

Great Sacandaga Lake Angler Diary Report

2010 Fishing Season

Robert Fiorentino
Aquatic Biologist
NYSDEC Region 5 Fisheries
March 2011

Introduction

An angler diary cooperator program designed to monitor Great Sacandaga Lake's (GSL) trout fishery began in 2002. A similar diary program oriented specifically towards monitoring the warm-water fishery in GSL ran from 1975 to 1981. The current program allows for a comparison of the GSL fishery between the two time periods and an evaluation of the current rainbow trout DEC stocking policy. The comparison should reveal if there have been any significant changes in the fishery since the early 1980's.

A netting survey of the lake was conducted in the summer of 2010. The survey was designed to target trout in the hopes to capture the clipped spring yearling rainbow trout that the DEC has stocked over the past few years. A report of that survey and the information from the diary program will be written.

If you were a cooperator during the 2010 fishing season and sent in your diaries, your name should appear in Table 1. If your name does not appear in the table and you returned a diary to us last year, please contact me at the Warrensburg office.

Results

Participation

A total of seven cooperators returned diaries of their 2010 fishing season. They recorded information from a total of 188 fishing trips (Table 1), including trips that did not have a start and end time. This is a 55% reduction of fishing trips from the 2006 fishing season and 12 less cooperators. The loss of participants from the program has had a significant impact on the amount of data collected. The small dataset may prove to be difficult to compare to historic information.

Cooperators can target more than one species on a fishing trip. These trips are referred to as targeted trips. The total number of targeted trips in 2010 was 423. Statistics in Tables 2 refer to the number of targeted trips for each species. Table 3 provides information on total numbers of different fish species caught and their lengths.

Fishing

Walleye have accounted for the greatest effort in both the number of trips and angler hours recorded for all five years of the diary program. Salmonids were the second most sought after group as in other years. The same number of cooperators targeted smallmouth bass and northern pike in 2010, but more hours were spent fishing for pike than bass unlike past years. One cooperator targeted yellow perch in 2010. The catch statistics for anglers targeting a specific fish species are presented in Table 2. The data presented in Table 2 only include trips that were complete, with both a start and end time, in the diaries. Ice fishing trips comprised 4% of 2010's total fishing trips recorded by cooperators, up one percent from the past few years.

The catch rate for walleye in 2010 increased to 0.46 walleye per hour compared to the last few years. That equals one walleye for every 2.17 hours of fishing on average. In 2006, the catch rate was 0.25 walleye per hour or one walleye every four hours. This large increase may be due to the small number of efficient cooperators that returned diaries.

Smallmouth bass catch rates continue to be much higher than during the 1970's. Catch rates then ranged from 0.04 to 0.09 bass per hour. The 2010 catch rate of 0.27 fish per hour is down compared to last years but similar to the 2007 rates.

Four cooperators targeted northern pike in 2010, one angler for ice fishing and open water both. A total of 12 pike were caught but only three pike by those anglers targeting them. No pike were caught while ice fishing in 2010. The catch rate for the open water pike caught was 0.01 northerns per hour. This is still a similar rate to the 1970's. Again, it is very difficult to extrapolate what is happening to a fishery with such a low number of cooperators and a small dataset.

The trout fishery in GSL is supported by many groups and private individuals from the lake area. The Great Sacandaga Lake Fisheries Federation (GSLFF) purchases two year old brown and rainbow trout to stock each year. These two year old fish are 14-19 inches in length on average. These fish provide an excellent fishery that the DEC is just not capable of providing. The catch rate for all trout on the lake was 0.09 trout per hour again in 2010. Six of the seven participating cooperators targeted trout in 2010.

Information on the lengths and numbers of fish caught in various size classes is presented in Table 3.

The quality of walleye for 2010 is similar to those from the 1970s. The average walleye caught was 15.42 inches long, up from 2009. A total of 199 walleye were caught, but two fish were not included in the data because of missing information in the diary.

Smallmouth bass lengths again are very similar to past years. Rainbow and brown trout numbers indicate the vast majority of the trout stocked by the GSLFF have been rainbow trout. Average reported trout lengths demonstrate the large, high quality trout that they are able to purchase for stocking. There were some very nice pike caught in 2010 with two fish over 40 inches in length.

Overall catch information is provided in Table 4 that compares open water to ice fishing. Table 5 separates angler effort by cold water and warm water fish.

