

Zone and Trail Descriptions

The Highlands Botanical Garden consists of a main garden area with three zones emulating natural communities: Woodland, Wetland & Lake, and Old Growth Forest. UNC Herbarium botanists define natural communities as “distinct and reoccurring assemblages of populations of plants, animals, bacteria, and fungi naturally associated with each other and their physical environment.” Natural communities are characterized by their unique blend of vegetation, animals, and other organisms in the context of topography, geological substrate, hydrology, and soil characteristics. Factors like elevation and slope aspect are also important, shaping microclimate. The naturalistic main garden is complemented by a Demonstration Garden zone in the heart of the developed campus, featuring a number of smaller specialty native plant gardens.

The **Old Growth Forest Zone** is a classic Canada Hemlock Forest. These forests occupy gorges, coves, and sheltered ridges in the southern Appalachian mountains. The forest fragment here has never seen the logger's ax and some of the hemlock are >4 ft. in diameter and likely over 350 years old! Canada Hemlock (also known as Eastern Hemlock (*Tsuga canadensis*)) is threatened by an exotic pest, the Hemlock Woolly Adelgid. This pest arrived on the Plateau around 2004 and within a decade killed the majority of hemlocks in the region. Many of the trees in this forest have been treated with an insecticide to prevent them from succumbing to the adelgid, but several gray trunks are a reminder that not every hemlock survived the appetite of the pest.

- **Coker Rhododendron Trail** - begins on Lower Lake Road, near the junction of Upper Lake Trail, and dead-ends at Bowery Road. Moderate to challenging, with steep inclines and roots. Distance: 0.25 mi. one-way.

