

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

BEAVER DAM LAKE 2000
 55 ACRES
 REGION 4, DISTRICT 14

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: 286/693 = 41.3%

NUMBER OF INTERVIEWS: 1803

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	4382	3849-4915 (12%)	80	70-90 (12%)	23%
	HOLIDAY	3895	3330-4460 (15%)	71	61-81 (15%)	47%
	TOTAL	8277	7500-9053 (9%)	151	137-165 (9%)	34%
SHORE	WEEKDAY	6266	5320-7212 (15%)	114	97-131 (15%)	18%
	HOLIDAY	4019	3451-4586 (14%)	73	63-84 (14%)	36%
	TOTAL	10285	9236-11334 (10%)	187	168-206 (10%)	25%
BOAT & SHORE	WEEKDAY	10648	9617-11679 (10%)	194	175-213 (10%)	20%
	HOLIDAY	7914	7113-8715 (10%)	144	130-159 (10%)	41%
	TOTAL	18562	17256-19867 (7%)	338	314-362 (7%)	29%

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

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
6470	5281-7659 (18%)	.278	.219-.337 (21%)	291.21	117.85	All species
255	154-356 (40%)	.014	.007-.021 (52%)	11.47	4.64	Black crappie
3951	2997-4905 (24%)	.187	.134-.240 (28%)	177.84	71.97	Bluegill
615	415-816 (33%)	.029	.017-.041 (41%)	27.70	11.21	Channel catfish
		****	NOT RECORDED ****			Gizzard shad
197	36-359 (82%)	.007	.003-.011 (59%)	8.88	3.59	Largemouth bass
1015	411-1620 (60%)	.019	.009-.029 (52%)	45.70	18.49	Rainbow trout
		****	NOT RECORDED ****			Redear sunfish
		****	NOT RECORDED ****			Smallmouth bass
411	245-576 (40%)	.022	.012-.031 (45%)	18.48	7.48	White crappie
25	0-55 (116%)	.001	.000-.002 (133%)	1.14	0.46	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
1264	1032-1497 (18%)	.055	.042-.068 (24%)	56.90	0.195	All species
66	39-93 (41%)	.003	.002-.005 (53%)	2.98	0.260	Black crappie
416	299-534 (28%)	.018	.013-.024 (29%)	18.74	0.105	Bluegill
327	177-477 (46%)	.017	.006-.028 (64%)	14.71	0.531	Channel catfish
		****	NOT RECORDED ****			Gizzard shad
131	45-217 (66%)	.006	.003-.009 (56%)	5.90	0.664	Largemouth bass
211	108-314 (49%)	.005	.002-.008 (62%)	9.51	0.208	Rainbow trout
		****	NOT RECORDED ****			Redear sunfish
		****	NOT RECORDED ****			Smallmouth bass
103	57-149 (44%)	.005	.003-.007 (46%)	4.63	0.251	White crappie
9	0-22 (132%)	.000	.000-.001 (155%)	0.43	0.372	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
2787	2274-3300 (18%)	.121	.092-.149 (24%)	50.76	0.431	All species
146	86-206 (41%)	.008	.004-.012 (53%)	2.66	0.573	Black crappie
918	660-1176 (28%)	.040	.029-.052 (29%)	16.72	0.232	Bluegill
720	389-1051 (46%)	.037	.013-.061 (64%)	13.12	1.171	Channel catfish
		****	NOT RECORDED ****			Gizzard shad
289	99-479 (66%)	.013	.006-.020 (56%)	5.26	1.465	Largemouth bass
