

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

1999 LAKE JACKSONVILLE
 442 ACRES
 REGION 4, DISTRICT 12

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: 294/693 = 42.4%

NUMBER OF INTERVIEWS: 1605

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	6392	5424-7360 (15%)	14	12-17 (15%)	14%
	HOLIDAY	9835	8220-11450 (16%)	22	19-26 (16%)	33%
	TOTAL	16227	14344-18110 (12%)	37	32-41 (12%)	26%
SHORE	WEEKDAY	2809	2238-3380 (20%)	6	5-8 (20%)	10%
	HOLIDAY	2374	1952-2796 (18%)	5	4-6 (18%)	24%
	TOTAL	5183	4473-5893 (14%)	12	10-13 (14%)	16%
BOAT & SHORE	WEEKDAY	9202	8078-10325 (12%)	21	18-23 (12%)	13%
	HOLIDAY	12209	10540-13878 (14%)	28	24-31 (14%)	31%
	TOTAL	21411	19398-23423 (9%)	48	44-53 (9%)	23%

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

# HARVESTED	95% CI		#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
3073	2291-3854	(25%)	.111	.084-.139 (24%)	17.18	6.95	All species
169	49-289	(71%)	.007	.002-.011 (63%)	0.94	0.38	Black bullhead
273	24-523	(91%)	.008	.001-.015 (88%)	1.53	0.62	Bluegill
44	0-149	(241%)	.002	.000-.006 (257%)	0.24	0.10	Carp
1173	637-1710	(46%)	.050	.033-.068 (35%)	6.56	2.65	Channel catfish
9	0-25	(187%)	.000	.000-.001 (157%)	0.05	0.02	Green sunfish
294	133-454	(55%)	.011	.003-.018 (69%)	1.64	0.66	Largemouth bass
			****	NOT RECORDED ****			Redear sunfish
38	0-98	(156%)	.000	.000-.001 (122%)	0.21	0.09	Striped bass hybrid
1041	662-1420	(36%)	.030	.014-.046 (53%)	5.82	2.36	White crappie
			****	NOT RECORDED ****			Yellow bullhead
32	0-70	(119%)	.003	.000-.008 (192%)	0.18	0.07	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
1602	1154-2049	(28%)	.060	.041-.079 (31%)	8.95	0.521	All species
101	30-171	(70%)	.004	.001-.006 (65%)	0.56	0.599	Black bullhead
18	0-40	(118%)	.001	.000-.001 (104%)	0.10	0.067	Bluegill
92	0-373	(307%)	.004	.000-.017 (310%)	0.51	2.134	Carp
637	329-945	(48%)	.027	.016-.038 (40%)	3.56	0.543	Channel catfish
1	0-2	(156%)	.000	.000-.000 (184%)	0.00	0.085	Green sunfish
266	144-388	(46%)	.011	.004-.017 (60%)	1.49	0.909	Largemouth bass
			****	NOT RECORDED ****			Redear sunfish
82	0-193	(135%)	.001	.000-.001 (112%)	0.46	2.157	Striped bass hybrid
396	212-581	(47%)	.012	.003-.022 (76%)	2.22	0.381	White crappie
			****	NOT RECORDED ****			Yellow bullhead
9	0-20	(119%)	.001	.000-.002 (191%)	0.05	0.299	Yellow bass