The DEC began stocking rainbow trout yearlings into GSL in the spring of 2006. This experimental stocking continued through 2010. Beginning in 2007, the rainbows had one of their fins removed prior to stocking. This will help distinguish the DEC stocked rainbows from the GSLFF stocked rainbow trout. In an effort to track the performance of these fish, beginning in 2007, we have asked anglers to record the fin-clip (if any) on the rainbow trout they catch. In 2007 the right ventral fin was removed and in 2008 it was the adipose fin. In 2009 the left ventral fin was clipped and in 2010 the right ventral fin was clipped again, (Table 6).

There were no rainbow trout recorded as having a fin clip in the 2010 diaries. Over the entire period of this diary program there have been 45,870 rainbow trout stocked by the DEC. There has not been one stocked fish with a clip by the DEC recorded.

Length frequency distributions for all recorded fish by species are presented in Figures 1 through 6. These figures include all fish caught by anglers regardless of what they were targeting.

The walleye length frequency distribution (Figure 1) is very similar to the last five years of data. In the final report I will combine all walleye caught in this diary study to compare them to the historic information. Historic length frequency distributions for other species are not available, so direct comparisons with the current data are not possible. However, the length-frequency distribution for rainbow trout, (Figure 2) shows the quality of fish that the GSLFF stocks annually.

Thank you!

I would like to thank all the angler diary cooperators for your support and participation during the diary program. As you may or may not know the 2010 fishing season was the last for the Great Sacandaga lake Angler Diary program. I hope to be able to compile the information gained from the study into a final report in the winter of 2011. In that report I will compare this current diary program to the historic program from the late 1970s. Please send me any diaries that you may come across, it is not too late for that information to be entered. If you have any questions or comments about the angler diary report please call me at (518) 623-1234 or email me at rjfioren@gw.dec.state.ny.us.

Robert Fiorentino
Senior Aquatic Biologist

Please pass on the great fun and take a child fishing.

Table 1. List of active cooperators in the Great Sacandaga Lake Angler Diary program during the 2010 fishing season.

ANGLER NUMBER	NUMBER OF TRIPS
25-John Pochobradsky	20
27-Raymond Bollart	57
28-John Fura	26
30- Kevin Forgette	48
59-Richard Valachovic	2
67- Bill Pfaffenbach	6
69- Brian Kedik	29
<u>TOTAL</u>	<u>188</u>

Table 2. Catch statistics for Great Sacandaga Lake angler diary cooperators by target species during the 2010 fishing season. These statistics include only those trips where a particular species, alone or in combination with another species, was targeted.

TARGET SPECIES WALLEYE

OPEN WATER VERSUS ICE FISHING TRIPS	NUMBER OF TRIPS	EFFORT IN ANGLER HOURS	NUMBER OF COOPERATORS	WALLEYE CAUGHT PER ANGLER HOUR	LEGAL-SIZED WALLEYE CAUGHT PER ANGLER HOUR	WALLEYE CREELED PER ANGLER HOUR	TOTAL NUMBER WALLEYE CAUGHT	NUMBER LEGAL WALLEYE CAUGHT	TOTAL NUMBER WALLEYE KEPT
Open	126	431.1	6	.46	.29	.21	197	126	89
Ice	6	66.0	2	.00	.00	.00	0	0	0
TOTAL	132	497.1	7	.40	.25	.18	197	126	89

TARGET SPECIES SMALLMOUTH BASS

OPEN WATER	NUMBER OF TRIPS	EFFORT IN ANGLER HOURS	NUMBER OF COOPERATORS	SMALLMOUTH CAUGHT PER ANGLER HOUR	LEGAL-SIZED SMALLMOUTH CAUGHT PER ANGLER HOUR	TOTAL NUMBER SMALLMOUTH CAUGHT	NUMBER LEGAL SMALLMOUTH CAUGHT	TOTAL NUMBER SMALLMOUTH KEPT
TOTAL Open	86	241.8	4	.27	.20	66	48	0

Continued.....

Table 2. (Continued)

TARGET SPECIES TROUT

OPEN WATER VERSUS ICE FISHING TRIPS	NUMBER OF TRIPS	EFFORT IN ANGLER HOURS	NUMBER OF COOPERATORS	TROUT CAUGHT PER ANGLER HOUR	TROUT KEPT PER ANGLER HOUR	TOTAL NUMBER TROUT CAUGHT	TOTAL NUMBER TROUT KEPT
Open	87	281.6	5	.11	.09	31	25
Ice	4	50.0	1	.00	.00	0	0
TOTAL	91	331.6	6	.09	.08	31	25

TARGET SPECIES NORTHERN PIKE

OPEN WATER VERSUS ICE FISHING TRIPS	NUMBER OF TRIPS	EFFORT IN ANGLER HOURS	NUMBER OF COOPERATORS	NORTHERN PIKE CAUGHT PER ANGLER HOUR	LEGAL-SIZED NORTHERN PIKE CAUGHT PER ANGLER HOUR	TOTAL NUMBER NORTHERNS CAUGHT	NUMBER LEGAL NORTHERNS CAUGHT	TOTAL NUMBER NORTHERNS KEPT
Open	57	209.6	3	.01	.01	3	3	0
Ice	4	50.0	2	.00	.00	0	0	0
TOTAL	61	259.6	4	.01	.01	3	3	0

Continued.....

