

Native Fishes at the Cleveland Metroparks Zoo

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The aquatics section of the Cleveland Metroparks Zoo opened in 1986, with many of its animals coming from the now defunct Cleveland Aquarium. At that time, a section of what was then the Primate and Cat building was renovated to hold about 30 aquatic exhibits ranging in size from 65 gallons to our largest exhibit of 19,000 total gallons (including filter volume), which houses Pacific reef sharks. Since opening, we have also displayed aquatic animals native to the Great Lakes region. Our most notable residents have been three longnose gars, which were locally collected for, and exhibited at, the Cleveland Aquarium's opening day on Labor Day, 1954!

In 1997, the Zoo opened Wolf Wilderness. In addition to timber wolves, this \$2 million exhibit displays other animals native to the Great Lakes region, including beavers, screech owls, a bald eagle, and various reptiles and amphibians. Fishes are displayed in two separate systems. One system is a 5,000 gallon stream/wetlands exhibit containing grass pickerel, creek chubs (some of the largest you'll ever see), fathead minnows, and rock bass.

The other system is truly impressive—a 65,000 gallon, five-foot deep outdoor pond, with an almost totally underwater view. It contains largemouth bass, bluegill (again, some of the largest you'll ever see), pumpkinseed, black crappie, channel catfish, bullhead, longnose gar, walleye, yellow perch, and bowfin. Paddlefish and sturgeon used to be displayed, but problems with the filtration system prevented these specialized feeders from competing well. We are making changes that will allow us to exhibit these unique creatures again.

An exciting local conservation program involves brook

trout. Until recently, this native fish had not been seen in Ohio streams since the mid-1800s. As a result, many attempts have been made to reintroduce them, mainly for anglers. Some of the stocked trout have formed viable populations, but habitat in many streams is not suitable for most trout to survive. (They require cold and clean water.) In the 1970s, however, brook trout were found in two small headwater tributaries of the Chagrin River in Geauga County, about 40 miles east of Cleveland. DNA analysis suggests that these two populations are native to the Great Lakes region and, therefore, might be considered glacial remnants (having survived introduction from glacial movement about 10,000 years ago). It is amazing to think that two small streams so close to Cleveland escaped the effects of human settlement over the past century.

The Ohio Division of Wildlife (ODW) has been working with this native strain of brook trout, stocking various small streams in Geauga County, and collecting data on their growth and survival rates. So far the project has met with mixed results. Some streams are showing natural reproduction, but others do not seem to be as successful.

The Zoo is working with ODW by acting as a repository for a number of these valuable fish. We recently moved four wild-caught adults from our 300 gallon exhibit back to ODW's fish hatchery in Castalia, Ohio, after growing them up from juveniles. These fish will be used as founder stock for future reintroduction programs. In exchange, we received eight additional juvenile wild-caught specimens, which we feed a combination of salmon pellets, a prepared gelatin diet, chopped smelt, and brine shrimp.

By housing some of the "brookies" here at the Zoo, we hope to eliminate the extinction of this strain by not keeping "all of our eggs in one basket."

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