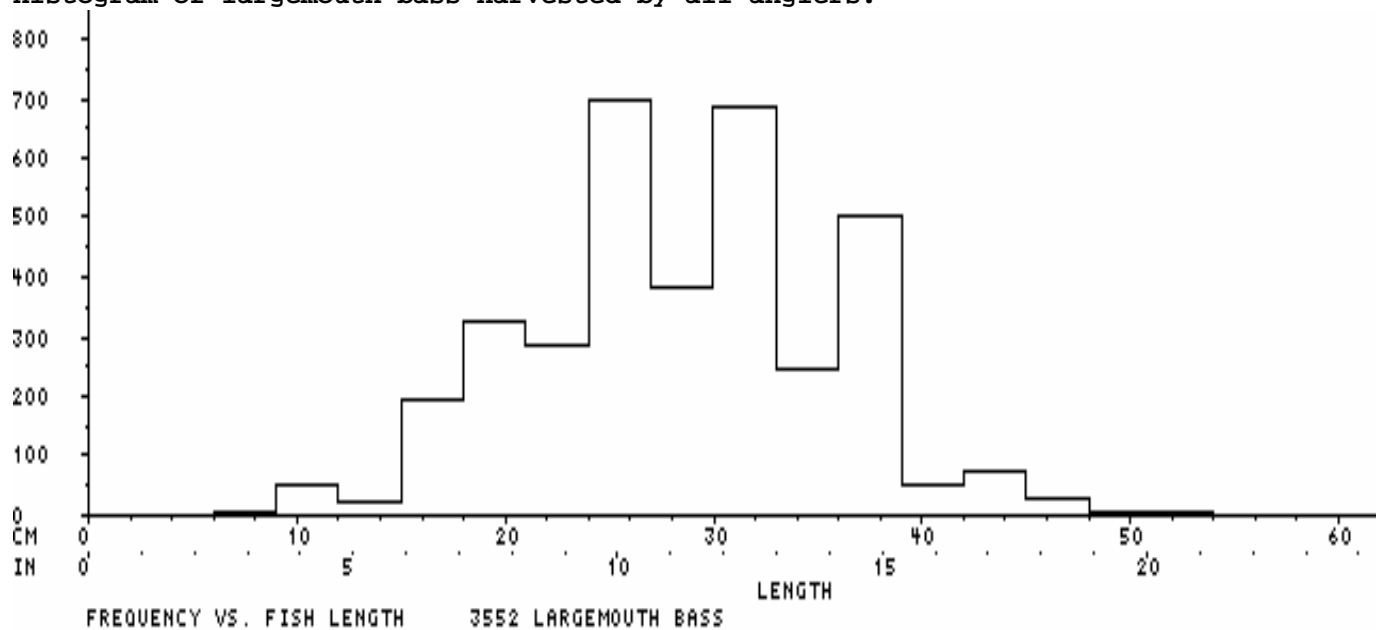


Figure 16. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of largemouth bass released by all anglers. Note the difference in scale from Figure 15.

