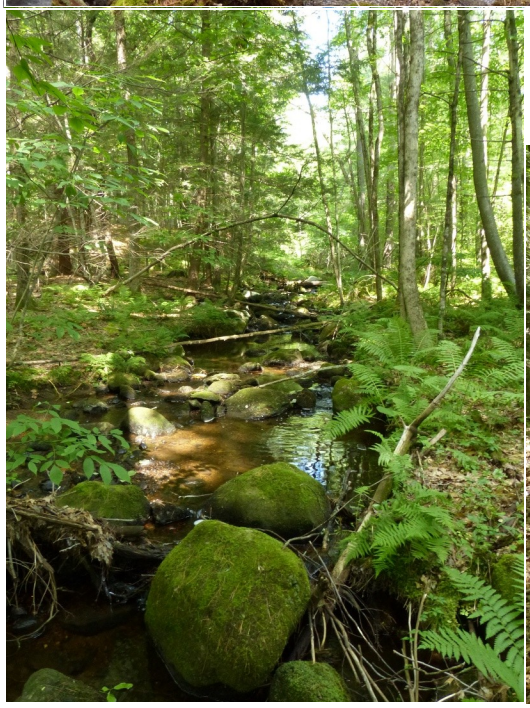
A Natural History of the Robert's Meadow Reservoir Conservation Area



Prepared by Laurie L. Sanders, M.S.
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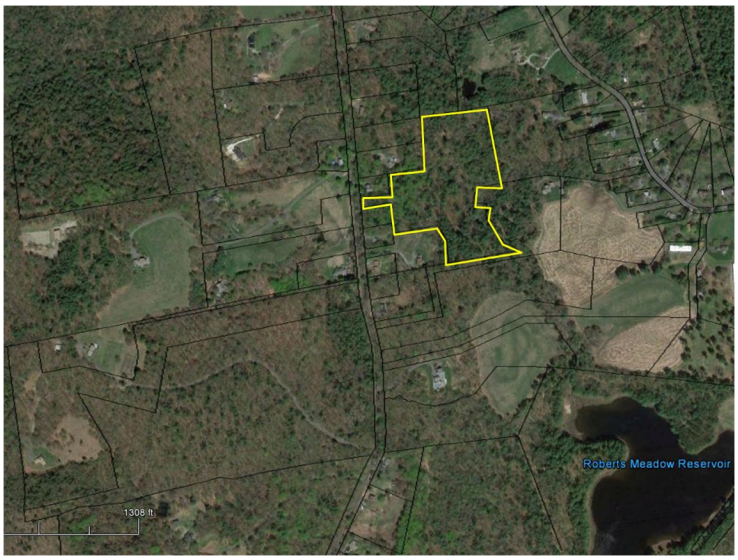
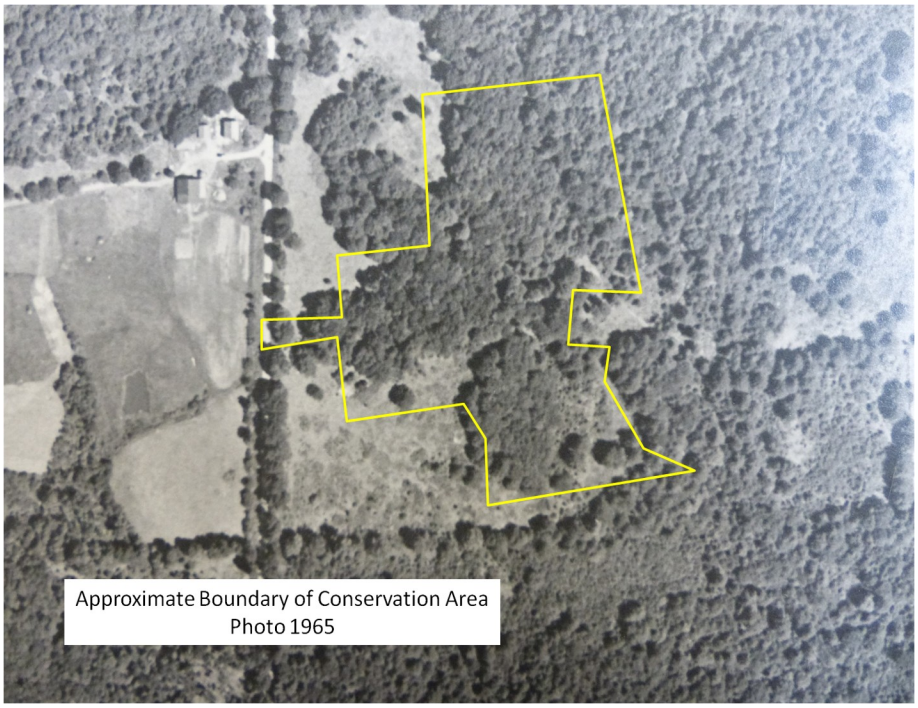
Located in Northampton's northwest corner, this 12.5 acre conservation area was part of a larger parcel and permanently protected in 2004 as a condition of a special permit for new construction. The special permit was required because the proposed development fell within the watershed of Roberts Meadow Reservoir and included a 1,000-foot stretch of Clark Brook, one of the reservoir's important tributaries and designated as an Outstanding Resource Water.



