

Loon Lake General Biological Survey (#521011)
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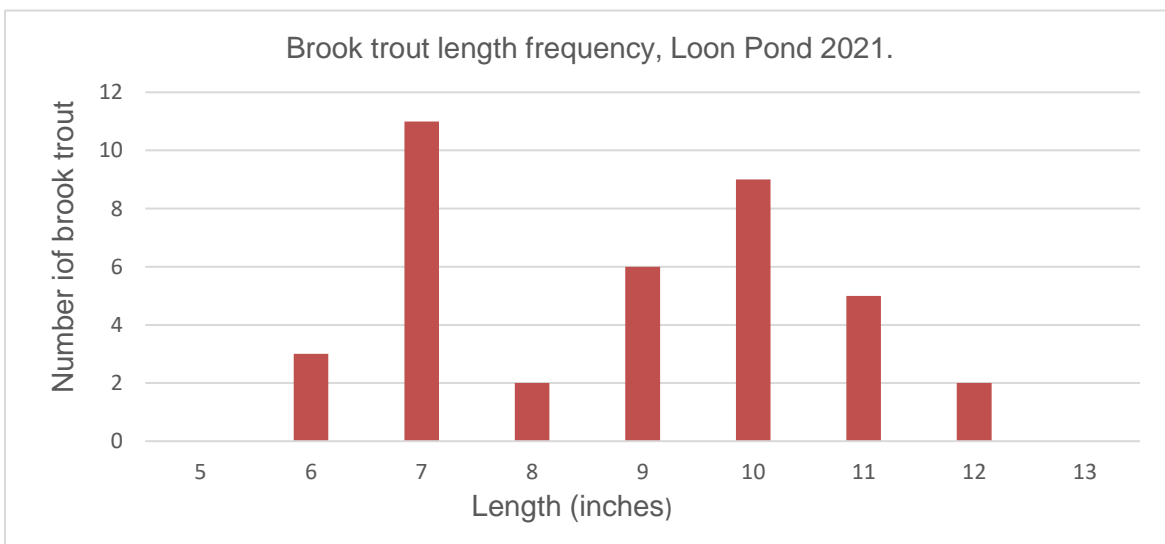
Loon Pond (C-P69) is a 20-acre lake in Franklin County in the Debar Mountain Wild Forest. It has been stocked annually with brook trout since 1929 and was last surveyed by the Adirondack Lakes Survey Corporation 37 years ago, in 1984. The current annual stocking policy is for 1,100 Temiscamie x Domestic hybrid brook trout. The pH of Loon Pond was quite acidic, 4.99 pH units, when measured during the 1984 ALSC survey. The maximum depth is 15 feet, the mean depth is 6.9 feet, dissolved oxygen was sufficient for trout throughout the water column.

Table 1. Loon Pond water chemistry variables, 2021.

Year	Depth (feet)	Air Equilibrated pH (pH units)	Acid Neutralizing Capacity ($\mu\text{eq/L}$)	Conductivity ($\mu\text{mhos/cm}$)	Silica (mg L^{-1})
2021	5	5.90	20.0	11.0	0.86
	10	5.84	19.1	11.3	0.91

The acid/base water chemistry here has notably improved since the 1984 ALSC survey. The air equilibrated pH is a full pH point higher and the ANC has improved by 25 $\mu\text{eq/L}$. The conductivity has decreased from 23 to 11 $\mu\text{mhos/cm}$, but this was not unexpected as it can occur when some Adirondack waters recover from acidity issues.

In May of 2021, two 150-foot Swedish experimental gill nets, a 30-foot minnow net, and a minnow trap were set overnight. A total of 38 brook trout were collected during the survey. The average length of a Loon Pond brook trout was 9.3 inches and the largest trout collected was 12.4 inches. The 2021 survey showed an increase in the number of brook trout collected, compared to the 1983 survey, but a decrease in the overall size of the brook trout. At the current stocking rate of 56 fall fingerling brook trout per acre it appears that the number stocked should be reduced. Selected brook trout were aged by scale analysis and poor length at age confirms that the number stocked here should be reduced.



In addition to brook trout two other fish species were also collected, brown bullhead and pumpkinseed. Brown bullhead numbers were greatly reduced in the current survey, when compared to the 1984 fish survey with 18 bullheads collected in 2021 and 124 collected in 1984.

Table 1. Number and length ranges of fish collected at Loon Pond, 2021.

Species	Number collected	Minimum length (in)	Maximum length (in)
Brook trout	38	6.3	12.4
Brown bullhead	18	5.0	8.8
Pumpkinseed	12	1.4	2.3

The number of fish stocked should be reduced to 700 Temiscamie x Domestic brook trout fingerlings annually. This reduction should promote brook trout growth and continue to provide a quality fishery.