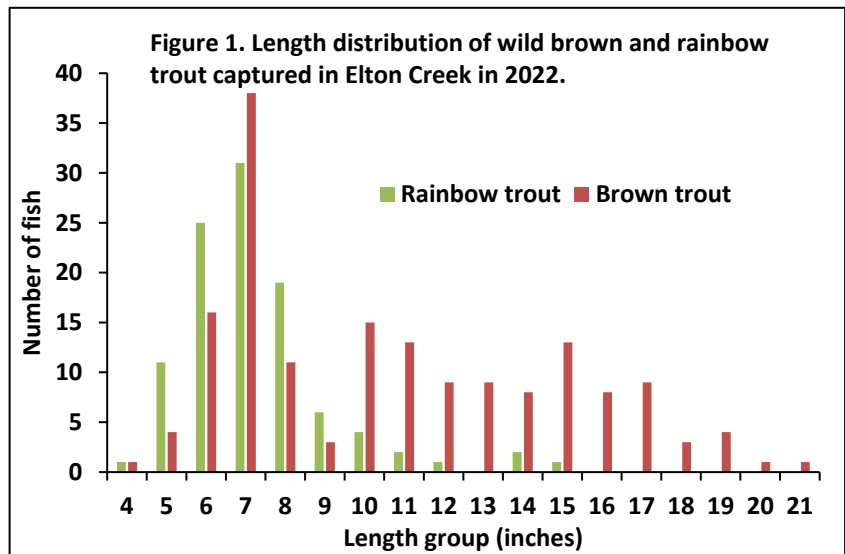


Elton Creek Trout Population Estimate
 Scott Cornett, Region Nine Fisheries

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Elton Creek, a tributary of upper Cattaraugus Creek in northeastern Cattaraugus County, provides a fishery for wild brown and rainbow trout. The lower six miles of stream are also stocked each spring with yearling and two-year-old brown trout. This stream has abundant access with public fishing rights easements totaling 5.4 miles. The stream from NYS Route 16 upstream to Swanson Hill Road 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 five sites within the “Wild-Quality” reach, totaling 2,439 feet of stream. Between 1991 and 2022, two of our sample sites had been sampled nine times and two had been sampled four times (Table 1). This was the first time we had sampled our upper most site, which was located on a recently purchased public fishing rights easement. To estimate the adult trout population abundance and biomass, we utilized two electrofishing passes from 2013-2022, prior to this we utilized single pass methodology.

In our 2022 survey, we captured 166 yearling and older (adult) wild brown trout along with 103 adult wild rainbow trout. Adult brown trout ranged in length from 4.8 to 21.4 inches, with an average length of 11.1 inches. Adult rainbow trout averaged 7.7 inches and ranged in length from 4.4 to 15.4 inches (Figure 1). Adult wild brown trout abundance averaged 363 fish/mile for our five sites (range: 131-898 fish/mile), while adult wild rainbow trout abundance averaged 225 fish/mile (range: 36-363 fish/mile).



For all five sites and both species combined, the total adult wild trout abundance averaged 586 fish/mile and the biomass averaged 114 lbs/acre in 2022. These values well exceeded the minimum needed to qualify for inclusion in the “Wild-Quality” management category.

At the four sites where we have long-term population abundance data, we did not see any long-term trends in abundance for brown or rainbow trout, except that at the Cagwin Road site, we observed a long-term increase in adult brown trout abundance from 1991 to 2022 (Table 1). We did observe an increase in adult wild rainbow trout abundance at our four sites from 1991-2013, but considerably lower abundance from 2016-2022 (Table 1). In-stream fish habitat in Elton Creek is very dynamic due to the cobble/gravel/sand substrate of the streambed, combined with poor



land use through the watershed, thus habitat for adult trout at our sampling sites varies considerably between years. Few young-of-year trout have been captured in most survey years at our sites on Elton Creek and it appears most reproduction is occurring in tributaries. Based on this year's sampling, it appears the "Wild-Quality" reach of Elton Creek will continue to provide good fishing for anglers wishing to pursue wild brown and rainbow trout.

Table 1. Adult wild brown trout (BT) and rainbow trout (RT) abundance (number per mile) at the four long-term sampling sites in Elton Creek, 1991-2022.

Year	Above Cagwin Rd		Below Stone Quarry Rd		Gravel Pit		Pigeon Hill Rd	
	BT	RT	BT	RT	BT	RT	BT	RT
1991	183	0	199	357	155	26	581	243
2001	274	200	275	1115	263	421	176	243
2004	---	---	---	---	---	---	368	1158
2013	287	471	123	1111	72	793	347	1020
2016	265	0	---	---	392	275	---	---
2017	438	213	---	---	284	353	---	---
2018	232	32	---	---	127	137	---	---
2019	284	116	---	---	167	275	---	---
2020	516	126	---	---	353	363	---	---
2022	570	210	131	273	213	363	898	306