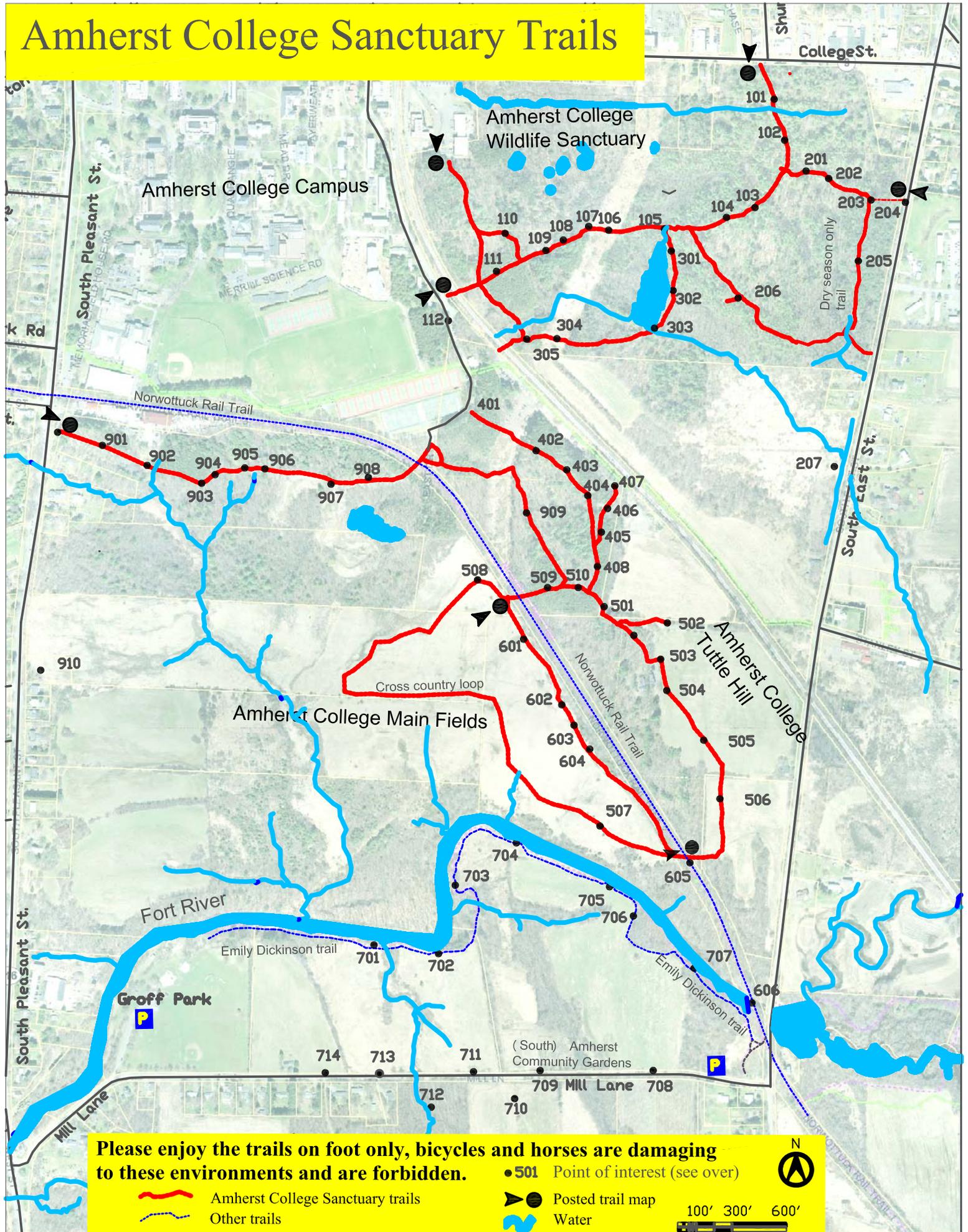


# Amherst College Sanctuary Trails



Please enjoy the trails on foot only, bicycles and horses are damaging to these environments and are forbidden.

