Bike Infrastructure Makes Belmont Safer

By Jeff Roth

Few Belmont residents use bikes to get around this small town of only 4.7 square miles, although most live hardly a mile from schools, recreation facilities, stores, transit stations, and restaurants. About 8.2% of Cambridge residents commute regularly by bike, but Belmont’s car-centered infrastructure likely is closer to the state average of 0.9%. Given that short, local trips are responsible for 60% of automobile pollution, how can we encourage car-free travel?

Benefits of Walking and Cycling

There are many benefits to expanding cycling and walking options in Belmont. People who cycle regularly for transportation and fitness have overall health comparable to people 10 years younger. People who walk and bike are also twice as likely to shop at local businesses as car users. A readily quantifiable benefit from cycling and walking is reduced parking costs. On-street surface car parking costs the public an average of $400 per space annually. Bicycle racks are so cheap that cities would profit even if they paid $5 to each person parking a bike there.

Accommodating bicycles is cheaper and easier to fit into compactly developed areas like Belmont than adding car spaces. The only way to provide new transportation capacity affordably in small communities like ours is to create safe and connected cycling and walking infrastructure, at least for those physically capable of cycling or walking some distance.

Electric bicycles are growing in popularity because they’ve gotten cheaper. Unlike mopeds and motorcycles, e-bikes can’t go faster than an unassisted rider on a regular bike, and e-bikes also replace substantially more car trips at a more substantial rate than regular bicycles. E-bikes make up more than 10% of sales at Belmont Wheelworks, the top bicycle store in Massachusetts.

Trends show people want to bike to more places. In 2013, a Belmont Community Path Advisory Committee (CPAC) survey reported that 89% of residents were in favor of an off-road community path in town for cycling and walking. During the COVID-19 pandemic, trail use in the United States tripled: cycling and walking proved to be popular outdoor activities conducive to social distancing.

A typical e-bike.
Traffic calming policy

Traffic calming reduces vehicle speeds and increases driver attentiveness, making streets and neighborhoods safer and more appealing, and improving safety for motor vehicles, pedestrians, and bicyclists. The theory behind traffic calming is that building or retrofitting roadways with certain features induces drivers to slow down and pay closer attention to their surroundings.

Belmont adopted a traffic-calming policy in 2020 that is designed to address concerns about traffic safety such as cut-through traffic and high motor-vehicle speeds.

Residents can initiate a request for their neighborhoods by filling out the Traffic Calming Request Form online, available at the end of the Traffic Calming Policy at www.belmont-ma.gov/transportation-advisory-committee. The town staff will evaluate the request. If it meets eligibility requirements, the Transportation Advisory Committee (TAC) holds a public meeting to discuss the needs assessment and possible traffic-calming measures, and then may recommend measures to the Select Board, which has the final say.

In the lead-up to the pandemic, the TAC received three traffic-calming requests:

- Residents on Village Hill Road requested restrictions for cut-through car traffic.
- Rutledge Road residents also asked for cut-through traffic restrictions.
- Residents on Somerset Street and Wellington Lane asked for traffic calming to address car-traffic volume and speed as a way to reduce cut-through traffic.

Once traffic data were collected, Village Hill Road and Rutledge Road requests met the eligibility criteria based on car volume and speed data. Turn-restriction signs for car traffic were recommended for installation after the pandemic ends.

The Somerset Street and Wellington Lane request is still under consideration pending further traffic studies.

The town has since received many more traffic calming requests. These will likely be addressed in the fall when traffic may have returned to pre-pandemic levels, and traffic studies can document the full burden of traffic on streets.

Winter/Concord/Mill roundabouts

Long-standing safety and congestion issues have persisted around the intersections of Winter Street, Concord Avenue, and Mill Street. The town hired the consulting firm VHB which presented potential redesigns to the Belmont Traffic Advisory Committee (the former iteration of the current TAC) in 2017. The current conceptual design under discussion by the TAC and Belmont residents was updated by VHB in 2021.

The TAC convened a public meeting in January on this draft design which includes a pair of roundabouts in the area. The design could include a 10-foot wide, shared use path extending between the two roundabouts for walking and cycling. The design also could incorporate sidewalks on the north side between Concord Avenue and Winter Street to improve connections to the Rock Meadow trail system.

Construction funding is the major challenge for this plan. The town wishes to apply for a MassWorks grant funding. However, to qualify for MassWorks funding, a project needs to be ready for construction within the current fiscal year, which is unlikely.

The project also calls for reducing cut-through traffic on Partridge Lane by closing it to through-car traffic while still admitting pedestrians and bicyclists. The residents expressed general support for this concept.

After the town gathers the necessary information for further consideration and development of the plan, the TAC will hold another public meeting to discuss the concept as it appears overlaid on the map.

Concord Avenue Re-stripping Proposal

The TAC has been discussing parking-protected bicycle lanes on the eastern segments of Concord Avenue from Leonard Street to the Cambridge border. This concept originated with and has been endorsed by both the High School Traffic Working Group and the Belmont Middle/High School Building Committee.