1999 LAKE JACKSONVILLE

DAY CREEL

03/15/1999 - 10/31/1999

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

LB HARVESTED	95% CI		LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
3531	2545-4517	(28%)	.132	.091-.173 (31%)	7.99	1.149	All species
222	66-378	(70%)	.009	.003-.014 (65%)	0.50	1.321	Black bullhead
40	0-87	(118%)	.001	.000-.002 (104%)	0.09	0.147	Bluegill
202	0-822	(307%)	.009	.000-.037 (310%)	0.46	4.705	Carp
1404	724-2083	(48%)	.060	.036-.084 (40%)	3.18	1.197	Channel catfish
1	0-4	(156%)	.000	.000-.000 (184%)	0.00	0.186	Green sunfish
587	318-856	(46%)	.023	.009-.037 (60%)	1.33	2.003	Largemouth bass
			****	NOT RECORDED	****		Redear sunfish
181	0-425	(135%)	.001	.000-.003 (112%)	0.41	4.756	Striped bass hybrid
874	467-1280	(47%)	.027	.007-.048 (76%)	1.98	0.839	White crappie
			****	NOT RECORDED	****		Yellow bullhead
20	0-45	(119%)	.002	.000-.005 (191%)	0.05	0.660	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
30711	26550-34872 (14%)	1.199	1.012-1.386 (16%)	171.69	69.48	All species
357	151-564 (58%)	.016	.007-.024 (52%)	2.00	0.81	Black bullhead
5138	2220-8055 (57%)	.304	.148-.459 (51%)	28.72	11.62	Bluegill
106	0-252 (139%)	.005	.000-.011 (142%)	0.59	0.24	Carp
2244	1401-3087 (38%)	.102	.066-.138 (35%)	12.54	5.08	Channel catfish
264	23-506 (91%)	.008	.001-.015 (85%)	1.48	0.60	Green sunfish
19048	16314-21783 (14%)	.619	.528-.709 (15%)	106.49	43.10	Largemouth bass
2	0-7 (236%)	.000	.000-.000 (236%)	0.01	0.00	Redear sunfish
93	0-201 (115%)	.005	.000-.015 (198%)	0.52	0.21	Striped bass hybrid
3014	2216-3811 (26%)	.107	.052-.162 (52%)	16.85	6.82	White crappie
17	0-46 (167%)	.001	.000-.002 (174%)	0.10	0.04	Yellow bullhead
427	221-633 (48%)	.034	.009-.058 (73%)	2.39	0.97	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
13396	11673-15120 (13%)	.448	.389-.507 (13%)	74.89	0.436	All species
165	63-266 (61%)	.006	.003-.009 (46%)	0.92	0.461	Black bullhead
203	101-304 (50%)	.011	.006-.016 (47%)	1.13	0.039	Bluegill
137	0-464 (239%)	.006	.000-.021 (247%)	0.77	1.304	Carp
837	502-1173 (40%)	.036	.024-.048 (34%)	4.68	0.373	Channel catfish
20	0-40 (102%)	.001	.000-.001 (97%)	0.11	0.075	Green sunfish
11300	9669-12931 (14%)	.363	.307-.418 (15%)	63.17	0.593	Largemouth bass
0	0-0 (236%)	.000	.000-.000 (245%)	0.00	0.053	Redear sunfish
128	5-252 (96%)	.002	.000-.005 (129%)	0.72	1.381	Striped bass hybrid
556	358-754 (36%)	.018	.007-.029 (63%)	3.11	0.185	White crappie
1	0-3 (187%)	.000	.000-.000 (206%)	0.01	0.055	Yellow bullhead
50	24-75 (51%)	.004	.002-.007 (59%)	0.28	0.117	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
29534	25734-33334 (13%)	.987	.857-1.117 (13%)	66.82	0.962	All species
363	140-586 (61%)	.014	.007-.020 (46%)	0.82	1.016	Black bullhead
447	222-671 (50%)	.025	.013-.036 (47%)	1.01	0.087	Bluegill
302	0-1022 (239%)	.013	.000-.045 (247%)	0.68	2.875	Carp
1846	1106-2585 (40%)	.080	.053-.107 (34%)	4.18	0.823	Channel catfish
44	0-88 (102%)	.002	.000-.003 (97%)	0.10	0.166	Green sunfish
24913	21317-28508 (14%)	.800	.677-.922 (15%)	56.36	1.308	Largemouth bass
0	0-1 (245%)	.000	.000-.000 (236%)	0.00	0.117	Redear sunfish
283	10-556 (96%)	.005	.000-.012 (129%)	0.64	3.044	Striped bass hybrid
1226	789-1662 (36%)	.040	.015-.065 (63%)	2.77	0.407	White crappie
2	0-6 (187%)	.000	.000-.000 (206%)	0.00	0.120	Yellow bullhead
110	54-165 (51%)	.009	.004-.015 (59%)	0.25	0.257	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	4.7	4.2-5.2	(11%)	0.5	8.2	99
SHORE	1.4	1.1-1.8	(24%)	0.2	3.4	17
BOAT & SHORE	4.2	3.7-4.7	(12%)	0.2	8.2	116
MILES TRAVELED	22.2	20.3-24.1	(8%)	1	300	1366
SUCCESS RATING (1-10)	4.0	3.9-4.2	(4%)	1	10	1327

*61 samples were from split interviews of completed trips.

7.5% of all 1543 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 15 out of 1543 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	529	617	52	6	2					
SHORE INTERVIEWS	154	113	45	21	2	2				

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

144 (9.3%)	ANY	All species
8 (0.5%)	BLG	Bluegill
1 (0.1%)	CAP	Carp
208 (13.5%)	CCF	Channel catfish
135 (8.7%)	CRP	Crappie spp.
1045 (67.7%)	LMB	Largemouth bass
1 (0.1%)	SBH	Striped bass hybrid (Wiper)
1 (0.1%)	WHC	White crappie

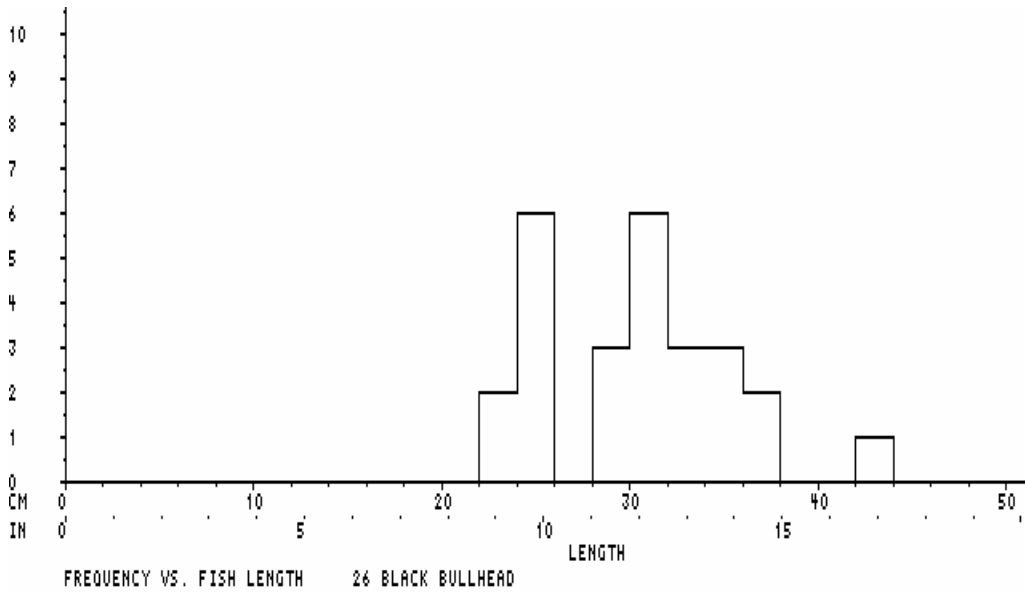


Figure 1. Lake Jacksonville 1999 day creel 3/15 through 10/31. Length-frequency histogram of black bullhead harvested by all anglers.