The conservation area, outlined in yellow, includes a tributary to the nearby reservoir, which is now an emergency water supply for the city, but in the late 19th century, was part of Northampton's primary drinking water supply.

This is a nice place to explore. It is entirely wooded, with a mix of uplands, small seeps, and an intermittent stream that flows into Clark Brook. Most of the land has been forested during the last century, but the remnants of an old dam and barbed wire on an abutting property provide evidence of earlier uses. In the 1830s the land in this area was owned by Captain Ayres,



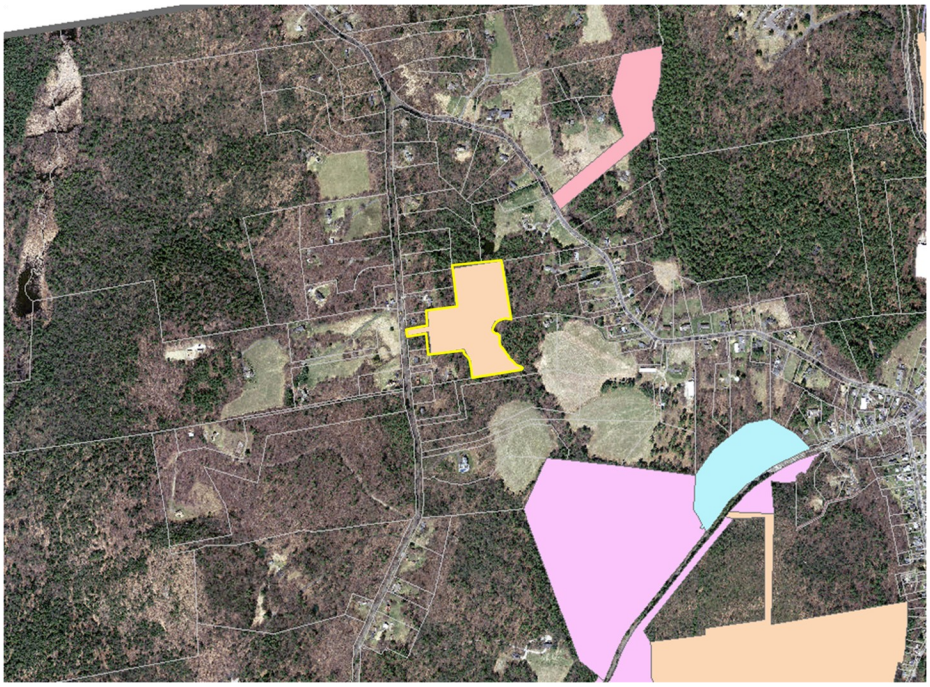
Like so much of Northampton, fifty years ago this conservation area was a mix of pasture and forest. Today it is entirely forested.

who probably had a mix of sheep, cattle and other livestock, just like his neighbor Clark Dickinson, who owned the farm on Audubon Road. The wetland on the former Dickinson farm is where Clark Brook originates and how it earned its name.