466	239-693 (49%)	.011	.004-.018 (62%)	8.48	0.459	Rainbow trout
		****	NOT RECORDED ****			Redear sunfish
		****	NOT RECORDED ****			Smallmouth bass
227	126-327 (44%)	.011	.006-.016 (46%)	4.13	0.553	White crappie
21	0-48 (132%)	.001	.000-.001 (155%)	0.38	0.820	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
13006	11290-14721	(13%)	.653	.554-.752 (15%)	585.37	236.90	All species
354	152-556	(57%)	.017	.009-.025 (46%)	15.93	6.45	Black crappie
6495	5178-7812	(20%)	.330	.252-.408 (24%)	292.33	118.31	Bluegill
1109	590-1628	(47%)	.049	.030-.068 (39%)	49.91	20.20	Channel catfish
6	0-15	(146%)	.000	.000-.000 (154%)	0.28	0.11	Gizzard shad
3128	2535-3722	(19%)	.192	.144-.240 (25%)	140.80	56.98	Largemouth bass
1302	716-1889	(45%)	.033	.019-.047 (43%)	58.61	23.72	Rainbow trout
3	0-10	(220%)	.000	.000-.000 (223%)	0.14	0.06	Redear sunfish
8	0-24	(204%)	.000	.000-.002 (236%)	0.36	0.14	Smallmouth bass
557	343-770	(38%)	.030	.017-.044 (44%)	25.05	10.14	White crappie
43	0-96	(121%)	.001	.000-.003 (147%)	1.95	0.79	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
2507	2153-2860	(14%)	.132	.106-.158 (20%)	112.82	0.193	All species
82	40-123	(51%)	.004	.002-.006 (47%)	3.68	0.231	Black crappie
515	389-641	(25%)	.023	.018-.029 (25%)	23.18	0.079	Bluegill
379	190-568	(50%)	.018	.008-.029 (59%)	17.04	0.341	Channel catfish
0	0-0	(169%)	.000	.000-.000 (189%)	0.01	0.023	Gizzard shad
1136	894-1377	(21%)	.072	.054-.090 (25%)	51.11	0.363	Largemouth bass
256	155-357	(39%)	.007	.004-.011 (44%)	11.51	0.196	Rainbow trout
0	0-1	(220%)	.000	.000-.000 (220%)	0.01	0.076	Redear sunfish
4	0-12	(223%)	.000	.000-.001 (241%)	0.17	0.480	Smallmouth bass
124	74-175	(40%)	.006	.004-.009 (42%)	5.59	0.223	White crappie
11	0-26	(126%)	.000	.000-.001 (152%)	0.51	0.263	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
5526	4746-6305	(14%)	.292	.235-.349 (20%)	100.65	0.425	All species
180	89-271	(51%)	.009	.005-.013 (47%)	3.28	0.509	Black crappie
1135	857-1414	(25%)	.052	.039-.064 (25%)	20.68	0.175	Bluegill
835	418-1251	(50%)	.041	.017-.065 (59%)	15.20	0.753	Channel catfish
0	0-1	(169%)	.000	.000-.000 (189%)	0.01	0.051	Gizzard shad
2504	1971-3036	(21%)	.159	.119-.198 (25%)	45.60	0.800	Largemouth bass
564	341-786	(39%)	.016	.009-.024 (44%)	10.27	0.433	Rainbow trout
1	0-2	(223%)	.000	.000-.000 (223%)	0.01	0.168	Redear sunfish
8	0-27	(223%)	.001	.000-.002 (241%)	0.15	1.059	Smallmouth bass
274	163-385	(40%)	.014	.008-.020 (42%)	4.99	0.492	White crappie
25	0-57	(126%)	.001	.000-.002 (152%)	0.46	0.580	Yellow bullhead