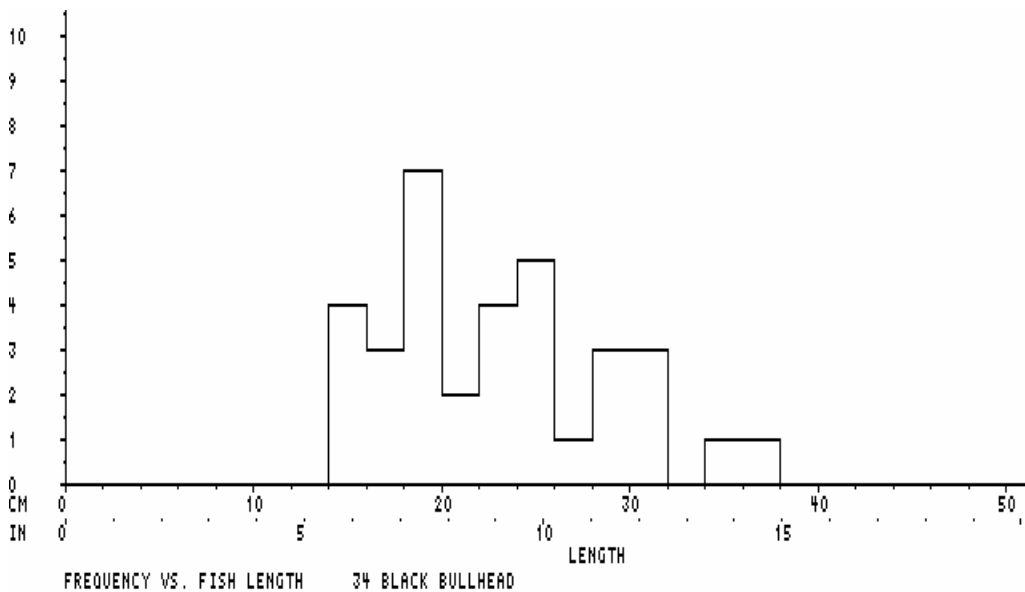


Figure 2. Lake Jacksonville 1999 day creel 3/15 through 10/31. Length-frequency histogram of black bullhead released by all anglers.

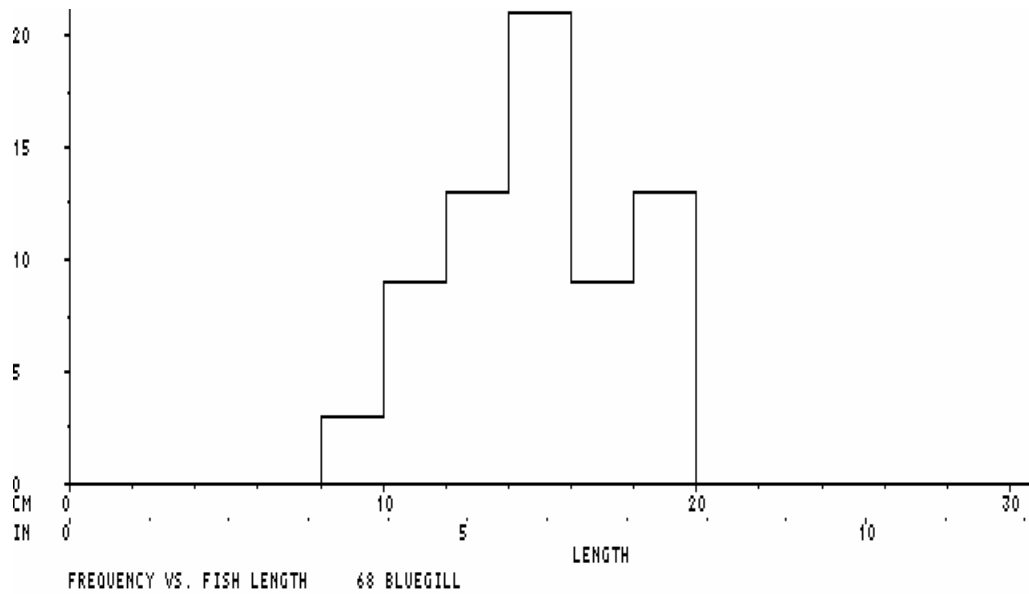


Figure 3. Lake Jacksonville 1999 day creel 3/15 through 10/31. Length-frequency histogram of bluegill harvested by all anglers.

