

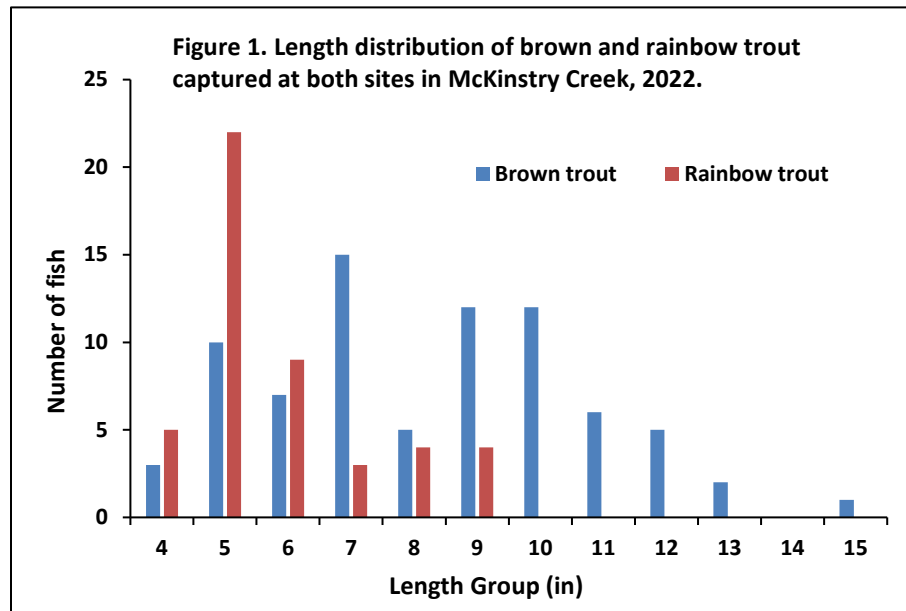
McKinstry Creek Trout Population Estimate

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McKinstry Creek is a tributary to Lime Lake Outlet located in northeastern Cattaraugus County. It offers quality wild brown and rainbow trout fishing, along with wild brook trout that are found in the upper two miles of the stream. There are 4.2 miles of continuous public fishing rights easements on the creek, covering almost its entire length. The entire stream from its mouth to source 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 2022, as part of New York State’s trout stream management plan, the stream was sampled by electrofishing at two sites (200 feet above the mouth and at Gooseneck Road) totaling 1,135 feet of stream to estimate the adult wild trout population abundance and biomass. These sites have been sampled 12 times between 1993 and 2022, utilizing two-pass electrofishing methodology to estimate the adult trout population abundance.

In 2022, a total of 78 adult (yearling and older) brown trout and 47 adult rainbow trout were captured. Adult brown trout ranged from 4 to 15 inches (Figure 1) with an average length of 8.7 inches. Adult rainbow trout ranged from 4 to 9 inches, with an average length of 6.2 inches. Table 1 displays the number of adult brown and rainbow trout per mile at each of the sampling sites over the 12 survey years. At the site above the mouth, adult brown trout abundance in 2022 was 216 fish/mile (± 0) and 190 fish/mile (± 8) for adult rainbow trout. The site at Gooseneck Road produced 556 adult brown trout/mile (± 50) and 253 adult rainbow trout/mile (± 10). For both sites and species combined, the average adult trout abundance was 591 fish/mile and the average biomass was 89 lbs/acre.



The average abundance and biomass of adult brown and rainbow trout in McKinstry Creek in 2022 greatly exceeded the values needed for its inclusion in the “Wild-Quality” management category. At the site above the mouth, we observed no discernable long-term trend in adult brown trout abundance, but we did see a short-term declining trend from 2016 to 2019, while the reverse was the case with adult rainbow trout (Table 1). However, adult brown trout abundance at this



site increased again in 2020 and 2022. At the site above the mouth, adult rainbow abundance has been highly variable since 2007, with 2022 being the second lowest since 2007 (Table 1). At our Gooseneck Road site, we observed long-term increasing trends in abundance for both adult brown trout and rainbow trout from 1993 to 2022, but no short-term trends for either species from 2016 to 2022 (Table 1). The abundance value for adult brown trout in 2020 at this site was by far the highest we have recorded in any survey and was the second highest in 2022 (Table 1). The numbers of young-of-the-year brown and rainbow trout captured in 2022 at the site above the mouth was the lowest we have recorded in 12 sampling years, while conversely, the numbers of both species at the Gooseneck Road site were the highest we have seen. Based on our 2022 sampling, McKinstry Creek should continue to provide good wild trout fishing for anglers in a small stream environment.

Table 1. Adult wild brown and rainbow trout population estimates (fish per mile) for McKinstry Creek, 1993-2022.

Year	Above Mouth (fish/mile)		Gooseneck Road (fish/mile)	
	Brown trout	Rainbow trout	Brown trout	Rainbow trout
1993	77	106	288	87
1995	125	29	88	61
1999	144	48	407	185
2000	278	163	328	152
2002	132	123	611	278
2007	282	330	305	379
2016	241	121	475	131
2017	267	422	394	162
2018	121	310	323	333
2019	78	241	303	232
2020	233	440	717	313
2022	216	190	556	253