Protected bicycle lanes (PBLs) lower crash rates by a factor of two to 23 times. Locations with high cycling usage, as in Cambridge, often rely on PBLs. “Dooring” crashes, which account for 20% of bike/car crashes, disappear almost completely with PBLs.

Belmonters’ great enthusiasm for the PBL is understandable: it allows easy access to the new school building as well as Cambridge’s extensive network of bike lanes. Other residents...
are excited that the plan’s traffic calming on Concord Avenue will result in slower and more attentive driving, thus increasing safety for all concerned. However, some residents and business owners have voiced concern about the proposal. Discussions are continuing on this topic.

Parking with bicycle lanes
When bicycle lanes were painted in Belmont Center a few years ago, the lanes were placed to the left of the metered, on-street parking spaces on Leonard Street.

Because cyclists are a minority, the more signs and symbols that train drivers to look for cyclists, the better and safer the roads become.

Bicycle lanes usually have a solid white line separating travel lanes from bicycle lanes, but there is no set standard for marking off bicycle lanes from on-street parking lanes. In Belmont Center, discontinuous “×” lines were used, which made it hard for drivers to see the edge of the bicycle lane when parking. Cars could block the bicycle lanes and make them less safe.

In 2019, TAC made a recommendation to follow the National Association of City Transportation Officials standard and paint solid lines between bicycle lanes and on-street parking spaces. This simple approach could be adopted in other areas with bicycle lanes such as Trapelo Road through Waverley Square.

Shared-lane markings (sharrows)
Other appealing features of cycling improvements include their low cost and simplicity. Shared-lane markings, or “sharrows,” are painted bike markings on streets where there is no room for a formal bicycle lane. Belmont first painted sharrows in 2018, on Concord Avenue, Lexington Street, Winter Street, and Brighton Street. Sections of Concord Avenue were repainted this spring, and there are plans to repaint the rest of these roads this year.

While sharrows don’t alter a road, they raise drivers’ (and pedestrians’) awareness of cyclists. Because cyclists are a minority, the more signs

Belmont Community Path Moves Forward

By Sara Smith, Jarrod Goentzel, and Eric Batcho

Momentum is picking up again for the Belmont Community Path, a critical two-mile link in the Mass Central Rail Trail (MCRT), a safe, off-road path that will ultimately link communities between Boston and Northampton. The 25% design is nearing completion, and the town has appropriated funds to begin securing the right of way. Both of these steps move Belmont closer to obtaining state and federal construction funds and bringing the path to fruition.

Community path 25% design phase
The town’s contractor, Nitsch Engineering, will complete the 25% design of Phase 1 in August or September. Phase 1 is the section of the path from Brighton Street to the Clark Street bridge just beyond Belmont Center, and includes a pedestrian underpass between the Winn Brook neighborhood and the new 7-12 school.

Nitsch states that it is incorporating comments received from abutters, the town, and the town’s Community Path Project Committee (CPPC) on the draft 25% design submitted in July 2020. Nitsch has also been gathering information about trees and utility locations along the tracks and is set to conduct the borings required to complete the Alexander Avenue underpass and retaining wall design, pending the availability of Keolis flaggers. Nitsch plans to submit the 25% design to the Massachusetts Department of Transportation (MassDOT) by September. MassDOT will hold a public hearing on the design shortly afterwards.

Funding for the design of Phase 1 has been supported by both a $150,000 grant from the state’s MassTrails team and $1.4 million previously allocated from the town’s Community Preservation Act (CPA) fund. This funding will cover the work through the 100% design on Phase 1.

Phase 1 right of way
The town is also responsible for securing the right of way (ROW) for the path, as defined by the 25% design. On June 7, Town Meeting voted by a wide margin of 200 to 50 to approve

TAC meeting schedule
TAC meetings are on Thursday evenings at 7PM monthly or bimonthly, and agendas are posted on the town website at www.belmont-ma.gov/transportation-advisory-committee.

Jeffrey Roth has lived in Belmont since 2009. He was chair of the Belmont Community Path Advisory Committee from 2011 to 2014, and he has been a member of the Belmont Transportation Advisory Committee since 2019.
The Cochituate Rail Trail Shows Success
By John Dieckmann

After we published an article on rail trails in our January newsletter (“Bikeway Building Booms Beyond Belmont”), well-known cycling advocate and expert John Allen pointed out that we didn’t include the Cochituate Rail Trail in Framingham and Natick. Since then, I have had the time to ride this trail and write this update.

The Cochituate Rail Trail (CRT) runs from the village of Saxonville in Framingham to the Natick Center commuter rail station along the right of way of the abandoned Saxonville Branch Rail Line. It is the culmination of advocacy dating back to the early 2000s. The Saxonville trail head is at the intersection of Concord Street and School Street (Route 126). Parking for about a dozen cars is available in the adjacent fire station parking lot. The trail passes under the Mass Pike in the original railroad underpass, reaching the Natick town line at Route 30.

The trail then crosses busy Route 30 over a substantial overpass and continues into Natick for another 2.4 miles to its current end point at Whitney Field and Mechanic Street. The trail crosses even busier Route 9 on another substantial overpass, then continues to the Natick Center rail station.