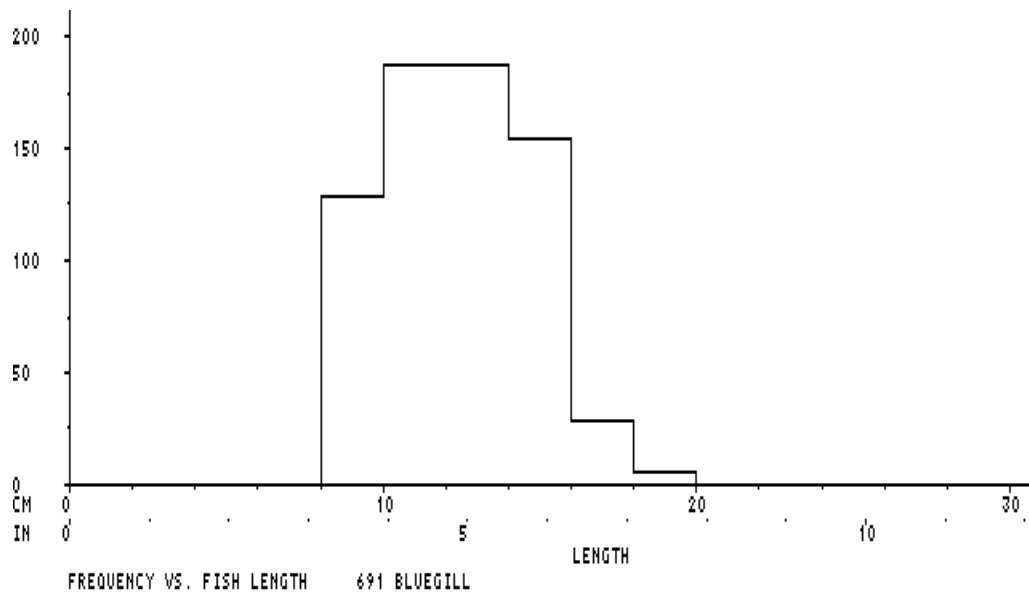


Figure 4. Lake Jacksonville 1999 day creel 3/15 through 10/31. Length-frequency histogram of bluegill released by all anglers.

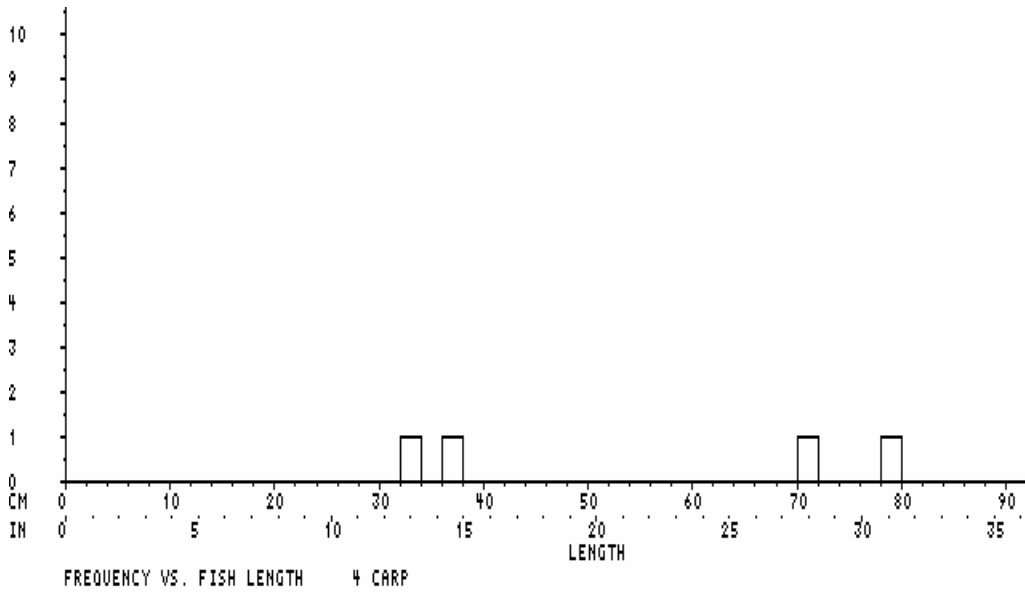


Figure 5. Lake Jacksonville 1999 day creel 3/15 through 10/31. Length-frequency histogram of carp harvested by all anglers.

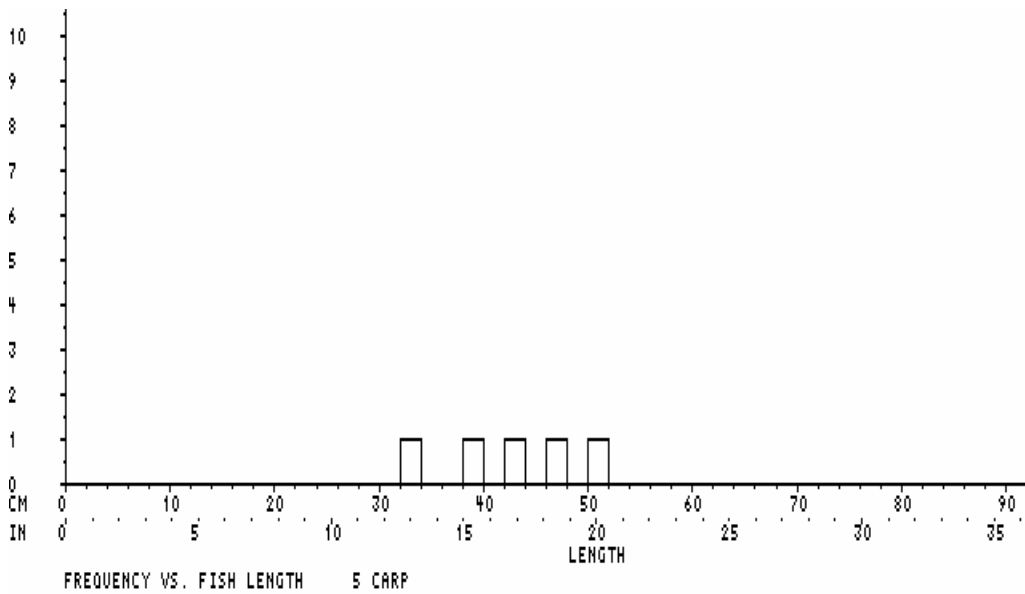


Figure 6. Lake Jacksonville 1999 day creel 3/15 through 10/31. Length-frequency histogram of carp released by all anglers.

