

Reconnect with Onondaga Lake

Much of Onondaga Lake's shoreline is in public ownership, with ongoing projects designed to connect the lake with the City of Syracuse and surrounding areas through trails, parklands, and destination venues. The public and private investments in lake and shoreline restoration benefit us all.

The remarkable recovery of Onondaga Lake is exemplified by the increasing numbers and expanding distribution of brown trout. Once rarely caught, brown trout are stocked in Ninemile Creek, and now persist in the lake throughout most of the year due to improving dissolved oxygen levels.

Other sport fishing opportunities abound, including bass and carp tournaments and family fun fishing derbies.

All are welcome to enjoy and celebrate the revitalized lake.



Health Advisory on Fish Consumption

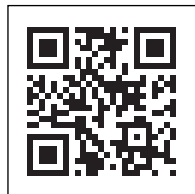
Similar to many New York State waterbodies, there are health advisories limiting consumption of fish from Onondaga Lake. The New York State Department of Health (NYSDOH) recommends that **women under age 50 and children under age 15 eat no fish from the lake.** This advisory is in place for many water bodies across the Finger Lakes region.

The NYSDOH further advises eating no **walleye, carp, channel catfish, or white perch** from Onondaga Lake. The health advisory also applies to **largemouth and smallmouth bass over 15 inches;** these larger fish should not be consumed.

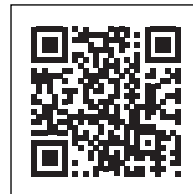
Other fish species are considered safe for adult men, but with some warnings: limit consumption of **brown bullhead** and **pumpkinseed** to four meals per month, and other species to one meal per month. Signs in multiple languages are posted around the lake as part of Onondaga County's ongoing commitment to ensuring that anglers are aware of the lake's fish advisory.

MORE INFORMATION

Learn more about fish consumption advisories at www.health.ny.com



Learn more about Onondaga Lake fish research at www.ongov.net/wep



August 2017



Onondaga Lake Fish Community



A Changing Ecosystem



J. Ryan McMahon II
County Executive

Save the Rain



Tom Rhoads, P.E.
Commissioner

Tracking and Understanding Change

For decades, scientists at Onondaga County Department of Water Environment Protection (OCDWEP) and the State University of New York College of Environmental Science and Forestry (SUNY-ESF) have been monitoring Onondaga Lake to evaluate how the lake is changing as pollution levels decline. The findings offer a unique window into the changing ecosystem of this valuable community asset.



Biologists sample the adult fish community during night electrofishing.

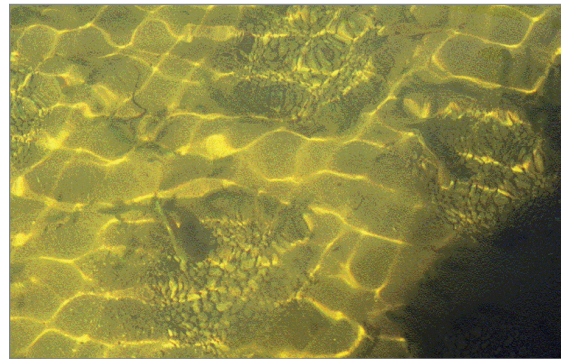
In the 1980s, the Onondaga Lake fish community consisted almost entirely of pollution-tolerant species. Now the lake's fish community is more diverse and comparable to other regional lakes.

Research and monitoring efforts of OCDWEP and SUNY-ESF provide early warning of new invasive species.

Further changes in the lake's fish community are anticipated as water quality and habitat conditions continue to improve.

Plant and Animal Communities Are Responding to Water Quality and Habitat Improvements

The Syracuse Metropolitan Wastewater Treatment Plant has dramatically reduced ammonia and phosphorus inputs to Onondaga Lake, shifting the lake from a eutrophic (nutrient-rich) condition to a mesotrophic (moderate nutrient levels) condition. This shift has expanded fish habitat both near the shoreline and in the open water. Decreased phosphorus supply has reduced algae levels, improving water clarity and increasing dissolved oxygen in deep water. Clearer water has expanded the coverage of rooted aquatic plants, thus improving fish habitat. Ammonia reductions have enabled survival of fish in sensitive early life stages.



Sunfish build their nests near the lake's shoreline.

Scientific experts and regulatory agencies worked with Honeywell to launch a habitat restoration program after dredging of the lake bottom was complete. The program, designed to improve lake and shoreline ecology, included improvements to enhance fish spawning areas and nursery habitat. Other projects include creating and enhancing shoreline wetlands, planting thousands of native trees and shrubs, and removing invasive plants. These efforts benefit many components of the food web that support the lake fishery.

Onondaga Lake Is Home to Many Fish Species

The Onondaga Lake fish community includes a diverse group of native and non-native species. Because Onondaga Lake is part of the Oswego River Basin, the fish community is similar to those found in Oneida Lake and the Seneca River.

Since the late 1980s, scientists have identified 66 fish species in the lake.

- Many lake fishes are highly valued by anglers, including **largemouth bass**, **smallmouth bass**, **walleye**, **brown trout**, **brown bullhead**, **yellow perch**, and **sunfish**.
- Small fish species such as **alewife** and **golden shiner** are a food source for predatory fish.
- **Longnose gar**, **bowfin**, and the state-threatened **lake sturgeon** are important for their unique appearance, life history, or relative scarcity.



A new generation of lake enthusiasts is here!

Invasive species found in Onondaga Lake, like the zebra mussel and round goby, have a profound effect on the lake ecosystem by altering food-web relationships, affecting water clarity, and changing nutrient exchange between the water and the bottom sediments.