

Lyon Lake Brook Trout Survey (Survey #:622208)
 David Erway, Region 6 Fisheries

06/05/2023

Lyon Lake (ONT-19-40-P493-2-P498) is an 80-acre lake north of Stillwater Reservoir in the Five Ponds Wilderness Area. An Adirondack Lakes Survey Corporation fisheries survey was conducted in 1985 and a Department of Environmental Conservation fisheries survey was conducted in 2012. No fish were collected in either survey. This water is in the Limed Waters Program and was limed in 2013 to increase the potential for brook trout survival. Temiscamie Hybrid and Horn Lake brook trout were stocked in the fall of 2013 and 2014 to determine which strain of brook trout would produce the best offspring from natural reproduction. Surveys conducted in 2016 and 2017 found both strains surviving and growing well although no natural reproduction was documented. The Horn Lake strain of brook trout is endemic to the Adirondacks; therefore, the decision was made to continue stocking only Horn Lake strain brook trout beginning in the fall of 2018 as a means of expanding the current geographic area of this strain. Stocking of 2,000 marked Horn Lake strain fall fingerlings began in 2018. Four experimental gill nets, a minnow net and minnow trap were set overnight on August 18, 2022 to assess the current brook trout population.

Brook trout are still the only fish species present in Lyon Lake. Sixty-six stocked trout were collected and resulted in a catch rate of 16.5 fish/net night. The length of stocked brook trout ranged from 7.2-14.4 inches and the average length is 10.1 inches (Figure 1). Natural reproduction has not been identified to date; however, we have documented that fish are out-migrating to Raven Lake. The average length-at-age decreased slightly compared to data collected in 2017 (Figure 2). The catch rate for this remote water is high and it is recommended that the stocking rate be reduced to 1,500 fall fingerlings to reduce competition for available food and promote increased growth. Future surveys will assess this new stocking rate change and determine if natural reproduction is occurring.