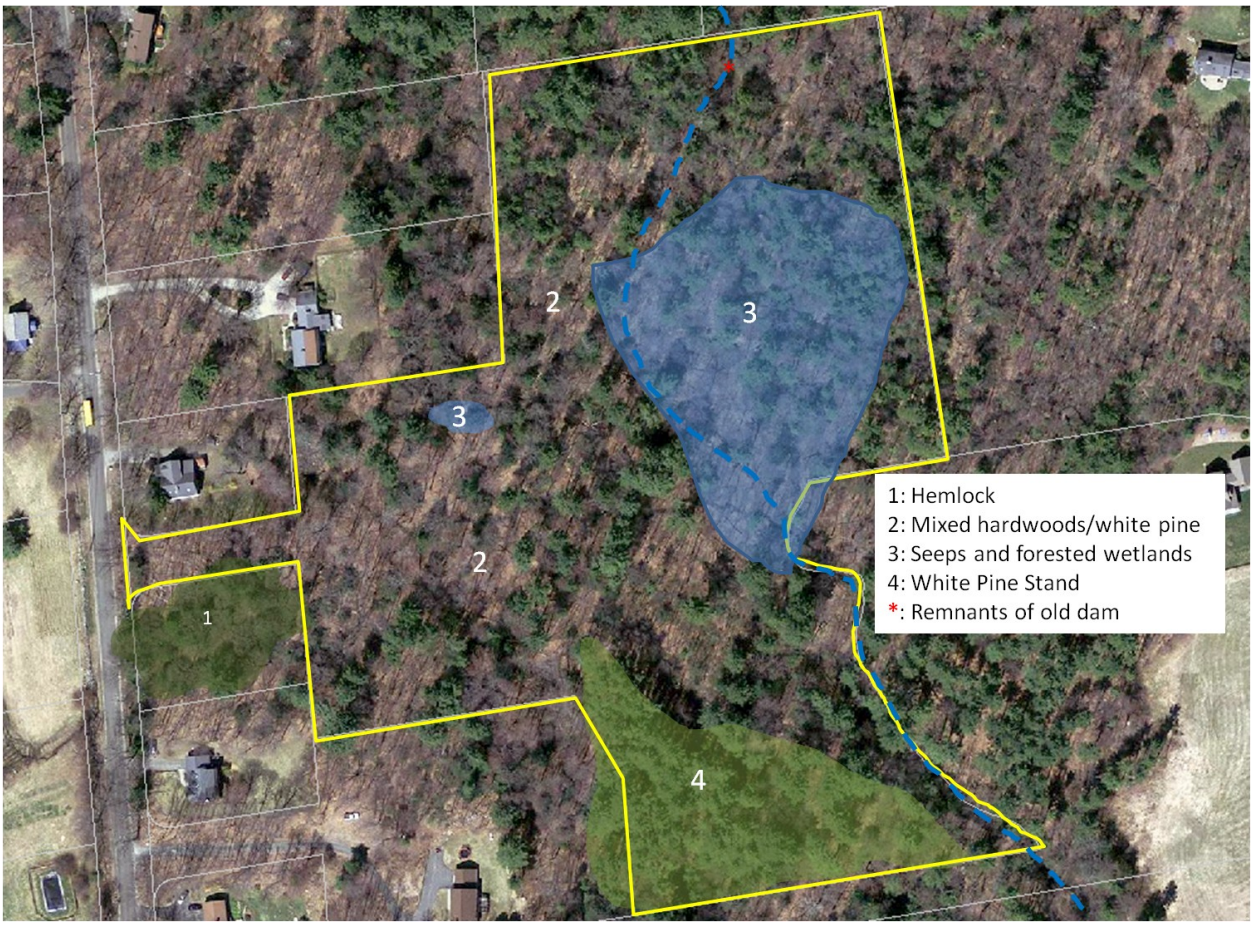
From Kennedy Road, all of the land slopes toward the Clark Brook, and begins to fall away almost as soon as you leave the roadside edge and enter the property. There is no path, but the forest is fairly open and you can easily follow the bank of the intermittent stream. The stream has fairly steep banks, but then flattens out. Along this more level plateau is a broad section of woods, with large pines and good-sized hardwoods. Not much further below is Clark Brook, which in this stretch is a lovely, little meandering stream with mossy banks and a rocky channel. Walking here, it is easy to feel like you're much further away from civilization than you are.

Vegetations Patterns

There is no easy parking at this site, so I parked two houses to the north, where there is a small pull-off. (A new invasion of Japanese knotweed has taken hold here, and the understory is covered with myrtle. Asiatic bittersweet vines are also growing here, curling around the old fence posts with barbed wire.)



Although isolated, this conservation area is not far from a private conservation restriction (northeast) and other city-owned land, including the watershed land (magenta), Roberts Hill Conservation Area (orange), and the Musante Beach Swimming Area (blue). It is also near hundreds of acres of undeveloped land to the west.



