

SELF-GUIDED TOUR

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Native Plant Collection and
Bolleswood Natural Area



Connecticut
College
Arboretum



WELCOME

This tour, which begins at the notice board just inside the entrance to the Native Plant Collection on Williams Street, is an introduction to the nearly 30-acre collection of trees and shrubs native to eastern North America, and to some of southern New England's common biological communities. The main trail is approximately 2 miles long and should take about 1 hour to complete at a leisurely pace. In addition, there are two optional loops, the first leading to a bog and the second through a former Hemlock forest. Numbered station markers are located at a variety of interesting sites. Common native trees are labeled along the way for easy identification. Intersections are marked with arrows.

The Arboretum was established in 1931, and is owned and operated by Connecticut College. Various bulletins describing the Arboretum and many of its plants and animals are available in the Arboretum Office (103 F.W. Olin Science Center). Enjoy your walk and please remember not to collect anything so that all the plants and animals are available for those who follow.

1 RED MAPLE SWAMP

This site is fairly typical of a forested wetland which evolved around a streamlet. Water is present at or near the surface

for most of the year. The conspicuous wetland tree is Red Maple, which can easily be recognized in early spring by the red flowers and twigs, and in autumn by the red foliage. In early spring, the shrub with the tiny pale yellow flowers is Spicebush, and the yellow, buttercup-like wildflower is Marsh Marigold. In summer, the fragrant white flowers of Sweet Pepperbush and Swamp Azalea are common. The ground cover with large leaves in spring and summer is Skunk Cabbage, an unpleasant smelling member of the Arum Family. Later in the summer and early autumn the annual wildflower Jewelweed blankets the area to a height of 3-4 feet.

2 MAGNOLIA FAMILY

You are standing between two Tulip Trees planted in 1936. Notice how tall and straight the trunks are. This fast-growing member of the Magnolia family is native to moist sites in our region. The native shrubs lining the trail are mostly the pink, spring blooming Roseshell Azaleas, planted in the 1940s.

3 CONIFER COLLECTION

On the left side of the trail is the Gries Memorial Native Conifer Collection, established in 1988. The site was formerly a grove of Red Pine planted in 1928 which succumbed to an insect infestation in the early 1980s. Native conifers now featured here include Red and White Spruce, Balsam and Fraser Fir, Hemlock, Redcedar, various Pines, Baldcypress and others. In addition to the normal growing species, a number of cultivated varieties of native conifers, including dwarf and weeping forms, are also present. Some broad-leaved native shrubs have been used as companion plantings, and between Station 3 and the circular wall is a meadow of native grasses and wildflowers which is most beautiful in late summer. Beyond the circular wall is a boardwalk connecting to the Edgerton and Stengel Wildflower Garden. In contrast to the meadow, this woodland garden is at its peak of bloom in early May.

4 POND

You are standing on a dam which was built in 1928. Prior to its construction, the entire wet area was a Red Maple swamp similar to that on the left (south) side of the trail. The dam created an open body of water of about 4 acres this is only about 3 feet deep. Over the years, this seepage-fed pond has slowly filled in with organic matter (dead plants, animals, fish, etc.), a natural process in lake and pond ecosystems. The vegetation in and around the pond is adapted to waterlogged soils. White Water Lilies grow through most of the pond. Pickerel Weed, with violet flowers in a dense spike; Arrowhead, with snowy white flowers and arrow-shaped leaves; and Common Cattail grow in the shallower places. Common shrubs around the pond edge are Sweet Pepperbush, Waterwillow, Button Bush and Alder. In 2006 the northern one-acre of the pond was deepened to about 12 feet.

STATION MAP



LEGEND

Tour stop

Main trail
Optional trail

Stonewall
Brook

Other paths
Boardwalk

5 BOLLESWOOD NATURAL AREA

Here at the edge of the Bolleswood Natural Area, the tree, shrub and herbaceous species are representative of those in many woodlands of southeastern Connecticut. The most common deciduous forest trees here are Oaks, Birches, Maples and Hickories. Prior to 1904, Chestnut was also a dominant member of the forest, but the introduced chestnut blight has all but eliminated this important food and timber species. Flowering Dogwood and the broad-leaved evergreen Mountain Laurel are two common understory plants which are adapted to living in the shade of the taller trees. The conifer most frequently encountered in our woods was Eastern Hemlock. Unfortunately, many hemlocks have been killed by an invasive Asian insect, the Hemlock Woolly Adelgid.

