

The Story of the Brook Trout

The early explorers of the Western Reserve found a "speckled trout" inhabiting the coldwater tributaries of Lake Erie in what is now northeastern Ohio. With settlement, the great eastern forests fell before the ax and saw to be replaced by agricultural fields and pastures.

And as a result, these coldwater streams warmed and filled with choking silt, greatly reducing the numbers of these native fish.

With only one remaining native brook trout population left in the state, cooperative efforts are underway to restore this fish to some of its original range in northeast Ohio. Brook trout are among the most colorful of all freshwater fish and are currently listed as a "Threatened Species" in Ohio.

These "speckled trout" and their habitat declined to such an extent that by as early as 1838 the naturalist Dr. Jared P. Kirtland wrote in his Report on the Zoology of Ohio that "speckled trout" were to be found in only two Ohio streams: a small creek in Ashtabula County, and a branch of the Chagrin River in Geauga County. The name and exact location of the Ashtabula County stream has been lost with time, but we know the Geauga County stream to be the East Branch of the Chagrin River. The "speckled trout" is known today as the brook trout, *Salvelinus fontinalis*.

Westward settlement continued, as did the destruction of the brook trout's habitat, and in 1945 Milton Trautman noted in his classic book, *The Fishes of Ohio*, that almost all vestiges of brook trout habitat in Ohio had been destroyed. He assumed that all populations had perished. Other aquatic biologists shared this view until 1972, when two populations of brook trout were discovered in the headwaters of the Chagrin River by Dr. Andrew White of John Carroll University. Division of Wildlife biologists were made aware of these populations through Terry Harmon (University School) during the mid-1980's and thereafter began to monitor the streams. Genetic testing (conducted by the University of Guelph, Ontario, Canada) established that these fish are the last relicts of original Ohio brook trout populations, dating back to the last glacial period more than 10,000 years ago. The brook trout is a fish that is both defined and held captive by its uncompromising life requirements. These fish thrive only in cold, clear, clean lakes and streams where the water temperatures remain below 66 degrees, dissolved oxygen levels are high, and siltation is practically non-existent. Any change in the lake, stream, or watershed that affects these critical components will affect the brook trout living there, and even a seemingly minor change in habitat can result in the loss of a brook trout population.

Over the past decade cooperative efforts were undertaken to restore this native Ohio fish species.

The Division of Wildlife initiated a project in the mid-1990's to reintroduce the native Ohio brook trout into streams primarily within the Chagrin River drainage that contained suitable habitat. Presently, there are 10 self-sustaining native brook trout streams (one stream is outside of the Chagrin River drainage), with 9 of these streams being a result of this project. Integral to accomplishing this success was having the assistance of the Geauga Park District, University School, Ohio EPA, Chagrin River Land Conservancy (now Western Reserve Land Conservancy), and the Cleveland Museum of Natural History Trout Club.

This recovery plan is not intended to produce a sport fishery. In fact, these fish will rarely exceed six inches in length. The goal is simply to return an interesting and habitat-sensitive native fish to its former range and abundance. This, in turn, will help maintain biodiversity and preserve a heritage species.