

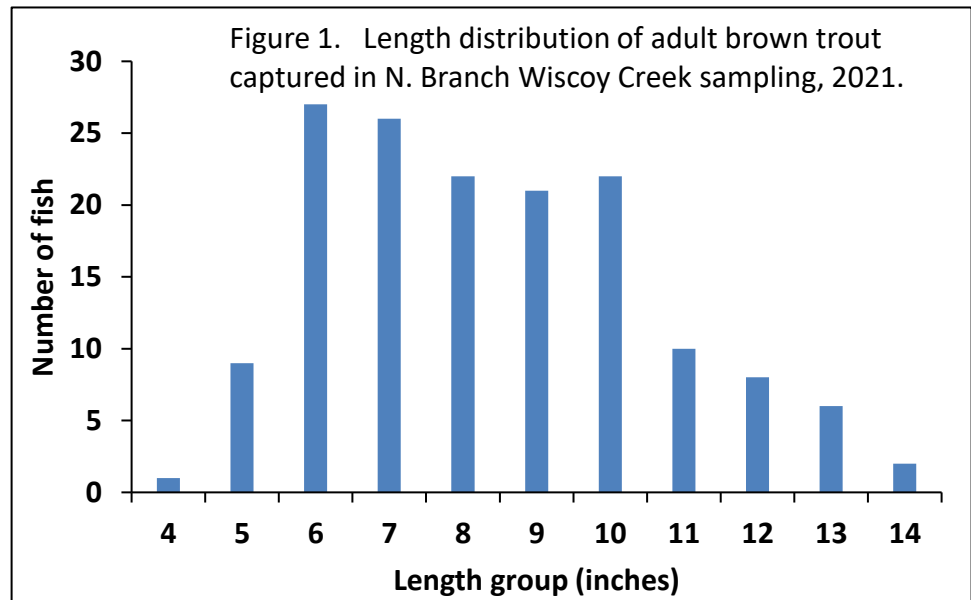
North Branch Wiscoy Creek Trout Population Estimate

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In late summer 2021, Region Nine Fisheries staff sampled the North Branch Wiscoy Creek (hereafter, N. Branch). The N. Branch is a major tributary of Wiscoy Creek and has over a mile of public fishing rights easements. The stream from its mouth upstream to the NYS Route 362 crossing is managed with a “Wild-Quality” designation, having a year-round open season, including catch and release – artificial lures only from October 16 through March 31. From April 1 through October 15, three fish may be harvested, only one of which can be >12 inches. In 2021, as part of New York State’s trout stream management plan, the stream was sampled in the “Wild-Quality” section by electrofishing at two sites, totaling 655 feet of stream. The site in the Village of Bliss had been sampled previously in 2006 and each year from 2009-2020. The other site was upstream, in a section where a habitat enhancement project was completed in 2011 and has been sampled each year since 2012. In all survey years, trout population abundance was estimated from two electrofishing passes.

In 2021, at our two sites, we captured a total of 154 yearling and older (adult) wild brown trout. These fish ranged in length from 4 to 14 inches and averaged 8.8 inches (Figure 1). The estimated abundance of adult wild brown trout in 2021 at the site in the Village of Bliss and at the habitat enhancement site were 1,211 fish/mile (± 28), and 1,236 fish/mile (± 19), respectively (Figure 2). For the two sites combined, the average