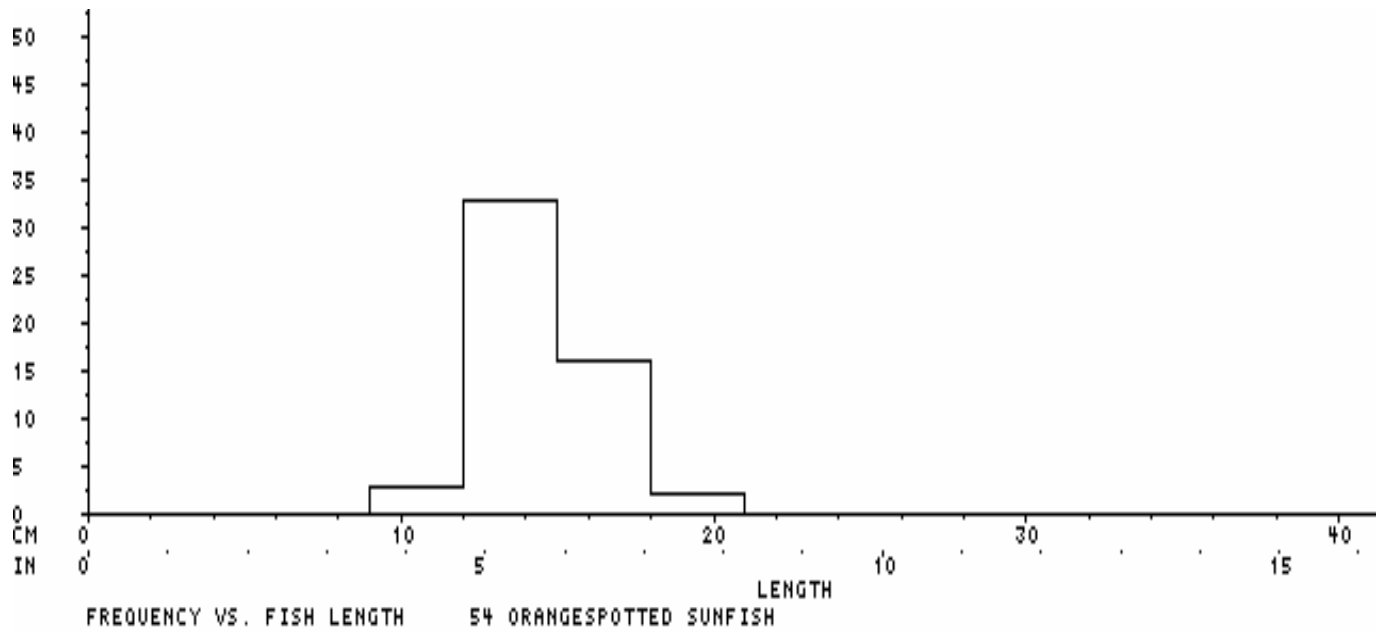


Figure 17. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of orangespotted sunfish harvested by all anglers.

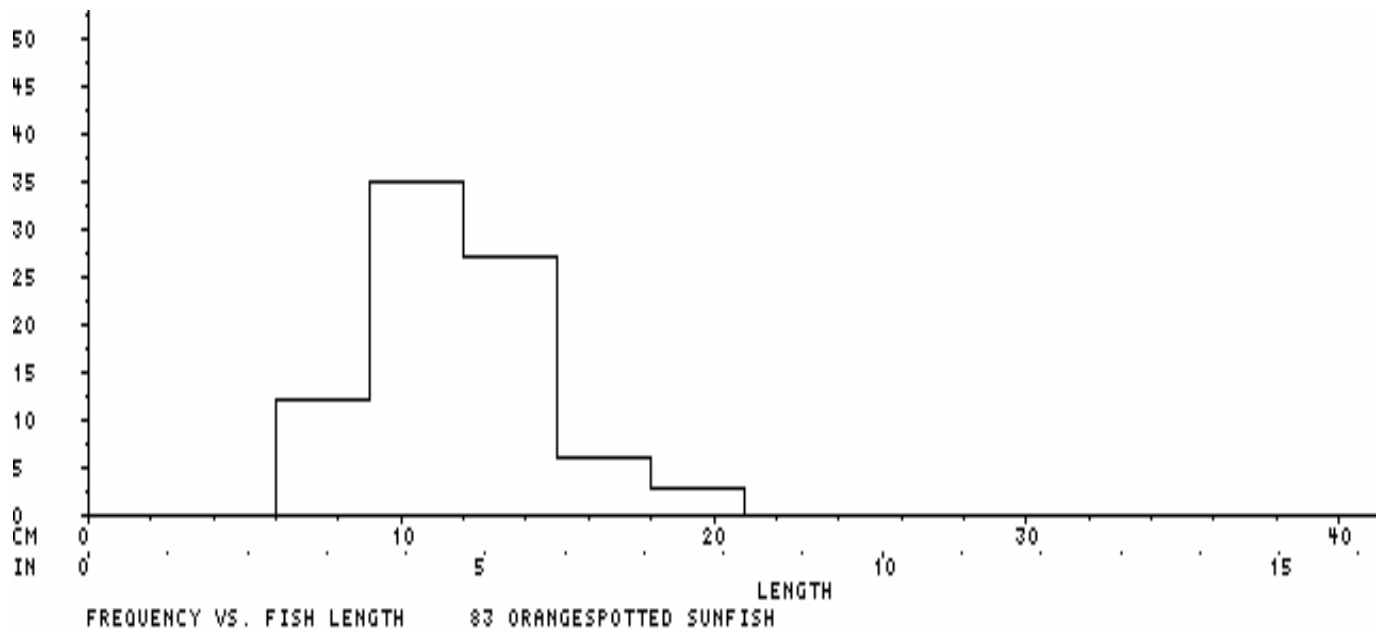


Figure 18. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of orangespotted sunfish released by all anglers.