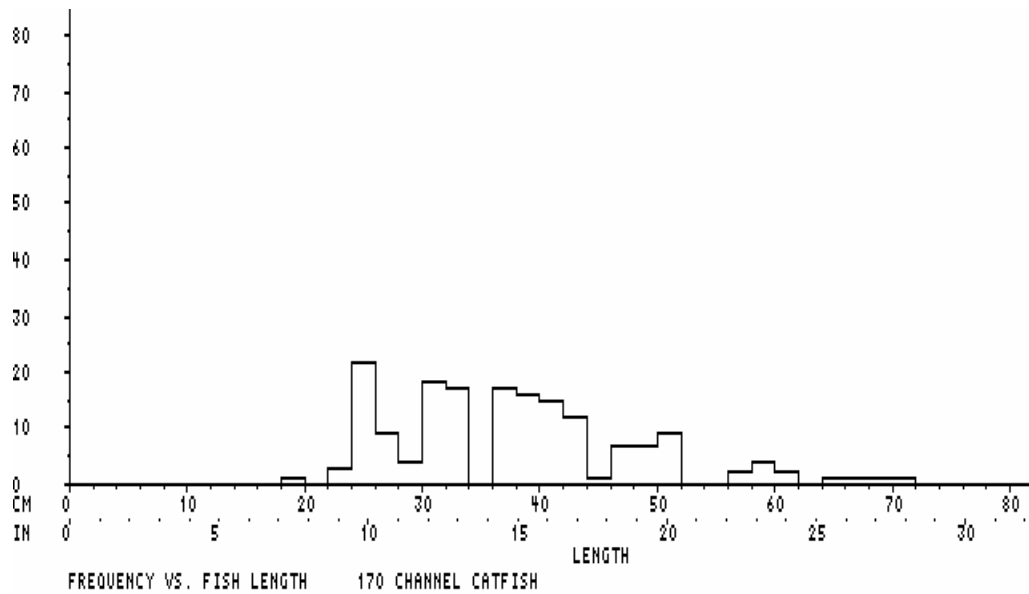


Figure 7. Lake Jacksonville 1999 day creel 3/15 through 10/31. Length-frequency histogram of channel catfish harvested by all anglers.

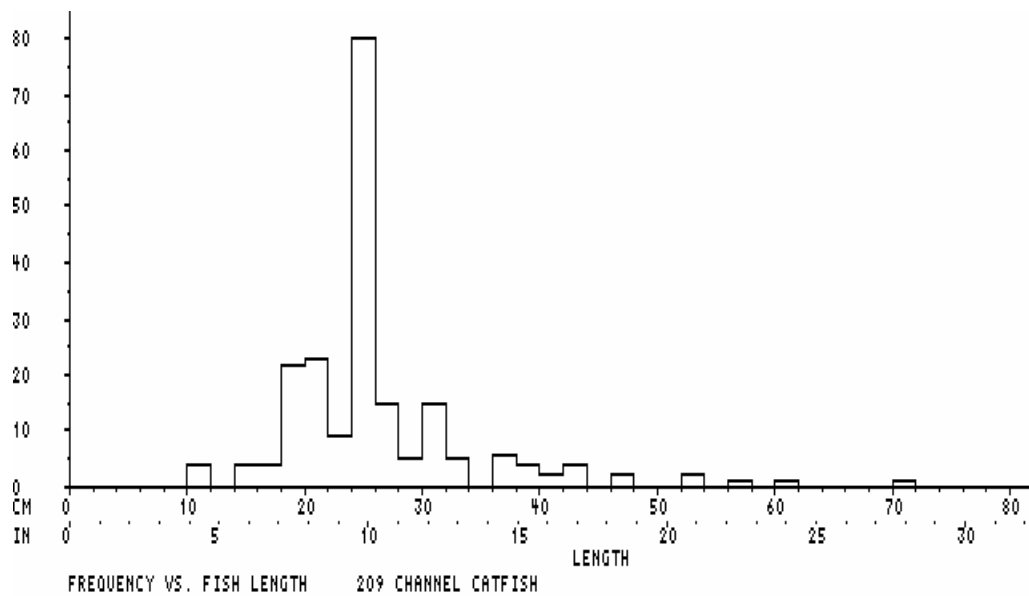


Figure 8. Lake Jacksonville 1999 day creel 3/15 through 10/31. Length-frequency histogram of channel catfish released by all anglers.

