



Belmont Citizens Forum

Belmont's Last Pandemic: the 1918 Flu

By Vincent Stanton, Jr.

Thought you could escape coronavirus news in the pages of the BCF *Newsletter*? You are safe, but there is a catch. If you can tolerate more grim news, consider taking a trip back to the last global pandemic, the so-called "Spanish Influenza" of 1918. The story of how Belmont responded is replete with both striking similarities to the 2020 coronavirus response and sharp differences.

A weekly record of the influenza pandemic as it swept through Belmont in the fall of 1918 can be found in the pages of the *Belmont Patriot*. However, before diving into the influenza news, here is a bit of context about our main source and the times.

The *Belmont Patriot* was an unusual newspaper. First, as the masthead declared just below the title, it was "Published Under the Auspices of the Belmont Public Safety Committee," a group of citizen volunteers organized to encourage and coordinate a range of town-wide activities in support of the United States war effort. Many sons of Belmont were fighting in Europe or training to deploy there; indeed, most of the front-page news was about their exploits. Every city and town in Massachusetts had a public safety committee which operated under the umbrella of the Massachusetts Committee on Public Safety.

Second, the *Patriot* did not carry bylines. Some committee reports were signed, as were letters to the editor, but page one stories never had an author. Third, the *Patriot* lasted just one year. With the surrender of Germany on November 11, 1918, marking the end of hostilities, the *Patriot* no longer had a reason to exist, and published its last issue six weeks later on December 28, 1918.

Given the mission of the newspaper, and the broader social context of a war mobilization effort that had taken over the US economy and inflicted some degree of privation on virtually every citizen, the influenza epidemic was generally not headline news, even as Belmont citizens died on the home front. In Washington, DC, the influenza pandemic was regarded as a

Belmont Patriot

VOLUME I. NUMBER 35

A Town Newspaper

Published every Saturday under the
Auspices of the Public Safety Committee
of Belmont, Massachusetts

EDITORIAL ROOMS

HOMER SCHOOL (Old High School)
MOORE STREET
Telephone

BOSTON OFFICE, 167 OLIVER STREET
Telephone Fort Hill 4523

The Belmont Patriot

The masthead of the *Patriot* shows that its "Editorial Rooms" were located in the Homer School (later the Town Hall Annex and today the restored Homer Building), further evidence of what an unusual operation it was. A one-year subscription cost 50 cents and a single issue cost 3 cents. While that seems inexpensive today, when an issue of the *Belmont Citizen Herald* costs \$2, the *Boston Globe*, a much fatter paper, cost 2 cents per issue in 1918.

Belmont Citizens Forum

Officers

Grant Monahon, President
John Dieckmann, Vice President
Evanthia Malliris, Secretary
Radha Iyengar, Treasurer

Directors

Sumner Brown
David Chase
Vincent Stanton, Jr.

Newsletter

Meg Muckenhaupt, Executive Editor
Mary Bradley, Managing Editor
Sue Bass, Newsletter Committee,
Director Emerita
Virginia Jordan, Evanthia Malliris,
Vincent Stanton, Jr.

Belmont Citizens Forum Inc. is a not-for-profit organization that strives to maintain the small-town atmosphere of Belmont, Massachusetts, by preserving its natural and historical resources, limiting traffic growth, and enhancing pedestrian safety. We do this by keeping residents informed about planning and zoning issues, by participating actively in public hearings, and by organizing forums.

The *BCF Newsletter* is published six times a year, in January, March, May, July, September, and November. Published material represents the views of the authors and not necessarily those of the Belmont Citizens Forum.

Letters to the editor may be sent to
P. O. Box 609, Belmont MA 02478 or to
bcfprogramdirector@gmail.com

belmontcitizensforum.org

© 2019 Belmont Citizens Forum. All rights reserved.

serious hindrance to the US military in the fall of 1918, and was underplayed by the Wilson administration as it focused on defeating Germany.

The *Patriot* was a four-page newspaper, published on Saturday, with regular features on each page. On page 3, running under the heading “Local Items,” was an account of social events in Belmont neighborhoods: the comings and goings of children and house guests, vacation destinations, who attended what parties, and the like (see, for example, the excerpt below from the “Local Items” on September 7). News that the recurrent influenza epidemic had reached Belmont in the fall of 1918 first appeared not on the front page, but in a single sentence in the page 3 “Local Items” column of September 14, where it was noted that “. . . Spanish Influenza . . . is quite prevalent at this time.”

