

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

2000 APPLE CANYON LAKE
 450 ACRES
 REGION 1, DISTRICT 1

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: 327/693 = 47.2%

NUMBER OF INTERVIEWS: 2025

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	27670	24010-31331 (13%)	61	53-70 (13%)	11%
	HOLIDAY	22812	19633-25991 (14%)	51	44-58 (14%)	22%
	TOTAL	50482	45634-55330 (10%)	112	101-123 (10%)	16%
SHORE	WEEKDAY	3432	2589-4275 (25%)	8	6-9 (25%)	10%
	HOLIDAY	3549	2792-4306 (21%)	8	6-10 (21%)	18%
	TOTAL	6981	5848-8114 (16%)	16	13-18 (16%)	14%
BOAT & SHORE	WEEKDAY	31102	27346-34859 (12%)	69	61-77 (12%)	11%
	HOLIDAY	26360	23093-29628 (12%)	59	51-66 (12%)	21%
	TOTAL	57463	52484-62442 (9%)	128	117-139 (9%)	16%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
37374	30792-43956 (18%)	.420	.352-.489 (16%)	205.23	83.05	All species
3561	2594-4528 (27%)	.048	.034-.062 (30%)	19.55	7.91	Black crappie
32294	26007-38582 (19%)	.350	.286-.414 (18%)	177.33	71.77	Bluegill
5	0-15 (208%)	.000	.000-.000 (209%)	0.03	0.01	Carp
1179	883-1475 (25%)	.020	.003-.036 (82%)	6.47	2.62	Largemouth bass
		****	NOT RECORDED ****			Muskellunge
14	0-32 (135%)	.000	.000-.000 (142%)	0.08	0.03	Northern pike
32	0-68 (112%)	.000	.000-.001 (124%)	0.18	0.07	Smallmouth bass
		****	NOT RECORDED ****			Tiger muskie
289	154-425 (47%)	.003	.001-.004 (61%)	1.59	0.64	Walleye
		****	NOT RECORDED ****			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
7775	6559-8990 (16%)	.098	.073-.122 (25%)	42.69	0.208	All species
934	679-1188 (27%)	.013	.009-.017 (31%)	5.13	0.262	Black crappie
5246	4198-6294 (20%)	.060	.048-.073 (21%)	28.81	0.162	Bluegill
1	0-3 (208%)	.000	.000-.000 (208%)	0.01	0.203	Carp
1153	861-1444 (25%)	.021	.000-.047 (128%)	6.33	0.978	Largemouth bass
		****	NOT RECORDED ****			Muskellunge
54	0-122 (125%)	.000	.000-.001 (136%)	0.30	3.940	Northern pike
34	0-69 (101%)	.000	.000-.000 (111%)	0.19	1.069	Smallmouth bass
		****	NOT RECORDED ****			Tiger muskie
353	200-507 (43%)	.003	.001-.005 (57%)	1.94	1.220	Walleye
		****	NOT RECORDED ****			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
17141	14461-19820 (16%)	.215	.161-.269 (25%)	38.09	0.459	All species
2058	1498-2619 (27%)	.029	.020-.037 (31%)	4.57	0.578	Black crappie
11566	9256-13875 (20%)	.133	.105-.161 (21%)	25.70	0.358	Bluegill
2	0-7 (209%)	.000	.000-.000 (209%)	0.00	0.447	Carp
2541	1898-3184 (25%)	.045	.000-.104 (128%)	5.65	2.155	Largemouth bass
		****	NOT RECORDED ****			Muskellunge
119	0-269 (125%)	.000	.000-.001 (136%)	0.27	8.686	Northern pike
75	0-152 (101%)	.000	.000-.001 (111%)	0.17	2.356	Smallmouth bass
		****	NOT RECORDED ****			Tiger muskie
779	441-1117 (43%)	.007	.003-.011 (57%)	1.73	2.691	Walleye
		****	NOT RECORDED ****			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
148415	130203-166626 (12%)	1.624	1.453-1.796 (11%)	814.96	329.81	All species
4598	3265-5930 (29%)	.061	.043-.079 (30%)	25.25	10.22	Black crappie
77393	64543-90242 (17%)	.806	.698-.914 (13%)	424.97	171.98	Bluegill
5	0-15 (208%)	.000	.000-.000 (209%)	0.03	0.01	Carp
63460	55594-71327 (12%)	.716	.595-.837 (17%)	348.47	141.02	Largemouth bass
18	0-38 (106%)	.000	.000-.000 (95%)	0.10	0.04	Muskellunge
203	25-382 (88%)	.004	.000-.008 (97%)	1.12	0.45	Northern pike
2137	1585-2690 (26%)	.031	.018-.043 (41%)	11.74	4.75	Smallmouth bass
2	0-7 (236%)	.000	.000-.000 (245%)	0.01	0.00	Tiger muskie
593	416-770 (30%)	.006	.003-.009 (49%)	3.26	1.32	Walleye
5	0-27 (430%)	.000	.000-.000 (430%)	0.03	0.01	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
37680	33126-42233 (12%)	.417	.364-.470 (13%)	206.90	0.254	All species
1065	772-1358 (27%)	.015	.010-.019 (29%)	5.85	0.232	Black crappie
7342	5935-8749 (19%)	.079	.065-.093 (17%)	40.31	0.095	Bluegill
1	0-3 (208%)	.000	.000-.000 (208%)	0.01	0.203	Carp
27382	23858-30905 (13%)	.300	.252-.348 (16%)	150.36	0.431	Largemouth bass
67	0-145 (117%)	.000	.000-.001 (104%)	0.37	3.653	Muskellunge
325	114-535 (65%)	.005	.001-.010 (86%)	1.78	1.596	Northern pike
950	705-1194 (26%)	.012	.008-.017 (36%)	5.21	0.444	Smallmouth bass
2	0-6 (236%)	.000	.000-.000 (236%)	0.01	0.856	Tiger muskie
544	367-720 (32%)	.006	.003-.008 (46%)	2.98	0.916	Walleye
4	0-19 (430%)	.000	.000-.000 (430%)	0.02	0.701	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
83069	73031-93108 (12%)	.920	.804-1.037 (13%)	184.60	0.560	All species
2348	1703-2994 (27%)	.032	.023-.042 (29%)	5.22	0.511	Black crappie
16186	13084-19288 (19%)	.174	.144-.205 (17%)	35.97	0.209	Bluegill
2	0-7 (209%)	.000	.000-.000 (209%)	0.00	0.447	Carp
60366	52598-68135 (13%)	.661	.556-.767 (16%)	134.15	0.951	Largemouth bass
148	0-320 (117%)	.001	.000-.002 (104%)	0.33	8.054	Muskellunge
716	252-1179 (65%)	.011	.002-.021 (86%)	1.59	3.518	Northern pike
2093	1554-2633 (26%)	.028	.018-.037 (36%)	4.65	0.979	Smallmouth bass
4	0-14 (236%)	.000	.000-.000 (236%)	0.01	1.887	Tiger muskie
1198	810-1587 (32%)	.012	.007-.018 (46%)	2.66	2.020	Walleye
8	0-41 (430%)	.000	.000-.001 (318%)	0.02	1.546	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	4.0	3.7-4.3 (7%)	0.3	13.0	255
SHORE	2.1	1.6-2.7 (25%)	0.3	5.8	36
BOAT & SHORE	3.8	3.5-4.1 (7%)	0.3	13.0	291
MILES TRAVELED	41.3	37.1-45.6 (10%)	1	3000	1725
SUCCESS RATING (1-10)	5.2	5.1-5.3 (2%)	1	10	1719

