

# Cattaraugus Creek Trout Population Estimate

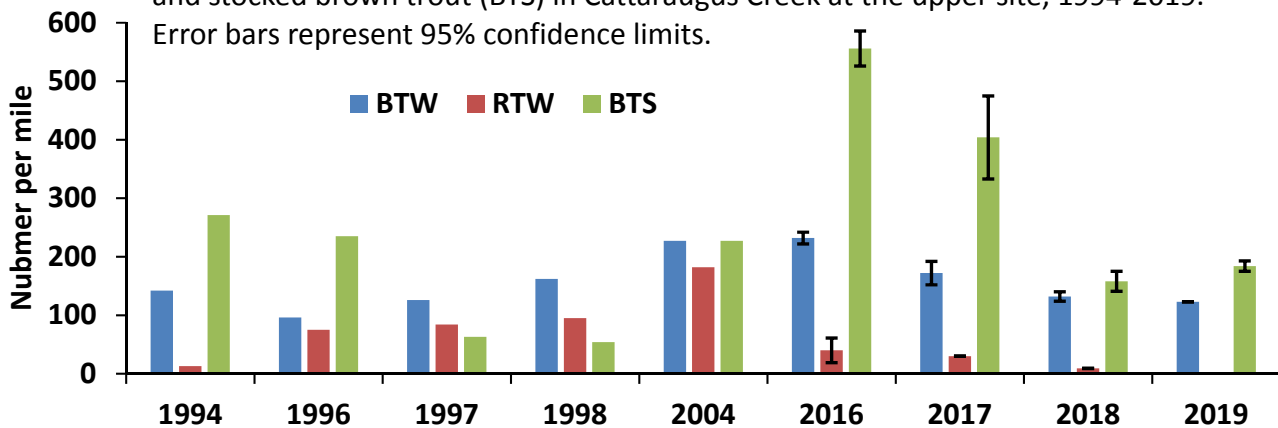
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Upper Cattaraugus Creek, flowing through Wyoming County and making up the border between Cattaraugus and Erie Counties, provides a fishery for stocked brown trout, wild brown trout and wild rainbow trout. This stream has abundant access with public fishing rights easements totaling 14 miles. The stream is currently stocked with 14,150 hatchery brown trout for 18.2 miles and managed with a year-round open season, including catch and release – artificial lures only from 10/16-3/31. In 2019, as part of region-wide trout population monitoring, the stream was sampled by electrofishing at two sites; Route 16 in Yorkshire (lower site) and Old Cattaraugus Road (upper site), upstream of Arcade. Both sites had been sampled five times (Figures 1 and 2) between 1994 and 2004. Additionally, the lower site was also sampled in 1990 and 2018 and the upper site was sampled from 2016 to 2018. In the 2016-2019 surveys, trout population abundance was estimated from two electrofishing passes; while in previous years we used one-pass methodology.

In 2019, at our upper site (600 feet), we captured 14 yearling and older (adult) wild brown trout along with 21 hatchery brown trout, but no wild rainbow trout. Hatchery brown trout at this site included 16 yearling fish and five fish stocked as two-year-olds. Adult wild brown trout ranged in length from 7.6 to 16.3 inches. The abundance of adult wild brown trout in 2019 at the upper site was 123 fish/mile, along with 184 hatchery brown trout/mile (Figure 1). At the lower site in 2019 (525 feet), we captured 13 adult wild brown trout, 30 hatchery brown trout and six wild adult rainbow trout. This resulted in trout abundance values of 131 fish/mile, 303 fish/mile and 61 fish/mile, respectively (Figure 2). Twenty of the hatchery trout were yearlings, while 10 were stocked as two-year-olds. Adult wild brown trout ranged from 5.8 to 15.9 inches. Adult trout habitat at both sites was of very good quality.

Figure 1. Abundance of adult wild brown trout (BTW), adult rainbow trout (RTW) and stocked brown trout (BTS) in Cattaraugus Creek at the upper site, 1994-2019. Error bars represent 95% confidence limits.



The abundance of adult wild brown trout in 2019 at our upper site was lower than most previous sampling years, while we captured no adult rainbow trout for the first time in any of our sampling years (Figure 1). At the lower site, both adult wild brown trout and rainbow trout abundances were higher in 2019 than in 2018. Adult abundance for both species has varied considerably over all the past sampling years, with no short or long term trends apparent (Figure 2). With very few young-of-year trout ever captured at either site, it appears that recruitment of wild trout is coming from tributaries and likely varies with the yearly trout production in those streams. The abundance of hatchery brown trout at both sites has also varied considerably over our sampling years, likely based on the combined factors of angler harvest, natural predation and warm water temperatures. This is consistent with 2011-2013 state-wide findings where short-term survival of stocked trout was poor in most streams. The higher abundance of hatchery brown trout at the lower site this year, may be due in part to cooler than normal temperatures and high flows through much of May and June, allowing for better survival of the stocked fish. With possible steelhead passage at the Springville Dam on Cattaraugus Creek, Region Nine and Lake Erie Unit staff are monitoring the wild trout population in this stream to assess any impacts to the fishery from expected reproduction of steelhead and increased angler use. Stocking and regulations are proposed to change somewhat in 2021, based on the 2020 state-wide Inland Trout Stream Management Plan. In the meantime, Cattaraugus Creek should continue to provide anglers with productive fishing for stocked trout, primarily in the spring, with wild trout adding to the catch throughout the year.