Table 2. (Continued)

TARGET SPECIES YELLOW PERCH

OPEN WATER VERSUS ICE FISHING TRIPS	NUMBER OF TRIPS	EFFORT IN ANGLER HOURS	NUMBER OF COOPERATORS	YELLOW PERCH CAUGHT PER ANGLER HOUR	TOTAL NUMBER YELLOW PERCH CAUGHT	TOTAL NUMBER YELLOW PERCH KEPT
Open	49	148 .1	1	.00	0	0
Ice	4	50.0	1	.00	0	0
TOTAL	53	198.1	1	.00	0	0

Table 3. Numbers and lengths of various fish species reported by Great Sacandaga Lake angler diary cooperators for the 2010 fishing season.

WALLEYE

OPEN WATER	TOTAL NUMBER WALLEYE CAUGHT	AVERAGE WALLEYE LENGTH CAUGHT	NUMBER LEGAL WALLEYE CAUGHT	NUMBER WALLEYE KEPT	AVERAGE WALLEYE LENGTH KEPT	NUMBER WALLEYE CAUGHT >18"	NUMBER WALLEYE CAUGHT >20"	NUMBER WALLEYE CAUGHT >25"
TOTAL Open	197	15.42	126	89	16.60	15	1	0

Continued.....

Table 3. (Continued)

BROWN TROUT

OPEN WATER	TOTAL NUMBER BROWN TROUT CAUGHT	AVERAGE BROWN TROUT LENGTH CAUGHT	NUMBER BROWN TROUT KEPT	AVERAGE BROWN TROUT LENGTH KEPT	NUMBER BROWN TROUT CAUGHT >15"	NUMBER BROWN TROUT CAUGHT >18"	NUMBER BROWN TROUT CAUGHT >21"
TOTAL Open	10	14.85	6	26.75	6	1	0

RAINBOW TROUT

OPEN WATER	TOTAL RAINBOW TROUT CAUGHT	AVERAGE RAINBOW TROUT LENGTH CAUGHT	NUMBER RAINBOW TROUT KEPT	AVERAGE RAINBOW TROUT LENGTH KEPT	NUMBER RAINBOW TROUT CAUGHT >15"	NUMBER RAINBOW TROUT CAUGHT >18"	NUMBER RAINBOW TROUT CAUGHT >21"
TOTAL Open	27	15.59	21	15.67	19	3	0

SMALLMOUTH BASS (SMB)

OPEN WATER	TOTAL SMB CAUGHT	AVERAGE SMB LENGTH CAUGHT	LEGAL SMB CAUGHT	NUMBER SMB KEPT	AVERAGE SMB LENGTH KEPT	NUMBER SMB CAUGHT >14"	NUMBER SMB CAUGHT >17"	NUMBER SMB CAUGHT >20"
TOTAL Open	95	12.98	69	1	15.00	42	8	0

Continued.....

Table 3. (Continued)

NORTHERN PIKE (NOP)

OPEN WATER	TOTAL NOP CAUGHT	AVERAGE NOP LENGTH CAUGHT	LEGAL NOP CAUGHT	NUMBER NOP KEPT	AVERAGE NOP LENGTH KEPT	NUMBER NOP CAUGHT >21"	NUMBER NOP CAUGHT >25"	NUMBER NOP CAUGHT >30"	NUMBER NOP CAUGHT >35"
TOTAL Open	12	27.83	11	0	0	9	8	4	3

YELLOW PERCH

OPEN WATER VERSUS ICE FISHING TRIPS	TOTAL PERCH CAUGHT	AVERAGE PERCH LENGTH CAUGHT	NUMBER PERCH KEPT	AVERAGE PERCH LENGTH KEPT	NUMBER PERCH CAUGHT >10"	NUMBER PERCH CAUGHT >12"	NUMBER PERCH CAUGHT >15"
Open	2	11.13	0	0	2	0	0
Ice	5	8.20	0	0	1	0	0
TOTAL	7	9.04	0	0	3	0	0

Table 4. Angler effort and catch statistics for the 2010 fishing season from trips with a start and end time.