*65 samples were from split interviews of completed trips.
14.8% of all 1960 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 8 out of 1960 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	426	844	227	96	25	4	2			3
SHORE INTERVIEWS	181	97	28	16	7	2		2		

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

778 (39.7%)	ANY	All species
110 (5.6%)	BLC	Black crappie
364 (18.6%)	BLG	Bluegill
3 (0.2%)	CCF	Channel catfish
2 (0.1%)	CRP	Crappie spp.
668 (34.1%)	LMB	Largemouth bass
2 (0.1%)	NOP	Northern pike
2 (0.1%)	SMB	Smallmouth bass
31 (1.6%)	WAE	Walleye

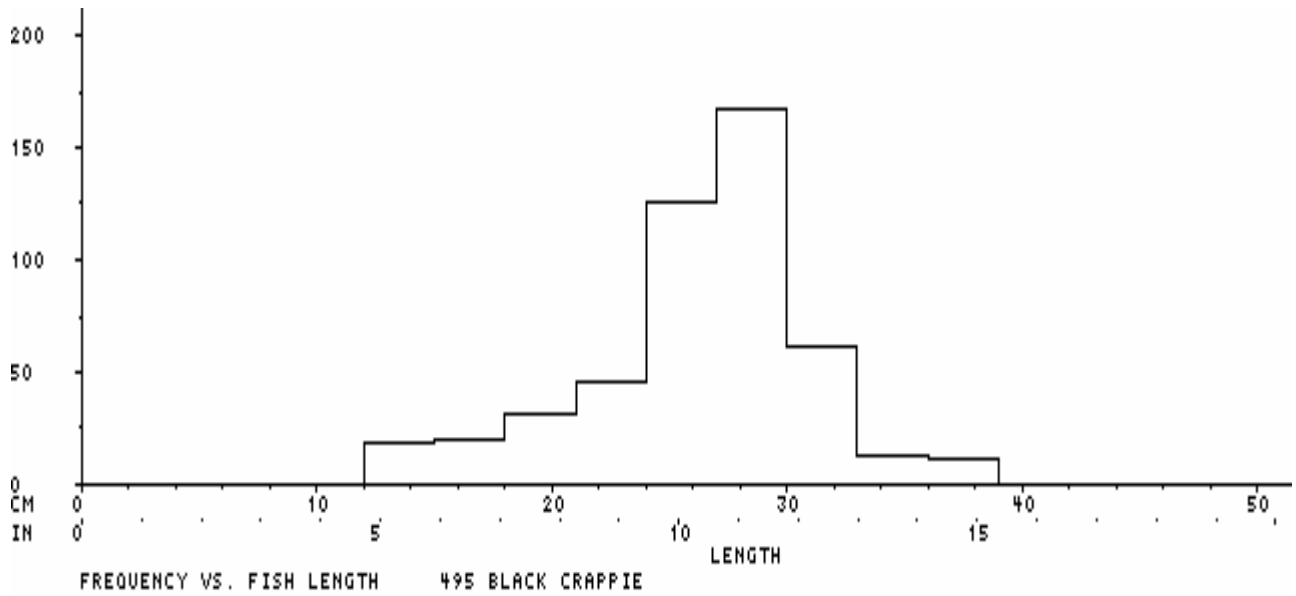


Figure 1. Apple Canyon Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of black crappie harvested by all anglers.