The following week, flu news dominated the “Local Items” on page 3, with reports of flu cases in Waverley, Harvard Lawn, and Clark Hill, including the news that “Dr. Wm C. Hanson is a very busy man these days. Increasing cases of

Stone Estates

Mr. Chester Hartley of Philadelphia is visiting his parents, Mr. and Mrs. Frank Hartley, of Stone road, for a few days.

Mr. and Mrs. W. E. Furniss and family have returned to their home on School street from their vacation on Lake Champlain.

Mr. Charles E. Lawrence spent the holiday at Hampton Beach, N. H.

Mr. Raymond Robinson returned from his vacation at Peake's Island, Maine, last Saturday, and Mrs. Robinson and the children followed him on Labor Day.

Mr. and Mrs. Walter H. Foster have returned from an enjoyable two weeks at Belgrade Lakes, Me.

Pre-influenza “Local Items” column excerpt from the September 7 1918 *Belmont Patriot*.

Harvard Lawn

Mr. John J. O'Brien of Marlboro street has been ill for a few days with the Spanish Influenza which is quite prevalent at this time.

First mention of the Spanish Influenza in the *Belmont Patriot*, September 14, 1918.

Spanish Influenza has [sic] kept him working night and day and last Sunday he was ordered to the sailors' hospital at Corey Hill to treat several cases of the sickness there.” There was still nothing on the front page of the *Patriot*, however, and Belmont held a primary election on September 24.

To put this low-key coverage in context, consider that the “hospital at Corey Hill” referred to a vast tent hospital erected overnight at the top of Corey Hill in Brookline, on September 9, 1918. It provided beds for several hundred flu-stricken sailors who had far exceeded the capacity of the Merchant Marine Hospital in Charlestown.

Further evidence of wide alarm about the epidemic can be inferred from an article published in the *Boston Globe* on September 23, reporting that a newly appointed committee of Boston and state health officials had, within hours of its first meeting, called Washington for medical aid. The national Red Cross office promised “to do all within possibility to assemble and hasten to Boston the nurses it could find available over the rest of the country.”

The article further noted the committee had agreed that “Boston school teachers might be drawn upon as assistants to nurses.” A voluntary registration system was instituted that very day at school department headquarters.

The flu news finally cracked the front page of the *Patriot* on September 28, 1918, though not as the lead story. Under the headline, “Epidemic Hits Belmont Hard,” the paper reported that the flu had “caused many deaths” and the governor had closed schools, churches, and theaters. Regular advertisers such as the Waverley Theatre, (“The Home of Clean Amusement”) announced



King Alfonso XIII of Spain

The “Spanish” Influenza

Spain was neutral in World War I, and consequently the press was free to report on the severity of the influenza pandemic in that country. King Alfonso XIII developed a severe case, and it became international news. The press in this country and elsewhere, by reprinting reports of the influenza outbreak in Spain, created the false impression that it was the origin or epicenter of the pandemic. In fact, other countries fared far worse.

temporary closures, but only until October 5; the closures were subsequently extended. The “Local Items” columns in the *Patriot* were full of reports of influenza.

The October 5, 1918, issue of the *Patriot* reported on page one that the Board of Health, acting on state instructions, was closing public gatherings (also reported on September 28). A new item on page two under the heading “Influenza Bulletin” relayed recommendations issued by the Massachusetts Department of Health. Many are familiar: “Wash your hands . . . Don't go to crowded places . . . avoid the person who sneezes.” Masks were recommended for nurses and doctors, along with instructions on washing and reuse, but not for the public.

