

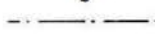


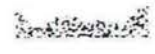
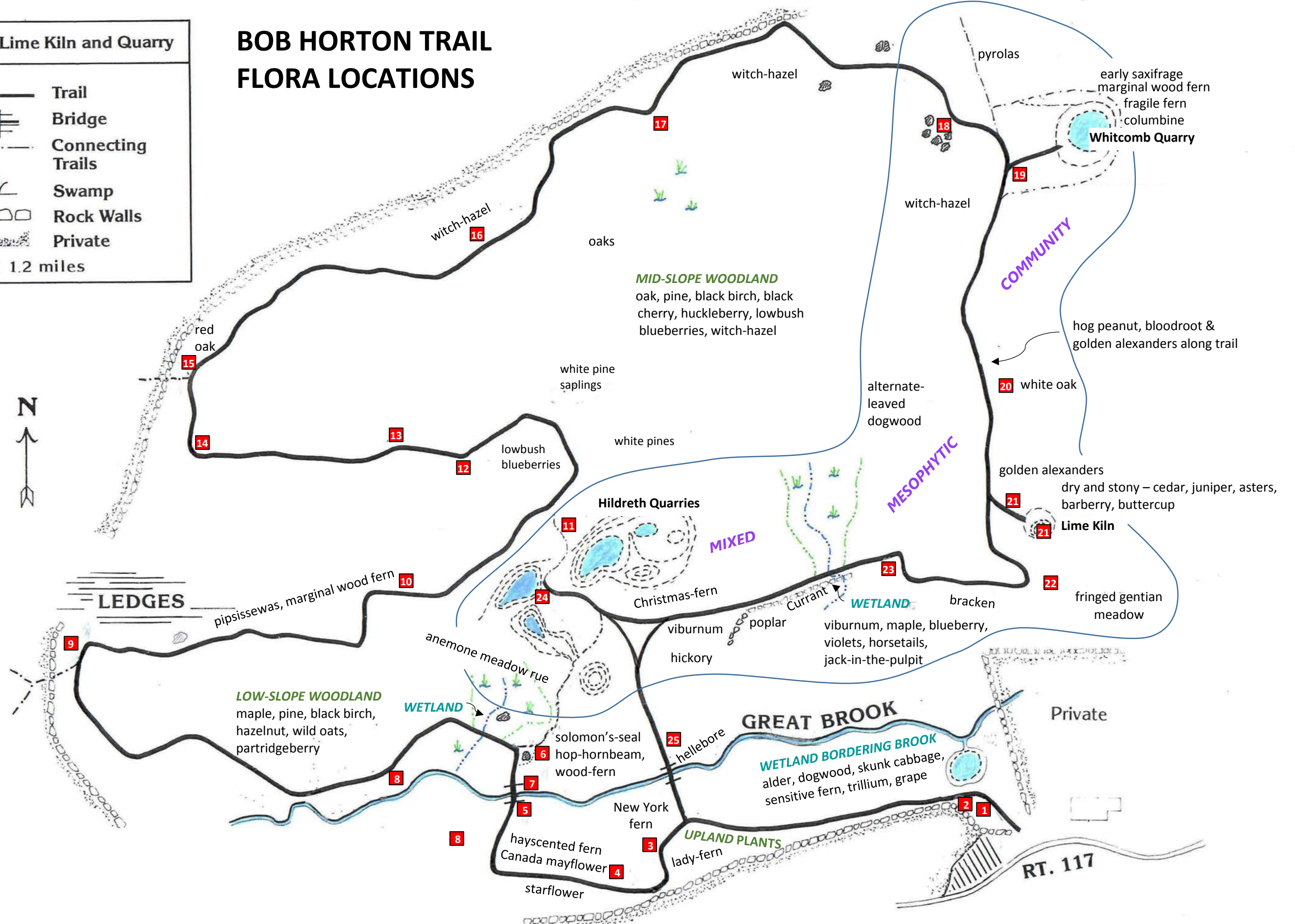


Bolton Lime Kiln and Quarry

-  Trail
-  Bridge
-  Connecting Trails
-  Swamp
-  Rock Walls
-  Private

Trail 1.2 miles

BOB HORTON TRAIL FLORA LOCATIONS



**Bob Horton Trail
Spring Wildflower (Native Plant) Walk
May 19, 2019 at 2:00 PM at the Rattlesnake Hill Trailhead 1**

**Commentary below and during the walk by
Elizabeth Bagdonas, Bedford Conservation Agent and amateur botanist**



The native plants along the Bob Horton Trail have been identified and marked since the 1980s, beginning with a Bolton Garden Club project and later revived by an Eagle Scout and his troop. The most recent effort began in 2016 and is still in process. Some of the summer and fall-blooming plants will be identified and marked later this year. If you are able to walk the trails through summer into fall, you will experience the peak periods of over 100 native plants.