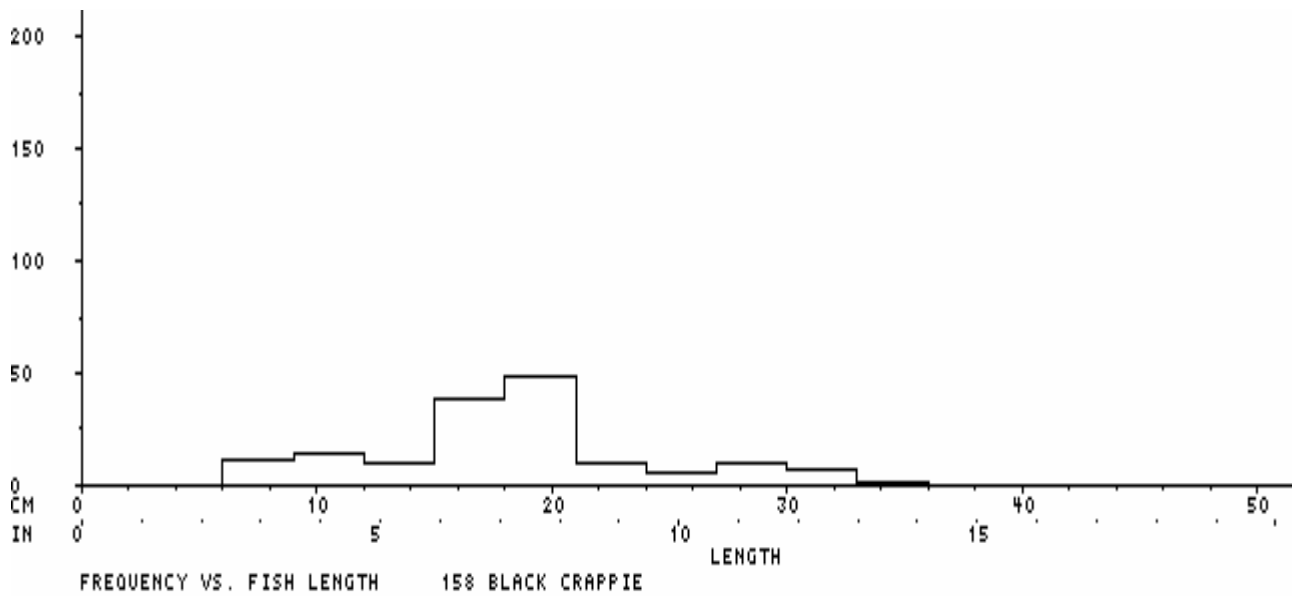


Figure 2. Apple Canyon Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of black crappie released by all anglers.

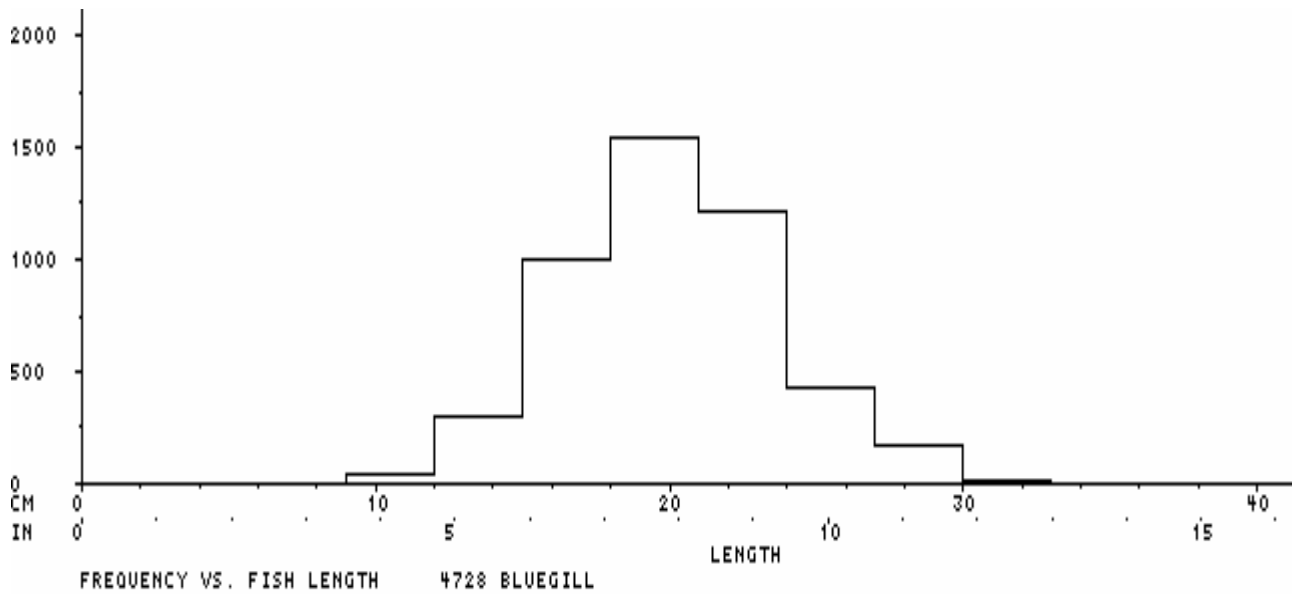


Figure 3. Apple Canyon Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of bluegill harvested by all anglers.