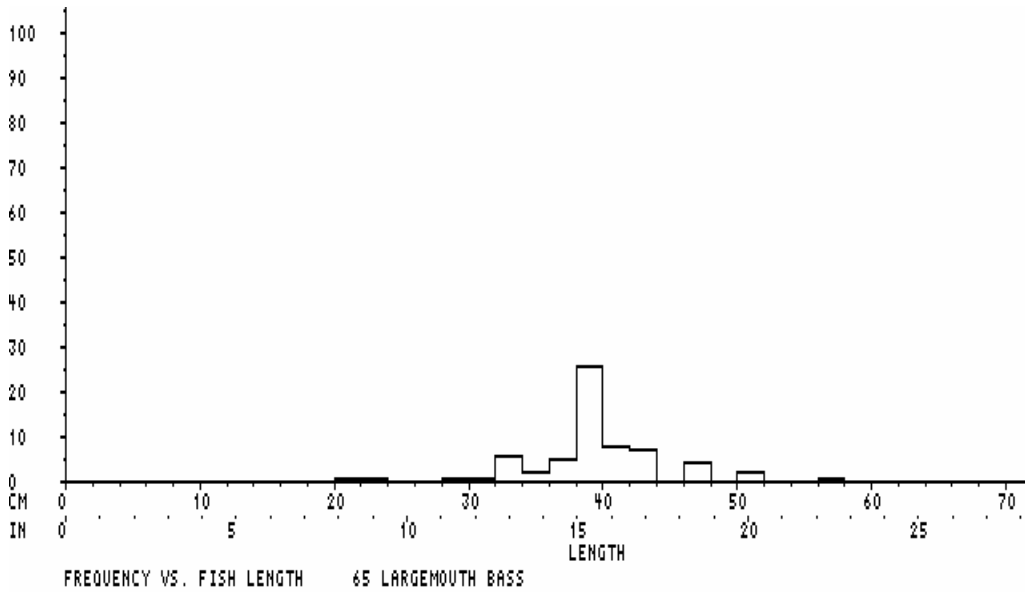


Figure 9. Lake Jacksonville 1999 day creel 3/15 through 10/31. Length-frequency histogram of largemouth bass harvested by all anglers.

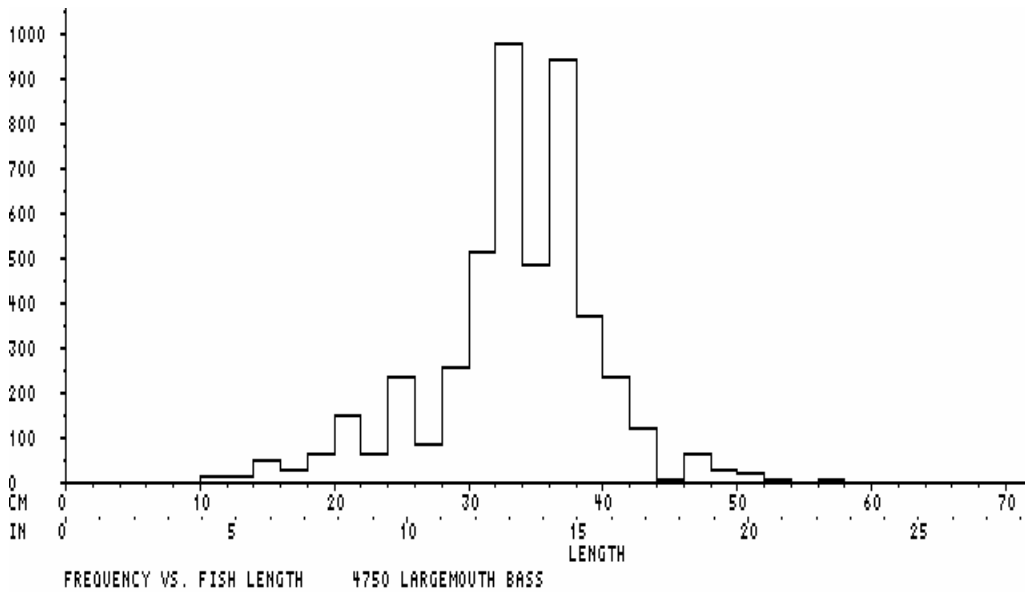


Figure 10. Lake Jacksonville 1999 day creel 3/15 through 10/31. Length-frequency histogram of largemouth bass released by all anglers. Note the difference in scale from Figure 9.

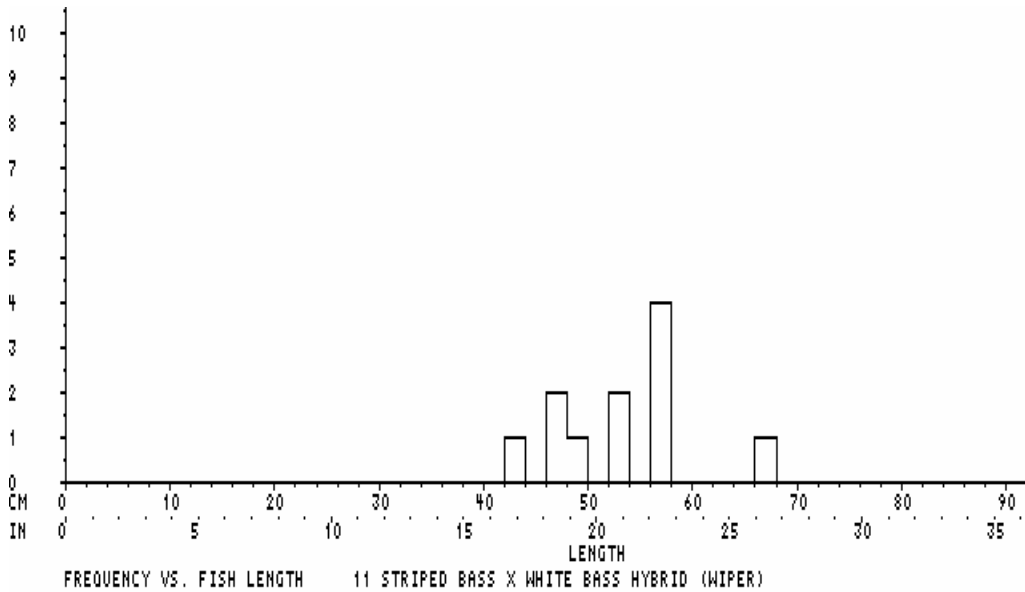


Figure 11. Lake Jacksonville 1999 day creel 3/15 through 10/31. Length-frequency histogram of hybrid striped bass harvested by all anglers.

