

Artist's Statement

Brook Trout in Algonquin Park

By Ida Knowe

When my sisters and I were young, my father brought us along when he went fishing. Walking through the forest, Dad would point out aspects of nature that surrounded us. Arriving at the lake, we would divide into two groups: Dad would fish in the water and we would play in the woods. Of all of the places we visited, Algonquin Provincial Park holds some of my fondest memories of the time I spent with my father.

While climate change has had more profound impacts on the world, I feel a personal connection to the slow loss of Algonquin brook trout. Sadly, there is already clear evidence of climate change in the park. Today, the ice-out dates for Sproule Bay and Lake Opeongo average 10 days earlier than in 1960. Additionally, midsummer lake surface temperatures are 20–25°C. Scientists predict that changes in air-temperature will increase these to 25–30°C by 2100. This warming will cause thermal stratification in lakes, creating a warmer surface and colder depths, leading to poor oxygen exchange between these layers. Adult brook trout prefer to live in water that is 13–17°C, meaning their habitat will soon have lower levels of oxygen. In addition, climate change will lower the productivity of brook trout's prey, further reducing their size and health. Scientists predict that by 2050, brook trout will decline by 49% in the park.¹

In this piece, I used acrylic paint to recreate one of the Algonquin forests where I loved to play as a child. The forest's increasing temperatures, and the warming climate, is shown by the fact that the forest has been painted in shades of red. This warming effect is causing the ice on the lakes to break up earlier than usual. The ice was created from watercolour pencils and permanent markers on paper. The ice is in the shape of a brook trout, and the trout is shattered, showing the impact of global warming on this species.

One of the challenges that I faced during the creation of this project was the format of the brook trout. I tried many colours and sizes of fish, and other media, including pencil crayon, but all realistic representations of the fish seemed to fade into the background. Muting the trees' colours would also mean muting the intensity of climate change, so I was determined to reformat the fish. A simple fish made entirely out of ice had the impact that I wanted: it clearly showed the impact of ice-out dates and it contrasted with the background drawing. Both these aspects draw the eye to the critical part of the painting: the fate of the brook trout.

¹ Ridgway, M., T. Middel and A. Bell. 2017. *Aquatic ecology, history, and diversity of Algonquin Provincial Park*. Ontario Ministry of Natural Resources and Forestry, Science and Research Branch, Peterborough, ON. Science and Research Information Report IR-10. 203. https://www.algonquinpark.on.ca/pdf/harkness_IR10.pdf