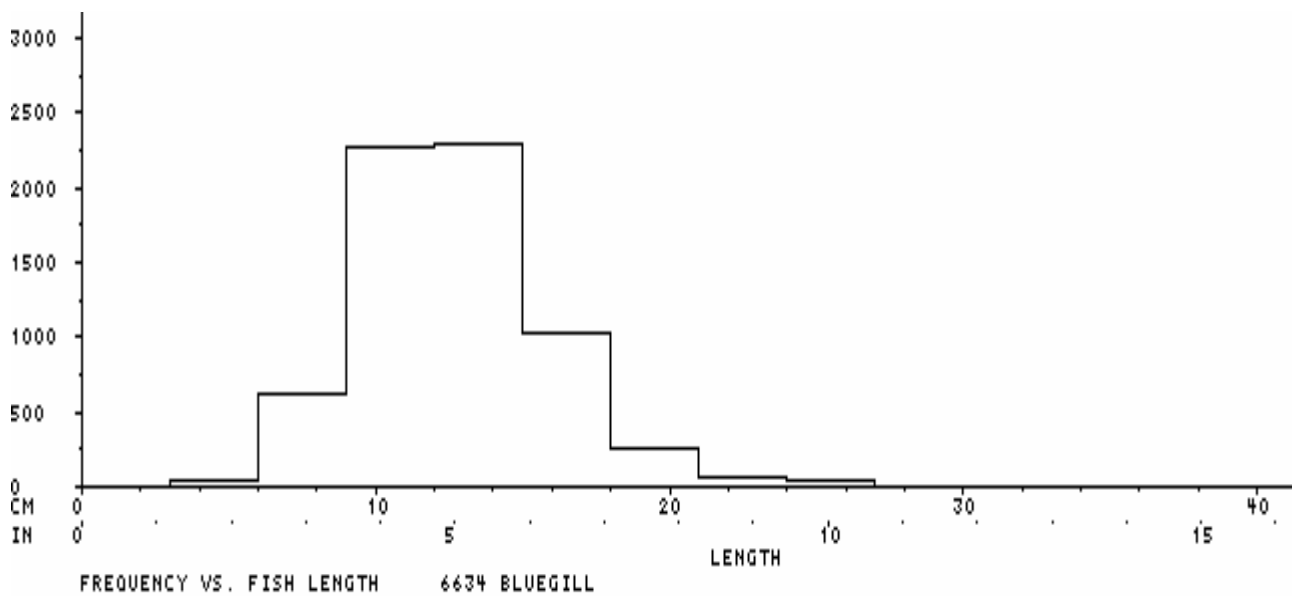


Figure 4. Apple Canyon Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of bluegill released by all anglers. Note the difference in scale from Figure 3.

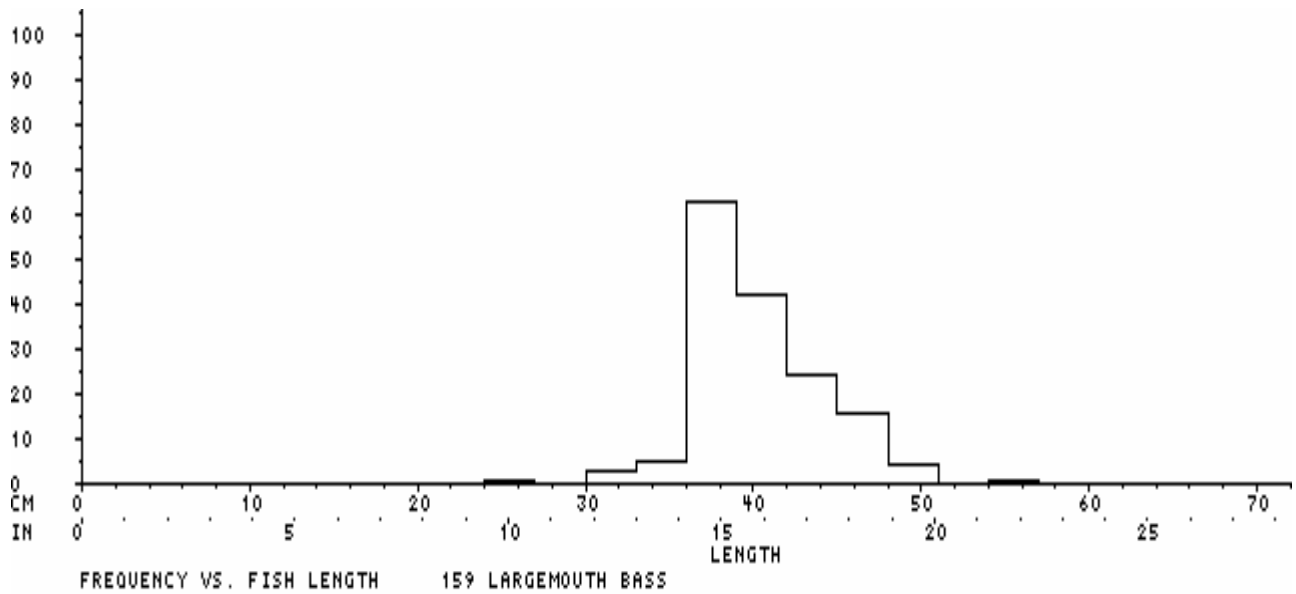


Figure 5. Apple Canyon Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of largemouth bass harvested by all anglers.