Other recommendations don't hold up so well, like the suggestion that nurses use “bichloride of mercury 1:1,000 or Liquor Cresol compound 1:1,000 for hand disinfection.” The “Local Items”

Emergency Hospital at Corey Hill

The “Local Items” column on page three of the September 21, 1918, *Belmont Patriot* noted that Belmont doctor William Hansen had been working night and day, and had been “ordered to the sailors’ hospital at Corey Hill” to care for influenza patients. The picture below shows the hospital in operation. As can be seen, staff wore masks. An article in the *Boston Globe* (September 29, p. 23) described the procedure:

“The safety of the attendants is due largely to the use of gauze masks. From the beginning every person who approaches a patient has been required to wear several folds of gauze over mouth and nose. A regular inspector of masks sees that everyone wears a mask and changes it every two hours. The inspector also is responsible for keeping a supply of masks always on hand and for the burning of the old ones.” Some municipalities, including San Francisco, passed ordinances requiring all citizens to wear masks. The exhortation went:

“Obey the laws, and wear the gauze./ Protect your jaws from septic paws.”



columns on page three reported many cases of flu; however, there were also accounts of social get-togethers (the Reciprocity Club held a dinner, the Odd Fellows held their 75th anniversary banquet) and travel. Social distancing seems to have been unevenly practiced.

The October 12 *Patriot* announced on page one, ‘Influenza Scourge is on the Wane,’ but warned in a sub-headline, “Too Early to Relax Vigilance and Precaution . . .”

The October 12 *Patriot* announced on page one, “Influenza Scourge is on the Wane,” but warned in a sub-headline, “Too Early to Relax Vigilance and Precaution, Soda Fountains and Bowling Alleys Closed.” Schools, churches, and saloons also remained closed. The Board of Health forbade the sale of ice cream.

Another page one headline read, “Red Cross Does Effective Work in Checking Epidemic,” but noted the “unorganized condition” in which the volunteers had been pressed into service. Yet another item “strongly urges all citizens . . . to join the Belmont Hospital Aid Society in order to help provide funds for materials to be made into hospital supplies.” In effect, hospital supplies were hand sewn by volunteers from cloth they purchased.

The larger context of this exhortation was that Belmont relied on the Waltham Hospital to care for sick residents. In previous years, about 15% of the patients admitted to Waltham Hospital came from Belmont. By contributing cash donations and supplies, Belmont was buying future access to the hospital for Belmont residents. In 1910, the population of Belmont was 5,542, and of Waltham 27,834, though Belmont grew much faster over the ensuing decade than Waltham. The Waltham Hospital closed in 2003, after 117 years.

The theme of recovery continued in the Saturday, October 19, *Patriot*, with the news that schools, churches, and theaters would reopen the next day, October 20, because “On Tuesday only one new case was reported and on Wednesday

none.” A story about the Belmont Hospital Aid Society noted:

“During the recent epidemic— in the month between Sept. 9 and Oct. 10—the Waltham Hospital has taken care of 254 cases of influenza. 140 of these developed pneumonia. This meant a great extra strain upon the limited capacity of the hospital and doctors and nurses were taxed to the utmost. For a few days there were 114 beds in use, the largest number in the history of the hospital.”

By November 2, the town was back to holding large public meetings, and the rest of November was relatively uneventful on the influenza front. Just a few cases were recorded in the “Local Items” columns (the end of the war was the big news). In the 1918 Belmont Annual Report, the Board of Health recorded a drop from 241 cases in September to 13 in November.

In summary, Belmont closed schools and businesses for only three weeks in 1918, and the *Patriot* consistently underplayed the severity of the epidemic. However, the 1918 influenza virus was different from SARS-CoV-2, with a shorter incubation time (interval from infection to illness) and apparently little dissemination by asymptomatic cases. Those factors made a three-week shut down (arguably) adequate, had it been complete. However, as noted in the “Local Items” columns, social activity never completely stopped, and influenza continued to smolder through November.

In the very last issue of the *Patriot*, December 28, 1918, the “Local Items” column reported flu cases in at least five families, while page four death notices, which usually did not include a cause of death, recorded the deaths of 6, 31, and 34 year olds. The last death was identified as a case of pneumonia following influenza. The 1918 Annual Report noted a jump of influenza cases from 13 in November to 222 in December, almost matching the September high. That is consistent with other parts of the country, where the flu epidemic did not end until 1919 or 1920.

For more pictures and excerpts from the *Patriot*, visit BelmontCitizensForum.org/Newsletter.

Vincent Stanton, Jr. is a director of the Belmont Citizens Forum.