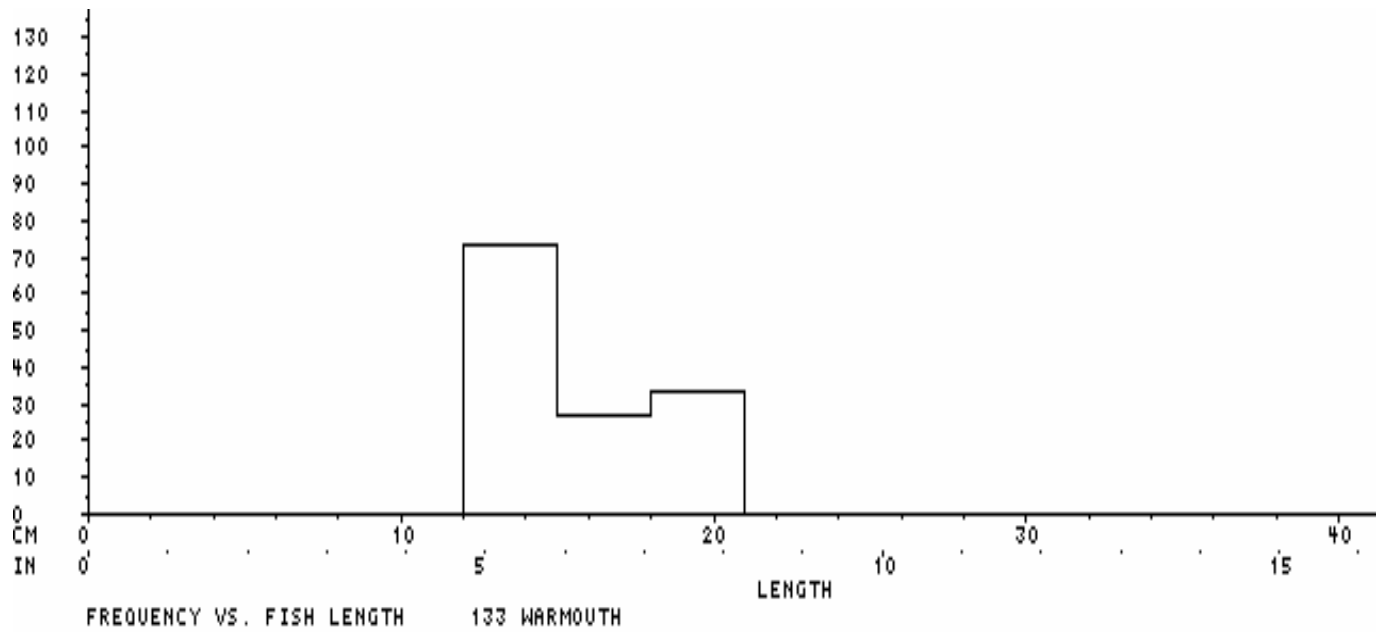


Figure 19. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of warmouth harvested by all anglers.

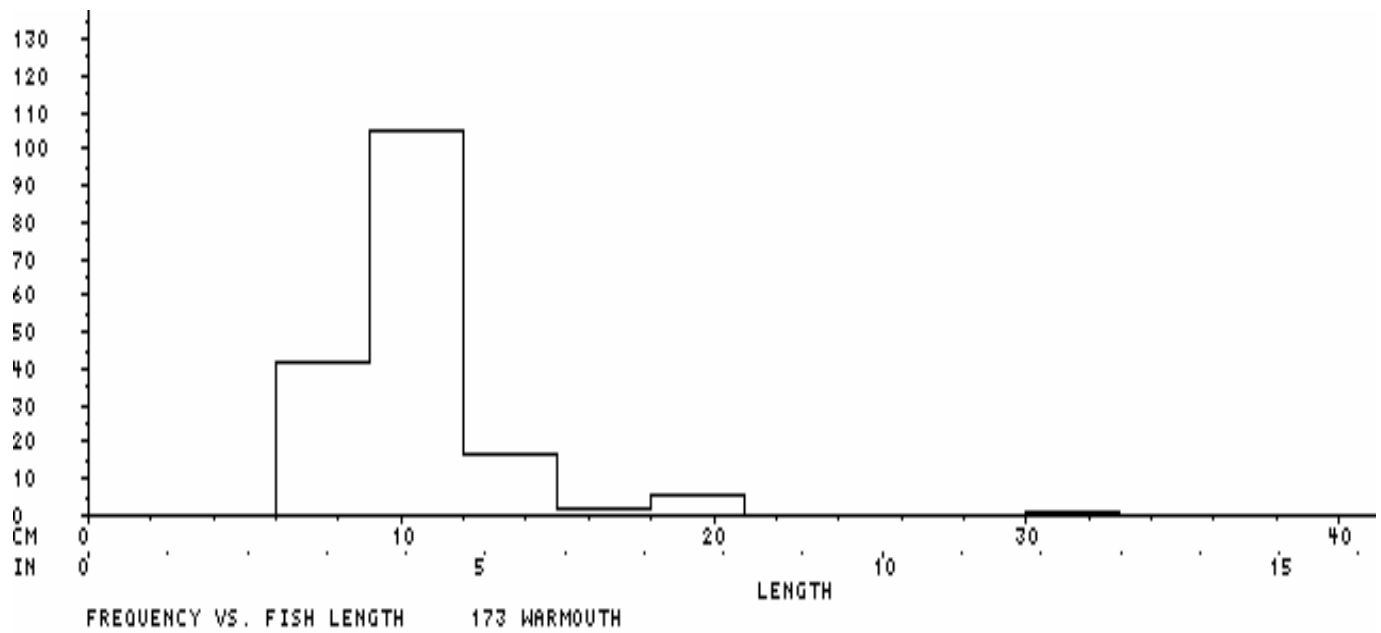


Figure 20. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of warmouth released by all anglers.

