

Salmon Lake Atlantic Salmon Assessment (Survey #:621215)

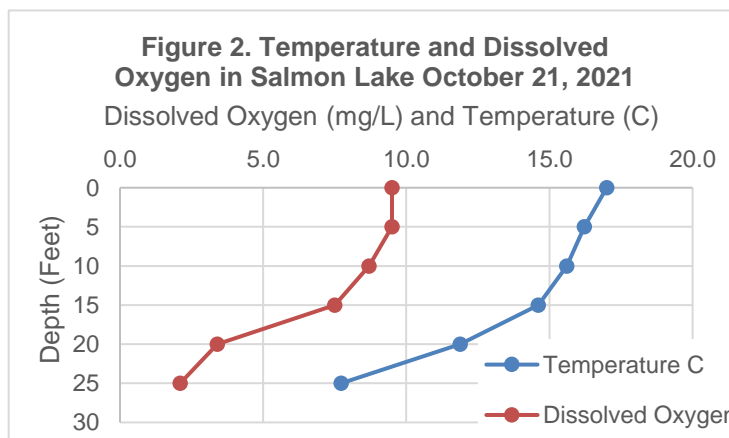
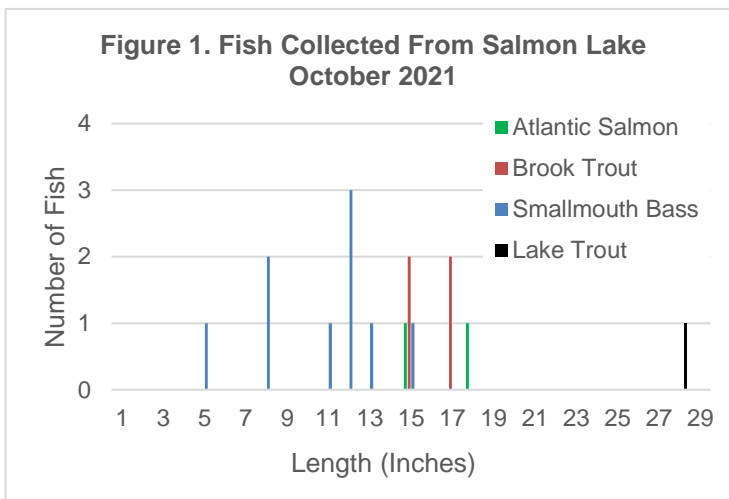
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Salmon Lake (ONT-19-40-P493-7-P517) is located in the Five Ponds Wilderness north of Stillwater Reservoir in Herkimer County. This lake is approximately 104-acres with a maximum depth of 50 feet. Access to this water is found by hiking the Red Horse Trail which starts in the Big Burnt Lake area of Stillwater Reservoir. Salmon Lake was historically a salmonid water with wild brook trout and lake trout as the dominant sportfish. A single smallmouth bass was collected in a survey conducted in 2006 and it is thought that the bass migrated up from Stillwater Reservoir. To increase the catch rate of salmonids and add diversity, Atlantic salmon stocking began in 2015. Yearling Atlantic salmon are stocked each spring and measure seven inches at the time of stocking. Special fishing regulations are that ice fishing and use or possession of baitfish are prohibited. The statewide regulation for Atlantic Salmon applies (i.e., season open all year, 15-inch minimum length, daily limit of three fish). In October 2021, two experimental gill nets and a 1.5-inch stretch monofilament gill net were set overnight to assess the Atlantic salmon stocking.

Smallmouth bass dominated the catch with nine bass caught ranging in length between 5.7-15.7 inches with the average length 11.2 inches (Figure 1). Two stocked Atlantic salmon were collected measuring 15.6 and 18.7 inches. Four wild brook trout were collected ranging in length between 15.4-17.2 inches. One wild lake trout measuring 27.9 inches was also collected. Catch rates of yellow perch, pumpkinseed, and brown bullhead numbers were lower than past surveys. White sucker and a single golden shiner were also collected.

Based on survey results, smallmouth bass are the dominant predator. Lake trout are still present; however, it seems that there may be limited habitat suitable for lake trout based on low dissolved oxygen levels measured in deeper water (Figure 2). Smallmouth bass likely compete with Atlantic salmon and lake trout for food which results in lower prey fish populations. Smallmouth bass are now well established in Salmon Lake and likely



prey on stocked Atlantic salmon and wild brook trout negatively impacting their populations. Angler reports have indicated that Atlantic salmon are being caught occasionally so at this time, we recommend continued stocking of Atlantic salmon and that future surveys be conducted to collect additional data on the fish population in this lake including the Atlantic salmon. This additional information will help inform management decisions in the future.