

**North Otter Pond General Biological Survey #519016:  
Jonathan Fieroh, Region 5 Fisheries**

12/20/2019

North Otter Pond (SC-P160) is a remote two-acre water located in the Saint Regis Canoe Area in Franklin County. The maximum depth is nine feet, the mean depth is 6.6 feet and there was sufficient dissolved oxygen for trout throughout the water column in the spring 2016 survey. However, in a summer 1984 Adirondack Lakes Survey Corporation (ALSC) survey, dissolved oxygen sufficient for trout was present only to about four feet. Acidity has never been an issue and in 1984 the pH was 6.25 pH units. North Otter Pond was reclaimed in 1953 and was stocked from that time until 2013 when the stocking policy was cancelled for apparent lack of angling pressure. The last fisheries survey was conducted by ALSC in 1984 when 11 brook trout and 24 white suckers were collected. The 2019 survey was undertaken to determine if the brook trout population had persisted despite the lack of stocking. High silica levels can be indicative of groundwater input which can in turn be related to natural reproduction of brook trout. In 1984, ALSC water chemistry found silica levels to be quite high (in excess of 5.6 mg/L).

A water sample was drawn for analysis at five feet. The pH was 5.96, with an ANC value of 34.4, and the silica and sodium values have remained high (Table 1.).

Table 1. North Otter Pond water chemistry variables 2019.

Year	Depth (feet)	Air Equilibrated pH (pH units)	Acid Neutralizing Capacity (µeq/L)	Conductivity (µmhos/cm)	Silica mg/L	Sodium mg/L
2019	5	5.96	34.4	16.4	5.9	0.69

In 2019, one 150-ft Swedish experimental gill net, a 30-ft minnow net, and a minnow trap were set overnight. No brook trout were collected during the 2019 survey, but two species were added to the fish community. Brown bullhead and golden shiner were collected, along with the white suckers which were present during the 1984 survey (Table 2.). All three of these species are known to be serious competitors with brook trout.

Table 2. Number and length ranges of fish collected at North Otter Pond, May 2019.

Species	Number collected	Minimum length (in)	Maximum length (in)
white sucker	4	7.8	11.8
brown bullhead	7	4.3	5.7
golden shiner	3	2.8	3.1

It now appears that the addition of competitive species to the fish population along with the possibly problematic summer dissolved oxygen levels have made this water unsuitable for brook trout reproduction despite the high silica levels. A stocking policy will not be restarted.