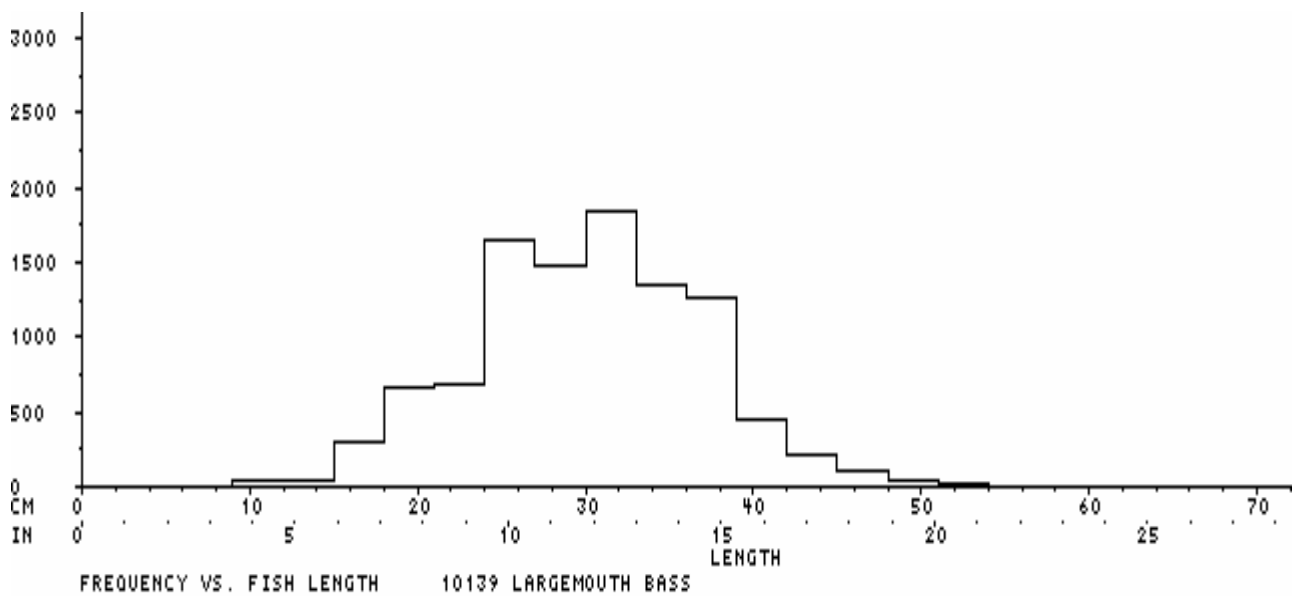


Figure 6. Apple Canyon Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of largemouth bass released by all anglers. Note the difference in scale from Figure 5.

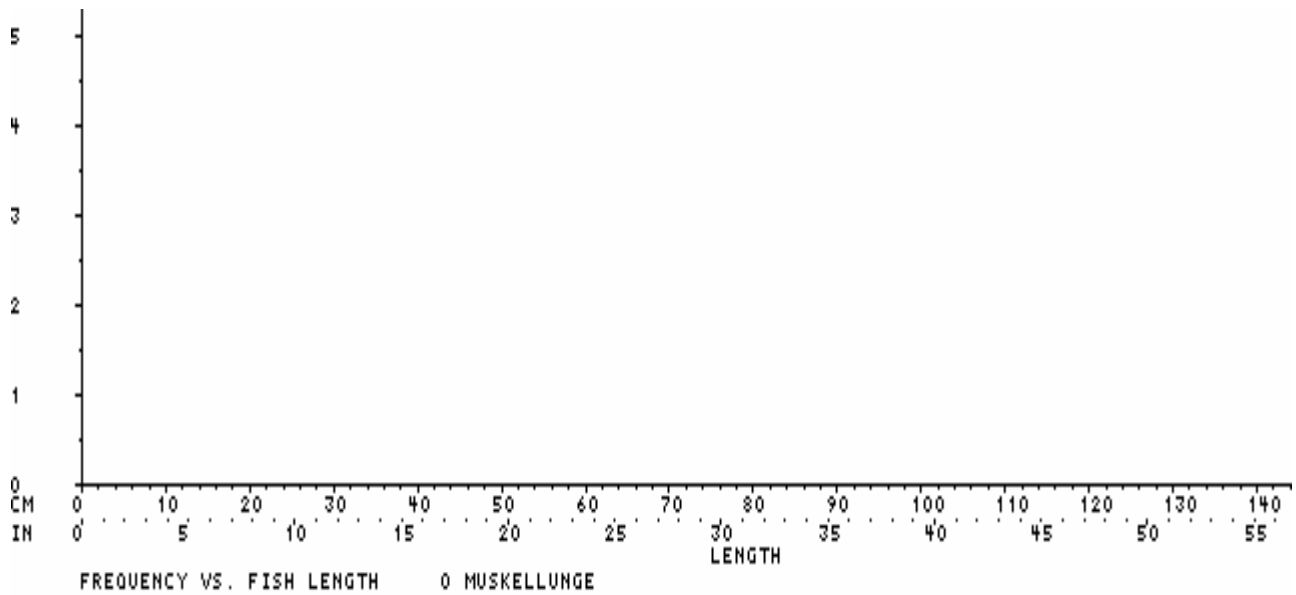


Figure 7. Apple Canyon Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of muskellunge harvested by all anglers.