Cleaning Belmont’s Water Means More Work

By Anne-Marie Lambert

There is good news and bad news in Belmont’s January 31 Report on Compliance to the EPA. On the one hand, the town decided to go ahead and reline or replace many sewer laterals and rehabilitate significant sections of the sewer system in certain Belmont neighborhoods as part of a comprehensive construction project planned for spring 2020. On the other hand, the report indicates that while there was a lot of investigation work (dye testing and sampling) and design work between July 2019 and January 2020, there was no significant mitigation work during the fall construction season.

The deferral of all the actual mitigation work (relining and repair work) to one large project in the spring 2020 construction season contrasts with last year’s “fix-as-you-go” approach, leaving sewage dripping into stormwater drains month after month before the project even starts.

The planned comprehensive construction project includes the relining of about 1,776 feet

of sewer laterals and the replacement of about 4,376 feet of sewer laterals, as identified in the July 31, 2019, Report on Compliance. It is an impressively large project that also includes significant rehabilitation of the sewer system in the Oliver Road and Knox Street/Bellington Street neighborhoods.

It remains frustrating that the town has not found a way to do sampling and construction work in different areas of the town at the same time.

At the time of this writing, the impact of the COVID-19 pandemic on the planned comprehensive construction project is unclear. While the investigative and design work done this winter was impressive, it remains frustrating that the town has not found a way to do sampling and construction work in different areas of the town at the same time.

Meanwhile, multiple companies now offer robotic inspection services to assess municipal sewer systems’ repair needs. In the past, inspecting a sewer required cleaning the pipes before cameras could be snaked into the sewer to check for cracks. RedZone Robotics in Pennsylvania has multisensor robots that crawl through sewer systems to assess repair needs without prior pipe cleaning. They call it “inspect to clean” and pitch it as a cheaper alternative to the usual “clean to inspect” approach.

A Somerville startup, Biobot (biobot.io), has recently started a pro-bono collaboration with Brigham and Women’s Hospital and researchers at MIT and Harvard to use their sewer-crawling robot sensors to track the COVID-19 virus analyzing sewage. I’m hopeful that as part of this crisis, innovation eventually results in accelerating the pace of finding high-impact repair needs for cleaning up Belmont’s dirty water.

Anne-Marie Lambert is a former director of the Belmont Citizens Forum.

How The Community Preservation Act Works

Changes in Store for Future Planning, Town Meeting Votes

By Elizabeth Harmer Dionne

The CPA up to now

In November 2010, 51% of Belmont voters adopted the Community Preservation Act (CPA), a state statute which allows communities to dedicate funds to acquiring and preserving open space and recreation land, historic resources, and affordable housing. Belmont property owners now pay a surcharge of 1.5% on the town’s annual real estate tax levy; residents who qualify as having low to moderate income according to state guidelines can apply through the Assessors Office for a full CPA surcharge exemption. Funds raised from this surcharge go into Belmont’s Community Preservation Fund. For fiscal years 2012 through 2019, Belmont collected \$8,152,137 in CPA funds.

The state supplements the CPA funds that communities collect through the Massachusetts Community Preservation Trust Fund. The Trust Fund originally provided a 100% match for community CPA, but the state match has declined since 2006 as more communities have adopted the CPA. Belmont’s receipts from the Trust Fund have ranged from a high of \$470,418 (52% match) in 2013 to a low of \$189,960 (19% match) in 2018. For fiscal years 2012 through 2019, Belmont’s Community Preservation Fund received a total of \$2,140,856 in Trust Fund and other state funds, as well as \$140,453 in interest and other miscellaneous funds.

As required by the CPA, Belmont has established a Community Preservation Committee (CPC) to administer Belmont’s Community Preservation Fund. Belmont’s CPC has nine members. Six members are designated representatives, one each from the following municipal boards:

- Conservation Commission
- Historic District Commission
- Planning Board
- Board of Parks Commissioners (the three members of the Select Board)
- Recreation Commission
- Housing Authority



The McLean Barn was cleaned and stabilized with Community Preservation Act funds.

The Select Board appoints the three remaining CPC members.

The CPC meets monthly and reviews proposed projects to evaluate compliance with CPA requirements, to ensure that projects provide a clear public benefit and enjoy public support, and to provide feedback to project applicants on improving their projects, including both design and cost.

