

The Branch (Elizabethtown) Biological Survey (Survey # 521045)
 Tom Shanahan, Region 5 Fisheries 4/5/2022

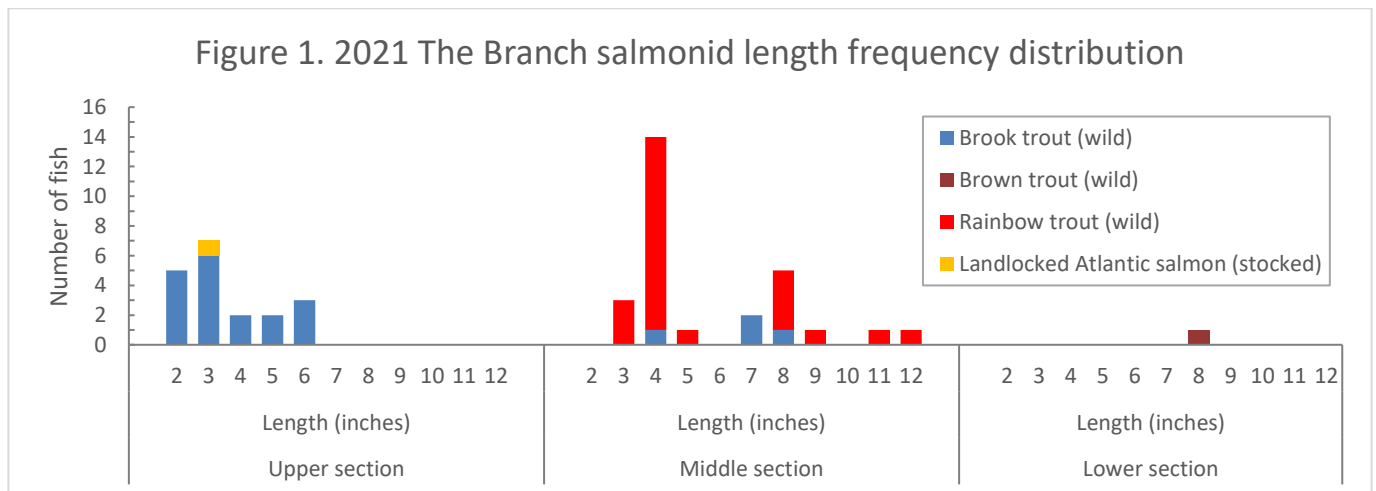
The Branch (C-48-34) is an Essex County stream with its source on the north side of Tripod Mountain at an elevation of about 2,500 feet. The stream is in the Champlain drainage and flows into the Boquet River. The headwater reach is in the Giant Mountain Wilderness, much of the remainder of the stream is privately owned. The Branch is currently stocked with brook trout along with Atlantic salmon fry as part of the Lake Champlain restoration effort.

Three sites, all in the Town of Elizabethtown, were sampled using a backpack electrofishing unit in August and September 2021. A total of nine fish species were collected across the three sites (Table 1). Salmonid distribution was quite varied over the sites (Figure 1).

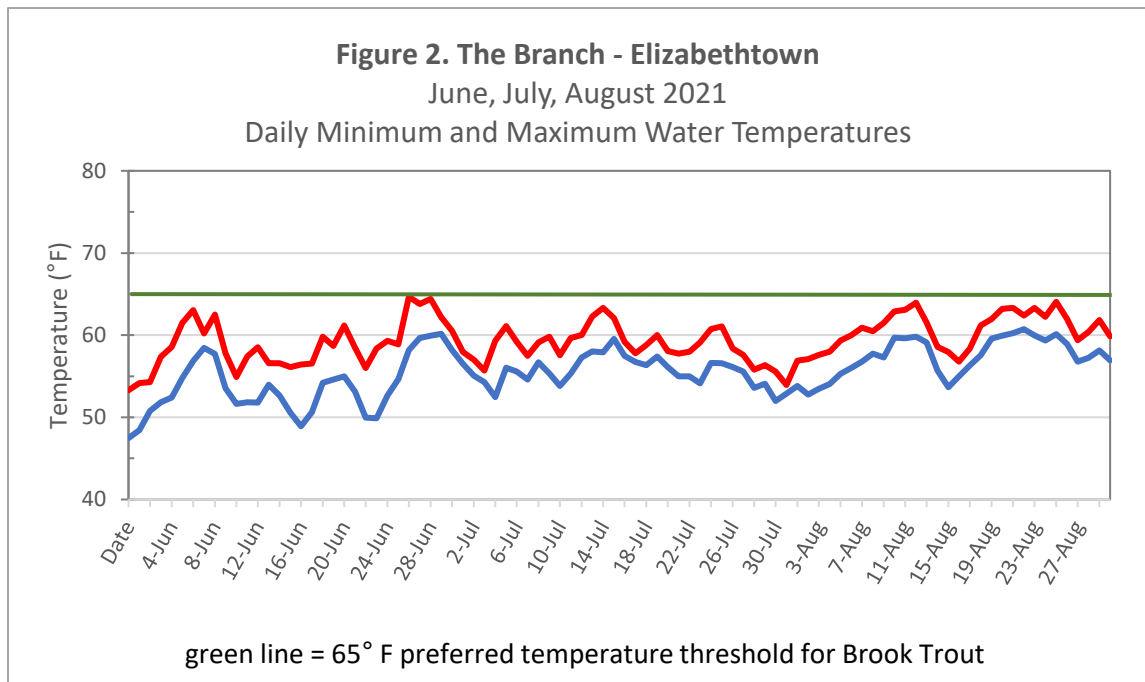
Table 1. Numbers caught and size ranges of fish from The Branch in 2021.

| Section | Species | Number caught | Length range (inches) |
|-------------------------------|------------------------|---------------|-----------------------|
| Upper site (300' sampled) | Brook trout | 18 | 1.9 - 6.2 |
| | Atlantic salmon | 1 | 2.5 |
| | Slimy sculpin | 14 | 2.0 - 3.5 |
| Middle site (280' sampled) | Brook trout | 4 | 3.7 - 8.4 |
| | Rainbow trout | 24 | 2.9 - 11.8 |
| | Eastern blacknose dace | 1 | 2.6 |
| Lower site (300' sampled) | Slimy sculpin | 22 | 1.5 - 3.3 |
| | Brown trout | 1 | 8.3 |
| | Cutlips minnow | 8 | 1.8 - 4.1 |
| | Common shiner | 6 | 2.9 - 4.0 |
| | Eastern blacknose dace | 17 | 1.4 - 2.9 |
| | White sucker | 4 | 4.0 - 5.6 |
| | Slimy sculpin | 77 | 1.1 - 3.1 |

Figure 1. 2021 The Branch salmonid length frequency distribution



A water temperature recorder was deployed about 0.5 mile downstream of the upper sampling site for the 2021 field season. Stream conditions and water temperatures were generally good in 2021, but the profile for The Branch was nevertheless outstanding (Figure 2), not once surpassing 65 °F in the summer months.



As expected, the brook trout population was strongest in the upper site, which had the best instream habitat and was the only site to have a complete overhead tree canopy. The lower site, which is stocked, had very little overhead cover and was wider and more slowly moving compared to the other two sections. A small municipal park offers access along the stream, however, providing a nice put-and-take opportunity in the midst of Elizabethtown. The middle section, with its rainbow trout, was more of a surprise. There are no recent stockings of record for rainbow trout in The Branch, but they could have emigrated from the Boquet River, which has received plantings of rainbows in the past. No management changes are proposed; monitoring in the form of periodic biological surveys is recommended.