Canandaigua Lake is a 10,558 acre lake in Ontario and Yates Counties with a maximum depth of 276 feet. The lake's cold, highly oxygenated water provides excellent habitat for coldwater species including lake trout, brown trout and rainbow trout. Forage species that support these predators include alewives, smelt, sculpin, and various minnow and shiner species. Monitoring these forage fish populations is important when determining fish stocking rates and for overall fishery management of the lake. Recently developed gill netting protocols were used to sample forage fish in Canandaigua Lake during the weeks of September 10th and 17th (Sethi 2017).

A total of 14 species were collected from Canandaigua Lake. Alewives were the most abundant fish species, making up 93 percent of the catch. Alewife appear to be the main forage species supporting the trout populations in Canandaigua Lake at this time. A total of four age classes of alewife were collected, with age-1 (2017 year class) comprising 44% of alewife sampled (Figure 1). The once abundant rainbow smelt are still present but in very low numbers.

Figure 1. Length frequency distribution of alewife
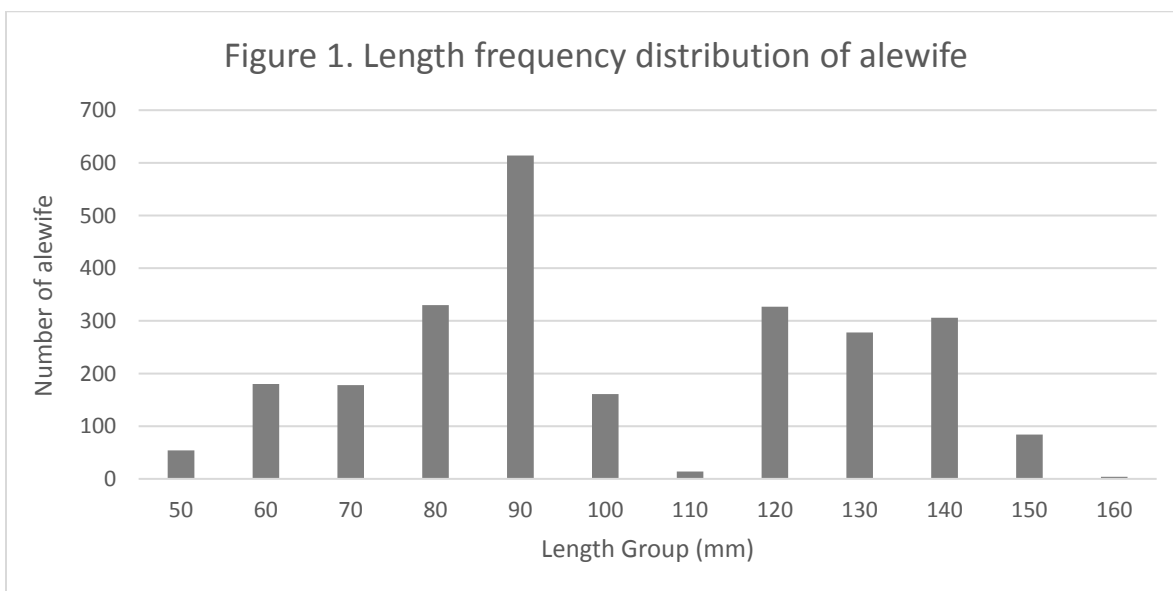
Results from this new gill netting protocol will be compared across the Finger Lakes and within each lake over time. Results will eventually be used to help make trout stocking decisions on Canandaigua Lake.

Sethi, S.A. 2017. Finger Lakes forage fish gillnet survey: power analysis to assess net designs. New York Cooperative Fish and Wildlife Research Unit, Cornell University. Unpublished – NYSDEC Region 8 file.