Walking back to the conservation area, the access point is an unmarked, 60-foot wide forested strip between two house lots. Along the roadside edge, the forest is a mix of sugar maple, red oak, black cherry, black birch, ash and hickory, while the understory is mostly bracken fern and Virginia creeper. There are also some invasive plants—including a few stems of Asiatic bittersweet, a couple bushes of Morrow's honeysuckle and a tiny patch of myrtle.

The intermittent stream, which begins in the forested hills to the west and flows down through fields, is piped under the road and crosses private land before entering the conservation land. Just after the road the stream is surrounded by a dense stand of hemlocks (now dying because of woolly adelgid). Below them, the understory is mostly free of ground cover, but the banks of the stream

Not far from the access into the wetland, the steep slope above the intermittent stream has been riprapped.

The conservation slopes gently away from the road. Grape vines grow in the foreground. There is little vegetation below the canopy.

The slopes of the intermittent stream are frequently covered with a variety of ferns.

As the elevation drops, the stream has cut down into the till layers below, exposing the glacially rounded cobbles.

The land flattens out and the forest opens up. It is easy to walk through the forest as there are few shrubs.

Hayscented fern grows in abundance in an area of the forest that was timbered during the last 25 years.

Glacial till covers this entire conservation area.

support a variety of ferns (Christmas fern, New York fern, silvery spleenwort, interrupted fern and spinulose wood fern).

As the conservation area opens up, the forest shifts to predominantly sugar maple. Carpets of hayscented fern, New York fern, and interrupted fern cover the ground. There are also a few winged euonymus growing in this section. Close by, along the border with the abutting property, is a small seep that supports a mix of wetland-loving species (spicebush, foamflower, violets, various grasses and ferns). Unfortunately it also has some multiflora rose too.

As the topography flattens out, the channel of the intermittent stream follows a gentler grade and the mix of species in the canopy shifts to one dominated by black birch and white pine, but with smaller amounts of red maple, yellow birch, gray birch, and hemlock. Canada mayflower, partridgeberry and mountain laurel are all abundant, as is New York fern and maple-leaved viburnum. Cut stumps and resprouts document that this portion of the forest was logged in the not-too-distant past. Near the property's southern border is a plateau with a stand of large white pine. Goldthread, with its delicate orange roots, grows here, as does an abundance of Canada mayflower and partridgeberry.

Just below the plateau is Clark Brook. Following the brook to the property's southern boundary, the canopy opens up and unfortunately (but not unexpectedly) multiflora rose, Japanese barberry and Asiatic bittersweet have all gained a foothold. They are not common here yet, but will probably continue to increase and spread unless they're controlled.

Heading upstream, however, most of the non-natives drop out, and plant diversity increases. The rich, wet soils along the stream support several kinds of ferns (lady, cinnamon, sensitive, spinulose wood), wildflowers (enchanter's nightshade, touch-me-not, foamflower, wood anemone, honewort, toothwort, hellebore, wild sarsaparilla, poison ivy, hog peanut, etc), as well as spicebush and leatherwood (uncommon in Northampton). At the other end of the conservation area, on the east side of the brook, the forested wetland is dominated by hemlock.

Beyond the boundary of the conservation area is a large hayfield and pasture.

Aside from its aesthetics and the brook's good water quality, what makes this conservation area interesting is that its stony, till soils are fairly rich (i.e. more fertile and less acidic) than in many parts of Northampton. The soil's fertility makes a big difference in terms of plant diversity, so in addition to leatherwood, there are even a few stems of maidenhair fern and black ash.

Wildlife & Rare Species

Because of the extensive amount of woods nearby and the presence of the Clark Brook, this site is used by a wide variety of wildlife, especially species that depend on forests—from bobcats and bears to scarlet tanagers and wood thrushes. It does not, however, fall within the estimated habitat for rare species.

Recommendations

Like many of the other small conservation areas in Northampton, this one will never become a destination for many people, and given the brook's water quality, it probably shouldn't. A sign should be installed to alert people of its conservation status, and with a small group of volunteers, the invasive plants could be controlled in less than a day's work with simple hand-pulling.

Knee-high (plus!) cinnamon fern grows in the wet soils bordering the brook.

Leaving the site "unimproved" is a good option. Not every piece of conservation land has to have trails and parking; this one could easily be left alone as a place for wildlife and to perform the host of ecological services it naturally provides.

A hemlock dominated swamp forest is found near the property's northeastern edge. What species will replace these hemlocks when they die is uncertain.

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