- Amherst College Sanctuary trails
- Other trails

- 501 Point of interest (see over)
- Posted trail map
- Water



100' 300' 600'

## Amherst College Wildlife Sanctuary: Selected Points of Interest

**101** – Fearing Brook brings water from the center of Amherst and the vicinity of Five Colleges Inc. on Spring Street through the Sanctuary woods en route to the Fort River.

**105** – One can find many seasonal or vernal pools throughout the College Sanctuary south of College Street and west of South East Street. They typically hold breeding populations of wood frogs, spring peepers, and various salamanders.

Woodpecker excavations in trees throughout the sanctuary woods are evidence of several species at work, including pileated, hairy, and downy woodpeckers. The now extinct ivory-billed woodpecker on display in the *Extinction: The Human Factor* at the Amherst College Museum of Natural History is superficially similar in appearance to the local pileated woodpecker.

**106,304** – This north-south power line crosses a variety of shrubby and open field habitat on College land. One may find the rare Hartford fern on the right-of-way near College Street, and a wide range of birds along much of the power line corridor.

**107** – A patch of “Umbrella tree” magnolias (*Magnolia tripetala*) is located along the main trail west of the power line clearing. They are probably escapes, as the natural range of this species is well to the south.

**108** – A single cork tree (*Phellodendron amurense*) grows next to the main trail a few hundred feet east of the railroad tracks. Cork trees are exotics that are capable of invading woods and edges in our area.

**111,903,904** – Stands of non-native red pines were planted in various

places around the College sanctuary in the 1930's. Many of these are now mature and in declining health, and will eventually be replaced by native species like sugar maple.

**112,401,405** – This stand of red pines near the tennis courts has been infected by *Fomes annosus* root rot, which spreads from tree to tree. College staff have removed many of the dead trees in this vicinity.

**201** – These old trees, including an ancient northern red oak, sit beside a vernal pool at the trail intersection where the trail to the College Street entrance to the Sanctuary woods and the trail to the South East Street entrance diverge.

**202** – Spring wildflowers like this patch of dwarf ginseng (*Panax trifolium*) can be found throughout the Sanctuary woods.

**205** – Near South East Street much of the wooded Sanctuary property floods in spring. The trail loop in this section may be impassable for parts of the year, especially after heavy rains.

This low-lying area was the floor of Lake Hitchcock, a large glacial lake that formed when the ice sheets retreated north from Amherst approximately 15,000 years ago. Fine clay accumulated on the lake bottom making for poor drainage today. *The Connecticut Valley 15,000 years ago* exhibit at the Amherst College Museum of Natural History has a reconstruction of the Amherst region as it appeared when Lake Hitchcock was at its greatest extent.

**206** – In these woods and along nearby forest edges one can find species of trees – butternut, beech, hickory, and the shrub choke cherry – that have populated central Massachusetts since the end of the

most recent ice age. Fossils of the seeds and nuts of these trees are on display in the *Modern Connecticut River* exhibit at the Amherst College Museum of Natural History demonstrating the presence of these species for at least 5,000 years. Most of this region, along with 90% of Massachusetts, was cleared for pasture during the early and mid-1800's, but these forest species have reestablished themselves with more recent change in land use.

**207** – This wet field is good habitat for a wide range of migrating and nesting bird species.

**301-303** – Turtles and frogs frequent this shallow pond in the wooded Amherst College Sanctuary. In winter the pond is known to freeze solid enough for wheeled vehicles to plow.

Sometimes the tracks of animals including muskrat and deer can be seen in the mud adjacent to this pond. Footprints such as these can be preserved and become part of the fossil record. *The Hitchcock Ichthyology Collection* at Amherst College Museum of Natural History exhibits tracks left by dinosaurs that roamed the Amherst area approximately 190 million years ago.

**401** – From here there is a good view to the northwest towards the main quad of Amherst College. At the end of the last glaciation, Amherst was inundated by glacial Lake Hitchcock. As shown in *The Connecticut Valley 15,000 years ago* exhibit at the Amherst College Museum of Natural History, the Amherst College campus was an island in Lake Hitchcock.