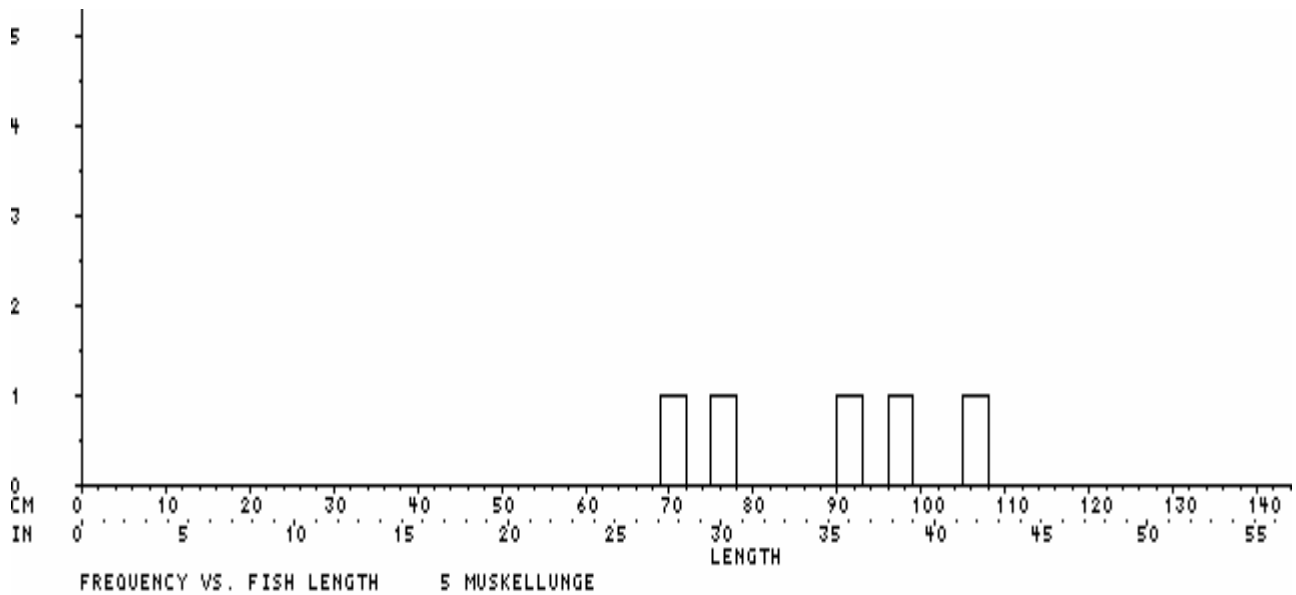


Figure 8. Apple Canyon Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of muskellunge released by all anglers.

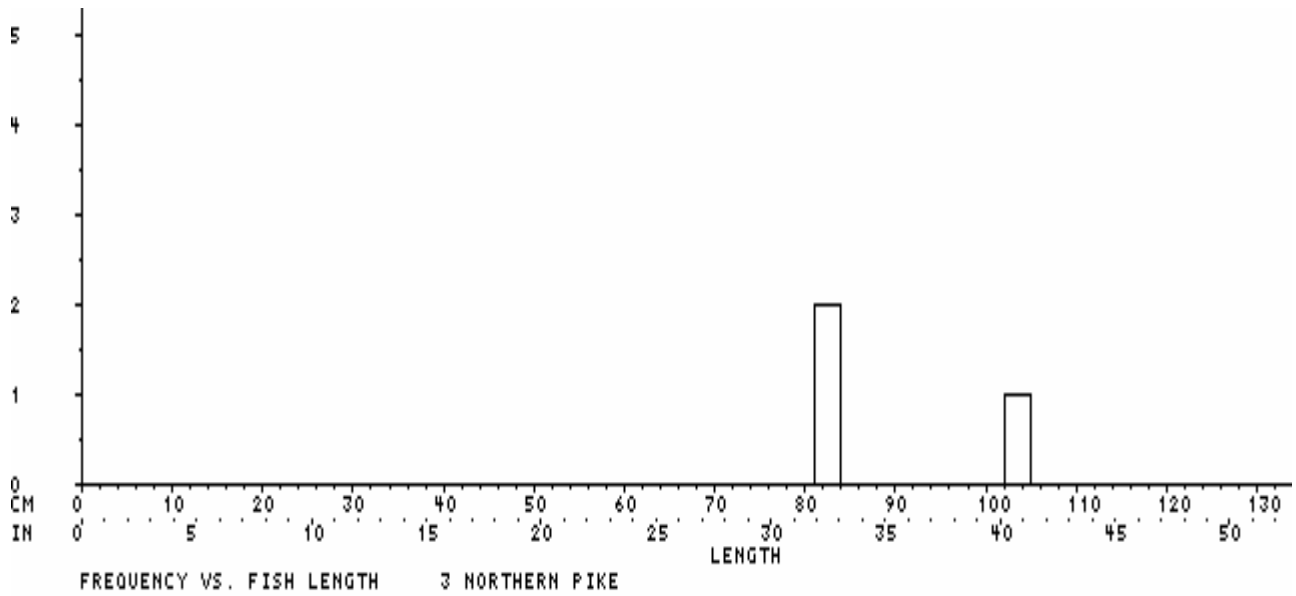


Figure 9. Apple Canyon Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of northern pike harvested by all anglers.

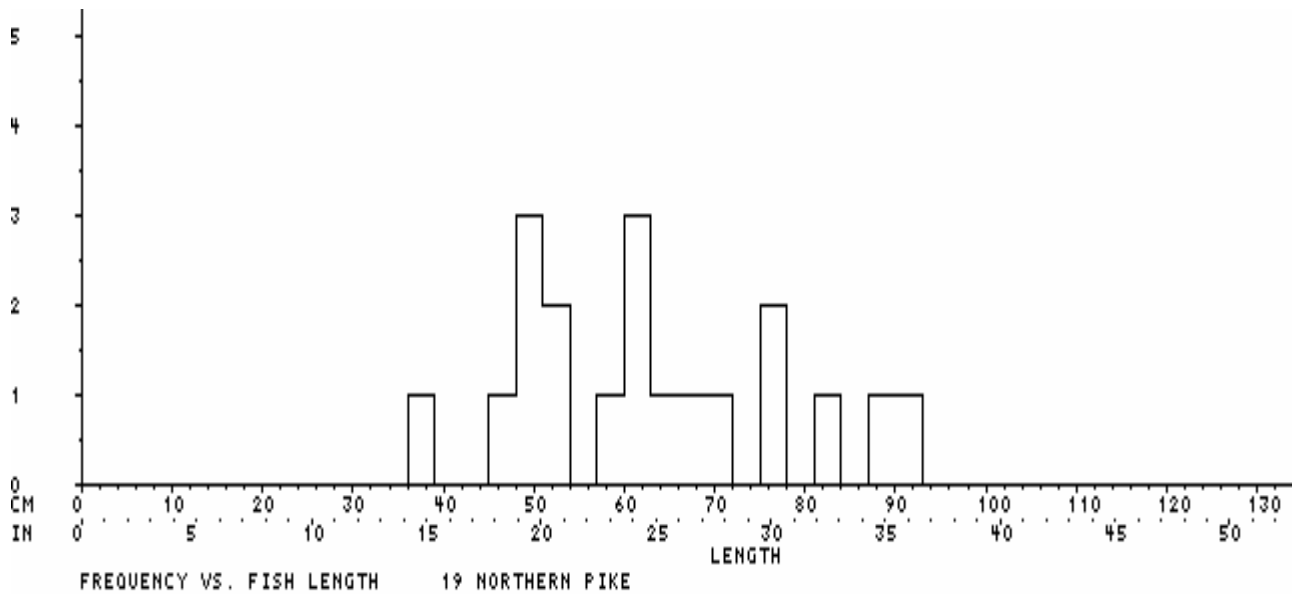


Figure 10. Apple Canyon Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of northern pike released by all anglers.