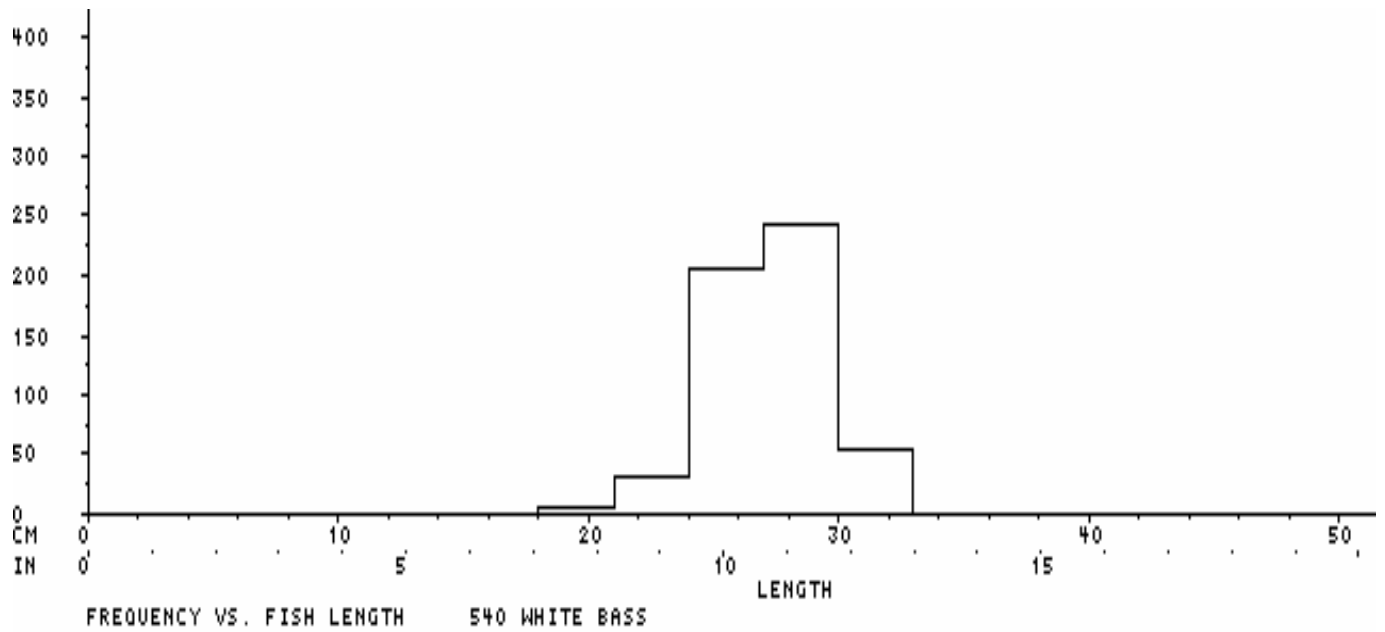


Figure 21. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of white bass harvested by all anglers.