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

	MEAN	95% CI	MIN	MAX	#SAMPLES
HOURS PER COMPLETED TRIP*					
BOAT	3.8	3.6-4.1 (6%)	0.3	11.8	372
SHORE	2.0	1.9-2.2 (8%)	0.1	6.7	258
BOAT & SHORE	3.1	2.9-3.3 (5%)	0.1	11.8	630
MILES TRAVELED	32.6	31.3-33.9 (4%)	2	400	1321
SUCCESS RATING (1-10)	4.1	4.0-4.3 (4%)	1	10	1319

*292 samples were from split interviews of completed trips.
42.3% of all 1491 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 3 out of 1491 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	191	228	57	15						
SHORE INTERVIEWS	508	351	99	32	6	3				1

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

727 (48.8%)	ANY	All species
165 (11.1%)	BLG	Bluegill
14 (0.9%)	BSS	Black bass spp.
175 (11.7%)	CCF	Channel catfish
114 (7.6%)	CRP	Crappie spp.
195 (13.1%)	LMB	Largemouth bass
87 (5.8%)	RBT	Rainbow trout
2 (0.1%)	SMB	Smallmouth bass

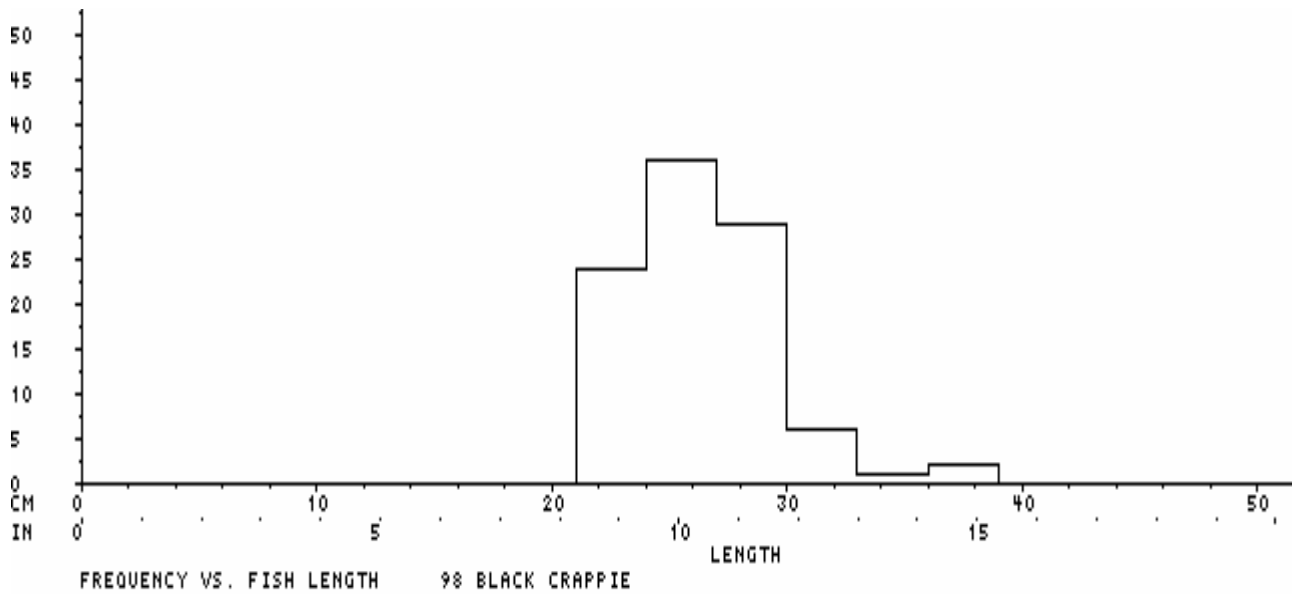


Figure 1. Beaver Dam Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of black crappie harvested by all anglers.

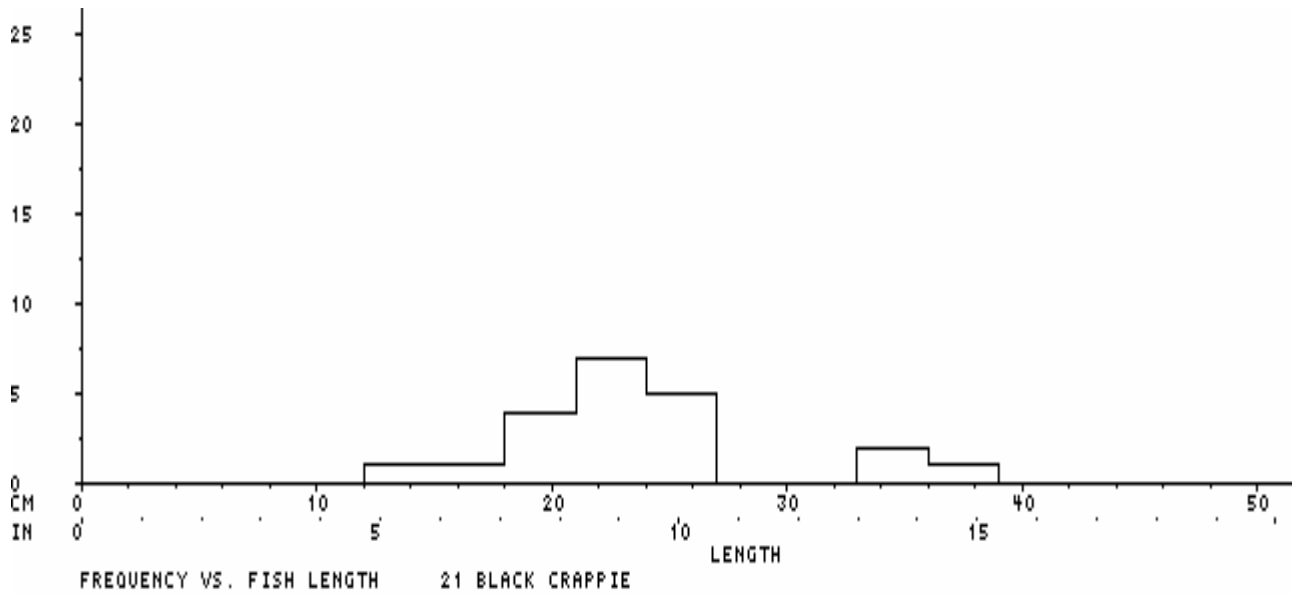


Figure 2. Beaver Dam Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of black crappie released by all anglers. Note the difference in scale from Figure 1.

