

Rainbow Trout (Steelhead) of the Ganaraska River and the Ganaraska Region Conservation Authority

Rainbow Trout (Steelhead) were not always in the Ganaraska River. They were introduced into Lake Ontario over a century ago and provide an important fishery to both Ontario and New York residents. Rainbow Trout stocking was initiated in 1878 for Lake Ontario and likely utilized California's McCloud River stock. However, they were first stocked on the Ontario side of Lake Ontario (Bronte Creek) as fingerlings in 1927 and 1930 from the Normandale Hatchery, with a subsequent stocking event in 1954. Stocked Rainbow Trout naturally began to reproduce in coldwater tributaries, and self-sustaining populations were established in Canadian Lake Ontario tributaries during the 1940's.



Figure 1: Wild juvenile Rainbow Trout (*Oncorhynchus mykiss*).

The Ganaraska River was first stocked with Rainbow Trout in early 1970, and a fishway at Corbett's Dam was constructed in 1974 allowing adult Rainbow Trout to access spawning habitat. Since the construction of the fishway, the fish in the Ganaraska River are reproducing naturally and have a sustainable population. The number of adult fish returning to spawn increased from approximately 500 to over 18,000 in 1989. Currently, approximately 4-9,000 adults return each year to spawn.

Observed Rainbow Trout counted at the Ganaraska Fishway

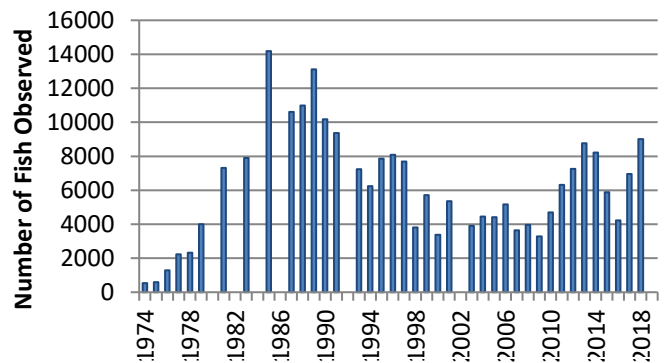


Figure 2: Observed upstream counts of Rainbow Trout at the Ganaraska River fishway during the spring 1974-2018. ¹

Spawning takes place in the spring, though mature fish may return from Lake Ontario to their home tributary as early as August of the previous year. These fall migrants are usually first to spawn in the late winter or early spring and usually spawn in headwater areas. Lake Ontario Rainbow Trout spawn multiple times; with healthy populations have repeat spawning levels between 50 and 70 percent for both sexes. Males are capable of spawning three or four times in successive years, while females commonly have four-six spawning migrations in a healthy populations.

Migration Period of Ganaraska River Rainbow Trout

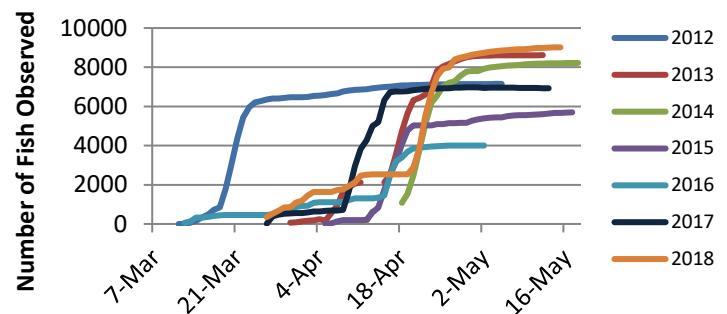


Figure 3: Accumulated daily observed upstream counts of Rainbow Trout at the Ganaraska River fishway. This shows the start and end of each year's migration. ¹

1. Ontario Ministry of Natural Resources and Forestry. 2019. Lake Ontario Fish Communities and Fisheries: 2018 Annual Report of the Lake Ontario Management Unit. Ontario Ministry of Natural Resources and Forestry, Picton, Ontario, Canada.