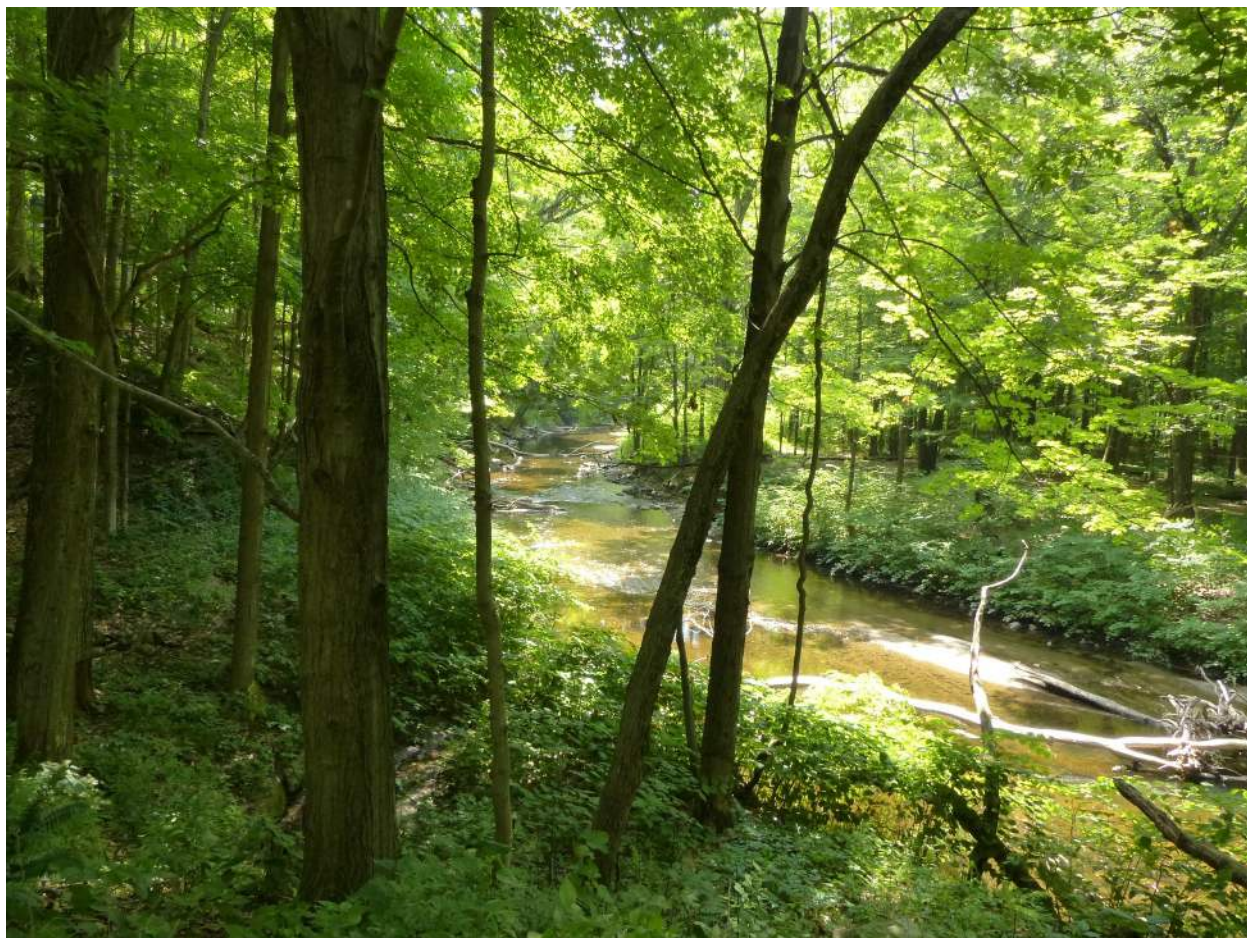


A Natural History of the Button Factory Conservation Area



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Button Factory Conservation Area



The Button Factory Conservation Area

From the edge of Main Street in Leeds, this small piece of conservation land along the Mill River currently looks like an impenetrable tangle—a neglected, overgrown lot dominated by invasive plants in the understory and a canopy of black locust and cottonwood. But it's also true that this is a site worth investing some energy in—not so much for its ecological values (although they exist), but more for its aesthetic possibilities, recreation potential, and its relevance to the history of Leeds.

