



“A Hidden Treasure of Northeastern Connecticut”

The Eastern Connecticut State University Arboretum, unlike many arboreta, is not a planted collection of trees from around the world, but a natural preserve of Connecticut’s forests and wetland habitats. Eastern’s property consists of 19 acres, comprising temperate deciduous forest, a stream, a freshwater marsh and swampland, and meadows. Over the past 17 years, this Environmental Field Lab has been used to provide field lab experiences and opportunities for faculty and student research projects for a variety of biology, geology and hydrology courses.

The most important characteristic of this environmental field lab is the highly diverse biological and physical nature of the property. The spatial variation in soils, geology, rock outcrops and glacial till remains, flooding, and woodland stream meanderings results in many microhabitats that are occupied by more plants and animals one would expect over this size of a preserve. The seasonal variation in vegetation and animal activity, in sights and sounds from spring through winter seasons makes this a natural wonder to enjoy by all.

Within 5 minutes walking distance from classrooms and residences, the 0.85 mile horseshoe-shaped trail exposes the hiker to three different habitats and to sounds that create the perfect blend of urban and rural environments. As one hears the sound of cars driving along state Route 6, and planes flying in the distance towards Windham Airport, one can also listen to the rush of water against the rocks that line the woodland stream, and enjoy the sound of forest birds calling to their mates. By the pond, the spring season starts with the magical late afternoon sounds of the spring peepers courtship calls. As we proceed into summer, we hear the buzz of bees, some years cicadas, the call of red-wing blackbirds, the splash of frogs, the prancing of deer along the stream. In one hour, you can travel through three different habitats. From spring through winter, the preserve changes monthly in its sights and sounds, inspiring beginning and advanced artists and poets to communicate this transitional nature to the public.

The self-guided trail contains 10 markers, each providing a different view and perspective into the workings of this diverse ecosystem. The goal of ecology is to provide the science to preserve and maximize biodiversity in any ecosystem – the more diversity, the healthier the ecosystem for all, especially humans. Eastern’s Environmental Field Lab is a place to study how spatial and environmental change affect the structural and functional diversity of the ecosystems encountered, allowing us to predict the impact of human and natural disturbance on the biological and physical nature of these various habitats.

- Trail markers #1 and #2 provide a good overview of the entrance of the stream into the Arboretum – this stream receives surface run-off water from the campus, and from groundwater seeps. The stream is wet all year round, meandering down the hill throughout the Arboretum. It is a favorite spot for prancing deer in early summer and visiting dogs all year round. Skunk cabbage and green hellebore line the streambank in early spring, followed by a carpet of trout lilies and lush cinnamon fern and hay-scented fern. The fallen trees and boulders throughout the areas maximizes the physical diversity that provides for so much plant and wildlife. Tall red and white oaks provide nesting sites for birds of prey, while the many flowering shrubs

extend the blooming season from spring to November, when yellow flowers abound by the stream highlighting our witch hazel shrub grove.

- Trail markers #3 and #4 transition the hiker through an area of wildflower diversity in the spring and lush diverse vegetation in summer. Here we see hollow trees that resound in the many woodpeckers claiming their territory in the spring, and provide much shelter for animals later in the year.
- Trail marker #5 is the site of an old stonewall, here probably before Eastern arrived at North Campus. This is a favorite area for redback salamanders to overwinter, after hatching in early fall.
- Trail marker #6 provides a great top view of the whole Arboretum pond – most visible in winter and early spring. Wild orchids are common in late spring here. In summer, bracken fern fills the gaps. Here one can see the transition from the glacial till soil and boulders of the top of the trail to the sandy, stratified drift of this site. Sounds go from rustling dry beech leaves in winter to scurrying ducks in flight, and forest birds in summer.
- As we proceed to the junction of the trail that parallels Route 6, we reach trail marker #7, the Arboretum Pond. A myriad of sounds are heard here, from spring peepers, to forest and wetland birds, to splashing frogs. Spotted turtles sun themselves and great blue herons fish calmly here throughout the summer. At any time of day you might see a beaver or a muskrat scurrying to the culvert that drains the pond, and connects under the highway to the pond on the other side of Route 6, by Eastern's baseball complex. Water lilies, swamp loosestrife, a variety of grasses and sedges, silky dogwood, sensitive fern, winterberry, sweet pepper bush and cattail create a diverse vegetation mosaic around the perimeter of the pond.
- As you turn back up the trail, on the other side of the pond, you will encounter trail marker #8 – where yellow birches, ferns and evergreen trees are more common – a more shaded, and quieter section.
- Markers #9 and #10 transition back to the top of the hill, where glacial boulders mix with ferns, shrubs and birch trees. Here you can either exit the trail going directly uphill, or cross over the stream at trail marker #10, ending back at trail marker #1 on the other side of the stream, back to the main Arboretum entrance.

The beauty and health of the earth depends on maintaining its diversity – of habitats and species. Eastern's Arboretum is a wonderful place to unravel the mystery of nature and our human impact, but it's also a place for recreation, reflection and inspiration. The seasonal variation in the diversity of vegetation and animal activity, in sights and sounds from spring through winter makes this a natural wonder to enjoy by all. So, visit us frequently and see for yourself why Connecticut Magazine calls us one of the hidden treasures of northeastern Connecticut.