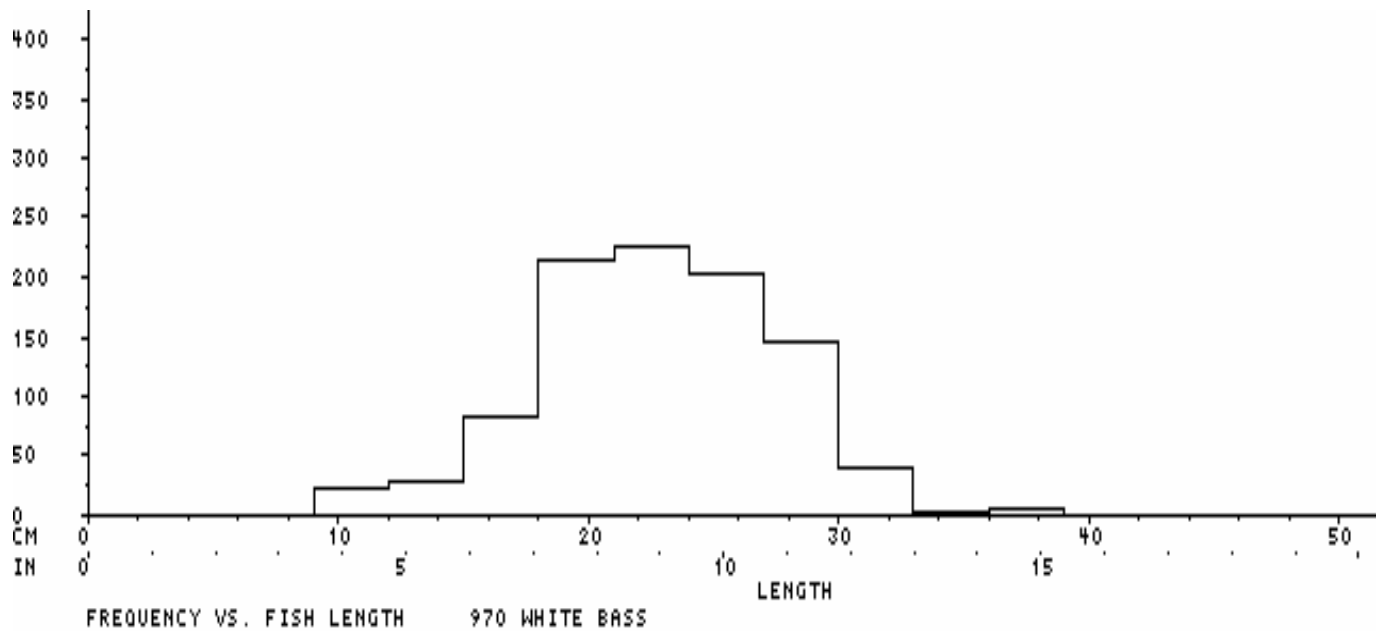


Figure 22. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of white bass released by all anglers.

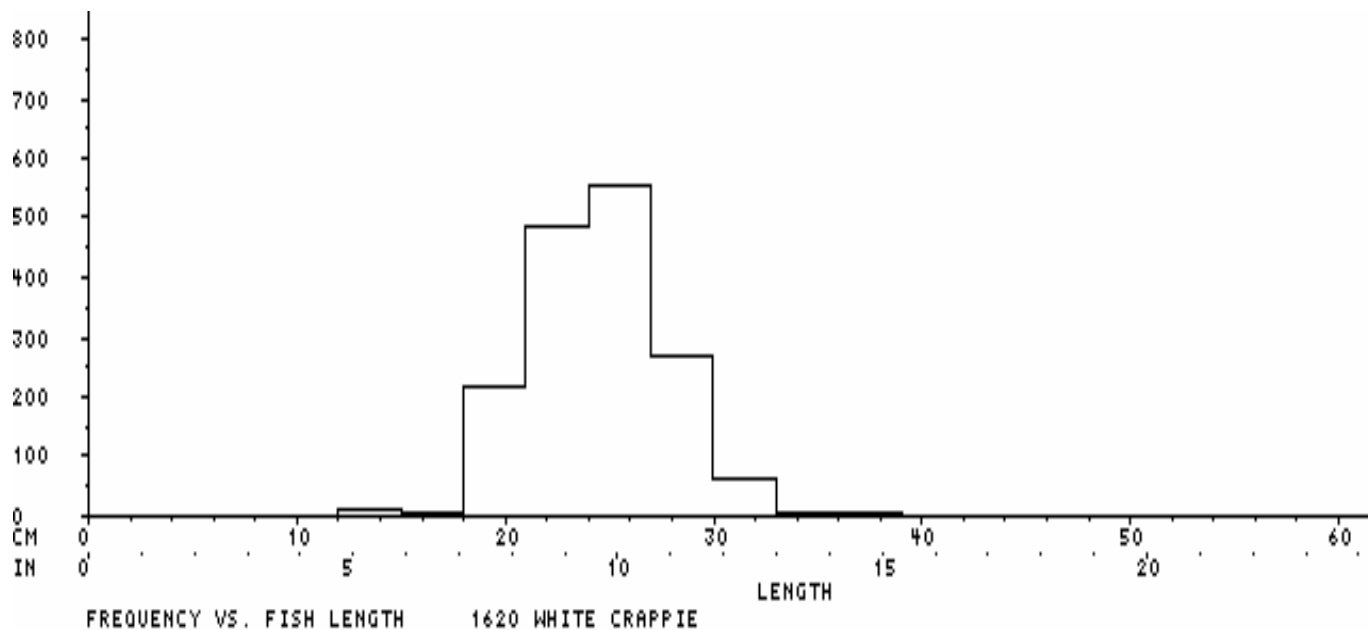


Figure 23. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of white crappie harvested by all anglers.