**407** – Two tuliptrees (*Liriodendron tulipifera*) can be found at the north end of a side trail where it meets the

## Amherst College Wildlife Sanctuary: Selected Points of Interest

utility road located just west of the railroad line. Tuliptrees or tulip poplars are common in Connecticut and southerly throughout the Appalachians but rarely grow naturally in Massachusetts.

**503,504** - Tuttle Hill is a drumlin, a streamlined north-south elongated hill that formed when glaciers covered the Amherst region. Other ice age features of the local landscape are described in the *Geological Evidence for Glaciation* exhibit at the Amherst College Museum of Natural History.

Looking east from Tuttle Hill are the Pelham Hills with a skyline of flat-topped hill. Over the past 2.5 million years, these hills were eroded as glacial ice flowed south over them.

The *Rifts in Triassic and Early Jurassic* at the Amherst College Museum of Natural History recreates this view as it would have looked 190 million years ago.

**505** – White-tailed deer frequent this open field. As recently as 10,000 years ago the fauna in this area would have been very different. As shown in *The Pleistocene Extinction* at the Amherst College Museum of Natural History the local wildlife population would have included the now-extinct American mastodon.

**507,601-604** – Thirty years ago, this field was in pasture rented to Charles Jacque and his family for their Jersey dairy herd. The dairy operation stopped in the early 1980's. Then, 15 years ago, the Town and the College joined forces with the US Fish & Wildlife Service to clear the field of invasive shrubs to create grassland bird habitat. Recently, Prof. Ethan Clotfelter and others have installed more than 200 tree swallow nest boxes used for faculty and student research

projects.

Looking south from this field, there is a good view of the Holyoke Range.

In the *Geology Defines the Landscape* exhibit at the Amherst College Museum of Natural History major topographic features of this view are related to the underlying bedrock geology. The crest of the range is held up by the resistant volcanic rocks of the approximately 200 million year old Holyoke basalt. The long, gentle south slope of the range (not visible from this side) is the tilted top of the lava flow. The skyline of the Holyoke Range is interrupted where the Holyoke basalt has been offset along a series of faults.

**508** – At the northern edge of the big main field is a wetland that was occupied by a pair of rare Sedge Wrens several years ago.

**605,606** – Crossing the Fort River on College land, the Norwottuck Rail Trail, a 10-mile route that occupies the former Boston and Maine RR bed, runs from Warren Wright Road in Belchertown to Damon Road in Northampton, where it nearly connects with the Northampton Bike Path.

**701,702,711,713** – Through a partnership between Amherst College and the Amherst Conservation Department, this field is kept open as grassland habitat. Downhill from point 701, there is evidence of beaver activity along the Fort River.

**703,707** - The Emily Dickinson Trail, one of the Town's "Literary Trails," follows Amherst College land next to the Fort River. The river next crosses under West Street and runs westerly through Hadley to the Connecticut River.

The Fort River cut its meandering course into sand, silt and mud left behind when glacial Lake Hitchcock drained 13,000 years ago. The process of meander formation is discussed in *The Dynamic Modern Connecticut River* exhibit at the Amherst College Museum of Natural History.

**704** – Around this old field on the Emily Dickinson Trail one can find blue-winged warblers, field sparrows, brown thrashers, eastern bluebirds, and other migrants or nesting species in season.

**709** – Amherst College provides these community garden plots to local residents under the supervision of the Amherst Conservation Department.

**710** – This Amherst College cornfield lies south of Mill Lane and west of South East Street across from the town community gardens.

**712** – A wooded swamp and a tributary of the Fort River occupy Amherst College land just south of Mill Lane.

**901** – This stand of old white ash has largely survived the ubiquitous "ash decline" disease that has killed many ash trees throughout New England.

**910** – This nest box attracts American Kestrels, whose populations have seen a steep decline over the past 20 years.