The Natick section is not officially open, but when I visited in April, the section from Route 30 to Whitney Field section was paved and the trail was in fairly heavy use. However the Route 9

---

Cochituate Rail Trail overpass over Route 30, Natick.

---

Phase 1 construction funding
Completing the 25% design and funding the ROW are key milestones toward being awarded construction funding through the federally-funded Transportation Improvement Program (TIP), a five-year budget administered by the Boston Metropolitan Planning Organization (MPO).

The MPO received over 350 letters of support for the path from the town and across the region when it considered the $16.7 million estimate for Phase 1 construction for the 2022-2026 TIP this spring. Letters cited benefits such as safety for students, new commuting options, recreation, stormwater upgrades, revenue generation in the town centers, and connections to neighboring paths. Cost increases for projects already in the TIP prevented the MPO from adding this path and many additional projects in this cycle.

In an encouraging response to letters, the MPO noted that “the robust enthusiasm for this project expressed by many stakeholders throughout this TIP cycle has been heartening.” The MPO formed a policy subcommittee to address cost increases and make more funding available for new projects in the 2023-27 budget planning next spring. With the completion of the 25% design and the ROW process underway, the path will be a strong candidate for construction funding in the TIP next spring.

Given that the Belmont Community Path is a top priority for the Governor’s MassTrails team, the TIP will likely fund construction costs. However, the TIP is just one of several funding sources committed to supporting this project. Last January, the Governor signed the Transportation Bond Bill that designated $7.5 million for the path. Also, Congresswoman Katherine Clark recently requested $3.5 million for path funding via the House Transportation Infrastructure Committee.

Next steps
With the 25% design submitted and the ROW process underway, Nitsch will continue to engage stakeholders in finalizing the design of Phase 1. In this phase community members will be able to visualize the path through artistic drawings and consider specific design elements such as landscaping.

The town is also looking ahead toward Phase 2, the extension of the Belmont Community Path from Clark Street Bridge to the Waltham line where it will connect with the Wayside Trail. The town submitted another MassTrails grant application for design work (as it did to begin the design of Phase 1) and should have a response this summer. The two phases can move forward concurrently. In starting Phase 2 design now, the town would be well-positioned to complete the path through town soon after Phase 1 is finished.

Sara Smith, Eric Batcho, and Jarrod Goentzel are members of Friends of the Belmont Community Path. They can be reached at belmontpath@gmail.com.

---

$200,000 of Community Preservation Act funds to begin the ROW process (tally at 2:54:50 of the recording). At that meeting (1:02:00), Russ Leino, chair of the CPPC explained that these funds will cover title and deed searches, appraisals of temporary easements for construction access, and potentially appraisal of a small number of permanent easements. The CPA funds are not intended for the purchase of these easements, though if money is left over it could be allocated for this purpose.

Last-minute controversy regarding a potential permanent easement at 40-42 Brighton Street was addressed when Nitsch Engineering confirmed that the path could be sited within the 13.8’ easement granted by the owner in 2008 to the Massachusetts Department of Conservation and Recreation for this purpose. In meetings ahead of the town meeting with Glenn Clancy, the town’s director of Community Development, the MBTA noted that the nine-foot clearance between the path and the track at this location is the minimum possible, but is feasible. They also noted that placing the path on the south side of the tracks at this location would have been impossible due to only eight feet of clearance. It is also important to remember that a path on the south side at this location would have required an at-grade crossing of the active commuter rail line.

Phase 1 construction funding
Completing the 25% design and funding the ROW are key milestones toward being awarded construction funding through the federally-funded Transportation Improvement Program (TIP), a five-year budget administered by the Boston Metropolitan Planning Organization (MPO). The MPO received over 350 letters of support for the path from the town and across the region when it considered the $16.7 million estimate for Phase 1 construction for the 2022-2026 TIP this spring. Letters cited benefits such as safety for students, new commuting options, recreation, stormwater upgrades, revenue generation in the town centers, and connections to neighboring paths. Cost increases for projects already in the TIP prevented the MPO from adding this path and many additional projects in this cycle.

In an encouraging response to letters, the MPO noted that “the robust enthusiasm for this project expressed by many stakeholders throughout this TIP cycle has been heartening.” The MPO formed a policy subcommittee to address cost increases and make more funding available for new projects in the 2023-27 budget planning next spring. With the completion of the 25% design and the ROW process underway, the path will be a strong candidate for construction funding in the TIP next spring.

Given that the Belmont Community Path is a top priority for the Governor’s MassTrails team, the TIP will likely fund construction costs. However, the TIP is just one of several funding sources committed to supporting this project. Last January, the Governor signed the Transportation Bond Bill that designated $7.5 million for the path. Also, Congresswoman Katherine Clark recently requested $3.5 million for path funding via the House Transportation and Infrastructure Committee.

Next steps
With the 25% design submitted and the ROW process underway, Nitsch will continue to engage stakeholders in finalizing the design of Phase 1. In this phase community members will be able to visualize the path through artistic drawings and consider specific design elements such as landscaping.

