

Catharine Creek and Tributaries Spring Rainbow Trout 2017 (Survey #'s: 817003, 817004, and 817005)

Brad Hammers, Region 8 Fisheries

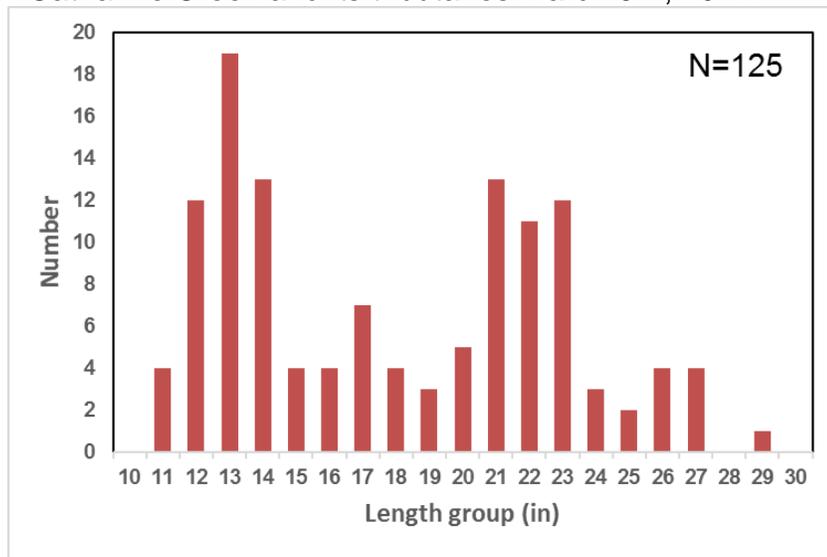
11/7/18

Catharine Creek is known for its annual spring rainbow trout spawning migrations. Catharine Creek originates in northern Chemung County and flows in a northerly direction until it joins Seneca Lake at Watkins Glen. Numerous tributaries, including Sleeper Creek and Havana Glen, join Catharine on its course to Seneca Lake. The stream and its tributaries provide excellent spawning and nursery habitat for rainbow trout. Although rainbow trout spawning occurs in other tributaries, Catharine Creek and its tributaries support the majority of rainbow trout production for Seneca Lake. Fishing for these large Finger Lakes strain rainbow trout draws anglers from outside of the local area. Public access is provided at several NYS Fishing Access Sites and nearly 8 equivalent miles of Public Fishing Rights.

The spring rainbow trout run in Catharine Creek and tributaries Sleeper and McClure (Havana Glen) Creeks were sampled using backpack electrofishing gear on March 6-7, 2017. Similar surveys have occurred on Catharine Creek since the 1950's, although effort and location may have changed over the years. The survey was conducted to assess the rainbow trout spawning run and to evaluate sea lamprey wounding and scarring information. This information is used in part to evaluate the sea lamprey control program in Seneca Lake and also to inform the public of prospects for the upcoming trout season. A total of 125 adult rainbow trout were collected ranging in size from 11.4 – 29.7 inches (Figure 1). The largest fish collected was a female that

weighed 10 pounds. Water temperature ranged from 34-42 F.

Figure 1. Size distribution of rainbow trout collected from Catharine Creek and its tributaries March 6-7, 2017.



Age of rainbow trout ranged from 3-9 with age 4 and 5 rainbow trout comprising 50% of the sample. Rainbow trout reached harvestable size (15 inches) between ages 4 and 5. Sixty-four percent of the total sample were legal size. (Figure 1). About 10,000 Finger Lakes strain rainbow trout yearlings have been stocked annually beginning in 2012. In 2017, 27% of the total sample was of stocked origin.

Catharine Creek and Tributaries Spring Rainbow Trout 2017 (Survey #'s: 817003, 817004, and 817005)

Brad Hammers, Region 8 Fisheries

11/7/18

Sea lamprey wounding/scarring rates for rainbow trout 500-599 mm in length was 1.38 wounds/scars/fish. This attack rate is above the 1.0 wounds/fish (Type I-IV) threshold objective for Seneca Lake (Figure 2). A total of 37 rainbow trout from the stated index size range were collected, slightly less than the recommended sample size to achieve an estimate within 60% of the true mean for Type I-IV wounds was met. This was the second straight year that the rate was higher than our index indicating that sea lamprey adult population in the lake is high. Sea lamprey treatment is scheduled for June 2018 in both Catharine Creek and Keuka Lake Outlet.

Rainbow trout were spread throughout the creek. A few ripe females were found in the sample, however no spent fish were collected. Overall numbers collected were similar to recent years. Stocked fish are

contributing to the adult spawning population. The population is represented by numerous year classes that should continue to provide anglers with good opportunities in future years. Successful lamprey control will be important in maintaining a robust rainbow trout population.

Figure 2. Sea lamprey wounding rates of rainbow trout 500-599 mm collected from Catharine Creek using backpack electrofishing gear during the spring spawning run, 1982-2017.

