

Olana Nature

lake walk

In the 1800s, Frederic Church had his swamp dredged to create this lake, a popular site to visit while at Olana. Church viewed the lake as a reflecting pool which mirrored the nearby Hudson River. The family also used the lake for recreation, such as boating, ice harvesting and ice skating.

Despite being man-made, the lake and its surroundings are a complex and diverse ecosystem.

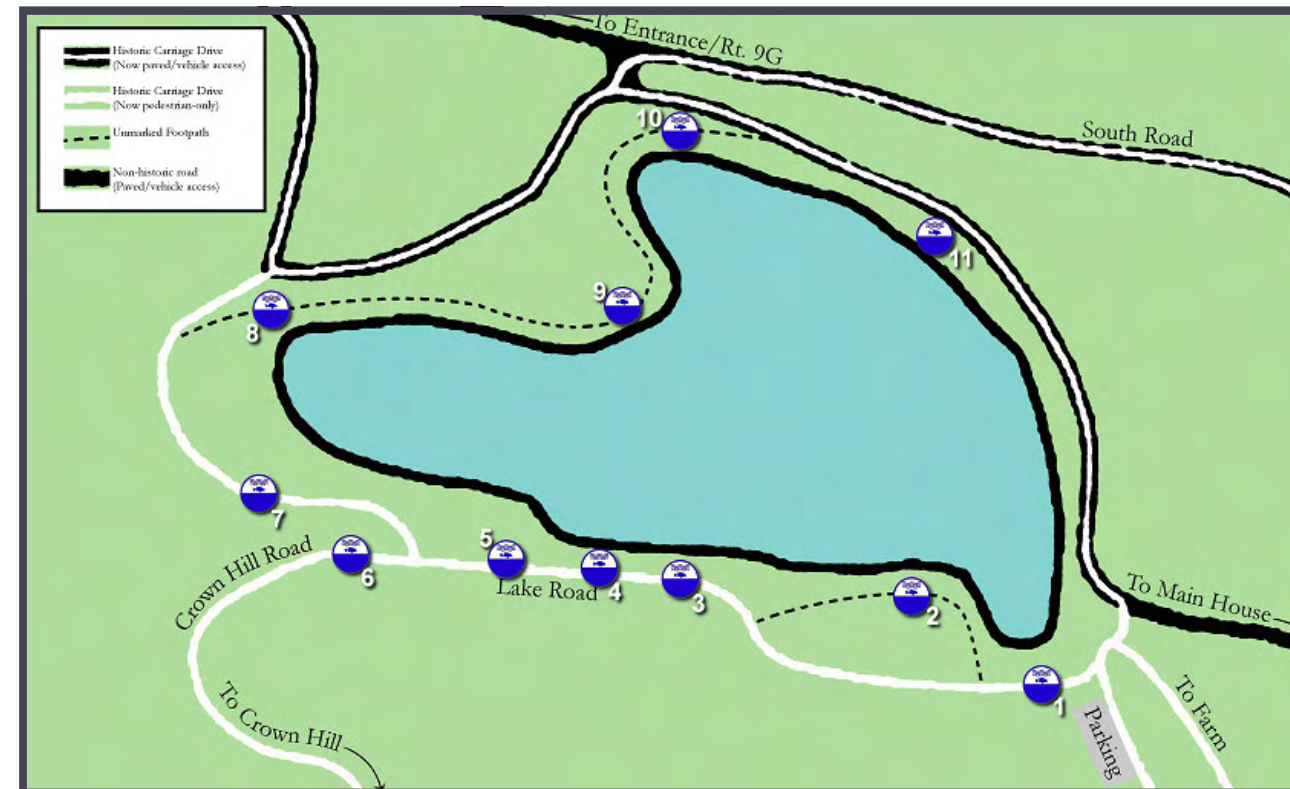
1. The Lake Community

From here you can see much of the lake. **With an area of about 10 acres and depths of more than 10 feet in some places, the lake provides habitat for many plants and wildlife.** The Churches stocked the lake with a variety of fish, which you will learn about later. Other animals live on or near the lake, such as frogs, turtles, and birds. The lake also provides habitat for many plants. Continue on to learn more!

To your right is a dirt footpath that leads up to a quiet picnic area. There are a couple steep hills so you may want to stay on the main trail and go on to Stop 3.

Watch out for ticks during and after your walk! For more information on ticks and Lyme Disease, pick up informative brochures at the Visitor Center or the Wagon House Education Center.

Olana's nature walks will be marked soon, but for now you'll need to pay extra-close attention so you don't miss your stop!



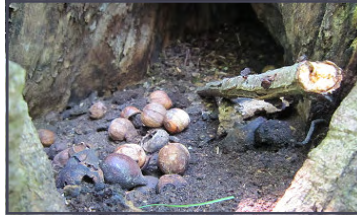
Nature walks at Olana developed by
Danielle Zeller and Jessica Zeller
SUNY ESF Interns, Summer 2010

OFFICE OF PARKS • RECREATION • HISTORIC PRESERVATION
NEW YORK STATE

For further information contact:
Olana State Historic Site
5720 Route 9G
Hudson, NY 12534
(518) 828-0135
www.olana.org
www.nysparks.com

2. A Hidden Cache

Look at the rotted base of this chestnut oak (*Quercus prinus*). Can you find anything unusual? **Squirrels and chipmunks store nuts found around the lake in hidden, sheltered places like this hole.** Although these nuts were stored for later eating, squirrels and chipmunks forget many of their caches, and are important dispersers of tree nuts and seeds. Some of the trees you see around you many have been “planted” by rodents! As you walk on, watch out for chipmunks, which are common in this area.



