

AROUND ONONDAGA LAKE

Different habitats like forests and spring-fed salt and freshwater wetlands once surrounded Onondaga Lake. This fact sheet introduces some of these historical landscapes, their plant and animal communities, and their uses by people.

HISTORICAL ECOSYSTEMS

This fact sheet draws from research conducted by Catherine Landis, graduate student at SUNY-ESF, with the support of the Atlantic States Legal Foundation and the Office of the General Counsel of the Onondaga Nation.

For more information about the Onondaga Nation and the Haudenosaunee Confederacy, please visit: www.onondaganation.org

For more information about the references cited for this fact sheet, please contact the Onondaga Environmental Institute.

Additional Resources:

Atlantic States Legal Foundation: www.onondagalake.org

The Golden Age of Onondaga Lake Resorts, by Donald H. Thompson. 2002.

Neighbors of the Onondaga Nation: www.peacecouncil.net/NOON/index.html



Onondaga Environmental Institute
315.472.2150 | outreach@oei2.org
102 West Division Street, 3rd Floor
Syracuse, NY 13204

To add your voice to community conversations about the lake, visit:
<http://reviveonondagalake.blogspot.com>



INLAND SALT MARSHES

Inland salt marshes are wetlands without woody vegetation that form around inland salt springs. They were historically rare in Eastern North America. The amount of water in these marshes varies seasonally.



White-tailed deer

Small pockets of inland salt marshes existed in NY, including along the southern shores of Onondaga Lake (circled on map). Salt water and freshwater habitats (including potable springs) were found side by side around the lake.



Relatively few plant species can survive in salty soils. Historical records tell us that the inland salt marshes around Onondaga Lake included plants such as saltmeadow rush, salt marsh sandspurry, and glasswort or samphire. It is common for inland salt marshes to have areas with no plant growth, either because the soil is too salty for plants to survive or because the ground has been disturbed by animals that are seeking salt, an important part of their diet.



Eastern massasauga rattlesnakes, which were found around the salt springs, were used by the Onondagas for both food and medicine.

Historically, the salt springs around Onondaga Lake attracted animals like deer, elk, rattlesnakes, flocks of many hundreds of passenger pigeons, and possibly buffalo. These animals were valuable food sources for the Onondagas, the indigenous peoples of this area. The Onondagas used salt for medicine but did not need it for preserving meats, which they routinely smoked and dried.



Wilson's snipe probably visited salt and freshwater marshes around the lake.

Major Changes After the Mid-1700s

In the late 1700s, Euro-American settlers began harvesting salt brine on the shores of Onondaga Lake for commercial salt production. Forests were cut down to fuel fires that evaporated the water from the salt brine and to build barrels to hold and ship the produced salt. As the forests were cleared and large amounts of brine were brought to the surface, the salt marshes expanded. The salt industry, which peaked in 1862, occupied much of the southern shore of Onondaga Lake.

In 1822, the lake level was lowered by 2 feet, and in the following decades, many wetlands around the lake were filled in. Toward the end of the 19th century, the salt marshes on the west side of the lake were buried under industrial wastes from the Solvay Process Company. Few traces of these unique habitats remain today.

FORESTED WETLANDS

Forested wetlands (swamps) are wooded areas that are often saturated with water and are home to a great variety of organisms.

Cedar Swamps

Cedar swamps were historically present at the southern end of Onondaga Lake (circled on map). Some of the trees commonly found in these cool, dark swamps were northern white cedar, tamarack, black ash, and hemlock. The Onondagas used black ash to create baskets.

Nineteenth century botanists who visited the Onondaga Lake cedar swamps reported finding abundant ferns and many rare plant species, including native orchids.



Fairy Slipper, a native orchid



Photo courtesy of New York Natural Heritage Program

Maple-Ash Swamps

Maple-Ash swamps were found in several places near Onondaga Lake (circled on map). According to historical records, these wetlands probably supported a variety of trees including red maple, green ash, black ash, American elm, swamp white oak, and bur oak. American elm was particularly important to the Onondagas because it provided them with medicine, cooking utensils, bark for building homes, and ceremonial objects.



Photo by: Donald J. Leopold, PhD

These wetlands were also home to a rich diversity of other plants such as northern spicebush, gooseberries, dogwoods and viburnum shrubs.



American Philosophical Society, Philadelphia PA

Major Changes After the Mid-1700s

The forested wetlands harbored mosquitoes, which bred malaria and infected the Euro-American settlers who lived near the lake. When the lake level was lowered to improve canal transportation, the wetlands were drained, filled in, and developed. Although this improved public health, the removal of the wetlands (including the salt marshes) destroyed habitat for many different kinds of animals, especially spawning and nursery grounds for fish and nesting sites for birds. The water level was raised again in the early 1900s, but most of the wetlands were never reestablished.

UPLANDS

Uplands are areas of higher elevation found upslope of streams or wetlands.

The soil around Onondaga Lake and the Finger Lakes is generally very fertile. In the uplands were large fields that the Onondagas had cleared for the construction of towns and cultivation of crops like corn, sunflowers, beans, and squash. The Onondagas moved their settlements periodically to allow the fields to recover their nutrients.

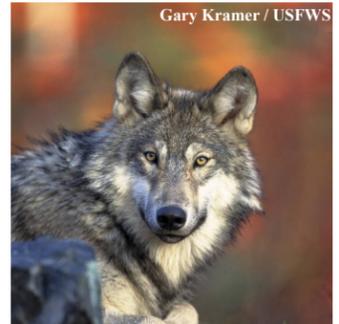


Photo by: Joseph W. Stoll, www.pbase.com/geojoe



Photo by: Joseph W. Stoll, www.pbase.com/geojoe

In the uplands there were also extensive, diverse forests that included beech, chestnut, oak, basswood, and elm. The Onondagas harvested food from trees like sugar maple and butternut.



Gary Kramer / USFWS

Gray wolf



Flickr photo by: gainesp2003

North American Beaver

The forested landscape was home to beavers, which helped shape the wetlands, as well as bear, otters, moose, wolves, elk, deer, hawks, and numerous other species. Many of the clans among the Onondaga Nation and the other nations of the Haudenosaunee Confederacy are named after these animals because of their importance to the people.



Flickr photo by: Jethro Taylor

American black bear

Major Changes After the Mid-1700s

Between the late 1700s and the early 1800s, salt production and agriculture intensified around Onondaga Lake. To support these industries and to make room for residential development, the surrounding land was deforested. This led not only to loss of habitat and the disappearance of many organisms, but also to severe erosion. Soil was washed down to the lake, damaging water quality and filling in some of the areas that were formerly wetlands.