

## Boreas Ponds Biological Survey (Survey # 517056)

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Originally three distinct ponds, the Boreas Ponds (UH-P564) is currently a single waterbody formed by a concrete dam on its outlet at the southern end of the pond. It is in the Town of North Hudson in Essex County and is part of the Upper Hudson watershed. The three-pond complex is approximately 350 surface acres and includes several islands and floating bog mats. The "First Pond" section contains the bulk of the deep water with a maximum depth of nearly 40 feet. A majority of the remaining pond is less than 10 feet deep and features large swaths of emergent vegetation. The pond has a special fishing regulation prohibiting the use or possession of baitfish (6 NYCRR §10.6 (d) (12)). Water chemistry was outstanding with a pH of 7.3 and an acid neutralizing capacity of 116  $\mu\text{eqL}^{-1}$ . Dissolved oxygen was sufficient for trout to a depth of about 14 ft.

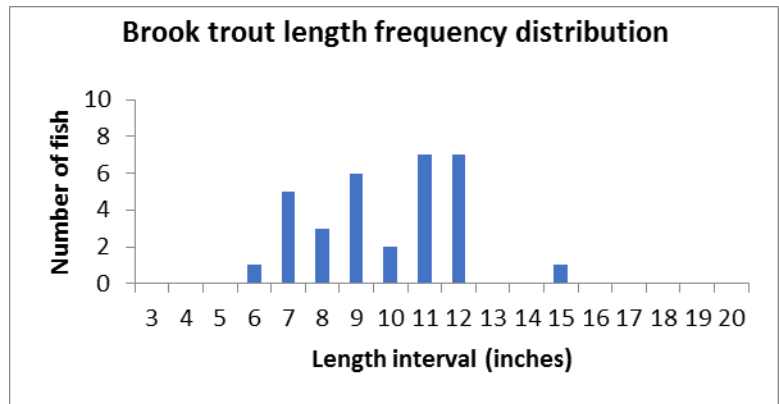
The pond is a recent addition to the Adirondack Forest Preserve and is now classified as part of the High Peaks Wilderness. Access details are still being developed, but motors will not be allowed on the pond. The primary purpose of this survey was to catalog the current fishery and water chemistry conditions, since the pond had previously been in private ownership and there were little data available.

A fisheries survey was completed in July of 2017 using overnight sets of three 150-ft Swedish experimental gill nets and a minnow trap. Catches documented nine fish species (Table 1).

Table 1. Species, number and length range of fish collected at Boreas Ponds, 2017.

Species	Number collected	Minimum length (in)	Maximum length (in)
Brook trout	32	6.8	15.9
Golden shiner	1	2.5	2.5
Common shiner	7	2.7	4.3
Northern redbelly dace	2	2.0	2.1
Creek chub	5	2.9	4.2
Pearl dace	1	3.7	3.7
White sucker	21	6.5	12.7
Brown bullhead	18	6.0	11.2
Pumpkinseed	6	1.6	5.7

Although much of the pond is shallow and likely too warm for brook trout in the summer, “First Pond” provides about 20 acres of cold, deep water, and most of the 32 brook trout captured were caught there. Catch rates and sizes of brook trout from the 2017 netting were very respectable compared to other Adirondack ponds.



The Boreas Ponds was last stocked by the private landowners in 2011 and has not been stocked by the DEC, therefore the trout caught in the 2017 survey were likely the result of natural reproduction. Despite its history of private stockings, Spencer Bruce of the NY State Museum found no evidence of previously stocked fish in the genetics of brook trout from Slide and Snyder brooks, two upstream tributaries of Boreas Ponds (Bruce 2017).

Doug Carlson with the Rare Fishes Unit sampled Boreas Ponds in 2013 (Survey # 513901) as part of studies on late spawning suckers of the Adirondacks. Carlson, in conjunction with Richard Morse of the New York State Museum, and Evon Hekkala of Fordham University, determined that Boreas Ponds contains an “unknown sucker variant” or “Elk Lake” sucker (Carlson et al. 2015), which is currently listed as a high priority Species of Greatest Conservation Need in the state’s [Wildlife Action Plan](#). Additional genetic work is needed to resolve the taxonomy and biogeography of “Elk Lake suckers”, including those found in Boreas Ponds [\(listed as white sucker in table 1 of this report\)](#).

Since there appears to be a naturally reproducing and self-sustaining population of brook trout, stocking is not recommended at this time. Statewide angling regulations will be applied, except that the use of baitfish will be prohibited. Because the pond was incorporated into the High Peaks Wilderness, use and possession of baitfish is prohibited in the unit-wide regulation per 6 NYCRR §10.6 (d) (1). Thus, the pond’s separate listing in §10.6 (d) (12) can be eliminated during the next fishing regulations change cycle.

Historic fishing pressure is an unknown and future use and exploitation are difficult to anticipate since the degree of public access has not been finalized. The Boreas Ponds will be managed for its brook trout fishery and to preserve its “Elk Lake” sucker variant, and will be periodically resurveyed to check the status of the brook trout fishery and to gauge the level of fishing pressure.

### Literature Cited

Bruce, S. 2017. Summary of Findings: Boreas watershed and Little Charley Pond brook trout genetic project. Report prepared for the Nature Conservancy: 6 pp.

Carlson, D. R. Morse and E. Hekkala. 2015. Late-spawning suckers of New York’s Adirondack Mountains. *American Currents* 40(4): 10-14.