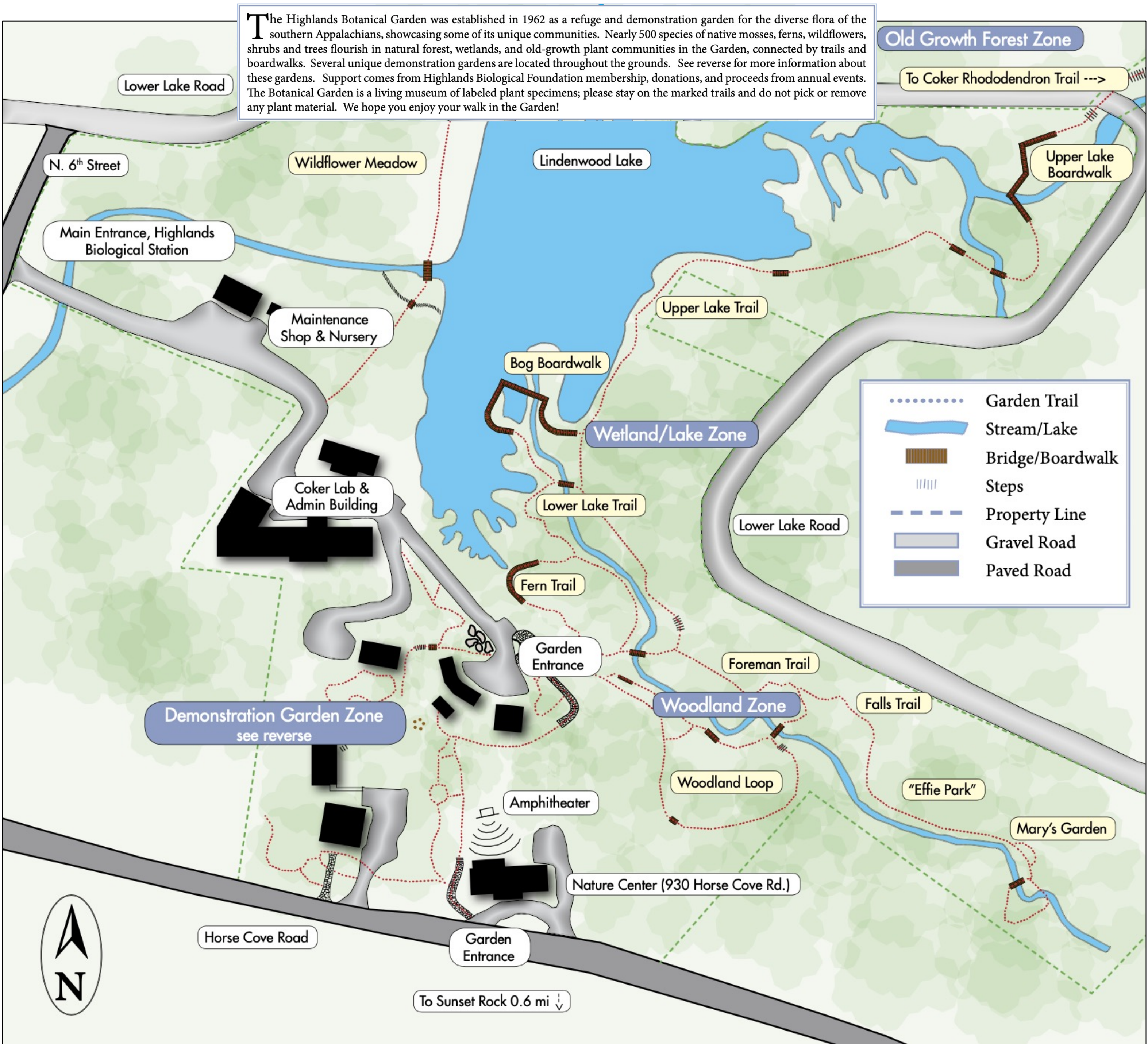


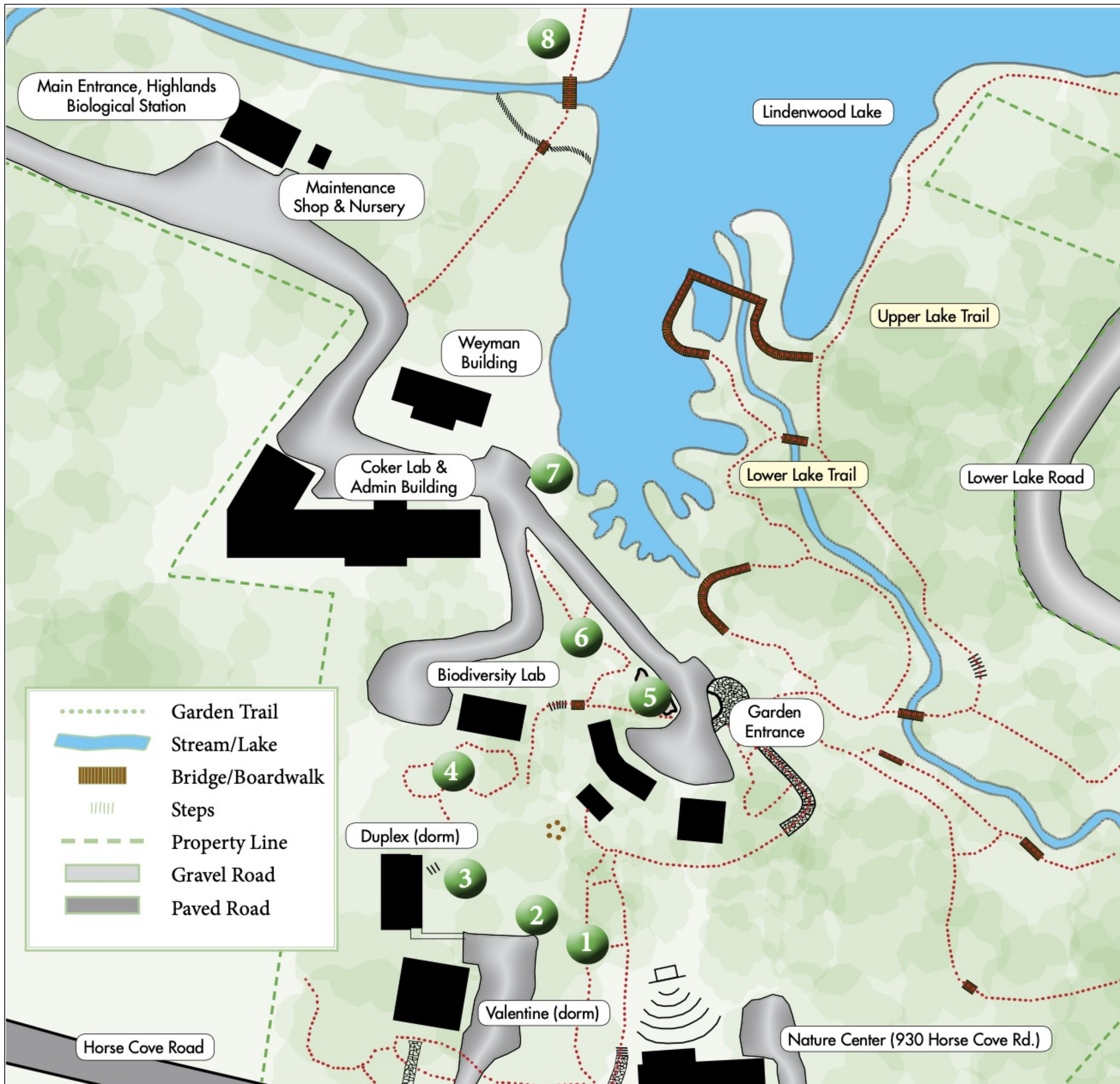
The **Wetland/Lake Zone** of the Garden is an area of moist, shaded woodland and open lake edge, wetland, and bog. Southern Appalachian wetlands have soils thoroughly saturated by water that moves slowly or not at all, allowing colonization by plants tolerating (or requiring) very wet, acidic conditions. Wetlands are dynamic. Some last for years to decades, others hundreds of years, depending on their origin and local conditions. The acidic conditions of wetlands stems from sphagnum moss and other accumulated organic matter. Over time sphagnum acidifies the water and builds up as peat. Eventually a wetland can accumulate so much peat and other organic matter that woody plants can get a root-hold; trees and shrubs then begin to create a canopy, further changing ecological conditions.

