

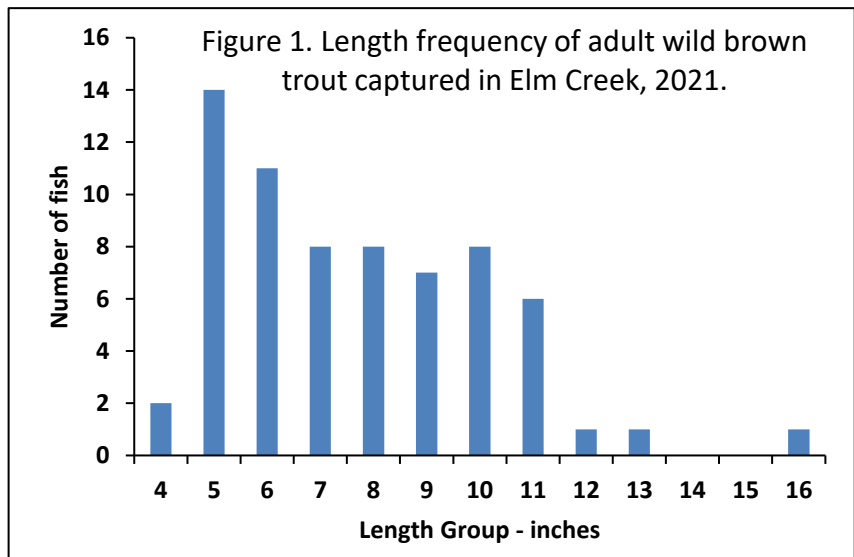
# Elm Creek Trout Population Estimate

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Elm Creek, a nine-mile-long stream flowing through western Cattaraugus County, provides a high-quality fishery for wild brown trout in its lower two miles. The best water quality for supporting brown trout is located from a cold tributary (The Ram) downstream to the mouth. Water quality for trout is compromised in the upper seven miles of the stream by flood control impoundments, which warm the water substantially. This stream has public fishing rights easements totaling 0.4 miles and another 0.5 miles of access in a village park. The stream from its mouth to NYS Rt 394 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 by electrofishing at one 580-foot site in the Randolph Village park and one 400-foot site below the junction with The Ram. Both sites had previously been sampled several times since 1991 (Table 1). In 2013-2020 surveys, trout populations were estimated from two electrofishing passes, while in previous years we used one-pass methodology.

In 2021, we captured 160 yearling and older (adult) wild brown trout, ranging in length from 4.3 to 16.9 inches and averaging 7.6 inches (Figure 1). The average abundance of adult wild brown trout in 2021 for the two sites was 898 fish/mile ( $\pm 64$ ). Abundance ranged from 809 fish/mile at the site in the Village park to 1,026 fish/mile at the site below the junction with The Ram (Table 1). The average biomass for adult brown trout in 2021 was 65 lbs/acre, ranging from 61-71 lbs/acre. Low to moderate



numbers of young-of-year (YOY) brown trout were captured in the first electrofishing pass at the two sites (145 and 513 YOY/mile). Adult trout habitat was of good quality at both sites consisting of deep pools, and overhanging shrubs, however the overall abundance of quality habitat in the Village Park site has declined in recent years.

The abundance of adult wild brown trout at our sampling sites showed no discernable trend from 1991 to 2021, with considerable year to year variation (Table 1). The average abundance (898 fish/mile) and biomass (65 lbs/acre) of yearling and older wild brown trout in this section of Elm 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. A lower number of large (>15 inch) brown trout were captured in 2021 than had been encountered in most past surveys of this stream. The reason for this was not clear. Based on this year's sampling, Elm Creek should continue to provide quality angling for those wishing to pursue wild brown trout.

Table 1. Adult wild brown trout population estimates (fish per mile) for Elm Creek sites, 1991-2021.

<b>Year</b>	<b>Village Park site (fish/mile)</b>	<b>Site below The Ram (fish/mile)</b>
<b>1991</b>	160	833
<b>1997</b>	899	828
<b>2000</b>	1122	473
<b>2003</b>	1391	1029
<b>2008</b>	962	2000
<b>2013</b>	1009	1521
<b>2016</b>	1400	---
<b>2017</b>	1391	---
<b>2018</b>	764	---
<b>2019</b>	673	---
<b>2020</b>	1136	---
<b>2021</b>	809	1026