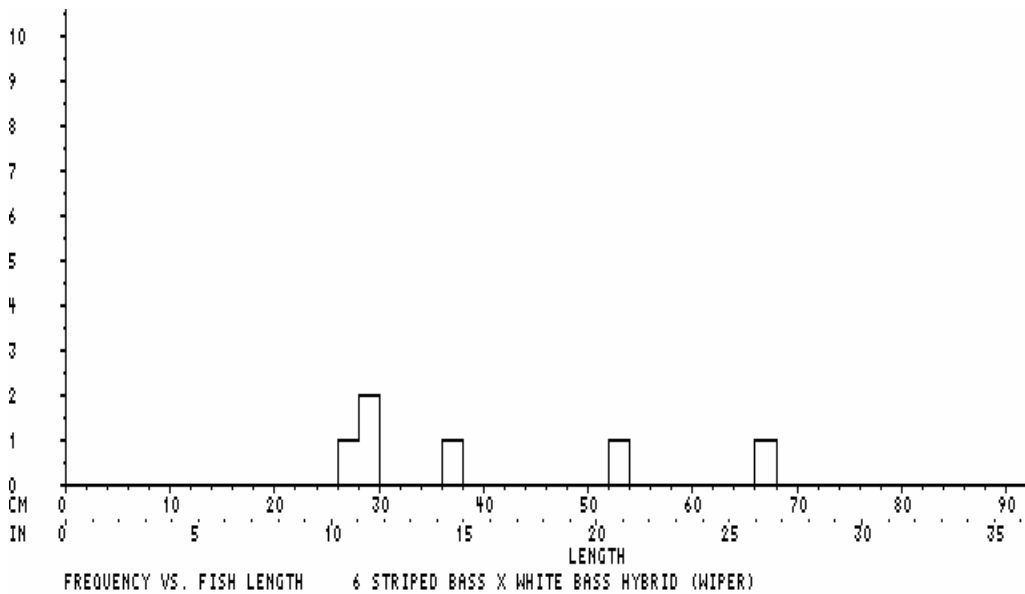


Figure 12. Lake Jacksonville 1999 day creel 3/15 through 10/31. Length-frequency histogram of hybrid striped bass released by all anglers.

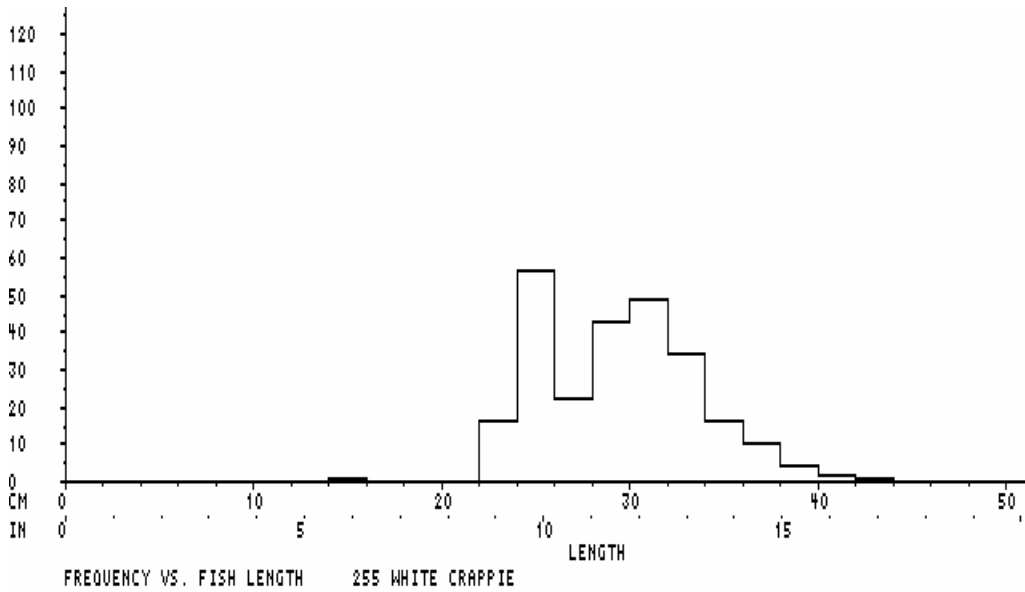


Figure 13. Lake Jacksonville 1999 day creel 3/15 through 10/31. Length-frequency histogram of white crappie harvested by all anglers.