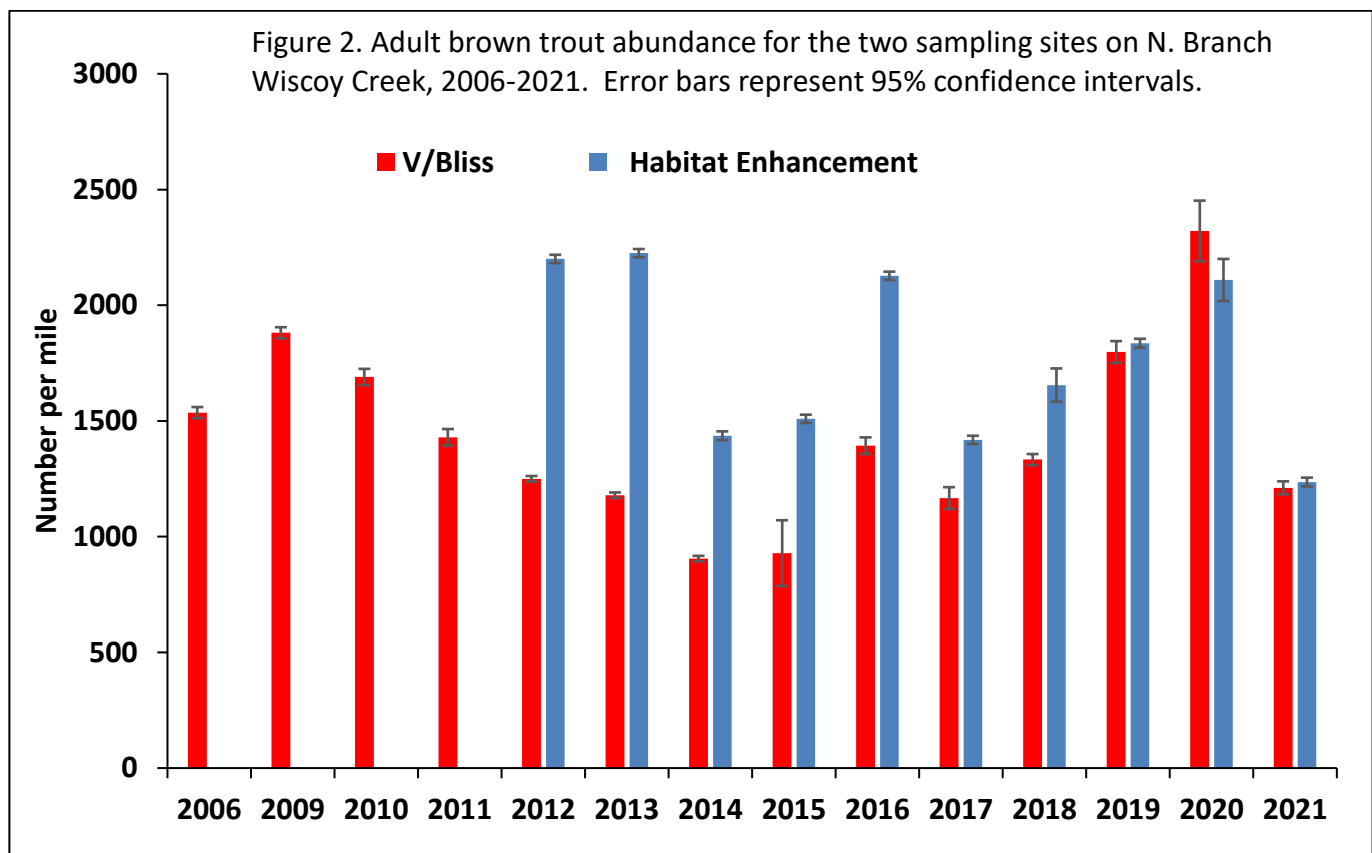


abundance of adult wild brown trout in 2021 was 1,222 fish/mile (± 24) and the average biomass was 189 lbs/acre. These values greatly exceeded the minimum needed to quality for the “Wild-Quality” management category. Adult trout habitat at both sites was of high quality, consisting of downed trees and undercut banks at the site in the Village of Bliss and man-made LUNKER structures (artificial undercut banks) at the habitat enhancement site. The number of young-of-year (YOY) brown trout captured in both electrofishing passes combined was 76 (1,070/mile) and 40 (727/mile) for the two sites, respectively.

Adult wild brown trout abundance at the Village of Bliss site had peaked in 2009 at over 1,800 fish/mi, then showed a significant declining trend to around 900 fish/mi in 2014 and 2015 (Figure



2). However, from 2016 to 2020 abundance showed a significant increasing trend, with 2020 being the highest abundance value we had measured. In 2021, the abundance at this site declined substantially. Adult trout habitat at this site has remained very stable throughout the entire survey period. At the site where habitat enhancement was completed, the pattern of adult brown trout abundance also showed a significant increasing trend from 2017 to 2020, with a substantial decline observed in 2021 to the lowest value we measured since the habitat work was completed (Figure 2). The reason for this decline in 2021 was not clear. A comparative study of adult trout abundance and biomass done in the two years before and two years after the habitat enhancement was completed, for the entire 2,100-foot section, showed that overall abundance remained similar but the abundance of age two and older trout as well as total biomass of adult trout was significantly higher after the habitat enhancement (Cornett 2014). Brown trout YOY numbers captured in 2021 in the N. Branch were high compared with most sites on other Region Nine streams this summer. Numbers of YOY brown trout captured in 2021 at the Village of Bliss site was the fourth highest recorded for this site in 13 sampling years. Conversely, numbers of YOY captured at the habitat enhancement site in 2021 were the third lowest since 2012, but still high compared with other streams. We also captured low numbers of YOY at this site in 2020, which may have been at least partly responsible for the large drop in adult numbers observed in 2021. Despite a reduction in the adult brown trout abundance observed in 2021, the N. Branch should continue to provide quality angling for those wishing to pursue wild brown trout in a small stream setting.



Literature Cited

Cornett, S.C. 2014. North Branch Wiscoy Creek habitat enhancement project evaluation 2010-2013. New York State Department of Environmental Conservation, Allegany, NY.