OVERALL CATCH STATISTICS

OPEN WATER VERSUS ICE FISHING TRIPS	NUMBER OF COOPS	NUMBER OF TRIPS	MEAN TRIP LENGTH IN HOURS	EFFORT IN ANGLER HOURS	NUMBER OF FISH CAUGHT	TOTAL CATCH PER ANGLER HOUR FOR ALL REPORTED SPECIES	TOTAL NUMBER OF FISH KEPT	NUMBER OF FISH KEPT PER ANGLER HOUR
Open	5	182	2.71	534.6	343	.64	117	.22
Ice	2	6	6.00	66.0	5	.08	0	.00
TOTAL	7	188	2.82	600.6	348	.58	117	.19

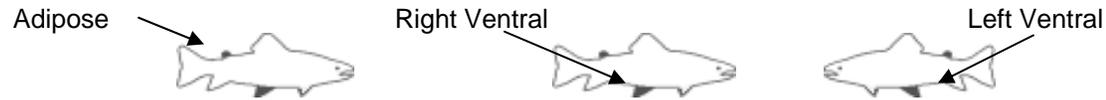
Table 5. Comparison of cold water catch rates to warm water species catch rates.

SALMONID AND WARM WATER CATCH RATES

OPEN WATER VERSUS ICE FISHING TRIPS	NUMBER OF TRIPS	MEAN TRIP LENGTH IN HOURS	EFFORT IN ANGLER HOURS	TROUT & SALMON CATCH PER ANGLER HOUR	WARM WATER SPECIES CAUGHT PER ANGLER HOUR
Open	182	2.7	534.6	.07	.39
Ice	6	6.0	66.0	.00	.00
TOTAL	188	2.8	600.6	.06	.34

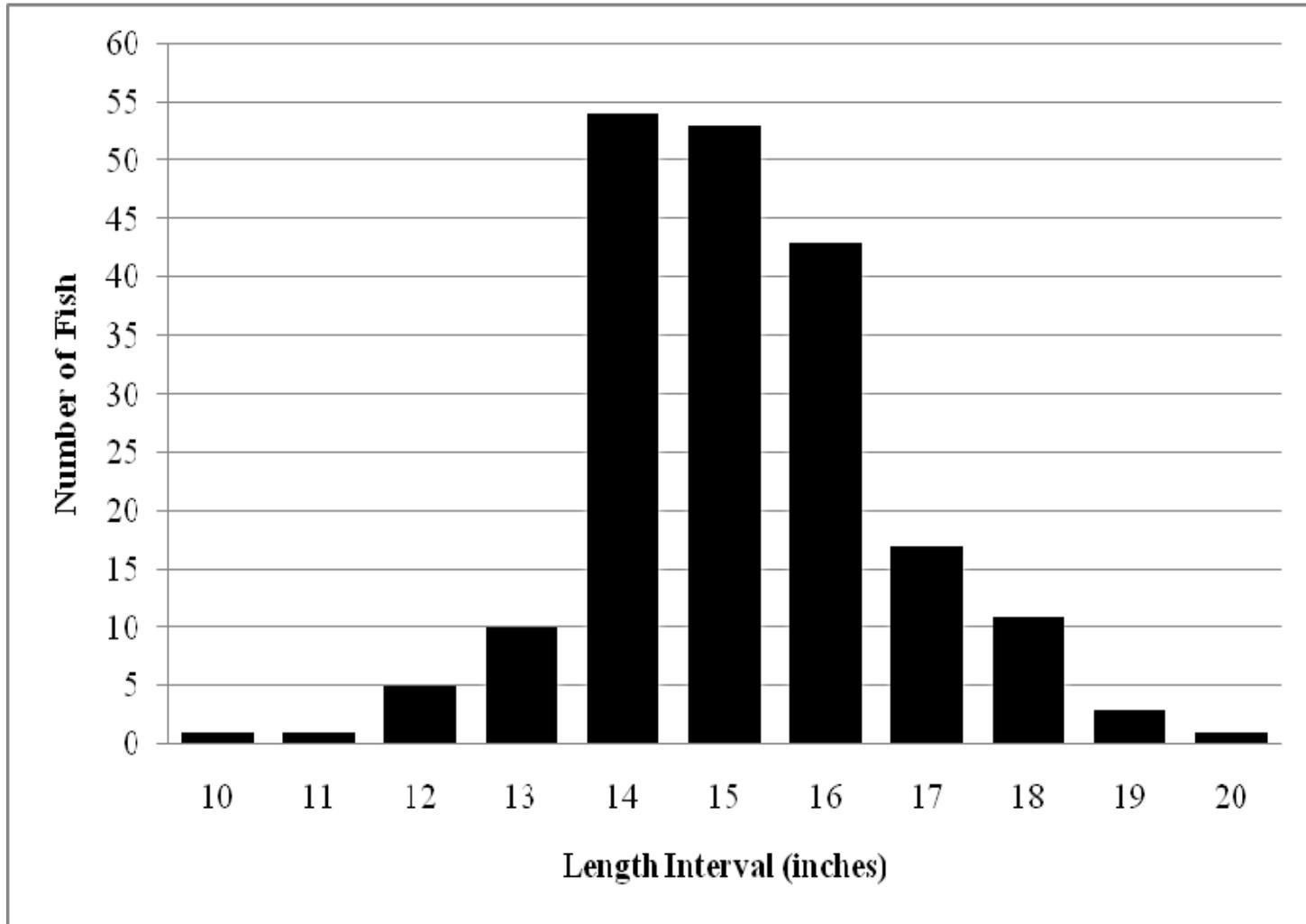
Table 6. Number of rainbow trout stocked by the New York State Department of Environmental Conservation, by year and their corresponding fin clip.