- **Fern Trail** - Crosses silty soil hosting wetland species and ferns. Easy, muddy at times. Distance: <0.1 mi.
- **Lindenwood Lake Loop** - A pleasant stroll around the lake. Follows a stream through riparian hardwood forest, crossing boardwalks over southern Appalachian bogs, and through our Pollinator Garden. Walking a short distance (~0.2 mi) on Lower Lake Rd required. Easy. Distance: 0.9 mi.

The **Woodland Zone** is the most extensive of the natural areas in the Highlands Botanical Garden. Much of it is upland woods - at our elevation a blend that has characteristics of Northern Hardwood Forest Community type and the mixed hardwood and conifer Acid Cove Forest community prevalent at mid-elevations in the southern mountains.

- **Woodland Loop** - Winds through a hardwood-dominated forest typical of Highlands. A variety of woodland wildflowers and understory trees and shrubs can be seen. Average, some stairs. Distance: 0.1 mi.
- **Foreman Trail** - Passes through a hemlock-hardwood forest. Average, some stairs. Distance: 0.1 mi.
- **Falls Trail** - Follows a shaded stream and loops past a small cascade at the property border. Some modest inclines, stairs; easy to moderate. Distance: 0.1 mi.





Demonstration Garden Zone

1. Azalea Garden. Sponsored by Highlands Rotary, this garden showcases the spectacular native azaleas of the southern Appalachians. Highlights include the common Flame Azalea and the rare Pinkshell Azalea and Pinxter-flower. May is the best month to see all of them in bloom!

2. Native Grass Garden. Hardy and subtly beautiful in texture and color, many of our native grasses are great choices for the garden. This garden features a selection of the wonderful grass diversity of the southern Appalachians.

3. Homeowner Demonstration Garden. This garden highlights native plants and attractive landscaping methods that you can incorporate into your own yards and gardens at home.

4. Plants of the Cherokee. This garden honors the Cherokee people and the traditional uses of native and in-troduced plants in their daily lives. A gift of the Mountain Garden Club of Highlands, its selection of herbs, shrubs, and trees provides examples of nutritional, craft, ritual, and medicinal plant uses.

5. Rock Outcrop. This garden is designed to bring the unique plant communities of granite dome peaks to you. It features a selection of the hardy plants, given in honor of Caroline Goforth, that are capable of withstanding the extremes of temperature and moisture that characterize rock outcrops of our region.

6. Moss Garden. Bryophytes are ubiquitous but too often unseen. Yet these plants bring a wealth of beauty to the garden. Relaxing in our Moss Garden is a great way to appreciate the textures and green hues of mosses and their relatives. Given in memory of Leila Barnes Cheatham.

7. Pollinator Garden. Over 75 species of native herbs and shrubs have been planted in this garden to attract native bees, flies, moths, and butterflies. Care has been taken to plant both early-, mid-, and late-blooming plants to ensure a 3-season supply of nectar and pollen for our insect friends.

Other Garden Features

NC BIRDING TRAIL, MOUNTAIN REGION. On the Highlands Plateau, an Important Bird Area, the HBS portion of this trail begins at the Nature Center and continues past the amphitheater to the main garden and around the lake.

HIGHLANDS PLATEAU GREENWAY. The HBS campus portion enters from Big Bear Pen Rd. via a connector trail through the Ilges Property. Follows Upper Lake Trail to Coker Rhododendron Trail. Or continue past Nature Center from Sunset Rock and follow the NC Birding Trail.

HBS WILLIAM BARTRAM TRAIL. Showcases na-tive plant species with a connection to the Bartrams, many of them described by William Bartram during his travels through the southeast in the 1770s.



HIGHLANDS
BIOLOGICAL STATION

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The Highlands Botanical Garden is free
and open to the public year-round from
sunrise to sunset.



Part of the Highlands Plateau Greenway &
North Carolina Birding Trail