

Mount Agamenticus and surrounding hills support the largest intact coastal region forest between the New Jersey Pine Barrens and Acadia National Park. The Mount Agamenticus region contributes significantly to the state's biological diversity, hosting one of the greatest concentrations of plant and animal species in Maine, including many rare species. This heritage hike highlights species and habitats that are typical of the region, as well as those that are at the northern edge of their range at Mount Agamenticus. Please remain on trails, as many of these habitats could be impacted by excessive foot traffic.

Getting There

The parking area for this heritage hike is along Mountain Road, approximately 1 mile north of the turn-off for the Mt Agamenticus Road and is closed during the winter.

Please visit mainetrailfinder.org for



Mature eastern hemlock tree.



① Hemlock Forest - 70.701227, 43.227903

Once open farmland, the trailhead is now a cool, closed canopy forest.

Hemlock forest is one of the most common forest types in southern Maine. Though the understory is relatively bare of herbaceous vegetation, hemlock forest provides important habitat for a variety of species, including wintering areas for deer, and nesting habitat for conifer forest specialists such as the Yellow-bellied Flycatcher, Black-throated Green Warbler, Red Crossbill and the Northern Parula. The deep shade cast by hemlock forest can insulate cold water streams from temperature extremes in the summer, benefitting brook trout populations. Eastern hemlock is one of the longest– lived tree species in the eastern U.S.; if undisturbed by pests or windthrow, hemlock trees can live for over 800 years. This hemlock forest is young, and has had a variety of human disturbances including past agricultural land-use and logging. Hemlock here are estimated to be approximately 30-50 years old, although scattered older individuals occur.



Sweet pepperbush (*Clethra alnifolia*) in flower.



Atlantic white cedar (*Chamaecyparis thyoides*) leaves and cones (above) and form (below).



Blandings turtle. Photo: Derek Yorks.

⁽²⁾ **Red maple swamp -** ^{-70.699122, 43.229772}

Southern Maine's most common forested wetland type

Red maple is a highly adaptable tree species, occurring in both upland and wetland habitats. Red maple swamps are forested wetlands dominated by red maple, their understory typically containing winterberry holly (*Ilex verticilla-ta*), tussock sedge (*Carex stricta*) and sensitive fern (*Onoclea sensibilis*). Red maple swamps at Mt. Agamenticus also contain a number of species that are rare in Maine because they are at the northern limit of their range and which are tracked by the Maine Natural Areas Program, including smooth winterberry (*Ilex laevigata*), spicebush (*Lindera benzoin*), and sweet pepperbush (*Clethra alnifolia*). A population of sweet pepperbush is visible along the 'Beaver Loop' side trail. Sweet pepperbush is easily identified in summer by its erect and fragrant raceme of white flowers.

3 Atlantic white cedar swamp - ⁻⁷0.697597, 43.229739

A rare wetland type at the edge of its range

Atlantic white cedar occurs in a handful of isolated locations in southern Maine, mostly in 'kettles' or other depressions near the coast. Atlantic white cedar is at the northern end of its range in Maine, but Atlantic white cedar dominant swamps are rare throughout cedar's range. Atlantic white cedar is shade intolerant and requires periodic disturbances to persist. However, Atlantic white cedar has fairly specific requirements for regeneration, and many cedar dominated forest stands are a result of infrequent wildfires. Atlantic white cedar is the host plant for Hessel's hairstreak, a state endangered butterfly species. At this site most of the Atlantic white cedar trees are roughly 50 years old, with a few older trees more widely scattered. This Atlantic white cedar stand may date back to the establishment of the historic ski area that was nearby.