Year	Number Stocked	Fin Clipped
2007	10,870	Right Ventral
2008	12,000	Adipose
2009	11,340*	Left Ventral
2009	2,500	Unclipped
2010	11,660	Right Ventral



* Additional 2,500 surplus of unclipped fish stocked

Figure 1. Length frequency distribution of walleye from 2010 Great Sacandaga Lake angler diaries, n=199



*n = number of fish caught

Figure 2. Length frequency distribution of rainbow trout from 2010 Great Sacandaga Lake angler diaries, n=28

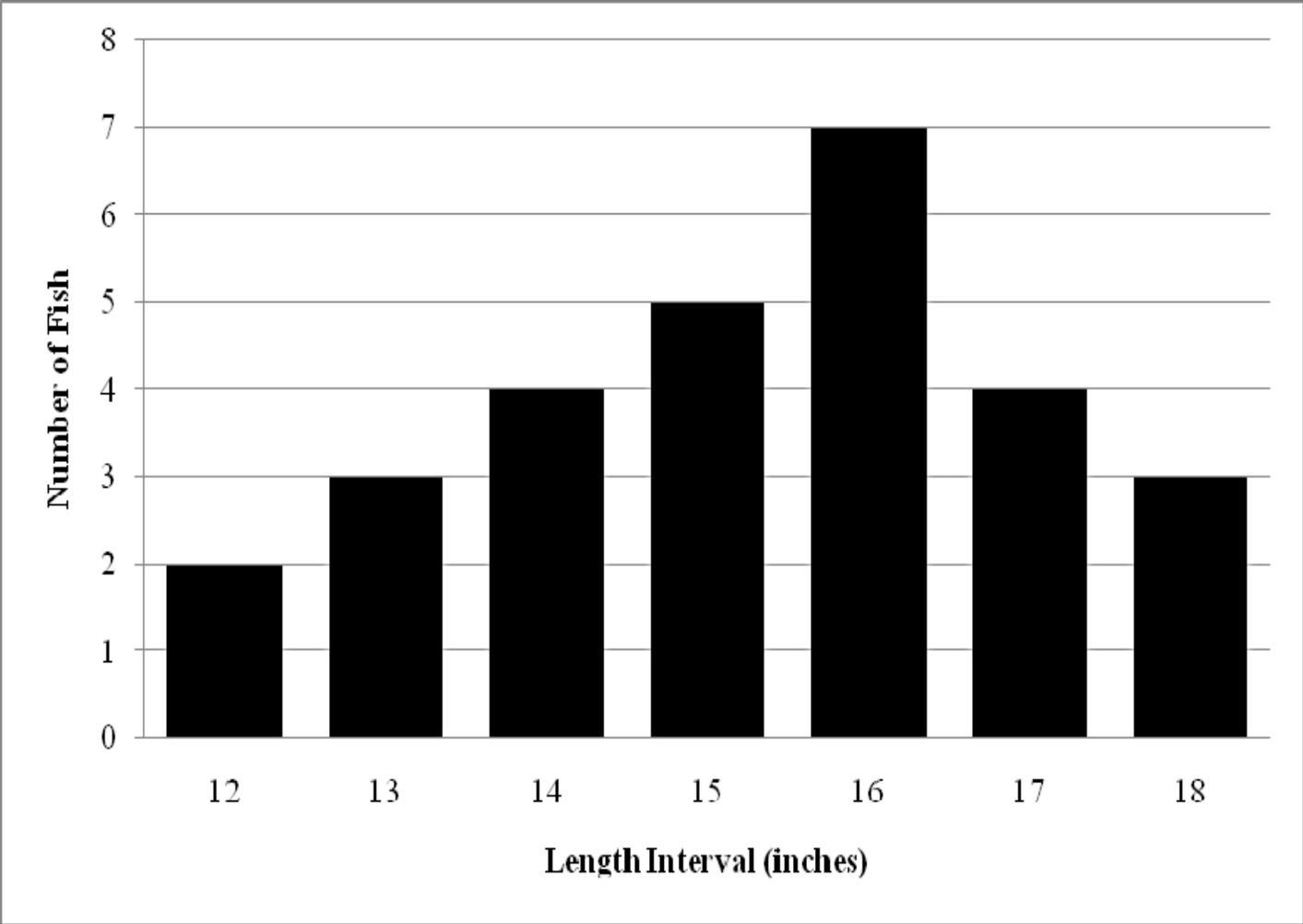


Figure 3. Length frequency distribution of brown trout from 2010 Great Sacandaga Lake angler diaries, n=10

