

**Phelps Brook General Biological Survey #519092:  
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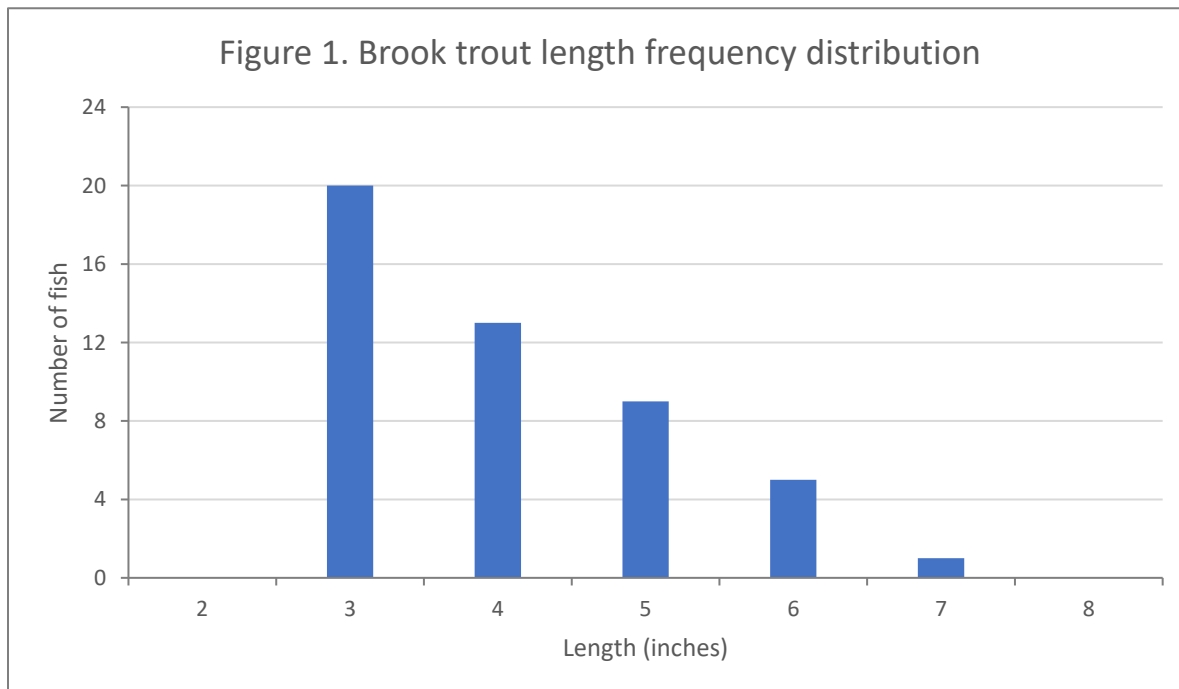
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Phelps Brook (C-48-31) is a small Champlain watershed stream that has a length of approximately seven miles and flows into the Boquet River. It is located north of the hamlet of Elizabethtown in the Essex County town of Lewis. The brook has its origin at about 2,500 feet in the Hurricane Mountain Wilderness, but is otherwise privately owned. This was a general biological survey of an unstocked water that had not been sampled in nearly 50 years and is also part of a larger effort to look at the distribution of wild brook trout in the Boquet system.

We sampled a single site, along the Fox Run Road, with a backpack electrofishing unit in September 2019. The 350-foot section was on the lower part of the brook at an elevation of roughly 650 feet. The brook did not have a mature tree canopy overhead, but was well shaded from fairly dense stands of alder and dogwoods. Though lacking deep pools, instream habitat was otherwise very good with numerous gravel riffles and small pools. The species assemblage (Table 1.) was typical of an Adirondack trout stream. We caught 48 brook trout, all wild fish, and more than one-year class based on the length frequency distribution (Figure 1.).

Table 1. Numbers caught and size ranges of fish from Phelps Brook in 2019.

Species	Number caught	Length range (inches)
brook trout	48	2.8 – 7.4
northern redbelly dace	2	2.1 – 3.0
blacknose dace	22	2.1 – 3.2
creek chub	4	3.0 – 5.7



Phelps Brook was at a relatively low elevation and lacked a deep forest cover, imparting a more “open” look than many of the best trout streams we have recently surveyed. Despite this, its wild brook trout population rivals the others for both catch rate and size structure. Though the current fish data suggest water temperatures are more than acceptable, Phelps Brook would seem to be more vulnerable to warming in the long term. The water temperature during the survey was an exceptional 50 °F, but temperatures are rarely a limiting factor in September. Phelps Brook is governed by Statewide Angling Regulations and that will continue. We will periodically resurvey the brook to monitor summer water temperatures and species composition.