In addition, this site is interesting geologically. If we could travel back in time and visit this spot 14,000 years ago (Figure 1), we would be standing near the rushing, icy gray waters of a much larger Mill River, just upstream from where it poured into Glacial Lake Hitchcock. Looking south, we would have seen an embayment of the lake, with a few small nearby islands (Baker Hill, High Street in Florence, Florence Road) and in the distance, the much larger, linear islands that we now call the Mount Tom and Holyoke Ranges. When Glacial Lake Hitchcock receded, the Mill River continued to flow through the narrow valley that contains Leeds' village center. Over time, the river moved back and forth, reworking and



As seen from the street edge....not too inviting!

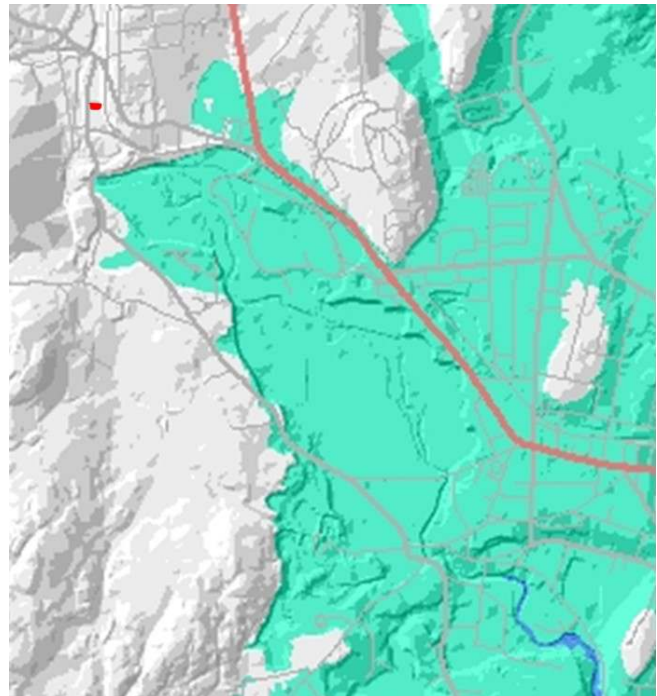


Figure 1. The tiny red dot is the location of the conservation area relative to the position of Glacial Lake Hitchcock. The white areas are either the surrounding uplands or islands within the lake. The two closest islands that would have been visible from the conservation area would be the drumlins that form the center of Florence and Baker Hill, seen here in the southeast corner.

depositing the material left behind by the glacier and leaving behind a river terrace that now underlies most of this conservation area.

Human History

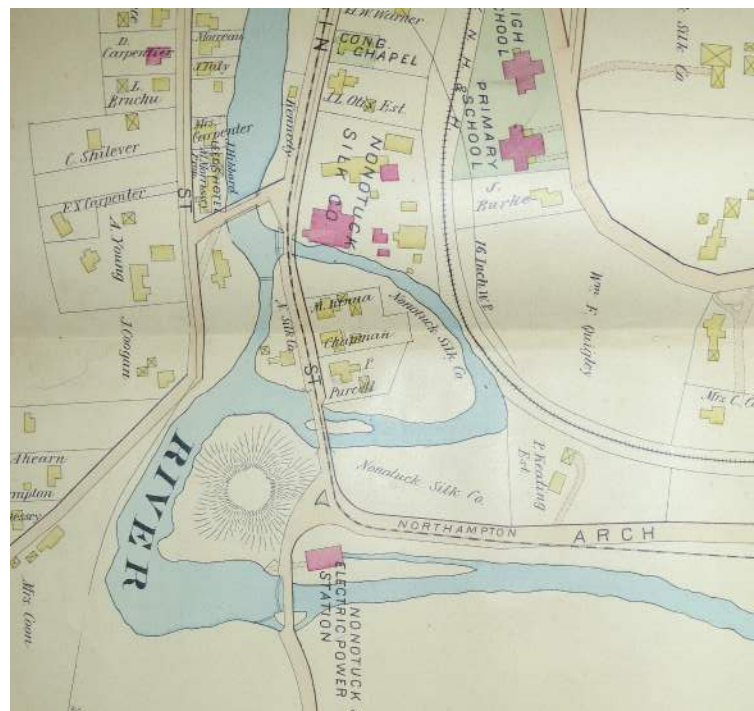
After the last glacial period, significant changes to this site didn't take place until the 19th century and once they began, they didn't stop for more than a century. The first major alteration to the land occurred in 1812. Just three years after building their first woolen mill, the Shepherd family built a second woolen mill on the land that includes this conservation area and the abutting parcel. After the Shepherd's company failed, another wool company took over the operations. When that one failed in 1857, the land and buildings were purchased by Alfred P. Critchlow, who used