The town is also looking ahead toward Phase 2, the extension of the Belmont Community Path from Clark Street Bridge to the Waltham line where it will connect with the Wayside Trail. The town submitted another MassTrails grant application for design work (as it did to begin the design of Phase 1) and should have a response this summer. The two phases can move forward concurrently. In starting Phase 2 design now, the town would be well-positioned to complete the path through town soon after Phase 1 is finished.

Sara Smith, Eric Batcho, and Jarrod Goentzel are members of Friends of the Belmont Community Path. They can be reached at belmontpath@gmail.com.

---
and 30 overpasses are most definitely NOT open with both ends securely fenced off. For the able bodied, crossing Route 30 on foot takes a little patience, but is not too difficult. Alternatively, the Route 30 and Speen Street intersection is about 100 yards to the west and one can cross Route 30 with the traffic light.

By contrast, crossing Route 9 on foot should not be attempted. The traffic is very heavy and fast and there is a guard rail in the median. When I rode the trail, I took about a half-mile detour to Route 27 and crossed Route 9 on that overpass.

The overpasses will be complete and opened by this fall, maybe sooner. The half-mile section to Natick Center has been graded and crushed stone has been laid down, but paving will not be done until ongoing construction of upgrades to the station are complete.

The trail is a delight, passing alongside Lake Cochituate for a good part of its length. The design is first rate, with excellent signage, over a dozen benches at intervals, and frequent mileage markers. It is a true community path, tying many neighborhoods together and providing access to schools, parks, and shopping in the Golden Triangle area (Natick Mall, Shoppers World). Natick Center is vibrant and has several restaurants.

A spur trail called Wonder Bread Spur (in memory of the one-time ITT Continental Baking Factory, which has given way to residential and more retail development) connects directly to the Natick Mall.

While the CRT does not connect directly to any of the major paved rail trails in the area, a mostly off-road connection does exist between the Saxonville trail head and the future Framingham section of the Bruce Freeman Rail Trail. The Bruce Freeman Rail Trail will intersect the Hultman Aqueduct at Edgell Road two miles west of Saxonville. The aqueduct right of way is a greenway on the surface and is open to the public. A single-track footpath called the Carol Getchell Nature Trail connects most of the half-mile distance from the Hultman Aqueduct to the Saxonville trail head of the CRT.

John Dieckmann is a director of the Belmont Citizens Forum.

Belmont Once Had a Cooperative Market

By Jane Sherwin

Many people are aware that Belmont was a town of farms until the mid-twentieth century, but fewer may know that we also had a cooperative grocery: the Belmont Cooperative Society Market, which opened in 1911. The Market, the earliest commercial building in Cushing Square, was located on the southwest corner, where the Bradford development now stands. A second store stood in Belmont Center. In his wonderful Footsteps Through Belmont, the late Richard Betts, town historian, wrote that among other things the market sold spring water from a nearby well, and later, gasoline for horseless carriages.

A 1905 photo shows a shingled building with a wide veranda, and steep roof supported by unfinished posts before a rough, unpaved road. In the roof is a high window that must have let sunlight flood the produce and other goods within. The man in a suit standing in front may well be Charles Merrow (1882-1962), one of Belmont’s best-known merchants until the mid-twentieth century. He opened the store in 1905, and then managed it for the Cooperative Society for many years. A 1927 Belmont Directory advertised “Cooperative Profit Sharing through the Belmont Cooperative Society, Dealers in First Class Groceries; Telephone either store; C.F. Merrow manager.”

After World War I cooperative societies “sprang up everywhere,” according to a 1922 US Department of Labor report, in reaction to unemployment, adulterated food, and exorbitant prices. Nationally, twenty-seven percent of stores selling groceries or both groceries and meat were cooperative. It is pleasant to imagine Belmont farmers selling pork and their famous straw-berries and celery at the Market, although we have no evidence of this.

The Cushing Square market building was moved in 1914 to Common Street and converted into a five-room, one-family bungalow, now at 47 Creeley Road. Merrow himself, and his wife Louise, built a home on Willow Street which still stands.

Jane Sherwin is a Belmont resident with a longstanding interest in history.
New Group Seeks to Keep Belmont Beautiful

By Jeffrey North

In 2008 volunteers and government leaders in Mansfield convened, and more than 700 volunteers assembled to give that town a good spring cleaning. They formed a Keep America Beautiful (KAB) chapter the next year to continue their efforts. Now Belmont can do the same—drastically reduce the volume of refuse littering our public spaces and strengthen our sense of community by organizing volunteers and donations for a cleaner, greener place to live. Belmont can take its place among the 33 local nonprofit KAB chapters across Massachusetts (collectively KMB) that are making significant improvements to their communities.

Litter attracts litter. Research shows that when an area is frequently littered or experiences illegal dumping (like some of our conservation and roadside areas), that sends a message that the behavior is acceptable, or unobserved. Conversely, when a local park or an entire community is litter-free, that sends a message that littering is unacceptable behavior.