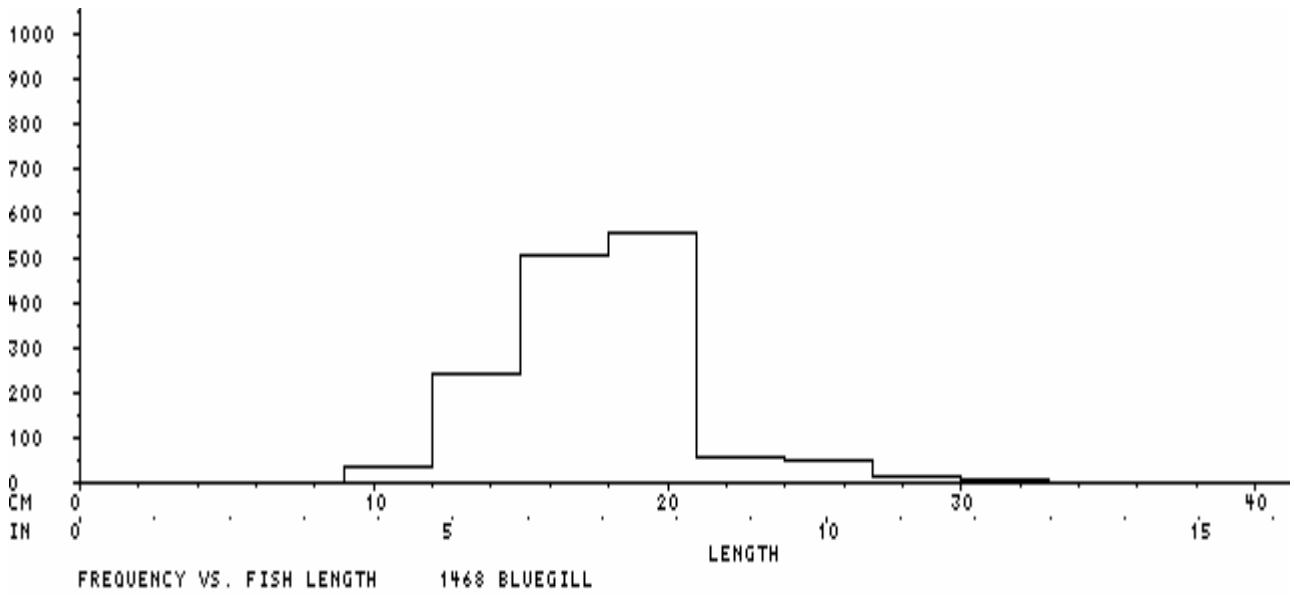


Figure 3. Beaver Dam Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of bluegill harvested by all anglers.

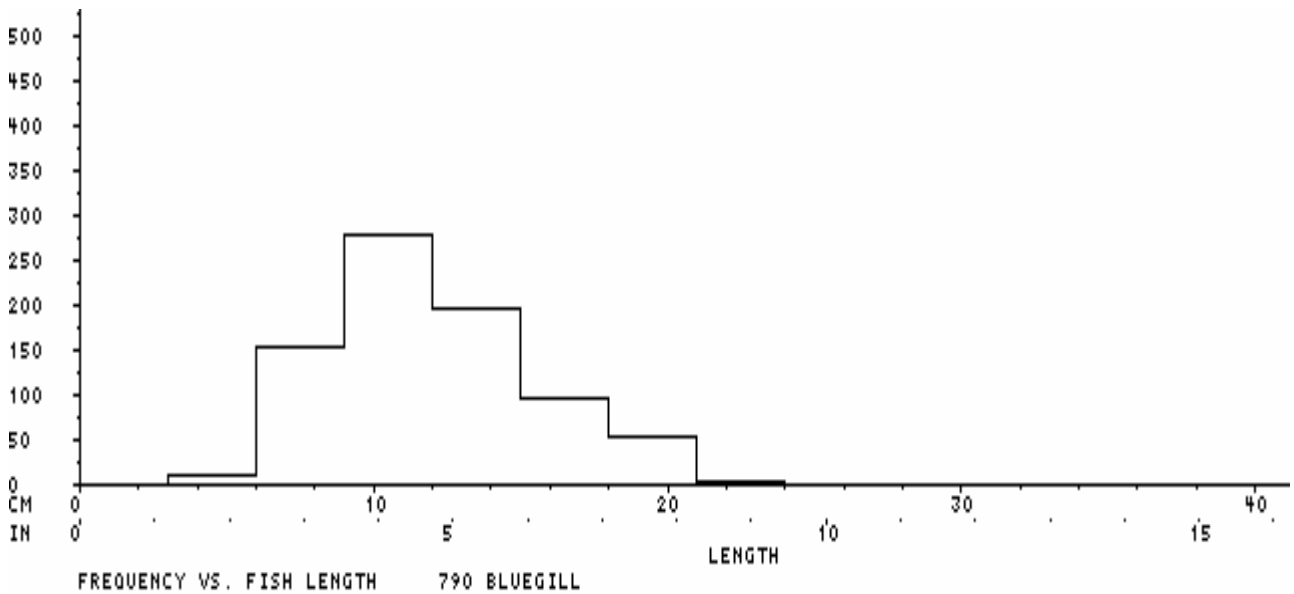


Figure 4. Beaver Dam Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of bluegill released by all anglers. Note the difference in scale from Figure 3.