④ Vernal pools - 70.693814, 43.235216

The Mount Agamenticus region supports one of the highest density areas of vernal pools in the state

Vernal pools are small, ephemeral wetlands that do not support populations of fish. In Maine, several animal species breed almost exclusively in vernal pools including fairy shrimp, wood frogs and yellow and blue spotted salamanders. These species are considered indicators of vernal pool habitat. Vernal pools can occur within other wetland complexes or as isolated depressions. Both of these types of vernal pools are visible here in late April and early May. In some cases where vernal pools completely dry out each year, they are unvegetated. In wetter sites, vernal pools may have peat or muck soils and contain wetland shrubs and forbs. Populations of several rare and threatened species that feed on amphibians in vernal pools, including spotted and Blandings turtles and ribbon snakes, occur in the Mt. Agamenticus region.



Scarlet Tanagers are sensitive to habitat fragmentation during the breeding season, requiring large, unbroken tracks of forest. In Maine, they are typically found in forests with abundant oak trees.

Photo: Mike Fahay



Chestnut oak leaf (above), and chestnut oak woodland (below).

5 Red oak- northern hardwoods forest - 70.689566, 43.236764

Broadleaf forests of southern Maine provide critical habitat for many interior forest species.

Until this point we have seen very little upland broadleaf forest. As we transition out of low areas to dryer slopes, red oak becomes the dominant tree species. This site is best described as *Red Oak– Northern Hardwoods Forest*. Red maple and American beech are also common. American beech has been affected across the northeast by beech bark disease, a combination of a non native scale insect and a fungal infection. This disease top-kills mature stems of beech, and trees will respond by aggressively sprouting from their roots. These shrubby beech 'suckers' can become quite dense and may shade out understory herbs in some situations. Other common understory shrubs and herbs at this site include witch hazel (*Hammamelis virginiana*), New York fern (*Thelypteris novaboracensis*), bracken fern (*Pteridium aquilinum*), huckleberry (*Gaylusaccia baccata*) and Indian cucumber root (*Mediola virginiana*). This natural community type provides nesting habitat for a number of interior forest birds including Black-throated Blue Warbler, Scarlet Tanager and Ovenbird.

6 Second hill - 70.683259, 43.230861

Outliers of a southern habitat type.

Chestnut oak is at the northern limit of its range in York county. Most known areas of chestnut oak in Maine occur near Mt. Agamenticus, and Second Hill. Mt. Agamenticus contains the state's only known location of Chestnut oak woodland, a partially wooded natural community characterized by chestnut oak, white pine and shagbark hickory in the canopy, and a variety of dry site species in the shrub and herbaceous strata including witch hazel, huckleberry, bracken fern, wild-oats (*Danthonia spicata*) and others. Chestnut oak forms a well developed, deep tap root that allows it to persist in well drained sites. Like other species in the 'white oak' group, chestnut oak acorns are low in tannins and highly palatable to wildlife, including a variety of mammal and bird species. Though very rare in Maine, Chestnut oak woodland is relatively common on hills in southern New England.

(7) Hemlock wooly adelgid- 70.692825, 43.227916

Having a temperate climate is not without risks.

Hemlock wooly adelgid is a non-native sap-sucking insect pest native to Asia. Several Heritage Hike descriptions describe the impacts of this nonnative tree pest on Hemlock forest areas. At Mt. Agamenticus, the impacts are becoming increasingly acute, and we are beginning to observe tree mortalities. While young hemlock seedlings and saplings are quickly killed by the wooly adelgid, mature trees may take a decade or more before succumbing to this pest. Tree mortality often occurs when the tree has been weakened by drought and other additive stressors. Over the next twenty years, we are likely to see dramatic decline in hemlock forests in southern and coastal Maine. It is possible that oaks and pines may eventually dominate these areas.

Natural Heritage Hikes is a project of the Maine Natural Areas Program in partnership with the Maine Trail Finder website.

For more Natural Heritage Hikes, please visit www.mainetrailfinder.com.

Funding for this project was provided by the Recreational Trails Program (RTP) an assistance program of the U.S. Department of Transportation's Federal Highway Administration administered by the Maine Bureau of Parks and Lands.

Map sources: Maine Office of GIS, Esri