The CPA requires communities to spend or reserve at least 10% of annual revenues in each of the three mandatory spending areas, treating open space and recreational land as a single category. The CPC can recommend that Town Meeting appropriate the remaining revenue (70% of annual funds) as necessary in any of the three community asset categories. Funds may be returned if a project comes in under budget or if the project sponsors fail to initiate or complete a project, and those funds are no longer subject to the 10% allocation requirements. Project sponsors must typically complete their project within 30 months from the beginning of the fiscal year for which Town Meeting approves their appropriation.

2020 Belmont Sewer Projects

Plans for the spring 2020 Belmont sewer system rehabilitation project:

Drainage area: action: streets

Wellington 8-2: line all sewer laterals: Shaw, Betts, Livermore Roads

Winn’s Brook 10-2: redirect a direct sewer connection to storm drain: Hoitt Road

Winn’s Brook 10-2: reline sewer laterals : Hoitt Road neighborhood

Wellington 8-6: permanently plug a discovered 6” drain service: Maple Street

Wellington 8-6: reline mainline sewer: Bartlett Avenue

Winn’s Brook 9A: line mainline sewer: Hill Road

Winn’s Brook 11, 11A & 12: reline or replace sewer mainline and service laterals: Oliver Road

Winn’s Brook 15A: line sewer: Knox Street/ Bellington Street

Updates to the CPA: Concerns, Costs, and Capital Plans

During the CPA’s tenure in Belmont, there have been occasional disagreements over the best use of CPA funds, including the inherent value of various projects, as opposed to their cost; the public benefit provided by certain projects (especially those with private sponsors); and the degree to which the CPC should function as a gatekeeper for projects brought for consideration before Town Meeting. The CPC has learned a lot about what projects are most likely to reach a successful conclusion and ways in which to maximize the benefits of CPA funding. As a result, last year the CPC made important revisions to Belmont’s current CPA Plan. (The CPC updates the plan annually. The current version is posted on the town website at bit.ly/BelmontCPA.)

Containing Costs

Members of the town’s various advisory bodies and Town Meeting have expressed occasional concern over “project creep,” the expansion and increased expense of projects, and the ongoing impact of projects on the town’s operating budget, such as the maintenance associated with CPA-funded town parks or walking path projects. In response to these concerns, the revised CPC plan now contains the following statements and/or questions:

“CPA-funded design does not obligate the CPC to fund the construction of the subsequent proposed project.” (p. 20)

“What, if any, potential secondary effects will your proposed project have on the town’s operating budget?” (p. 22)

“The CPC, in its sole discretion, may provide guidance to applicants regarding the maximum amount it anticipates may be available or appropriate for ultimate construction of the proposed project.” (p.23)

Public Benefit

Another area of occasional concern has been the extent to which private projects funded by Belmont’s CPA actually benefit the public. Belmont’s CPA Plan “encourages Belmont residents to spearhead their own community-based projects that uphold the integrity of our

community” (p. 7.) At the same time, application materials ask sponsors to justify their project’s public benefit.

Among the most significant changes made to Belmont’s current CPA Plan is a new requirement that private-project sponsors contribute funds equal to 10% of the amount of CPA funds provided by Belmont.

Among the most significant changes made to Belmont’s current CPA Plan is a new requirement that private-project sponsors contribute funds equal to 10% of the amount of CPA funds provided by Belmont. The revised plan also states that projects on publicly owned land or sponsored by town departments will not be expected to contribute any private funds. This policy reverses the prior expectation that project sponsors would raise 10% of the funds required to renovate public parks.

Gatekeeping

The CPA’s annual budget is not large. However, given Belmont’s fiscal constraints and limited capital budget, CPA expenditures have a significant impact in their allowed areas: open space/recreational land, historic resources, and affordable housing. Current needs in these areas far outstrip town funding. As a result, the CPC has experienced pressure to limit or prioritize projects that it recommends to Town Meeting. The CPC has declined to do so for two reasons. First, it lacks clear and comprehensive information about Belmont’s overall capital needs.

Second, the CPC feels that Town Meeting is the appropriate body to prioritize projects that the CPA funds.

That said, the CPC can respond to gatekeeping concerns in the following ways. First, it may qualify its recommendation of projects to Town Meeting. Even if a project meets objective CPA criteria, and the CPC forwards it to Town Meeting, the CPC may provide a qualified recommendation based on the project’s perceived merits. Second, the CPC will carefully explain its process to Town Meeting, so that members of Town Meeting may feel empowered to refuse to appropriate funds for particular projects.