The conservation area, outlined in yellow, abuts a small property across the river under conservation restriction and the bike trail (purple). It is also in close proximity to two conservation areas (Leeds Memorial and Robert's Hill) and Look Park.



Photo by Robert Emrick.
Courtesy of Forbes Library.



The 1895 Atlas of Northampton showed the location of the buildings that were on the site, which was then owned by the Nonotuck Silk Mill. At least six are on the current conservation area. The property is opposite the Hotel Bridge and west of the primary school.



A view of the Button Shop, courtesy of Forbes Library Collection. The date of this postcard is unknown so this may be the brick mill that existed from 1871-1874, or the one that was built after the Mill River Disaster. Based on the height of the stack and size of the trees in the rear view, it appears that this may be the mill that was built after the disaster. Compare with the images below.



- (A) Warner's button mill was completely destroyed by the flood. Note the stairway in the back leading to the rail line. This is how many workers escaped. *Courtesy of Digital Commonwealth: <https://www.digitalcommonwealth.org/search/commonwealth:c534g3182>*
- (B) Another view of the button mill, photographed from the rail line, a little ways downstream. *Courtesy of Digital Commonwealth: <https://www.digitalcommonwealth.org/search/commonwealth:c534g3271>*

the building to manufacture buttons. Critchlow had experimented with horn and mountain laurel buttons, but at this site he chose a new material-- palm nuts. The nuts were shipped from South America and here at the factory, they were cut, carved and dyed to make buttons. Critchlow was the first in the United States to use them, and his business flourished.

After the all-wood construction factory burned in 1870, the new owner George Warner (who was also Critchlow's son-in-law) built a new one in 1871, this time out of brick. Three years later it was completely destroyed by the 1874 flood.

Although Warner re-built the factory the next year, his operation never really recovered and by 1895, the property had been sold

to the Nonotuck Silk Company (later the Champlain Silk Mill), which operated until 1930. At that time, this part of the property included the flume, wheelpit, a chimney, boiling room, filling machines, a drying room, and a machinery storage area (O'Reilly, Talbot & Okun reports, 9/2010 and 10/2010).



By the 1950s most of the buildings, as seen in this aerial image, had been knocked down.



Today rock walls, old fill and other debris are the lasting physical evidence of the decades of manufacturing that took place on this site.

After 1940, the property changed hands five different times and sometime between 1939 and 1950, most of the old buildings were razed. In 1982, the Tacy family purchased the lot that included this land as well as the abutting property. During their tenure, they filled in part of the raceway, but they also let most of the land that now forms the conservation area grow up into trees and brush. In 2010, the Tacy family divided the original parcel and donated this 1.37 acre portion to the City as conservation land. The other property (175 Main Street) is now owned by Alternative Recycling Systems.



Alternative Recycling Systems abuts the conservation area.

Prior to accepting the property, the City had Phase I and Phase II environmental site assessments conducted. Soils and groundwater testing did not reveal any hazardous materials on the site, but noted the likelihood of coal spoils and building debris in the fill on the site.



Vegetation Patterns Today

When viewed as a whole, this property is one where disturbance is a primary factor in determining the plants that grow here—not only in the uplands, but also along the river edge. Throughout the site, the soils have been altered repeatedly—either by people or the river itself. As a result, most of the plants are species that do well in disturbed soils and many of them are non-native, invasive species (Eiseman, 2012.).



Two views of the property. *Top:* From the bridge in the early spring, the site's industrial heritage is obvious. *Bottom:* The energy and dynamics of the river influence the site's vegetation patterns.

Uplands

Along Main Street, beyond the clone of staghorn sumac, the forest includes a mix of tree species. Black locust is the most common component in the canopy, but other trees include elm, box elder, sugar maple, Norway maple, cottonwood, black cherry, black birch, white pine, a large catalpa and closer to the river, a very large butternut.