Clean communities tend to stay clean, which is why litter prevention and cleanup in Massachusetts are so important, according to KMB. Where litter and dumping already exist, a sustained effort is usually needed to clean it up.

A Belmont KMB chapter will complement groups of engaged residents, government, and business leaders who already focus on issues like litter prevention, organized cleanup, waste reduction and recycling, beautification, and community greening. By implementing proven methodologies and sharing ideas that have helped other KMB chapters succeed, we can make dramatic improvements to our townscape.

Patrick O’Dougherty AKA “the litter guy” has been Belmont’s stalwart one-man clean-up crew for years now. He recently launched the Keep Belmont Beautiful Facebook page for interested residents, www.facebook.com/keepbelmontbeautiful.

But let’s not leave it all to Patrick. If you are tired of seeing litter and want to improve the appearance and health of our community, soon you’ll be able to do something about it. Learn more about the benefits of launching a KMB chapter at www.keepmassbeautiful.org/join.

Jeffrey North is managing editor of the Belmont Citizens Forum Newsletter.

Let’s Do Something About It

It’s time that Belmont had its own town beautification brigade. Join other interested Belmontians for a kickoff meeting at 7 PM on Thursday, July 15. Meet Belmont organizers and KMB founder and executive director Neil Rhein, who will present a primer on launching a Keep Belmont Beautiful chapter.

Visit www.keepmassbeautiful.org and click on the events tab to register.

Belmont Day School Cleans Up Lone Tree Hill

Nineteen students and three teachers from Belmont Day School spent the morning of May 19 removing invasive garlic mustard and trash from Belmont’s Lone Tree Hill. The bags of garlic mustard and trash were collected by Belmont’s Department of Public Works.

Thank you to everyone who pitched in to help keep Belmont beautiful!
Fernald Site Contains Rare Specimen Trees

By Eric Olson

It is vanishingly rare that a town within ten miles of Boston can, with a single purchase, add nearly 200 acres to its portfolio of open space. That is exactly what Waltham did in the fall of 2014 when its mayor and city council agreed to buy the former Fernald Development Center from the state. I bet most Belmont residents are at least passingly familiar with this property, tucked up in Waltham’s northeast corner between Trapelo and Waverley Oaks roads, less than a quarter-mile from the Belmont line. As a resident of Newton, I had never heard of the place, but as a sometimes-volunteer with the Waltham Land Trust and as an instructor of a field biology course at Brandeis, my name came to the attention of George Darcy, one of the Waltham city councilors who spearheaded the Fernald purchase. Darcy wanted someone to survey the trees of his town’s new acquisition, and I was pleased when he asked me if I would like to take on the job.

I agreed on the condition that I could also scope out the property for a possible location of my favorite New England habitat, a sunny meadow attractive to butterflies, bees, and other pollinators. Such a habitat would have to be deliberately planted, though. “I am quite certain that we can do that,” replied Darcy. So we had a deal.

That was back in 2019, and teaching duties and other obligations meant I could get over to the Fernald only now and then. Gradually my visits to the property—always stopping by its species at the site, even if common elsewhere. The Fernald is no Arnold Arboretum, in other words, but there’s one large Katsura, a tree native to Japan, and a Stewartia, also Asian in origin. I recommend readers visit a few Stewartia websites for a look at this handsome tree, for it has it all: lovely white flowers, interesting bark in all seasons, and terrific fall color. We should always favor native species when choosing to plant a new tree, but I would not object to seeing more Stewartias planted in local parks and yards!

Other trees of note include some impressively large red and white oaks, towering hickories, and the biggest hop hornbeam (Ostrya virginiana) I have ever seen. Species represented include black walnut, basswood (both native and the European little-leaf); the native maples silver, red, and sugar; cottonwoods, sycamores, white and red pines, honey locust, catalpa, willow (species unclear), black cherry, arbor vitae, staghorn sumac, some surviving elms and Eastern Hemlocks (both species vulnerable to long-term disease or pest problems, and increasingly rare throughout their range); tulip tree (one) and a magnificent larch also known as tamarack (also just one).

In addition to an abundance of Norway maples, other non-natives include a couple of Japanese Zelkova and some Norway spruce. Yes, the Fernald could become something for most everyone. The potential is certainly there. May its development—and “un-development”, returning more land to nature—proceed apace, so that it can soon become more welcoming to all varieties of organisms: birds, insects, and of course, us humans.

Dr. Eric Olson is a senior lecturer in ecology at Brandeis University.

I have sent the completed maps to Darcy, Sonja Wadman of the Waltham Land Trust, and the City of Waltham Geographic Information System director, Eric Rizzo. Rizzo intends to merge my survey results with his city-wide tree-inventory maps, at which time they should be widely available on the city website. Until then interested Belmont residents should be able to obtain a PDF of the work via Rizzo or perhaps other city or Land Trust officials.

Upon reviewing the tree maps of his city’s new 190+ acres, Darcy took great delight in the botanical diversity of the place, and observed, “Fernald is kind of a site that has something for everyone, be it human, bird, or insect.” Darcy also welcomed my separate maps indicating a few promising locations for installing a pollinator meadow.