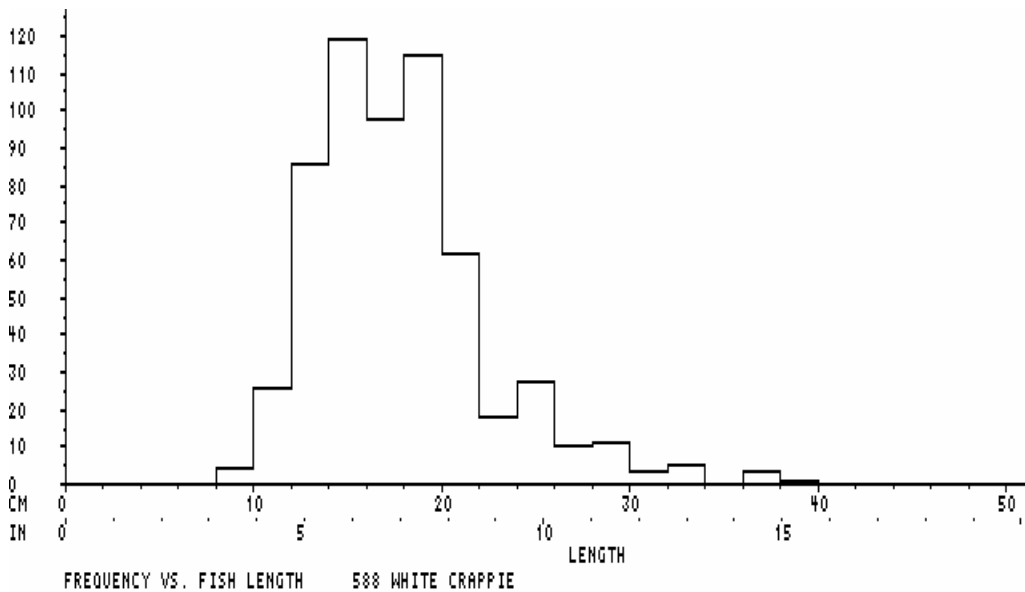


Figure 14. Lake Jacksonville 1999 day creel 3/15 through 10/31. Length-frequency histogram of white crappie released by all anglers.

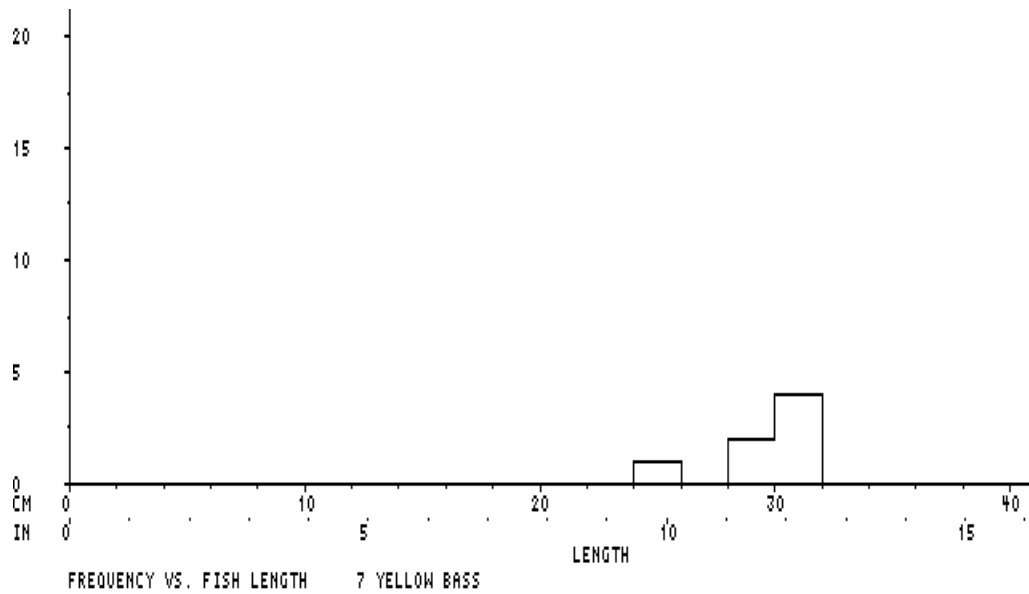


Figure 15. Lake Jacksonville 1999 day creel 3/15 through 10/31. Length-frequency histogram of yellow bass harvested by all anglers.

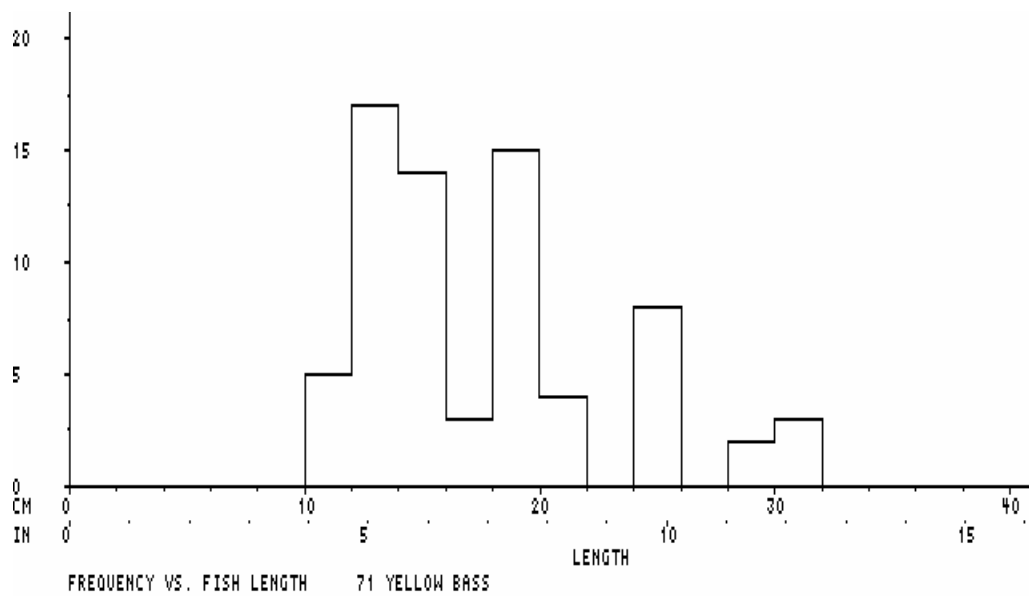


Figure 16. Lake Jacksonville 1999 day creel 3/15 through 10/31. Length-frequency histogram of yellow bass released by all anglers.