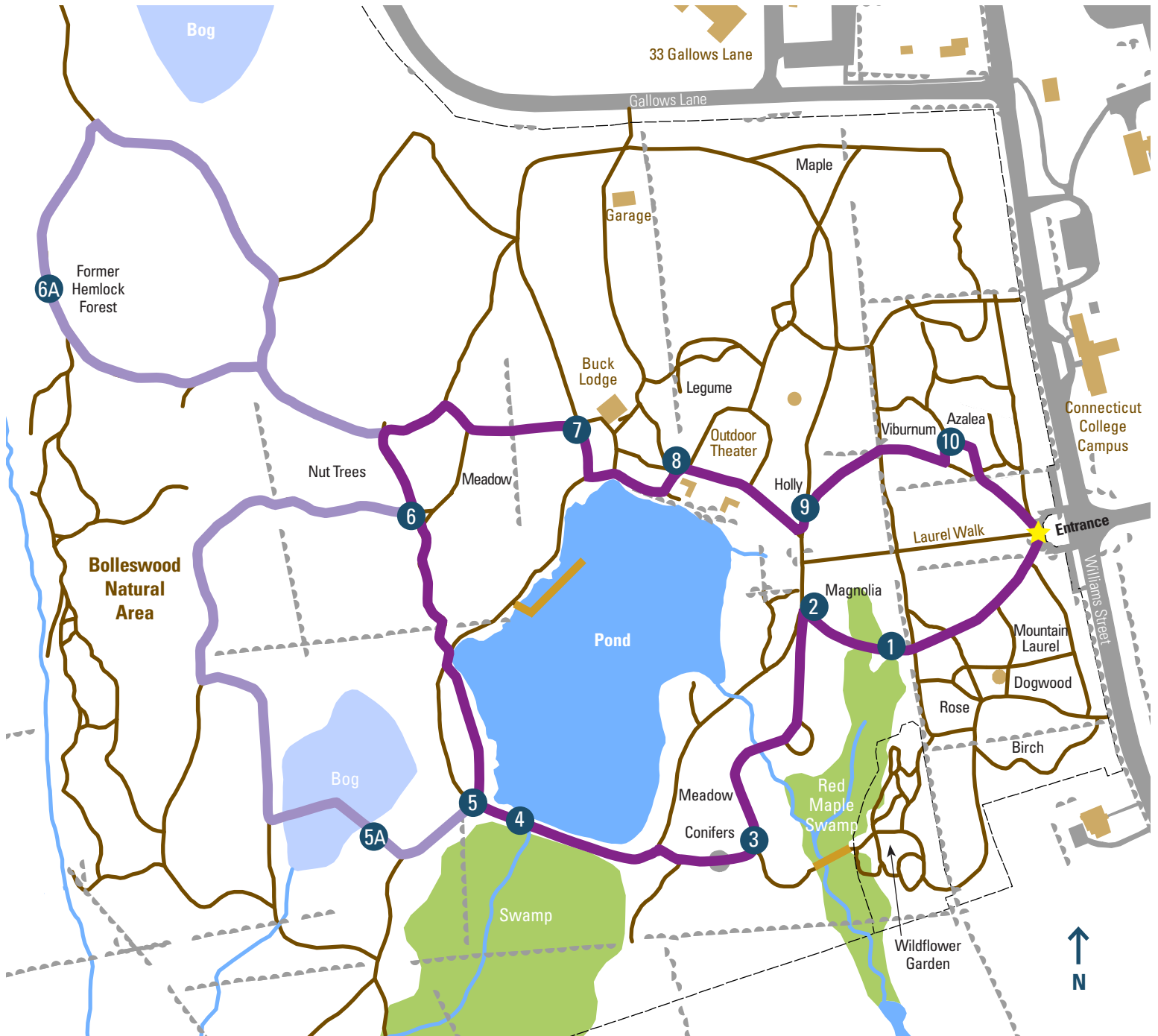


SELF-GUIDED TOUR: Native Plant Collection and Bolleswood Natural Area



LEGEND



Start here



Tour stop



Main trail



Optional trail



Stonewall



Brook



Other path



Boardwalk



**Connecticut
College
Arboretum**

For more information
visit arboretum.conncoll.edu
email arbor@conncoll.edu
call 860-439-5020

WELCOME

This tour, which begins at the notice board just inside the entrance to the Native Plant Collection on Williams Street in New London, 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 one hour to complete at a leisurely pace. In addition, there are two optional trail loops, the first leading to a bog and the second through a former Hemlock forest. Numbered tour stops 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 (F.W. Olin Science Center, room 103). 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 formost 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 roshell azaleas, planted in the 1940s.

3 CONIFER COLLECTION

The next section of trail winds through 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 (cone bearing trees) now featured here include red and white spruce, balsam and fraser fir, hemlock, red cedar, various pines, bald cypress 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. A meadow of native grasses and wildflowers which is most beautiful in late summer is best viewed from the circular wall. Just east of this garden 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 spring.

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 which was only about 3 feet deep. Over the years, this seepage-fed pond slowly filled in with organic matter (dead plants, animals, fish), a natural process in 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 waters. 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 to create deep-water habitat for ecology classes.

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 GLENN DREYER BOG

This tour stop 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. Named to honor Glenn Dreyer, the Charles and Sarah P. Becker '27 Arboretum Director from 1988 to 2018.

As you walk toward the next tour stop, note the rock outcrops to the left, which were quarried during the early part of this century to provide stone for College buildings.

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 late-summer blooming wildflower meadow planted from seed on top of muck dredged from the pond bottom in 1993 and 2006. At the top of the trail are the remnants of an old quarry.

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 (see cover of this brochure). 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

This tour stop 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.

10 ALZALEA

Established in 1978, the Nancy Moss Fine Memorial Native Azalea Collection contains over a dozen different species of deciduous *Rhododendron* shrubs native to eastern North America. Visitors can find at least one species in bloom here from April through August. In June 2018, the American Public Gardens Association recognized this plant collection with national accreditation.