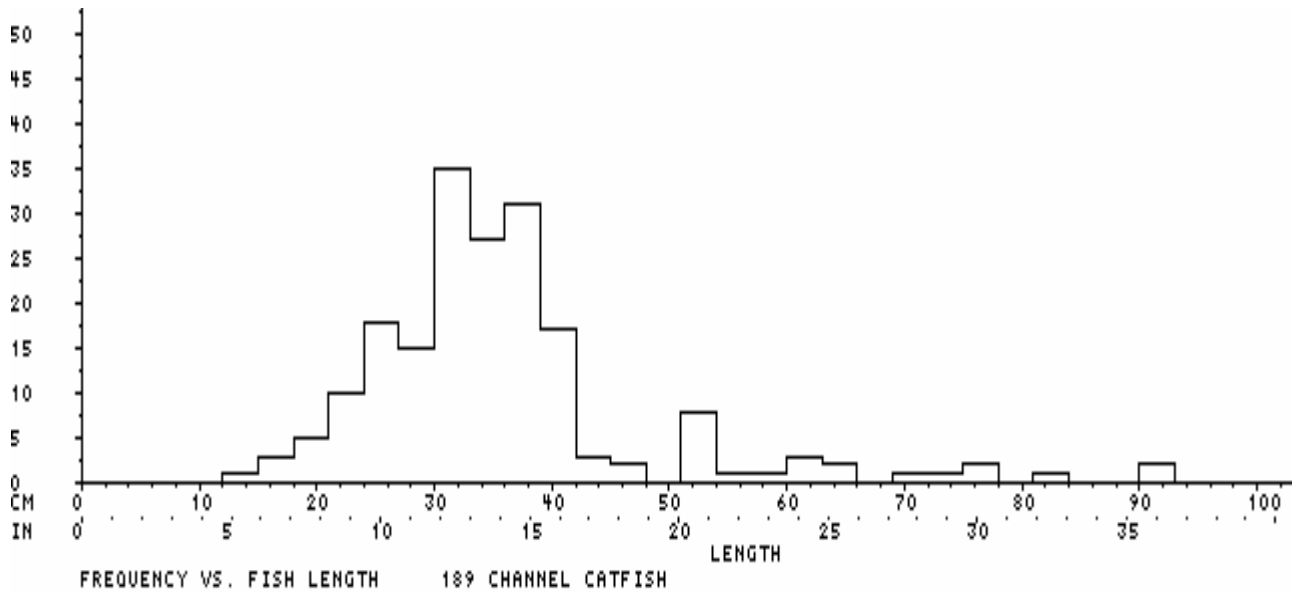


Figure 5. Beaver Dam Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of channel catfish harvested by all anglers.

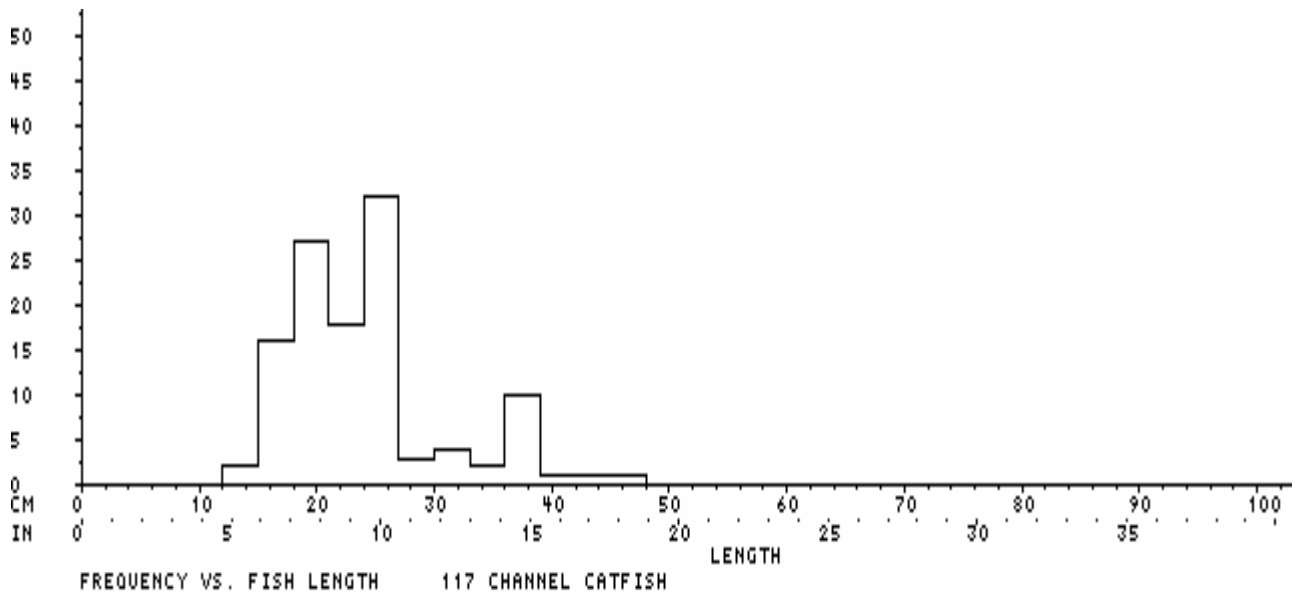


Figure 6. Beaver Dam Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of black crappie released by all anglers.