Yes, the Fernald could become something for most everyone. The potential is certainly there. May its development—and “un-development”, returning more land to nature—proceed apace, so that it can soon become more welcoming to all varieties of organisms: birds, insects, and of course, us humans.
By Jeffrey North

Invasive plant species are disrupting ecosystems from Belmont to Beijing, permanently altering the ecology of our forests, fields, and gardens and causing biodiversity loss and species extinction. This article is the third in a series on invasive plant species found in Belmont, the implications of their presence, spread, and ecological damage potential, and hopes for their removal and remediation.

Japanese knotweed (Polygonum cuspidatum), also known as Asian knotweed, is native to Japan, China, and Korea. It is frequently found on the sides of volcanoes, where it breaks down igneous rock into new soil. You might think it was native in some places in North America (and Europe) too. Brought to these shores from England in the 1880s, Japanese knotweed was grown as a curiosity as an ornamental plant and, ironically, for erosion control. It is currently found in most states, throughout Canada, Europe, and even in southern stretches of Chile approaching Patagonia. This dense-growing shrub can reach 10 feet in height and 4 feet wide, with its (hollow) bamboo-rhubarb look-alike stalks. The stems are smooth, stout, and hollow. The leaves measure about six inches long by three inches wide, oval to somewhat triangular in shape. Japanese knotweed’s white flowers emerge in summer; its fruits are winged on three sides; its seeds are triangular, dark brown, shiny, and about 1/10-inch long. Look-alikes include Virginia knotweed (Polygonum virginianum), and two exotic invasive relatives: prince’s feather (Polygonum orientale) and giant knotweed (Polygonum sachalinense).

The Problem

Japanese knotweed is changing the character of the woodland edges and the banks of our streams. Knotweed can crowd out native herbaceous species, depriving the natives of light, moisture, nutrients, and space. The weed destabilizes soil, most notably on the banks of streams, where the soil is too often carried away during storms and snow melt. This erosion changes the course of the stream as it sends silt into the water to be deposited downstream as water quality is sullied. Reproduction occurs every which way. It spreads by its tentacle-like rhizomes (lateral growing roots), via seed dispersal, and simple cuttings or fragments carried by wind, water, shoes, or birds. When cut or disturbed, regrowth is rapid and robust. This plant is thus extremely difficult to eradicate.

Japanese knotweed invades a wide variety of habitats and forms dense stands that crowd out other plants. Dense thickets are routinely found along roadways, stream banks and abandoned and disturbed areas, and increasingly in our gardens and among landscape plantings.

What not to do

Do not attempt to pull Japanese knotweed out of the ground. The plants’ root systems are extensive (up to 20 feet in length) and deep (up to 10 feet deep) for established patches of the weed. Pulling or digging up the stalks usually results in a rapid, vigorous regrowth as the plant returns seemingly stronger than the original weed patch. Do not compost Japanese knotweed. Even burning might not destroy the plant’s zombie-like ability to return. Repeated cutting of leaves and stalks might be effective for young plants in new infestation patches, but typically, the roots need to be killed for effective remediation. Even deep digging with an excavator usually fails to remove all the root fragments, and the plant returns with a vengeance.

Meanwhile, disposing of the infested soil is problematic due to the presence of root fragments. Try covering a patch with black weed block and watch the sharp stems puncture even thick plastic, or watch it poke through tiny cracks in concrete or asphalt.

The Solution

Chemical treatment can be effective if repeated with a systemic herbicide, particularly if the stems are cut and injected, a very labor-intensive initiative. Eliminating Japanese knotweed is a multiyear campaign. Start by cutting the plants in late June or early July, then treat the regrowth with a foliar spray of a systemic herbicide in late August or early September.

Control of invasive plants in wetlands is subject to the Massachusetts Wetlands Protection Act. Check with the Belmont Conservation Commission before implementing control measures, and only use herbicides registered for use in wetland areas. There is no shame in seeking professional help.

New experimental treatments include soil sterilization using steam, applying seawater, and biological control using certain fungi or insects. Goats will eat the stalks and pigs will root up the rhizomes, but these measures are only practical in a few areas. So far, no magic bullets exist to kill knotweed. The following native plants can serve as good replacements to knotweed in a garden:

- New England Aster (Aster novae-angiae)
- Blue False Indigo (Baptisia australis)
- Sweet Joe-Pye-Weed (Eupatorium purpureum)
- Queen-of-the-Prairie (Filipendula rubra)

Source: Concordma.gov/783/Japanese-knotweed

Jeffrey North is the ex officio Belmont Conservation Commission representative on the Land Management Committee for Lone Tree Hill and managing editor of the Belmont Citizens Forum Newsletter.
To the Editor:
As a 40-year resident in Belmont I take exception to the tone of the article in the latest issue of the Belmont Citizens Forum concerning the treatment of the shore of Clay Pit Pond (“Clay Pit Pond Defforestation Damages Wetland,” Belmont Citizens Forum Newsletter, May/June 2021), which attempts to blame the residents who perpetrated an “ecologically damaging assault” on the area. Rather, it seems to me, that these “miscreants” have called attention to the town’s lack of attention and mismanagement of one of our town’s greatest assets: an attractive body of water in the middle of our town that could be a focus of our attention rather than hidden from our view. For years the existing plantings of flowering trees and care of the water’s edge have been ignored and residents forced to push through tangles of invasive vines and bushes to have the right to do this? Probably the same kind of people who drive 40-50 MPH down my side street and other roads in town. To the Editor:

