

Lonkto Hollow Trout Population Evaluation #918010
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On June 21, 2018 Region 9 Fisheries staff conducted a trout stream survey at three sites on Lonkto Hollow, a tributary of Bay State Brook. The stream is located in Allegany State Park, Cattaraugus County. Lonkto Hollow supports a population of wild brook trout, with a few wild brown trout also present in the lower end. The stream has only been surveyed once by DEC, in 2004. However, in the 1937 Biological Survey the notes indicate it was recommended to be closed to fishing as a nursery stream. This year’s survey was done to collect data on the brook trout population prior to planned replacement of an impassable culvert located on a snowmobile/horse trail. The first site was located approximately 0.3 miles above the mouth with the other two sites located below and above the trail culvert to be replaced, located approximately one mile above the mouth.

Our lower survey site was 200 feet in length, with a 12-foot average width. We collected nine yearling and older (adult) wild brook trout, one young-of-year (YOY) brook trout and one adult wild brown trout. Adult brook trout captured ranged in length from 6.5-10 inches and the brown trout was 6.5 inches. Other fish species collected at this site were blacknose dace, mottled sculpin, fantail darter and creek chub. Our site located below the impassable culvert was 400 feet long, with an average width of 10 feet. At this site, we captured 13 adult and four YOY brook trout. The adult trout ranged from 4.6 to 9.0 inches. We also captured creek chubs and sculpin at this site. The site above the culvert was 350 feet long, with a width of 10 feet. At this site, we captured 13 adult and 19 YOY brook trout. Sculpin were the only other fish captured at this site above the impassable culvert. Habitat for adult trout was good to excellent at all three sites, consisting of large boulders and undercut banks.

The abundance of adult brook trout in Lonkto Hollow varied minimally by site, with the density decreasing as you move upstream from 263 fish/mile at the lower site to 212 fish/mile at the upper site (Table 1). However, YOY abundance varied much more with a very low number found at the lower two sites and a moderate to high abundance at the site upstream of the culvert (Table 1). One difference that was noted was the high abundance of creek chubs at the two sites below the culvert, with none present above the culvert. It is possible that predation by and/or competition with creek chubs was responsible for the lower density of YOY brook trout at the lower two sites.

Table 1. Adult and young-of-year wild brook trout population estimates (fish per mile) for Lonkto Hollow, 2018.

	Lower Site	Middle Site	Upper Site
Adult	263/mile	224/mile	212/mile
Young-of-year	53/mile	105/mile	545/mile

