

Keuka Lake Standard Lake Trout Netting Survey 2019 (Survey #: 819017)

Brad Hammers, Region 8 Fisheries

10/26/21

Keuka Lake, a y-shaped, western Finger Lake nestled in between Penn Yan, Hammondsport and Branchport, occupies 11,548 acres. The lake is relatively deep, with steep sloped sides with a maximum depth of 185 feet and an average depth of 101 feet. Littoral habitat is mostly concentrated at both northern ends of the y-shaped lake. Public boating access is limited to Keuka Lake State Park in Branchport and Village of Penn Yan Boat Launch on Keuka Outlet, both at the northern ends of the lake. There is a small DEC launch on Sugar Creek with access to the lake for small boats on the northern end of the northwest arm of the lake. Keuka Lake is a two-story lake supporting a fishery for both coldwater and warmwater fishes. Gill netting was conducted during the weeks of July 16th and 23rd, 2019 to determine the status of the lake trout population.

A total of 458 lake trout ranging in size from 8.4 to 28.8 inches (average length was 14.7 inches) were collected from 32 gill nets (Figure 1). The largest lake trout caught weighed 9.3 pounds. Lake trout collected ranged in age from one to seven years, with age 2-4 lake trout being most abundant. Size indices indicated only one lake trout in the preferred¹ sized range (25.6 – 31.4 inches), with stock (11.8 – 19.6 inches) and quality size fish (19.7 – 25.6 inches) accounting for most lake trout collected. Relative weights of stocked¹ and quality¹ size groups of lake trout were 91 and 87 respectively indicating slightly below average condition. No alewives, rainbow smelt, or cisco were collected suggesting these forage populations remain at low levels.

Catch rates of lake trout increased compared to recent sampling events (Figure 2).

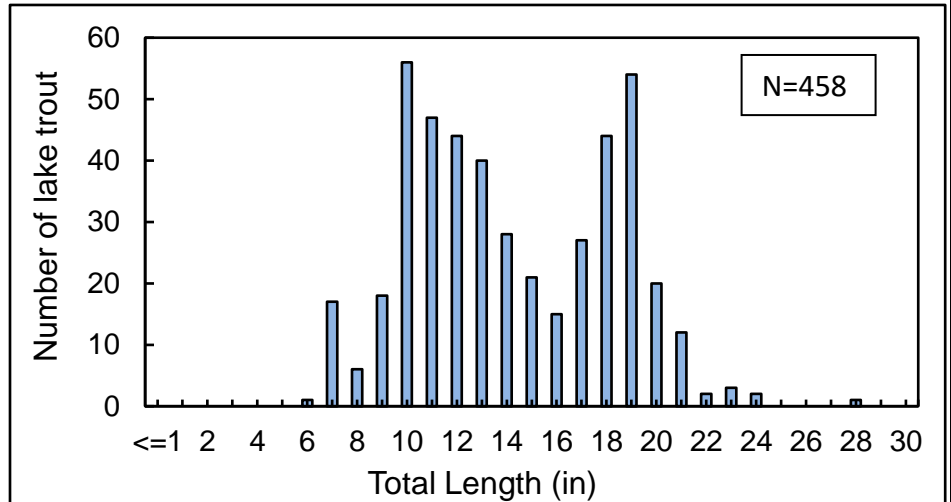


Figure 1. Length frequency distribution of lake trout

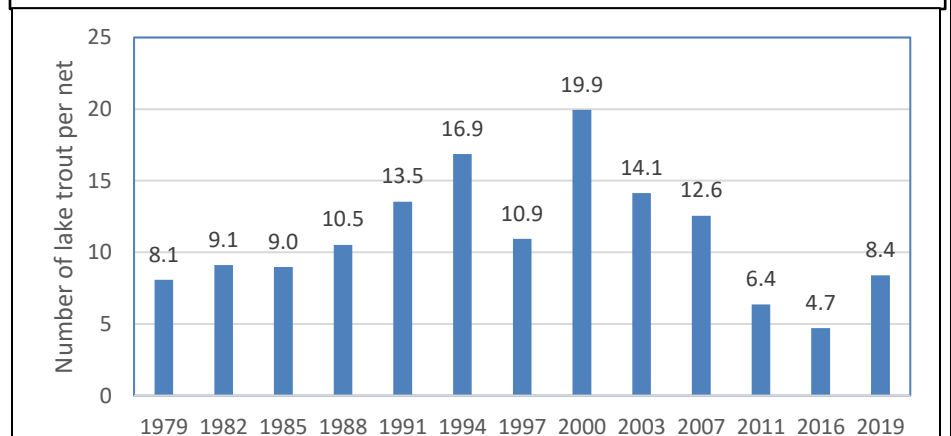


Figure 2. Lake trout catch rate from standard netting on Keuka Lake



Keuka Lake Standard Lake Trout Netting Survey 2019 (Survey #: 819017)

Brad Hammers, Region 8 Fisheries

10/26/21

About 56% of the catch consisted of sublegal (< 15 inch) lake trout which should recruit into the fishery within the next couple of years.

Keuka Lake continues to provide anglers with the unique opportunity to catch 100% wild lake trout. While lake trout size is down, populations appear to be rebounding from recent reductions in abundance. However, recent changes in forage abundance and composition (TB#819025) as well as a decrease in lake productivity have the potential to impact lake trout abundance and condition (Hammers 2018). Efforts to establish a native forage fish, cisco, to stabilize the forage base are ongoing. Monitoring efforts to track lake trout and forage population characteristics will continue to be conducted to make informed decisions on management of Keuka Lake.

¹For definition of stock, quality, and preferred size groups please see [fisheries dictionary](#).

Literature Cited

Hammers, B.E. 2018. Keuka Lake salmonine management assessment update, 2010-2016. New York State Department of Environmental Conservation, Avon, NY. 50 pp.