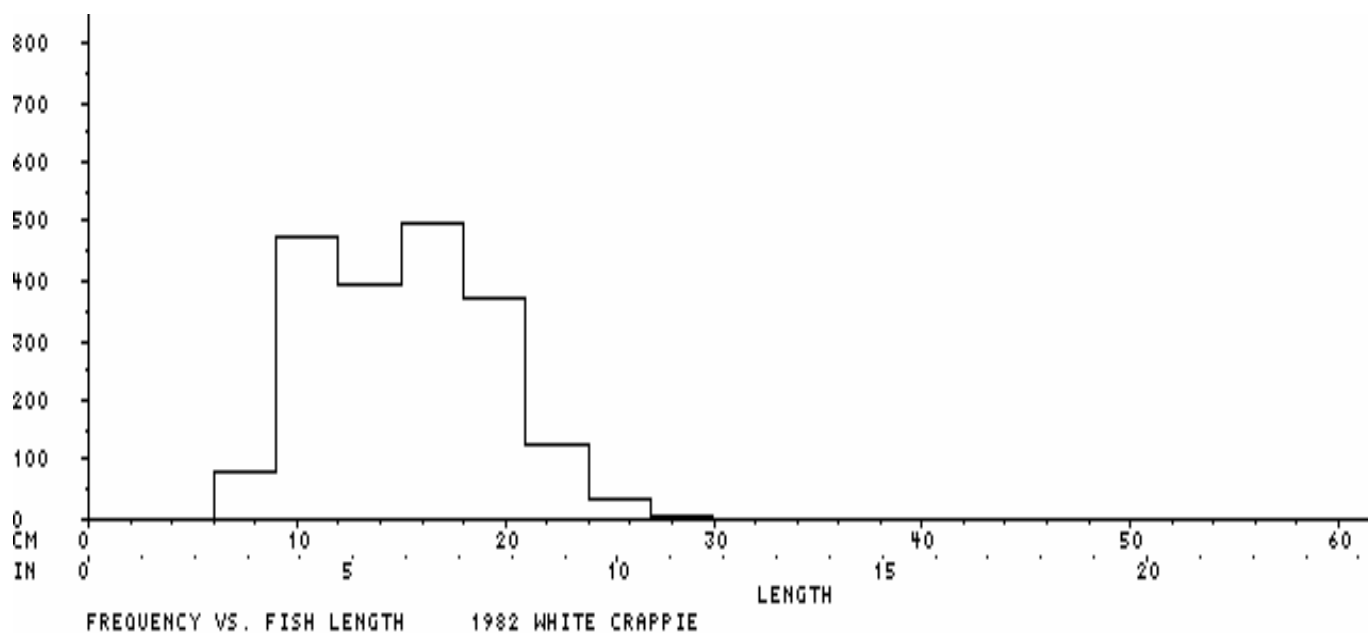


Figure 24. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of white crappie released by all anglers.

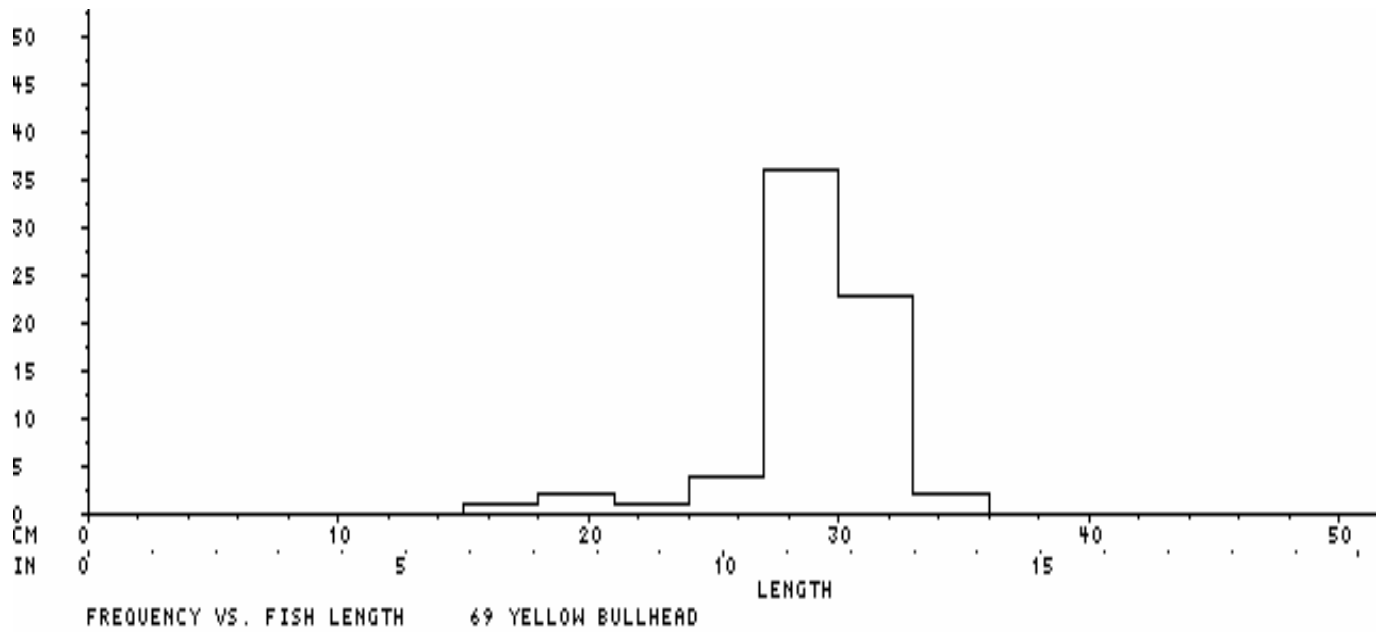


Figure 25. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of yellow bullhead harvested by all anglers.