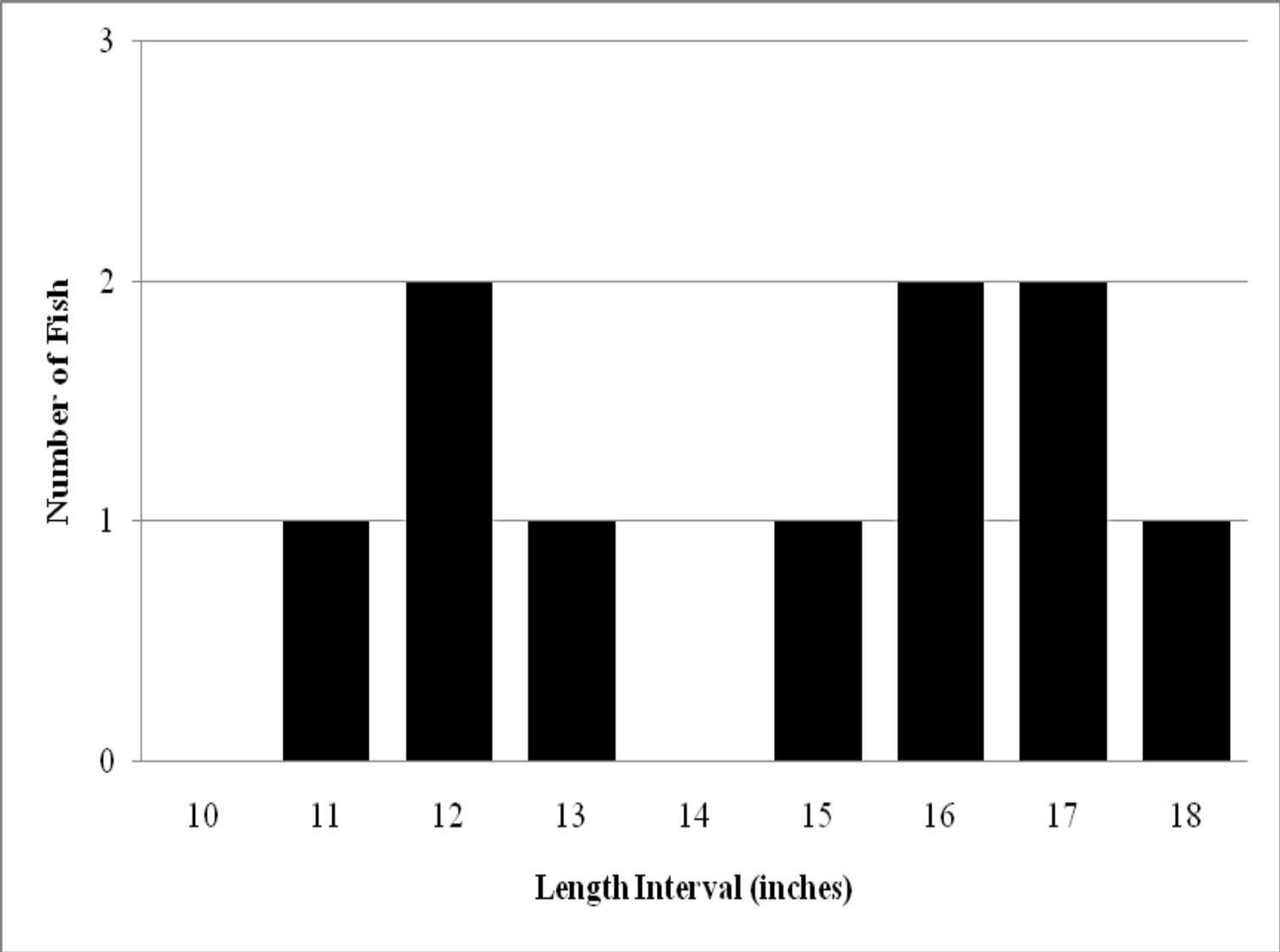


Figure 4. Length frequency distribution of smallmouth bass from 2010 Great Sacandaga Lake angler diaries, n=95