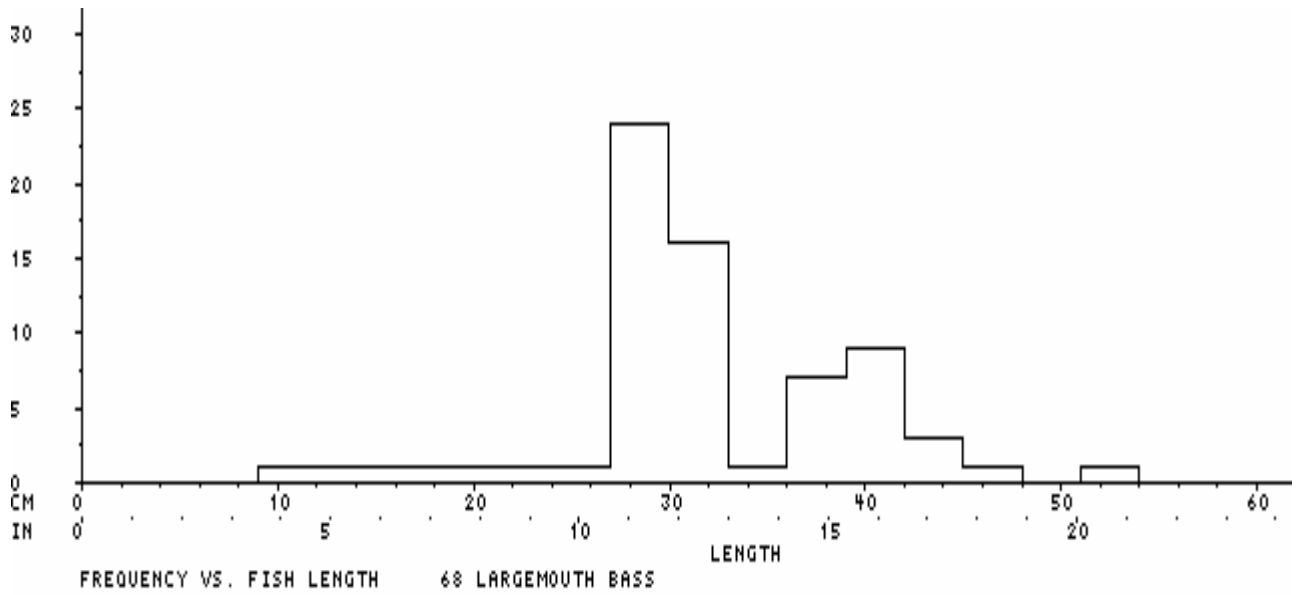


Figure 7. Beaver Dam Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of largemouth bass harvested by all anglers.

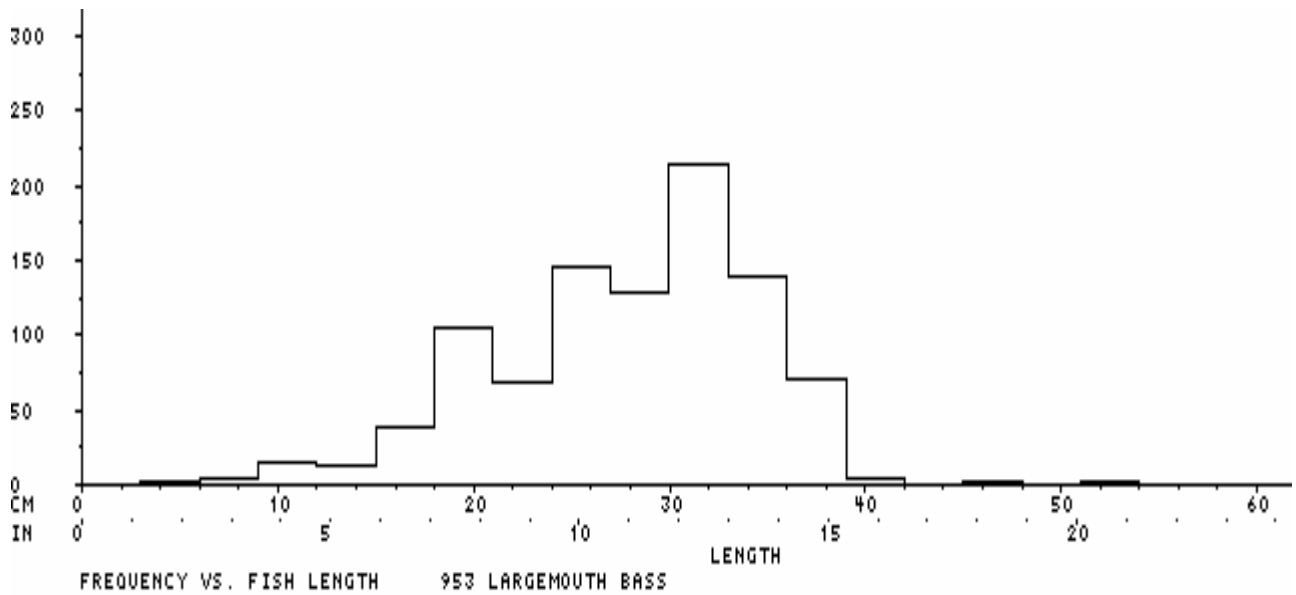


Figure 8. Beaver Dam Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of largemouth bass released by all anglers. Note the difference in scale from Figure 7.