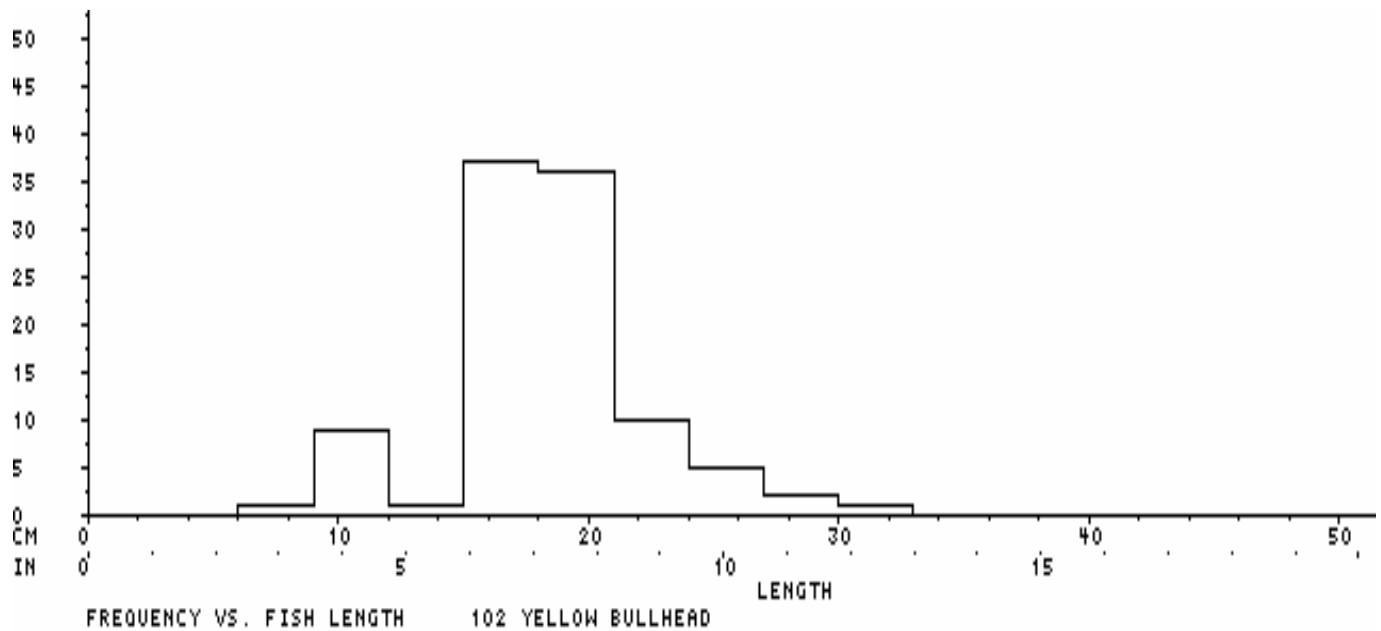


Figure 26. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of yellow bullhead released by all anglers.