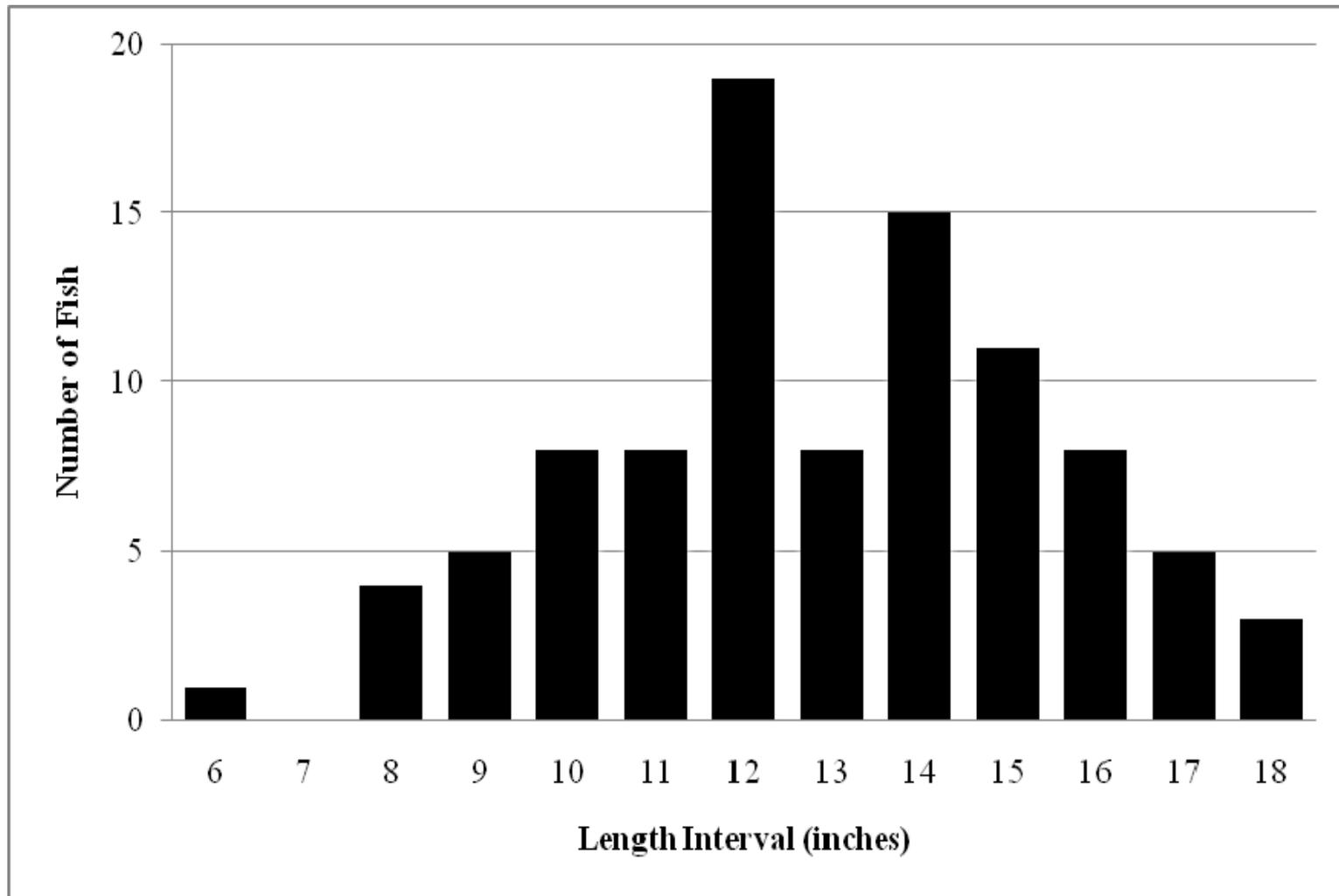


Figure 5. Length frequency distribution of yellow perch from 2010 Great Sacandaga Lake angler diaries, n=7