Below the canopy, the understory is a mix of native and non-native species, with the non-natives being the most common. They include multiflora rose, Asiatic bittersweet, Morrow's honeysuckle, winged euonymus, privet, barberry, garlic mustard, celandine, Dame's rocket and winter creeper. Native plant species include poison ivy, goldenrod, jack-in-the-pulpit, enchanter's nightshade, asters, grape, and Virginia creeper.



Clockwise: A tangle of barberry grows below the canopy; butternut; Dame's Rocket; a twisting, tangle of bittersweet vines grow up the trunks of black locust.

On the eastern part of the property, there is a small seep near an enormous red oak, then a steep slope. At the top, the property adjoins the former rail line, now bike trail. The slope is underlain by till and is covered by red oak and black locust.

Riverbank and Margin

Although much of the riverbank is steep, there is fairly easy access at the eastern end of the property near the small seep/spring that is surrounded by old stonework. Christmas fern and spinulose wood fern grow in this section, and there are also patches of scouring rush, hellebore, golden alexanders, and along the sandy shoreline, swaths of sedges (*Carex torta*). There is also a sizeable (and growing) patch of Japanese knotweed.



Two views looking downriver, at different types of year.

A lot of the bank has been filled in over the years, and there is a section of old stonework not far from the dam. This is a pretty stretch, as the river curves and its bottom is a mix of sand and cobbles. On the other side of the river is an open floodplain forest that is under private conservation restriction. The latter includes a mix of black locust, sugar maple, yellow birch and red oak. Several large sycamores grow there too, as well as some good sized patches of Japanese knotweed.

Wildlife

Although this property has such a long history of alteration, it is connected to long narrow strips of forested land along the river and is not far from other protected areas (Roberts Hill, Look Park, Broughton's Meadow). Because of this, wildlife



Japanese knotweed crowds the shoreline. In foreground, *Carex torta*.

sign is easy to find. On my outings, I found evidence of deer, rabbits and beavers. The beavers had even clambered up the steep bank and chewed through several bitter-sweet vines on the old river terrace/mill site. Undoubtedly it is used by many other species

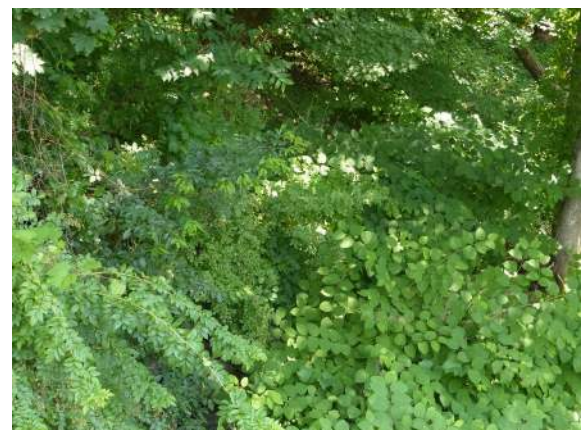


Clockwise: Woodpecker holes, probably from a pileated, in a catalpa on the property; raccoon tracks along the sandy shoreline; beaver cutting on a large oak near the seep; a beaver-chewed Asiatic bitter-sweet vine. Go beavers!

(mink, otter, etc.) and the river itself supports a wide variety of aquatic animals, from fish and caddisflies to stoneflies and crayfish.

Recommendations

This property is already a stop on the soon-to-be-published historical walking trail for Leeds, and its location between the bike trail and Hotel Bridge makes it an ideal link for a future trail. Although non-native species are abundant, many of them could be knocked back to make this area (or at least portions of it) more accessible and usable to the public. A bench could be installed overlooking the river and a small kiosk could be added to explain the property's



A mix of Japanese knotweed, multiflora rose, privet and Norway maple—as seen from the bridge. Yikes.

history and show photos of the button factory, before and after the flood, as well as an image of the buttons themselves. The property could also be renamed the Button Factory Conservation Area, which was one of the 19th century businesses that helped define Leeds as a manufacturing center. The biggest challenge will undoubtedly be controlling the Japanese Knotweed and this is where a comprehensive strategy for controlling invasive plants along the Mill River Greenway will be useful.



The old railroad line, now bike path, is located above the property.

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