I appreciate and welcome most concerns raised by BCF in your newsletters, but I take issue with your concerns raised in the last May/June 2021 newsletter. BCF front page headline and a lengthy article claim an “unlawful deforestation and an ecologically damaging assault” was committed by Belmont residents at Clay Pit Pond in Sept. 2020, that caused shoreline damage. This story appears to be “blown out of the water” a bit.

I believe most Belmont residents appreciate that volunteers spent much time performing community service to enable us to view the scenic pond and walk to the waters edge without encountering scrub brush and weed trees. Clay Pit Pond never has a constant shoreline because it fills and empties from a feed and exit pipe. What appears to be shoreline erosion or damage is simply equivalent to a low tide when rain has been scarce.

Rather than allowing scene-blocking regrowth again, simply planting grass seed is the cure all. Golf courses and many surrounding communities have beautiful ponds that are kept clear because they were simply cut, and not properly removed. Now, dozens of small stumps still remain, posing tripping hazards to those who might “walk to the water’s edge”, and regrowth of invasives and other plants will now occur, because they were simply cut, and not properly removed. Some erosion is seen in the new exposure of roots of trees lining the shore and silting is noted in runoff from the exposed soils which has created a few small beaches where there were formerly clear banks.

In short, taxpayer dollars have already been spent to address the damage, and more resources, time and funds, will be required to mitigate the damage, whether or not a clear view of the pond is maintained.

Mike Flamang responds:
Mr. Benoit is concerned about drawing funds from the town’s operating budget to pay for the clock repair. If we were to request funding assistance from the town, it would be from the Community Preservation Committee. The CPC oversees distribution of the Community Preservation Fund which has been created specifically for projects that preserve the environmental, cultural and historic resources of municipalities. No operating funds are involved.

Mike Flamang

To the Editor: Thank you for reporting on this. Since the pandemic, I have been doing a lot of walking around the town and remember seeing the damage at the pond. I couldn’t believe that someone did this! I assumed it was the town. This is clearly wanton vandalism and those responsible should be prosecuted to the full extent of the law and should be held financially responsible for the work to be done because of their damage. What kind of people think they have the right to do this? Probably the same kind of people who drive 40-50 MPH down my side street and other roads in town.

Michael Tymm

To the Editor: I appreciate most concerns raised by BCF in your newsletters, but I take issue with your concerns raised in the last May/June 2021 newsletter. BCF front page headline and a lengthy article claim an “unlawful deforestation and an ecologically damaging assault” was committed by Belmont residents at Clay Pit Pond in Sept. 2020, that caused shoreline damage. This story appears to be “blown out of the water” a bit.

I believe most Belmont residents appreciate that volunteers spent much time performing community service to enable us to view the scenic pond and walk to the waters edge without encountering scrub brush and weed trees. Clay Pit Pond never has a constant shoreline because it fills and empties from a feed and exit pipe. What appears to be shoreline erosion or damage is simply equivalent to a low tide when rain has been scarce.

Rather than allowing scene-blocking regrowth again, simply planting grass seed is the cure all. Golf courses and many surrounding communities have beautiful ponds that are kept clear because they were simply cut, and not properly removed. Now, dozens of small stumps still remain, posing tripping hazards to those who might “walk to the water’s edge”, and regrowth of invasives and other plants will now occur, because they were simply cut, and not properly removed. Some erosion is seen in the new exposure of roots of trees lining the shore and silting is noted in runoff from the exposed soils which has created a few small beaches where there were formerly clear banks.

In short, taxpayer dollars have already been spent to address the damage, and more resources, time and funds, will be required to mitigate the damage, whether or not a clear view of the pond is maintained.

Mike Flamang responds:
Mr. Benoit is concerned about drawing funds from the town’s operating budget to pay for the clock repair. If we were to request funding assistance from the town, it would be from the Community Preservation Committee. The CPC oversees distribution of the Community Preservation Fund which has been created specifically for projects that preserve the environmental, cultural and historic resources of municipalities. No operating funds are involved.

Mike Flamang

To the Editor:

I appreciate and welcome most concerns raised by BCF in your newsletters, but I take issue with your concerns raised in the last May/June 2021 newsletter. BCF front page headline and a lengthy article claim an “unlawful deforestation and an ecologically damaging assault” was committed by Belmont residents at Clay Pit Pond in Sept. 2020, that caused shoreline damage. This story appears to be “blown out of the water” a bit.

I believe most Belmont residents appreciate that volunteers spent much time performing community service to enable us to view the scenic pond and walk to the waters edge without encountering scrub brush and weed trees. Clay Pit Pond never has a constant shoreline because it fills and empties from a feed and exit pipe. What appears to be shoreline erosion or damage is simply equivalent to a low tide when rain has been scarce.

