

Lemons Brook Farm Interpretative Trail Guide

Delaware Highlands Conservancy

Bethel, New York



Welcome to the Lemons Brook Farm property and the New York field office of the Delaware Highlands Conservancy. This 119-acre property is one of many privately owned lands in the Upper Delaware River region protected by a land protection agreement (legally referred to as a conservation easement) with the Conservancy. The woodland trail you're about to experience is one of several phases of the Site Plan for the property created with support from a Sullivan Renaissance Environmental Initiatives Grant. Other phases supported by Sullivan Renaissance include the installation of a herb garden, pollinator garden, and reverting lawn to natural meadows, all of which are

coupled with educational events open to the public (check the Conservancy's website—www.DelawareHighlands.org).

The Trail begins to the right of the large red barn behind the farm house (see the map on the back of this guide). Look for the 'Nature Trail' sign at the entrance of the forest. Interpretative trail stops are found along the trail and correspond to the numbered information in this guide. The trail is marked with red, white, and yellow discs on the trees like the image to the right.



The owner of this land generously allows the Conservancy and our guests to enjoy the property. Please respect the following **trail etiquette**:

- ♣ Feel free to enjoy a picnic while visiting but remember that the property is Carry In, Carry Out - please bring your trash and recycling home
- ♣ Follow Leave No Trace practices and remember to 'leave only footprints and take only photographs'
- ♣ For your safety, stay on the marked trail
- ♣ Use this guide during your visit and return it to the kiosk when done. You can download an electronic version from the website.



Before you head to the trail, take a moment to notice the fruit trees and the bluebird boxes located behind the farm house. Each year these homes are occupied by beautiful eastern bluebirds and tree swallows. See if you can spot a few —the busy parents are usually seen in the trees or on top of the boxes.



1. As you enter the forest from the open lawn, notice how the habitat around you changes. You are standing within a typical pine-northern hardwood stand of small sawtimber. Almost all of these trees started growing at the same time when a previously cleared agricultural field was left to revert back to forest. If we were to cut down several different sizes of trees from this area and count their growth rings, we would see that even the small diameter trees are very close in age to the large diameter ones! Try to estimate the age of a small nearby pine tree by counting its whorls of branches starting from the bottom and working your way up the trunk. In this area during the early spring, you can find many unique forest flowers emerging such as Columbine, Jack-in-the-Pulpit, Dwarf Ginseng, and Starflowers.



2. Standing here you can see an almost pure stand of Eastern white pine trees on one side of the trail and the continuation of the pine-northern hardwood stand on the other side. Several animals favor habitats such as these and if you listen and watch quietly, you may see eastern chipmunks or red squirrels scurrying along the ground, up the tree trunks or perched on a log nibbling down a pine cone. Try identifying the eastern white pine whose needles are soft, about 4 inches in length and are always found in bundles of 5 (which coincidentally is the same number of letters in the word 'white' which helps in distinguishing this pine from others in our area).

3. Looking northeast from this station you can see into the edge of a fenced field which is leased to a local farmer who seasonally grazes young cattle and mows hay from the field.



For a shorter hike, turn left up ahead to cross over to the lower loop on the trail.



4. Openings in the forest canopy, either from trees falling or being cut down, allow more light to reach the forest floor. In some places, these areas with more light may be overtaken by a native, but very difficult to control plant called hay-scented fern. The roots of these ferns, called rhizomes, create a dense mass under the surface of the soil and do not easily allow tree seedlings to grow. Additionally, white-tailed deer will eat tree seedlings but eat around the ferns. Quiet hikers during the spring, summer and fall may observe the ovenbird, a thrush-sized brown bird whose white chest is streaked with brown. This bird sings a progressively louder and louder "teacher, Teacher, TEACHER!" and builds a nest shaped like a covered dome on the ground.



5. Here you will see a wonderful eastern hemlock. Because these trees can grow to be 500+ years old, hemlocks are known as a keystone species, playing a crucial role to a number of forest inhabitants. Their dense canopies can create distinct ecosystems year-round, providing shelter during harsh winters and cooling during hot summers. Currently their survival is being threatened by the invasive hemlock woolly adelgid, an exotic pest native to Asia.