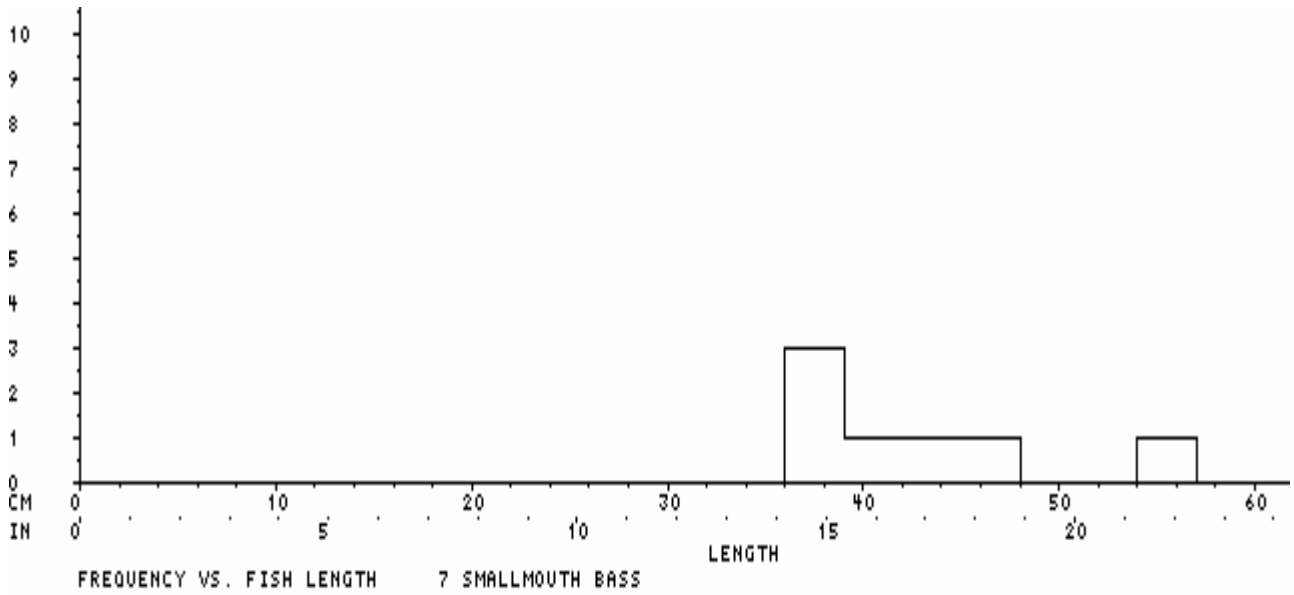


Figure 11. Apple Canyon Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of smallmouth bass harvested by all anglers.

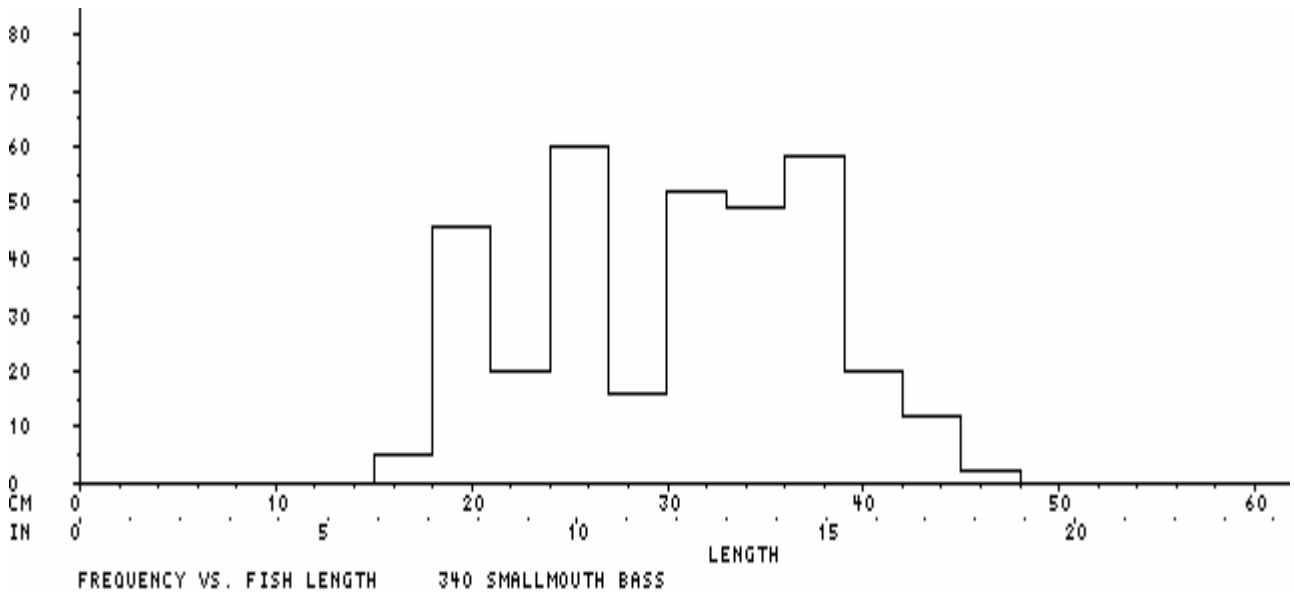


Figure 12. Apple Canyon Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of smallmouth bass released by all anglers. Note the difference in scale from Figure 11.