Rather than allowing scene-blocking regrowth again, simply planting grass seed is the cure all. Golf courses and many surrounding communities have beautiful ponds that are kept clear because they were simply cut, and not properly removed. Now, dozens of small stumps still remain, posing tripping hazards to those who might “walk to the water’s edge”, and regrowth of invasives and other plants will now occur, because they were simply cut, and not properly removed. Some erosion is seen in the new exposure of roots of trees lining the shore and silting is noted in runoff from the exposed soils which has created a few small beaches where there were formerly clear banks.

In short, taxpayer dollars have already been spent to address the damage, and more resources, time and funds, will be required to mitigate the damage, whether or not a clear view of the pond is maintained.

Mike Flamang responds:
Mr. Benoit is concerned about drawing funds from the town’s operating budget to pay for the clock repair. If we were to request funding assistance from the town, it would be from the Community Preservation Committee. The CPC oversees distribution of the Community Preservation Fund which has been created specifically for projects that preserve the environmental, cultural and historic resources of municipalities. No operating funds are involved.

Mike Flamang

To the Editor: Thank you for reporting on this. Since the pandemic, I have been doing a lot of walking around the town and remember seeing the damage at the pond. I couldn’t believe that someone did this! I assumed it was the town. This is clearly wanton vandalism and those responsible should be prosecuted to the full extent of the law and should be held financially responsible for the work to be done because of their damage. What kind of people think they have the right to do this? Probably the same kind of people who drive 40-50 MPH down my side street and other roads in town.

Michael Tymm

To the Editor:

I appreciate most concerns raised by BCF in your newsletters, but I take issue with your concerns raised in the last May/June 2021 newsletter. BCF front page headline and a lengthy article claim an “unlawful deforestation and an ecologically damaging assault” was committed by Belmont residents at Clay Pit Pond in Sept. 2020, that caused shoreline damage. This story appears to be “blown out of the water” a bit.

I believe most Belmont residents appreciate that volunteers spent much time performing community service to enable us to view the scenic pond and walk to the waters edge without encountering scrub brush and weed trees. Clay Pit Pond never has a constant shoreline because it fills and empties from a feed and exit pipe. What appears to be shoreline erosion or damage is simply equivalent to a low tide when rain has been scarce.

Rather than allowing scene-blocking regrowth again, simply planting grass seed is the cure all. Golf courses and many surrounding communities have beautiful ponds that are kept clear because they were simply cut, and not properly removed. Now, dozens of small stumps still remain, posing tripping hazards to those who might “walk to the water’s edge”, and regrowth of invasives and other plants will now occur, because they were simply cut, and not properly removed. Some erosion is seen in the new exposure of roots of trees lining the shore and silting is noted in runoff from the exposed soils which has created a few small beaches where there were formerly clear banks.

In short, taxpayer dollars have already been spent to address the damage, and more resources, time and funds, will be required to mitigate the damage, whether or not a clear view of the pond is maintained.

Mike Flamang responds:
Mr. Benoit is concerned about drawing funds from the town’s operating budget to pay for the clock repair. If we were to request funding assistance from the town, it would be from the Community Preservation Committee. The CPC oversees distribution of the Community Preservation Fund which has been created specifically for projects that preserve the environmental, cultural and historic resources of municipalities. No operating funds are involved.
Cue up the bands! Dust off your dancing shoes! Porchfest is back!

By Mary Bradley
Plans are underway for Belmont Porchfest to fill porches (and hearts) around the town with music and arts by local artists on September 11, 2021. Musicians, porch hosts, and volunteers can sign up to participate at BelmontPorchfest.org through August 1.

Porchfest will be held on porches throughout town simultaneously for four hours this year to allow neighbors to host sequentially and town simultaneously for four hours this year to allow neighbors to host sequentially and encourage crowds to spread naturally. Here are just a few tantalizing genres to be heard: Celtic, Klezmer, Classical, Cajun, Swing. . .

To be part of the team shaping Porchfest 2021, please contact Mary Bradley at BelmontPorchfest@gmail.com

Belmont Porchfest is made possible in part by a grant from the Belmont Cultural Council, a local agency that is supported by the Massachusetts Cultural Council and Anne Mahon, our first and perennial lead individual sponsor

Mary Bradley is the founder of Belmont Porchfest.
July/August 2021

Bike Infrastructure Makes Belmont Safer . . . 1
Belmont Path Moves Forward . . . . . . . 5
Cochituate Rail Trail Shows Success . . . . . 7
Belmont Had Cooperative Market. . . . . . 9
New Group to Keep Belmont Beautiful . . . 10
BDS Cleans Up LTH . . . . . . . . . . . . 11
Fernald Site Contains Rare Trees . . . . . 12
Belmont Invasives: Japanese Knotweed. . . 14
Letters to the Editor . . . . . . . . . . . 16
Belmont Roots . . . . . . . . . . . . . . . 18

Please visit our website for updates and to read this issue in color: belmontcitizensforum.org