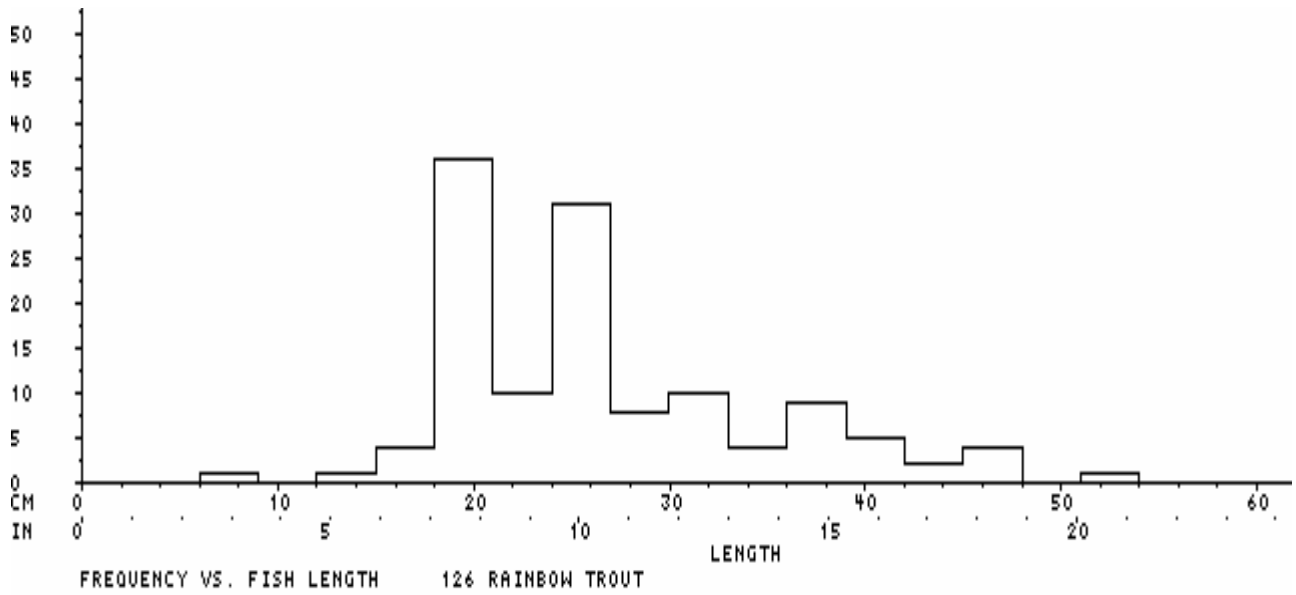


Figure 9. Beaver Dam Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of rainbow trout harvested by all anglers.

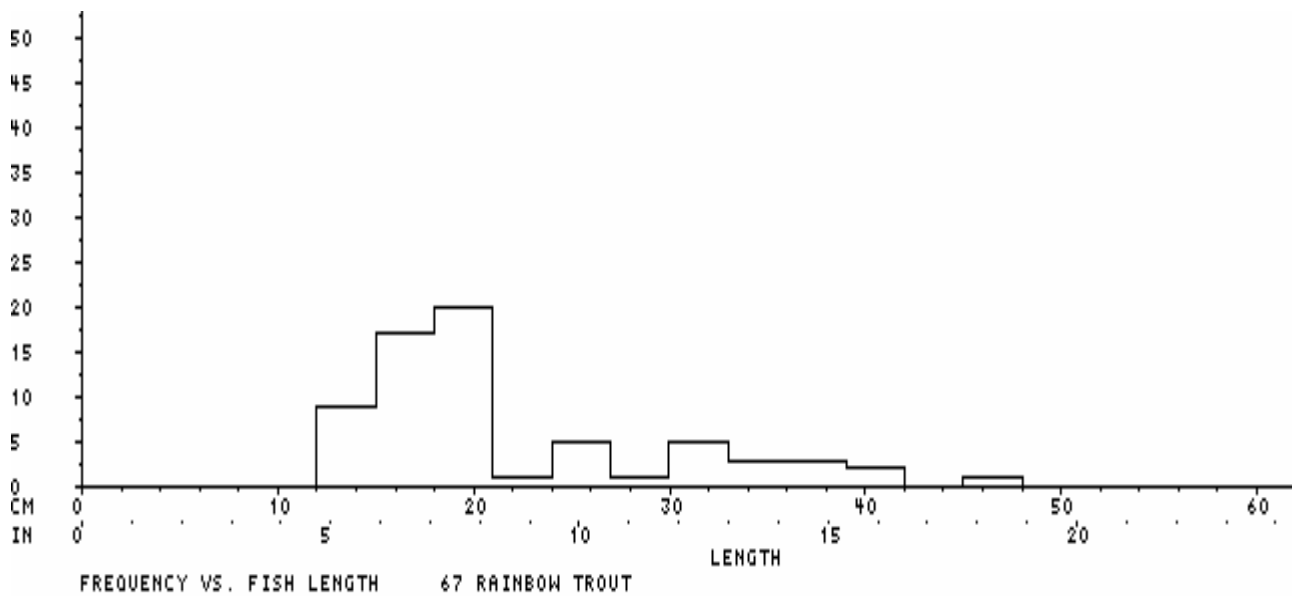


Figure 10. Beaver Dam Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of rainbow trout released by all anglers.

