

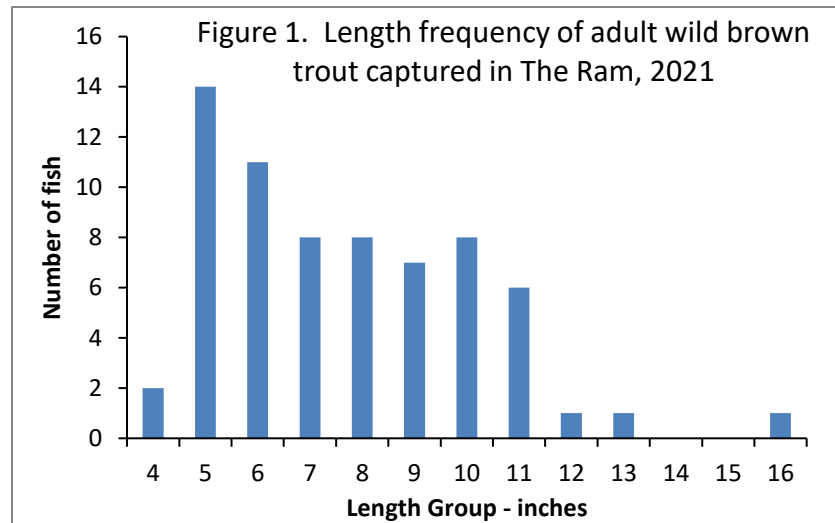
The Ram Trout Population Estimate

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The Ram, a major tributary of Elm Creek is only 1.5 miles long; however, it receives abundant spring water and supports a high abundance of wild brown trout. The stream flows through western Cattaraugus County in East Randolph. Prior to its removal in 1998, water quality for trout was severely compromised by a shallow, 30± acre impoundment, located near the headwaters, which raised water temperatures substantially. The stream from its mouth to NYS Route 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. There are no public fishing rights easements on The Ram, with fishing access at a village park and the abundant non-posted, private lands. In 2021, as part of New York State’s trout stream management plan, the stream was sampled by electrofishing at one 460-foot site, located upstream of Mill Street. This site had been sampled 11 times previously from 1992-2020. In 2013-2021 surveys, trout population abundance was estimated from two electrofishing passes, while in previous years we used one-pass methodology.

In 2021, we captured 67 yearling and older (adult) wild brown trout, ranging in length from 4-16 inches and averaging 8.1 inches (Figure 1). The estimated abundance of adult wild brown trout in 2021 was 761 fish/mile (±12) (Figure 2). Adult brown trout biomass in 2021 was 99 lbs/acre. The number of young-of-year (YOY) brown trout captured in the first electrofishing pass was 16 (182 YOY/mile). Adult trout habitat was of good quality consisting of log jam pools, undercut banks and overhanging shrubs.



Following the sudden draining of the headwater pond in 1998, which greatly reduced water temperatures and allowed heavy sediment deposits to flush through the stream, trout reproduction and adult trout abundance in The Ram increased substantially beginning in 2003 (Figure 2) (a similar improvement was noted downstream in Elm Creek). Consequently, we observed a long-term increasing trend in adult brown trout abundance from 1992 to 2021 at the site (Figure 2). No significant short-term trend in adult trout abundance was observed from 2017 to 2021, after an all-time peak abundance in 2016. The number of YOY brown trout captured at our sampling site on the first electrofishing pass has been highly variable over our sampling years with 1992, 2000 and 2017 having low numbers captured (14-78 YOY/mile) and 2003 having a very high number

(859 YOY/mile). The average number of YOY captured from 1991-2020 was 276 YOY/mile. The 2021 number of YOY captured was below the long-term average. The estimated abundance (761 fish/mile) and biomass (99 lbs/acre) of yearling and older wild brown trout in this section of The Ram 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 this year’s sampling, The Ram should continue to provide quality angling for those wishing to pursue wild brown trout in a small stream setting.

Figure2 . Abundance of adult wild brown trout in The Ram, 1992-2021. Error bars represent 95% confidence limits.

