## Bureau of Fisheries Technical Brief # tb521047

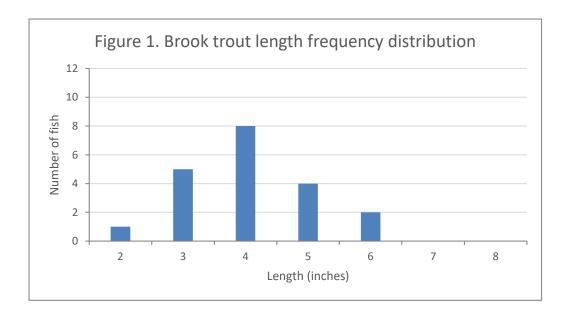


## Nichols Brook Biological Survey # 521047 Tom Shanahan, Region 5 Fisheries

4/6/2022

Nichols Brook (C-25-27-23-1) is in the Town of Keene in Essex County and in the Champlain watershed. It begins in a small valley on the north side of Pitchoff Mountain, in the Sentinel Range Wilderness, and eventually drains into the East Branch of the Ausable River. There is good access to the brook along the foot trail that is better known as the Jackrabbit Ski Trail. The stream is not stocked and there are no data after 1929, so this was a general survey to assess the status of the wild brook trout population. The survey is also part of a larger effort to look at the distribution of wild brook trout in the Ausable system.

A 300-foot section at a single site was electrofished with a backpack unit in August 2021. Stream conditions were less than ideal due to the previous day's rain, but water levels and clarity were adequate for sampling. The stream had very good habitat with pocket water and a substrate consisting of cobble, boulders, and gravel. A mix of coniferous and deciduous trees in the canopy provided full shade. Twenty wild brook trout were collected; no other fish species were captured or observed. The size range of the brook trout (Figure 1) indicates that multiple year classes were present, and the fish looked to be in good condition.



The lack of recent data for Nichols Brook precludes comparisons through time, however, the current survey reveals a very good brook trout stream with natural reproduction. The sizes of the fish are not especially large, but this is typical for wild brook trout in a mountain stream. No stocking or other management is needed at this time. Nichols Brook is governed by statewide angling regulations.