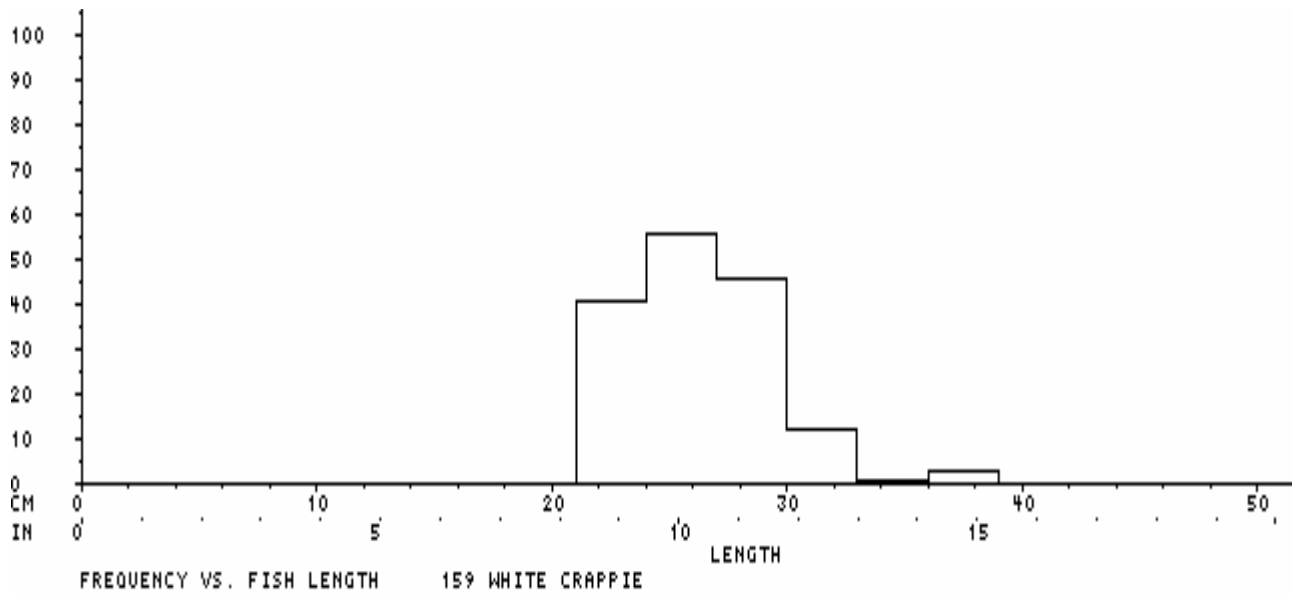


Figure 11. Beaver Dam Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of white crappie harvested by all anglers.

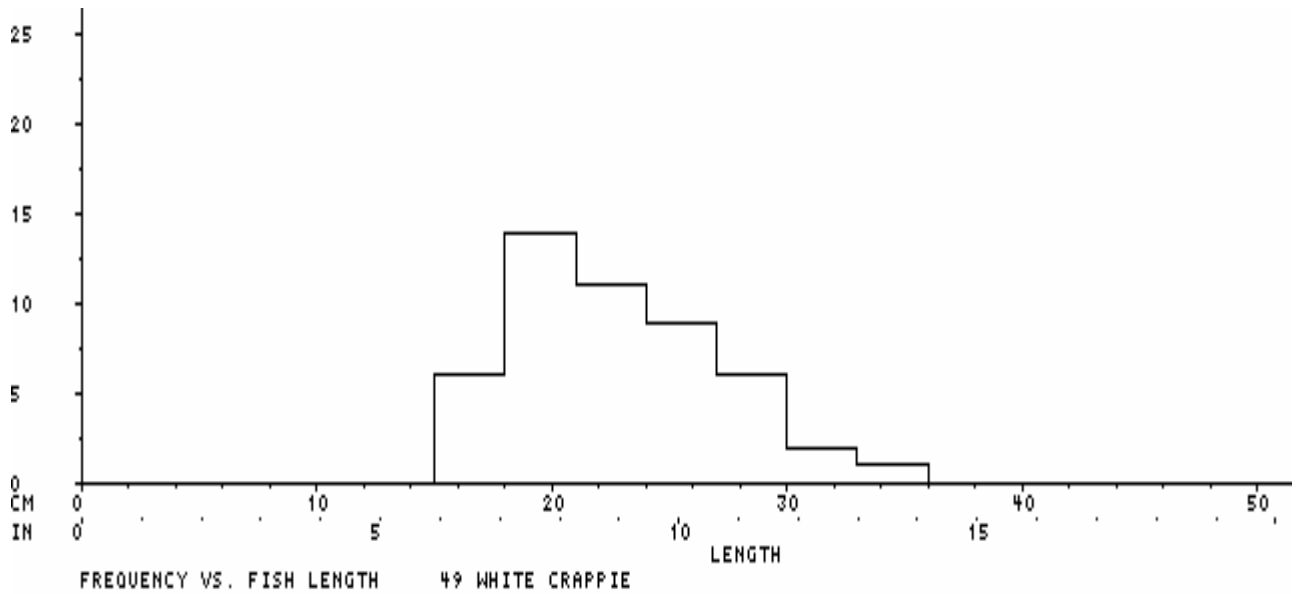


Figure 12. Beaver Dam Lake 2000 day creel 3/15 through 10/31. Length-frequency histogram of white crappie released by all anglers. Note the difference in scale from Figure 11.