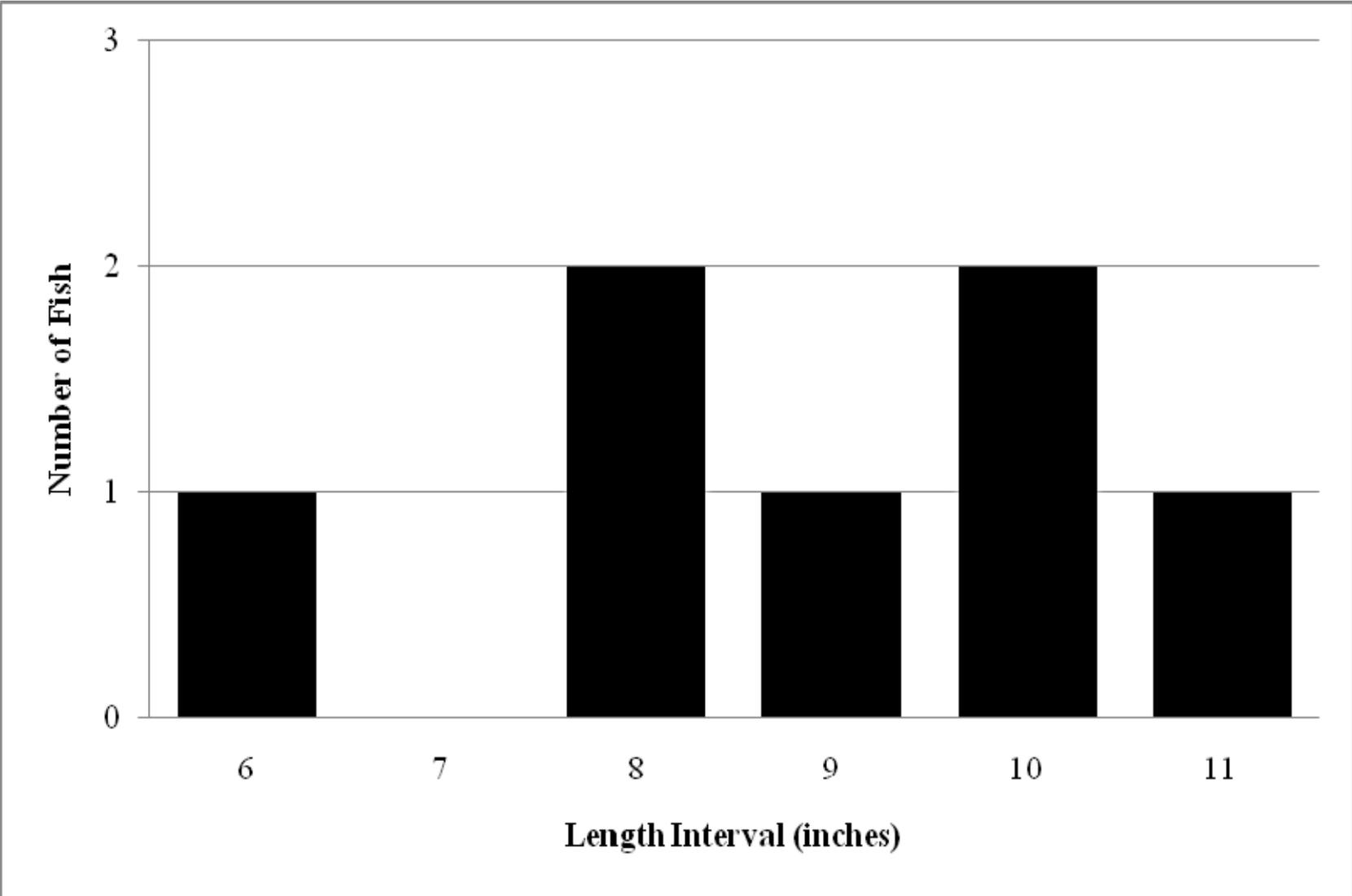


Figure 6. Length frequency distribution of northern pike from 2010 Great Sacandaga Lake angler diaries, n=12