Throughout this forest and in many others you may notice trees that seem to be standing up on their roots. These 'stilted' trees are typically birch whose seeds are eager to sprout on moss-covered logs or rotting stumps (known as "nurse logs," decomposing stumps and trees that provide nutrients to saplings). Once the wood rots away, the stilts are exposed. If you look closely to the trees behind you, they seem to be growing along the same lump in the Earth. Perhaps a tree fell here decades ago and this black birch and red maple tree sprouted along its trunk? See if you can find more stilted trees along the rest of the trail.



6. Walking through these woods, a keen eye may have spotted signs of white tail deer. For example, nipped-off tree shoots, deer scat, or tree bark peeled off from an antlered buck—but other signs are harder to attribute to the hoofed vegetarians. Many deer trails traverse the area and are frequently used as deer feed in the nearby hayfields and then travel towards the dense cover offered by the wetlands. A forester may judge this lack of understory, or shrub layer, in the forest as an indicator that the resident deer herd is higher than desired. This can lead to too many deer and not enough habitat or food for them to stay healthy in addition to a limited amount of regeneration of diverse tree species. Check out the small tree with buck rub just to the right of the sign post.

7. The cleared field between here and the road was the site of an old homestead. The remains of human occupancy are still visible including the wooden flagpole, an old cedar tree and a hand-dug well covered with big slabs of rock. And as with many homesteads, junk and garbage were often piled in the back lot since garbage disposal was not readily available in rural areas. Walking through this section of woods, watch carefully for broken glass, pottery, metal buckets and other trash. Notice the old flagpole has a new purpose: it now holds a kestrel box. Kestrels are the smallest falcons North America.



8. Here the trail spurs off past a few large wind snapped hemlock trees, under the shade of a smooth-barked American beech tree and through a tunnel of native rhododendron bushes. Quietly follow the short trail to see if you can sneak a peek at any small wood-elves having a picnic lunch under the tangled hemlock trees. How did these trees grow this way? Once done exploring this unique place, back-track up past station 8. At the trail intersection, stay right to follow the loop deeper into the forest to station 9 .



You will begin to notice changes in temperature, foliage, and sounds. Keep your ears open for the distinct call of the barred owl hooting of 8-9 notes, described as "*Who cooks for you? Who cooks for you-all?*"

9. The edge of this wetland habitat contains an understory of dense rhododendron bushes and an overstory of hardwoods (like maple and birch) and softwoods (like hemlock and white pine). The water level underground is quite close to the surface here and in wetter seasons you may see water pooling on the surface. The high water

9. table and clay soils cause the trees to produce very shallow roots, and trees are susceptible to getting blown over by strong winds. Have you noticed any more stilted trees?

As you make your way to station 10, keep your eye out for lady slipper orchids and the colorful hemlock varnish shelf, a relative to the well-known reishi mushrooms. If you listen carefully, you may hear “swamp angel,” commonly known as the hermit thrush, which nests in wetlands and is known for delicate flutelike song.



a
its



10. Wetlands provide a multitude of benefits to people and wildlife including flood and storm water control, surface and groundwater protection, fish and wildlife habitat, public recreation and enjoyment. In fact, the benefits are so great that wetlands of a certain size or quality are protected in

New York by the 1975 Freshwater Wetlands Act. Wetlands are generally areas between uplands and aquatic habitats like streams, lakes or rivers. They contain a variety of plants that need soils that are wet for most of the growing season.

The spongy, green moss in front of you – called sphagnum moss – is an important wetland plant. It can hold up to 20 times its own dry weight in water! In this area, you might also find painted trillium, Indian pipe, and cinnamon fern.

After a rain storm, keep an eye out for red efts. These salamanders on the forest floor are in an exciting life stage, where they will remain for about five years until they re-grow their gills to live their adult life as aquatic salamanders. These little guys are great at controlling the mosquito population and excellent indicators of a healthy ecosystem.



Cross back up to the upper trail loop by turning left at the trail junction ahead.