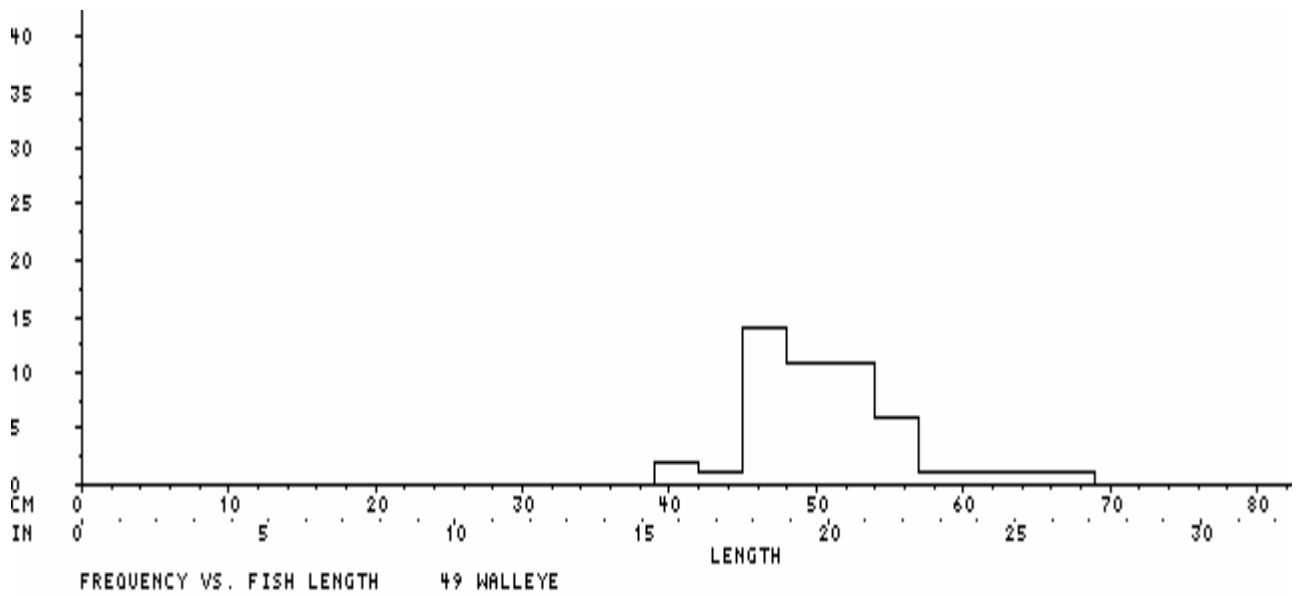


Figure 13. Apple Canyon Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of walleye harvested by all anglers.

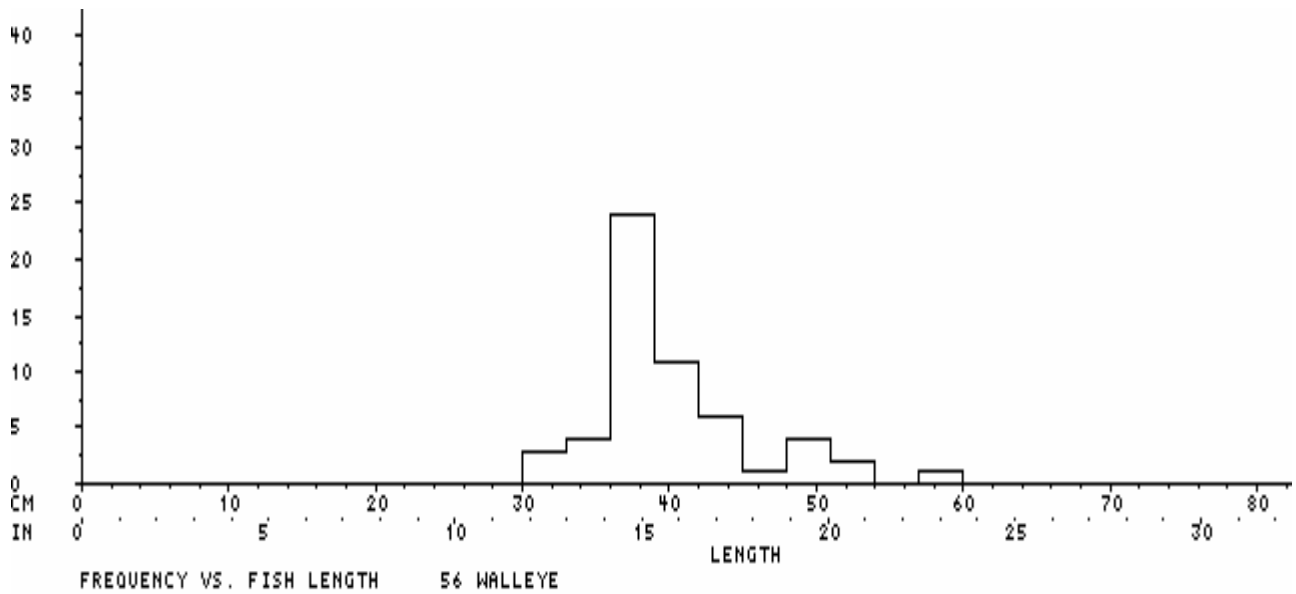


Figure 14. Apple Canyon Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of walleye released by all anglers.