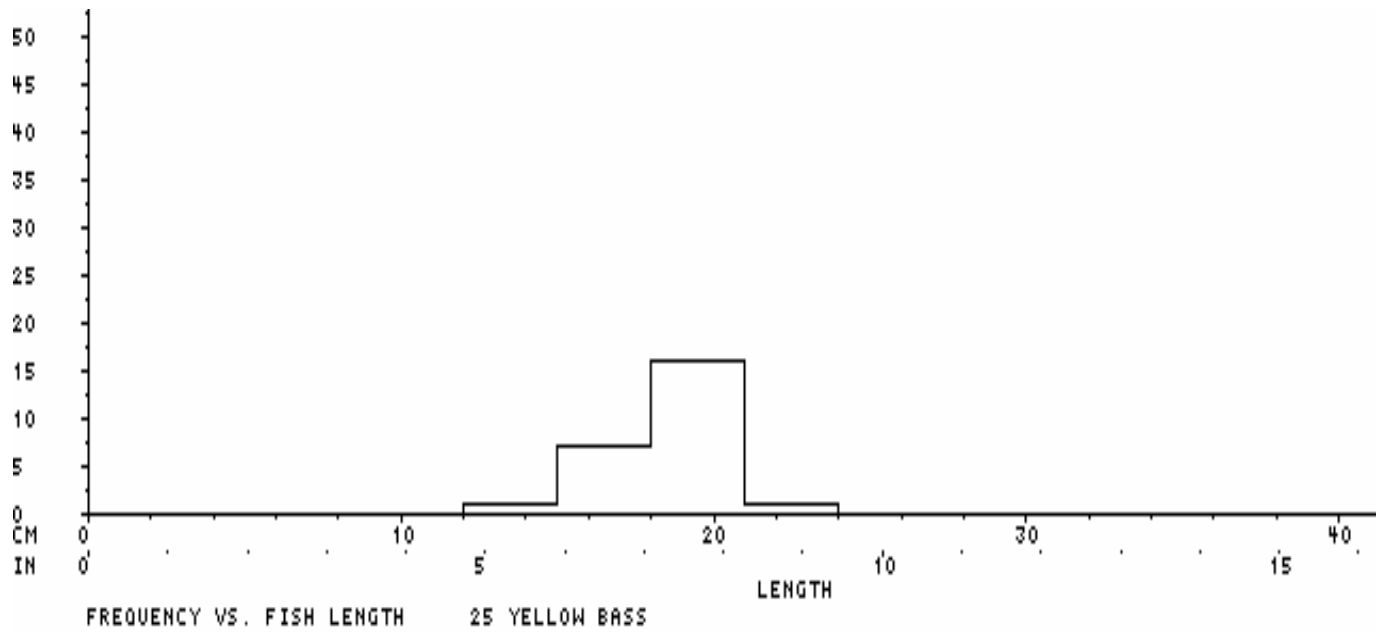


Figure 27. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of yellow bass harvested by all anglers.

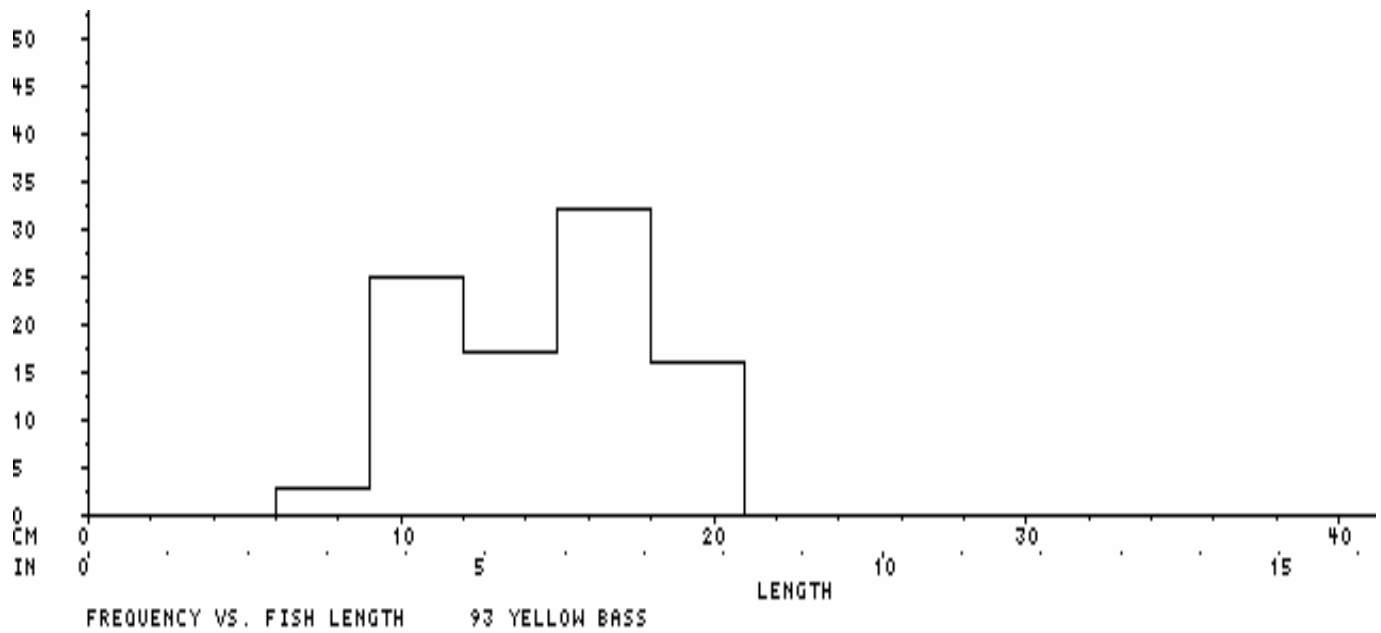


Figure 28. Crab Orchard Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of yellow bass released by all anglers.