In many ways the upland woods of Rattlesnake Hill are typical of the mixed hardwoods and softwoods found in east-central Massachusetts: red and white oaks, hickories and white pines occur together in a familiar association. Other tree and understory species such as black birch, hop-hornbeam huckleberry and witch-hazel also occur, with herbaceous cover including bloodroot, partridgeberry, ferns, asters and goldenrods. The low-lying stream bank and wetland areas support plant species adapted to saturated soils. Some wetland trees and shrubs are familiar, such as red maple, highbush-blueberry, alder and winterberry. Common herbaceous plants include skunk cabbage, ferns and jack-in-the-pulpit.

Stream bank, low-slope and mid-slope ecological communities exist in close proximity, and the differences in species may be observed easily. Even though these plants are all common throughout Bolton, the Lime Kiln and Quarries is quite unique, and that difference is expressed and revealed by the ground cover,

or herbaceous plants. The presence of marble in the bedrock allowed quarrying for the production of lime. This underlying mineral characteristic is favorable to certain native plants that are not usually found in the more common, acidic soils of our area. These include several ferns, wild columbine, and some rare plants.

At this time of year, the forest floor includes some “spring ephemerals”, plants that come into bloom in a woodland flooded with light as the forest canopy is first developing. These plants provide nectar for early-foraging insects, as part of the interconnected forest ecology. The spring ephemerals include marsh-marigold, nodding trillium, bloodroot, violets, jack-in-the-pulpit, golden alexanders, wood anemone, anemone meadow-rue, wild geranium and wild columbine.

However, there have been changes since the plants were first inventoried in the 1980s, almost 40 years ago. At that time, a lime-loving plant called rattlesnake fern was common along the path to the quarry. By 2004 it had disappeared from the paths, and could be found in only “a few places off-trail”. Other changes noted now is that the spicebush shrubs are all dead, the ashes have succumbed to a regional ash disease, and the gorgeous fringed gentian, once counted in the hundreds, has now completely died out in the wet meadow below the lime kiln. Possible environmental influences could include increasing soil acidity, more heavily used trails, prolific poison-ivy, flower collection, and the gradual dominance of non-native invasive shrub species. These have now been labeled, and include multiflora rose, Morrow’s honeysuckle, winged euonymus, Japanese barberry, Japanese privet and oriental bittersweet. One non-native invasive flowering plant is dame’s rocket at the beginning of the trail. This plant has beautiful pink flowers later in the season, but has invaded the area around the nodding trillium marker.

The Bolton Conservation Trust developed the Bob Horton Trail with the cooperation of the Bolton Conservation Commission to enhance and interpret the fauna, flora, geological and cultural features of this area, and to establish a memorial to Robert G. Horton, who was instrumental in the acquisition of the property. The Trail and accompanying Guide were designed by Neil Jorgensen. Interpretive signs, historical information and graphics are in place along the trail and invite the observer into other times and human ventures of this site.

Many field guides are available. Most will allow you to find the exact species or at least the genus to which the species belongs. More detailed sources are often necessary to identify a species in a large genus, such as goldenrods and asters. The following sources offer a wide range of detail, some with outstanding photographs.

1. Elliman, Ted & New England Wild Flower Society*, Wild Flowers of New England, Timber Press, Inc., 2016
2. Newcomb, Lawrence, Newcomb’s Wildflower Guide, Little, Brown and Company, 1977
3. Jorgensen, Neil, Sierra Club Naturalist’s Guide - Southern New England, Sierra Club Books, San Francisco, 1978
4. Haines, Arthur, Flora Novae Angliae, New England Wild Flower Society, Yale University Press, 2011
5. Richardson, Mark and Jaffe, Dan, Native Plants for New England Gardens, New England Wild Flower Society, Globe Pequot, 2018
6. Thoreau, Henry David, Wild Fruits, Bradley P. Dean (Ed.), W.W. Norton, 2000
7. Go Botany, Native Plant Trust Web Site * The New England Wild Flower Society is now The Native Plant Trust