## Bureau of Fisheries Technical Brief #tb521051



Department of Environmental Conservation

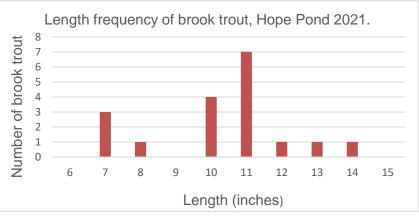
## Hope Pond General Biological Survey #521051 Jonathan Fieroh, Region 5 Fisheries

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Hope Pond (C-P59) is a 23-acre lake in Franklin County in the Debar Mountain Wild Forest. The maximum depth is 37.7 feet the average depth is 19-feet and there was sufficient dissolved oxygen for trout to a depth of 30 feet in 2021. Water samples for chemical analysis were not drawn in 2021 as this pond was part of the Long-Term Monitoring project conducted by the Adirondack Lakes Survey Corporation and acid/base chemistry is no longer considered problematic for trout survival here. Hope Pond was last surveyed in 2005 (#505008) when the presence of golden shiner was discovered post-reclamation. Hope Pond has been stocked with brown trout and splake in the past but has been stocked only with Temiscamie x Domestic brook trout fingerlings since it was reclaimed in 2000. The number of fingerlings stocked was reduced from 1,100 to 700 annually in 2014, and this survey is the first to evaluate that change.

In August of 2021, two 150-foot Swedish experimental gill nets, a 30-foot minnow net, and a minnow trap were set overnight. A total of 18 brook trout were collected during the survey, their lengths ranging from 7 to 14 inches. The reduction in stocking rate seems to be having the desired effect of increasing growth

as the average size of a Hope Pond brook trout has increased from 7.5 inches, in the 2005 survey, to 10.8 inches in the current survey. The number of brook trout collected in the 2021 survey was correspondingly decreased. While some decent size brook trout are present their growth, as evidenced by the depressed length at age, is poor. This poor growth is a direct consequence of competition from the large golden shiner population.



Golden shiners were still found to be present and while 75 were collected, they were observed to be very abundant. A new species, pearl dace, was collected for the first time here in 2021.

Species	Number collected	Minimum length (in)	Maximum length (in)
Brook trout	18	7.2	14.8
Golden shiner	75	3.1	3.9
Pearl dace	10	3.3	4.1

Table 1. Number and length ranges of fish collected at Hope Pond, 2021.

The current stocking rate of 700 Temiscamie x Domestic brook trout fingerlings is providing a better fishery in this easily accessed and very frequently fished water and should continue. The golden shiner population, however, is extremely large and Hope Pond should be reclaimed to eliminate this species.