5A BOG

This station is located at a Sphagnum-Heath bog. Bogs are rather uncommon in southern New England and of great interest to naturalists because they contain many unique species adapted to the nutrient-poor, acidic, waterlogged environment. This bog began as a glacial depression filled with water. Plant material gradually accumulated, forming deposits of peat up to 3 feet deep. Grass-like Sedges and Sphagnum Moss form a mat in the center of the bog, which is surrounded by a zone of heath shrubs such as Cranberry, Highbush Blueberry, Sheep Laurel and Leatherleaf. Certain insectivorous plants such as Pitcher Plant and Sundew are also unique to bogs. The vegetation of this ecosystem can be easily damaged by human visitation; therefore, it is especially important not to leave the trail.

As you walk toward Station 6, note the granite outcrops to the left, which were quarried during the early part of this century to provide stone for College buildings. You will also see many dead and dying hemlock trees.

6 NUT TREES

You are standing at the base of a south-facing slope which has been planted with various native nut trees, predominantly Hickory. Notice that each individual Hickory leaf is composed of 5 to 11 leaflets. The hard-shelled fruits are edible and provide an important source of food for wildlife. There are also some hybrid Chestnuts in this collection. To the right (east) is a wildflower meadow planted from seed on top of muck dredged from the pond bottom in 1993 and 2006.

6A FORMER HEMLOCK FOREST

You are now in the Bolleswood Natural Area, which has remained largely undisturbed by human activity since the early 1950s. One of its many scientific and educational uses is for research concerning changes in plant and animal populations over time. Due to the rock outcrops, the Bolleswood was unfavorable for agriculture and was

probably never completely deforested. The undulating nature of the forest floor is partly due to trees uprooted and blown over by the 1938 hurricane. At least 100 Hemlocks 100-175 years old were lost in that storm. The majority of the mature trees seen today have become established since then. By 2003, the forest was in the midst of another dramatic change, as most of the once dominant Hemlocks had been killed by the Hemlock Woolly Adelgid, first identified here in 1987. Various hardwoods have established among the dying trees.

7 BUCK LODGE

This rustic stone building is Buck Lodge, a gift from the Buck family to the Arboretum in 1937. The Arboretum and the greater college community use it for recreational gatherings and meetings.

8 OUTDOOR THEATER

You are standing under a White Pine tree which was planted in 1940 to replace a large pine lost to the 1938 hurricane. The original tree is the basis for the Arboretum logo. The open area adjacent to this tree is the Outdoor Theater, also a gift from the Buck family. The theater was renovated during the 2006 pond dredging project, and the rustic arbors flanking the stage were built soon after. The Outdoor Theater was once the scene of College commencement exercises. Currently, it is used for occasional concerts, summer theatrical events, weddings, and picnics.

9 HOLLY, VIBURNUM & ALZALEA

This station is in the Arboretum's native Holly collection. Members of the Holly family are dioecious, meaning that male and female flowers grow on separate plants. This explains why only some plants, the females, have the characteristic berries. Some Holly species are evergreen, like American Holly, and some are deciduous, like Winterberry.

As you ascend the slope toward the Arboretum entrance, you pass through the native Viburnum collection. These ornamental shrubs are very suitable for landscape use, and their attractive fruits also provide important food for wildlife. A little farther up the hill is the Nancy Moss Fine Native Azalea Garden. Established in 1980, the collection contains over a dozen Azaleas native to eastern North America. Visitors can find at least one species in bloom here from May through August.

The Arboretum and its programs are supported by Connecticut College and the generous contributions of Arboretum Association members and friends. For more information about the Arboretum, visit our office in the F.W. Olin Science Center, or call (860) 439-5020, view our website at <http://arboretum.conncoll.edu>.

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The Arboretum is open free to the public every day, dawn to dusk.

To learn about the plant collections, natural areas, and upcoming programs and events, please visit us in Olin Science Center room 103, go to www.arboretum.conncoll.edu, send an email arbor@conncoll.edu or call 860-439-5020.



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Connecticut College Arboretum
270 Mohegan Avenue
New London, CT 06320

www.conncoll.edu