

# Mansfield Creek Trout Population Estimate

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Mansfield Creek is located in central Cattaraugus County and is a tributary to the South Branch of Cattaraugus Creek. It supports a substantial population of wild brown trout and wild rainbow trout in the upper 5.5 miles of stream. The lower 2.5 miles of stream are stocked annually with yearling and two-year-old brown trout and contains a small population of wild brown trout. There are 6.3 miles of public fishing rights easements on the creek. The stream from 0.5 miles upstream of the western-most Co. Rt. 13 crossing upstream to Hinman Hollow Rd, near Poverty Hill Rd, 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 (Lindberg Road Bridge and Toad Hollow Road Bridge) totaling 965 feet of stream. Both sites had been sampled previously 13 times between 1992 and 2020 (Table 1). To estimate the trout population abundance, we utilized two electrofishing passes in 2013-2021. Prior to this we utilized single pass methodology.

In early July of 2021, at the two sites combined, a total of 101 wild adult (yearling and older) brown trout were captured. At the upper site (Lindberg Road Bridge), 16 wild adult rainbow trout were also captured. Adult brown trout ranged from 4 - 15 inches (Figure 1), with an average length of 7.0 inches. Adult rainbow trout ranged from 4 - 9 inches with an average of 6.5 inches. Rainbow trout have only been present in Mansfield Creek since 1995. They were introduced by NYSDEC from wild populations to provide a more diverse trout fishery.

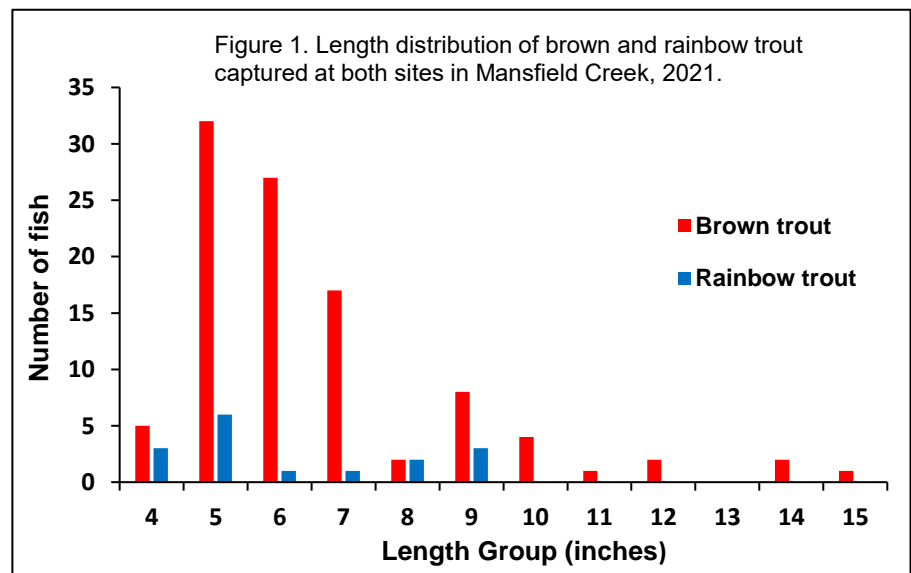


Table 1 displays the number of adult wild brown and rainbow trout per mile at each of the sampling sites over the 14 sampling years. At the Toad Hollow Road site, adult brown trout abundance in 2021 was 752 fish/mile. The Lindberg Road Bridge site had 338 brown trout/mile and 225 rainbow trout/mile. For both sites and species combined, abundance averaged 678 adult fish/mile and the average biomass was 47 lbs/acre.

At the Toad Hollow Road site, adult brown trout abundance increased substantially in 2020 and 2021 over values seen during a shorter-term decline from 2016 to 2019. No significant long-term trend was apparent in adult brown trout abundance at this site from 1992-2021 (Table 1). Adult



wild rainbow trout were found in low abundance at the Toad Hollow site in a few years, but apparently have not found this area of the stream particularly suitable (Table 1). At the Lindberg Road Bridge site adult brown trout abundance in 2021 was similar to 2018 and 2019 values but was lower than in 2020. (Table 1). Adult rainbow trout abundance in 2021 was similar to that seen in 2016-2019. Reproduction for brown trout at both sites appeared to be very good in 2021, especially at the Lindberg Road site where we captured the most young-of-year brown trout in any sampling year. A low number of rainbow trout YOY were captured this year at our Lindberg Road Bridge site, which has also been observed in six of the previous seven survey years at this site. The estimated abundance (678 fish/mile) and biomass (47 lbs/acre) of yearling and older wild brown and rainbow trout in this section of Mansfield Creek in 2021 well exceeded the level needed to qualify for inclusion in the “Wild-Quality” management type, according to the new trout stream management plan for New York streams. Based on the results of this year’s survey, it appears Mansfield creek should continue to provide good fishing for both wild brown trout and upstream of Maples, wild rainbow trout.

Table 1. Adult wild brown and rainbow trout population estimates (fish per mile) for Mansfield Creek, 1992-2020.

Year	Toad Hollow Road Bridge (fish/mile)		Lindberg Road Bridge (fish/mile)	
	Brown trout	Rainbow trout	Brown trout	Rainbow trout
1992	527	-	234	-
1995	340	-	217	-
1997	621	-	237	20
1998	732	-	428	13
1999	664	96	124	273
2003	1102	120	160	328
2008	320	60	181	562
2013	587	29	439	1070
2016	615	10	578	200
2017	468	-	489	278
2018	311	-	328	300
2019	239	9	350	288
2020	532	-	613	475
2021	752	-	338	225