

Peacock Brook General Biological Survey (Survey #521039)
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Peacock Brook is a small tributary stream to Kayaderosseras Creek near the town of Greenfield, Saratoga County. The 1.22-mile-long stream drains an area of 4.02 square miles, 98.4% of which is forested (U.S. Geological Survey, 2021). Despite limited public access on the stream for anglers, the purpose of the survey was to evaluate the status of wild trout and the fish community in the water as part of a larger effort to better understand wild trout distribution and prioritize restoration and conservation efforts in the Kayaderosseras Creek Watershed.

One site (274' long) below the Coy Road crossing was surveyed using single-pass backpack electrofishing on July 15th, 2021. Water quality metrics and stream characteristics were recorded prior to the surveys. The stream was nine feet wide on average with a predominately sand, gravel and cobble bottom and moderate cover in the form of woody debris. Water temperatures were 63.1°F at the time of sampling.

Thirty-five brook trout, one brown trout and three blacknose dace were captured during the survey (Table 1). Trout ranged in size from 1.6-6.6 inches, the majority of which were young-of-year brook trout. All of the fish captured during this survey were of wild origin. The brook trout population structure appears to be healthy, containing numerous young immature fish as well as a range of sexually mature adults (Figure 1).

Table 1. Numbers caught and total length ranges of fish from Peacock Brook in 2021.

Species	Number caught	Size range (inches)
Brown Trout	1	4.3
Brook Trout	35	1.6 – 6.6
Eastern Blacknose Dace	3	2.6 – 3.6

Peacock Brook supports a wild population of brook trout and to at least some degree brown trout. Although this stream may not be a popular destination for anglers due to its small size, limited public access and relatively small fish, it may influence trout populations in the watershed as a whole. The stream provides suitable spawning and nursery habitat, as evidenced by an abundance of young trout. Fish produced in the brook may migrate to the larger Kayaderosseras Creek contributing to the population and fishing opportunities there. Furthermore, the stream remains relatively cool during the summer months, potentially providing thermal refuge for trout looking to avoid suboptimal warm temperatures that are known to occur in Kayaderosseras Creek during the summer months.



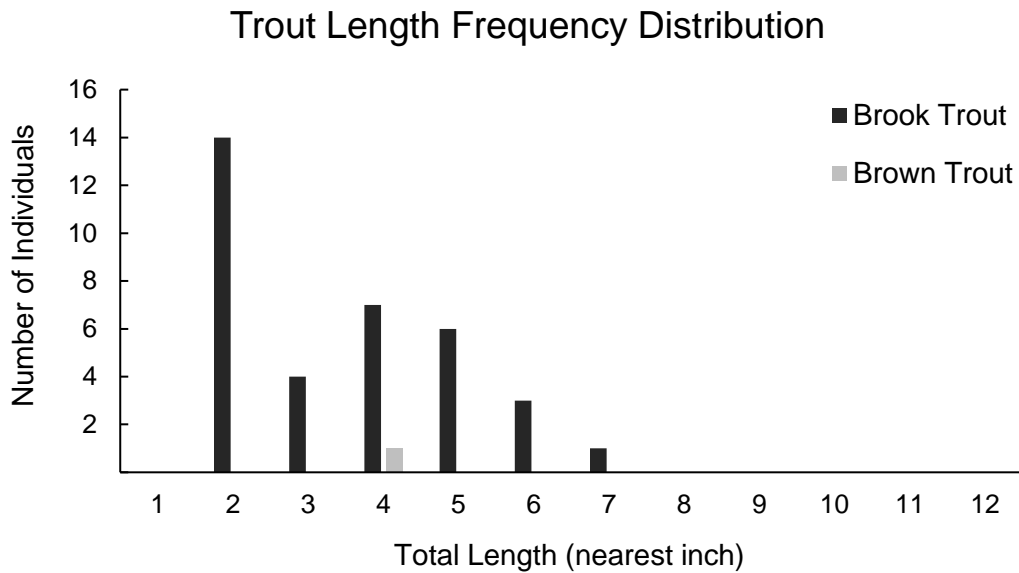


Figure 1. Trout length frequency distribution at site located below Coy Road.

The local chapter of Trout Unlimited has expressed interest in conducting restoration projects in the Kayaderosseras Creek Watershed. Protection and restoration of quality stream habitat and promotion of aquatic connectivity in cold water tributaries like Peacock Brook should be a priority. Attentive NYS DEC regulatory oversight of any stream disturbance projects on this brook should be employed to prevent stream degradation and maintain the status of this wild trout stream.

Literature Cited

U.S. Geological Survey, 2021. The StreamStats program online at <<https://streamstats.usgs.gov/ss/>>. 21 Dec 2021.