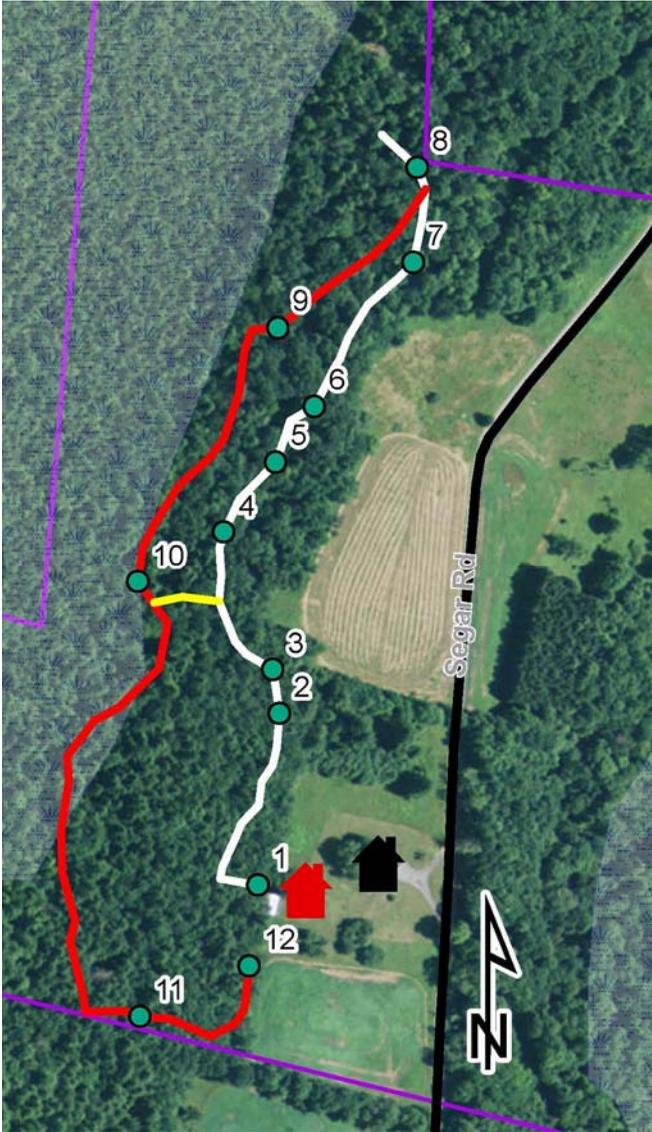
11. The eastern screech owl likes to live in forests, old orchards, city parks and suburban lots where there are trees large enough to have cavities for the birds to nest. They can hunt all hours of the day but mainly during dusk, dawn and at night. Screech owls have a diverse diet including birds like blue-jays and sparrows in addition to mice, voles, and sometimes cottontail rabbits. They'll even eat snakes, worms and crickets! During the day they roost in evergreen trees and if a predator comes near, they close their large yellow eyes and rely on their feathers to camouflage them with the bark of the tree. This bird box was created with the specifications preferred by the screech owl – a 10" cavity and a 3" entrance. The metal sheet below the box on the tree helps to deter raccoons and other predators from climbing up to the nest.



12. During the late 1940s and early 1950s farm equipment manufacturers stopped building horse-drawn equipment, leaving horse farmers no choice but to make do by repairing and rebuilding old implements, along with adapting tractor machines for use behind horses. Eventually most of the remaining old implements wore out. At the same time sustainable and organic farmers began discovering that farming with horses does less damage to the land than farming with heavy machinery, and working with horses reduces the demand on fossil fuels. Check out the signs on each of the old farm equipment to learn what each was used for.



Special thanks to Trail Stewards Ed Morse and Dawson Smith for siting and creating the mile + loop. Also thank you to Bill Palmer and Geoff Greulich for installing the sign posts. Location signs crafted by Ed Falkowski of Eddie's Rustic Wood Signs of Hawley, PA. Locust posts provided by Sequoia Tree Service of Dingmans Ferry, PA. Thanks to photographers David B. Soete, Natasza Fontaine, and Steve Sachs for providing the photos throughout.

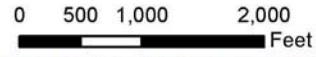


Lemons Brook Farm*

-  Property Boundary
-  stream
-  wetland
-  road
-  Color-coded Woodland Trail
(approximately 1 mile full loop via stations 1-12)
-  Interpretative Trail Stops
-  Farmhouse
-  Barn



DELAWARE
HIGHLANDS
CONSERVANCY



Support for the trail project at the Lemons Brook Farm property provided by Sullivan Renaissance Environmental Initiatives Grant.



www.DelawareHighlands.org
 PO Box 218
 Hawley, PA 18428
 570-226-3164
 845-583-1010