Walk past the picnic tables and climb the hill back to the shale road.

3. A Tree of Many Names



Look at the trees with scaly bark. **This species (*Ostrya virginiana*) has characteristics which give it several common names.**

It is known as Ironwood because it has extremely hard wood, often used in tool handles, which also nicknames it Leverwood. In mid-summer, these trees produce white, papery fruit

that look like hops. The fruits give it another name, American hop-hornbeam. Many birds and small mammals eat the fruit.

4. At Home in the Water

Through the trees and down by the water is a stand of cattails (*Typhus* sp.). **Cattails are distinctive plants that grow near bodies of water.** They are easily recognized by their brown “clubs”, which are



actually flowers. Several species of birds build their nests in the tall stems and leaves, including the Red-winged blackbird (*Agelaius phoeniceus*) and Common yellowthroat (*Geothlypis trichas*). Watch for the conspicuous Red-winged blackbird as you walk around the lake.

5. Small but Important



Feel free to enter the glade and carefully observe the moss. It is soft and cushiony, but it’s not just a nice place to sit. **Like the lake, mosses store water.** Plants that grow here take advantage of the extra moisture. In return, shade from the trees help the moss retain water, which it would not be able to do in direct sunlight.

When you come to Crown Hill Road, turn left and walk down a short distance to the swamp.

6. The Lake’s Little Sibling

In the 19th century, Frederic Church created the lake from a wet area much like this one. **Swamps provide a safe habitat for amphibians such as frogs and salamanders to lay their eggs.** Because there are no fish, eggs and young have a better chance of survival. Some amphibians you can see here are the Green frog (*Rana clamitans*), Eastern newt (*Notophthalmus viridescens*), and American toad (*Bufo americanus*).



Now return back to Lake Road and continue.

7. It Takes Two

Have you ever felt like things are easier if you have a friend to help you? The lichen on this tree trunk does!

Lichens form when a fungus partners with an alga or a bacterium. The fungus can’t produce its own food, but the alga/bacterium can photosynthesize (or turn sunlight into energy). In return for food, the fungus provides protection and resources like water to the alga/bacterium. It’s a win-win situation!



The next part of the Lake walk is optional. A narrow footpath before the gate leads you close to the lake, but it is steep in places and there are exposed roots and some fallen trees. Only surefooted, experienced hikers should venture onto the footpath. If you would like to stay on the main trail, remember what you’ve learned about the lake community so far and keep an eye out for plants and wildlife as you travel up the paved road toward Stop 11. Be aware of cars on the road.

8. Aliens Among Us



When Frederic Church was alive, this lake was clear and mirror-like. **Today, however, it is nearly choked with an invasive aquatic plant called Eurasian watermilfoil (*Myriophyllum spicatum*),** which you can easily see from this point. It is thought the plant may have reached the lake through public fishing. Eurasian watermilfoil is very hard to remove once established because it can grow from floating fragments.

9. Something Fishy

You are now standing on Picnic Point, a scenic area with a wonderful view of the House. **From here you may also spot fish swimming in the lake.** The lake is stocked with a few species of fish. These include Largemouth bass (*Micropterus salmoides*) and Bluegill (*Lepomis macrochirus*). If you look long enough, you may be surprised to see flashes of orange. These are koi or

goldfish, both species of carp. The Church family stocked these bright fish, and today some still remain. Stay for a few moments to watch and listen for jumping fish.



Bluegill Sunfish

You may fish in the lake, but you must have a fishing license and obtain permission from Olana. Call (518) 828-0135 for further information on fishing permits.

10. Mystery Mollusks

Can you see any snail shells on the shore or floating on aquatic vegetation? **How exactly these non-native Chinese mystery snails (*Cipangopaludina chinensis*) got into the lake is a mystery,** but it was likely through fishing. Because these are the snails you find in aquariums, Chinese mystery snails are also commonly spread when people dump their fish tanks in waterways. These snails feed on algae and are unusual because they give birth to live young.



Continue along the dirt path until you reach the paved road, then turn right. Be aware of cars.

11. Spruce it Up

Look at the towering tree in front of you. **The Norway spruce (*Picea abies*) is commonly planted for ornamental purposes.** Its tolerance of a wide range of growing conditions combined with its graceful upturned branches and drooping needles makes the Norway spruce popular in yards across the country. It is prized so much for its beauty that the majority of New York City’s Rockefeller Center Christmas trees have been Norway spruce!



You have now finished the lake walk. Continue along the paved road and up the hill toward the House or turn right to the Wagon House Educational Center. We hope you enjoyed the walk and will come back to visit the beautiful landscape at Olana.