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Department of Environmental Conservation

Moose Pond Round Whitefish Survey #521076 Jonathan Fieroh, Region 5 Fisheries

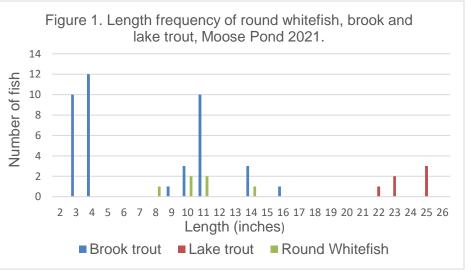
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Moose Pond (R-P221) is a remote 185-acre lake in the High Peaks Wilderness of Essex County. It was acquired as part of the Santanoni Preserve Acquisition and was first surveyed in 1972. The last comprehensive fish survey was conducted by NYSDEC in 1997 (#597091). The maximum depth is 53-feet, the pH is circumneutral, and dissolved oxygen sufficient for salmonoids was present to a depth of 30-feet. Temiscamie x Domestic hybrid brook trout fingerlings have been stocked here since 1999. A water chemistry sample was not drawn for analysis primarily due to the circumneutral pH.

The 2021 survey was performed primarily to assess the round whitefish population. Round whitefish are an endangered species in New York. The survey was performed in mid-October of 2021 when it was hoped that water temperatures would be suitable for the capture of round whitefish. However, warm fall temperatures kept temperatures near 60-degrees F to a depth of 30-feet. It should also be noted that, as brook and lake trout may begin to congregate prior to spawning, surveys performed late in the fall can sometimes either over or under-represent their numbers.

Five 150-foot experimental gill nets, a 30-foot minnow net, and a minnow trap were set overnight. A total of six round whitefish, 11 lake trout, and 40 brook trout were collected, despite the warm mid-October temperatures. Round whitefish lengths ranged from 8.7 to 14.5 inches. Round whitefish are not stocked here so the range of lengths and ages indicates that the population is continuing to sustain itself through natural reproduction. Round whitefish were aged using otoliths, and individuals were aged to be 2,3,4, and 13-year-old. The warm mid-October water temperatures may have limited the catch of additional larger round whitefish. Lake trout lengths ranged from 22.6 to 26.0 inches and their ages, as determined

by scale analysis, ranged from 10-14 years. It is possible that large spawning lake trout were overrepresented in the net catch during this mid-October survey. A total of 40 brook trout were collected but 22 were recently stocked fall fingerlings ranging from 3.8 to 4.6 inches. The remaining 18 brook trout averaged 12.0 inches in length and 0.67 pounds in weight (Figure 1).



Several additional fish species were also collected during the survey including white sucker, brown bullhead, pumpkinseed, creek chub, lake chub and common shiner (Table 1). Northern redbelly dace, eastern blacknose dace and slimy sculpin were caught in a 2010 survey (#510905) by electrofishing but these species were not collected in the 2021 survey. The 2021 survey found no new additions to the fish community and this fish community continues to be composed of only native species.



| Table 1. Number and length ranges of fish collected at Moose Pond, 2021. | | | |
|--|------------------|---------------------|---------------------|
| Species | Number collected | Minimum length (in) | Maximum length (in) |
| Round Whitefish | 6 | 8.7 | 14.5 |
| Brook trout | 40 | 3.8 | 16.1 |
| Lake trout | 6 | 22.6 | 26.0 |
| White sucker | 64 | 3.4 | 17.4 |
| Brown bullhead | 125 | 6.2 | 16.7 |
| Pumpkinseed | 9 | 4.4 | 6.0 |
| Creek chub | 37 | 1.9 | 7.6 |
| Lake Chub | 42 | 3.2 | 3.7 |
| Common shiner | 23 | 3.3 | 3.9 |

The stocking of 5,900 brook trout fingerlings annually is providing a nice fishery and should continue. The round whitefish population appears to be small but stable in this fish community composed entirely of native species. The importance of the "no baitfish" regulation here cannot be overstated and should be strictly enforced.