Prioritizing CPA projects will become increasingly important as Belmont gains a greater understanding of future capital needs and

the role of CPA funds in meeting those needs. Two important examples include design funds for Phase II of the community path (up to \$2 million) and the possible redevelopment of the town’s entire affordable housing stock (up to \$1 million provided by the town in order to access federal, state, and other construction grants). The CPC has not previously had a policy of reserving CPA funds for upcoming needs, but Town Meeting may decide to do so as Belmont’s newly formed Long-Term Capital Planning Committee identifies significant projects that qualify for CPA funding.

Elizabeth Harmer Dionne is the chair of Belmont’s Community Preservation Committee. The opinions expressed in this article are her own and do not necessarily reflect the views of the CPC.

It’s Officially Census Day



By now, all Belmont households have received one or more official invitations by mail to take the 2020 Census. It has never been easier or more important to take the census. Residents can respond on their own, whether online, over the phone, or by mail—all without having to meet a census taker. With the flexibility and support of Belmont residents, we will achieve a complete and accurate count to help guide funding decisions for things like health centers, roads, and emergency services. Both phone and online options are available in 13 languages, and assistance in many more languages is available on [2020Census.gov](https://2020census.gov).

Mandated by the US Constitution, the census is a once-in-a-decade count of every person living in the United States, regardless of their citizenship or immigration status. The 2020 census asks nine questions and takes less than 10 minutes to complete. The information you provide on the census is confidential and protected by federal law. Your answers can be used only to produce statistics and cannot be used against you by any government agency or court.

Census data is used to determine legislative districts, determine state representation in Congress, calculate how federal funding is allocated to states and municipalities, and develop vital information that helps us understand our town, attract new businesses, and identify areas of need for support services, health care, and more.

The town of Belmont has created a web page with some helpful information. It contains a number of quick links including: [How’s Belmont Doing](#); [Track Here](#). This allows residents to see our response rate. As of May 1, the town was at 73%.

Visit the town’s website at www.belmont-ma.gov/2020-census

Belmont Tackles Climate Vulnerability Planning

By Catherine Bowen

How is Belmont preparing for the impacts of climate change?

As we are in the midst of a public health crisis, we are seeing the vulnerabilities and strengths of our community similarly to how we may experience them in a climate-change related crisis. It is timely that Belmont is now in the first phase of the Municipal Vulnerability Preparedness Program (MVP), a tool Massachusetts created in 2017 to enable local governments to prepare for the weather-related impacts of climate change and address vulnerabilities, including emergency communications.

Modeled on the state's Green Communities Program, the MVP program awards competitive grants to designated communities to act on climate adaptation. Belmont received \$31,000 for planning, one of 64 communities funded in 2019 by the Executive Office of Energy and Environmental Affairs (EOEEA) to identify vulnerabilities and determine the steps to be taken. Like other state-granting programs, the MVP program requires recipients to match 25%

of funds for any selected project's total cost, and report progress and outcomes of the grants. Grants favor nature-based solutions due to their resiliency and lower cost (**Resilientma.org**). Environmental Justice (EJ) communities are also given extra consideration due to their unique vulnerabilities.

The town held a workshop in January to fulfill requirements to be designated a Climate Change Municipal Vulnerability Preparedness Community (MVP Community). This workshop included presentations from EOEEA professionals and small group discussions with invited town department leaders, town committee members, and residents. The intention was to educate participants as well as identify Belmont vulnerabilities to climate change. These preliminary steps in education and evaluation are critical to developing an effective plan. A required public forum was held on April 22, after this issue went to press: slides from that forum are available at **Bit.ly/BelmontMVPSlides**.

While Belmont has a Climate Action Plan (2009), and subsequent Roadmap (2018, see

Town Energy Committee), those plans primarily focus on prevention, identifying and reducing greenhouse gas emissions. The MVP focuses on adapting to and preparing for the effects of climate change.

What are Environmental Justice communities?

Environmental justice is based on the principle that all people have a right to be protected from environmental pollution and to live in and enjoy a clean and healthful environment. Environmental Justice communities in Massachusetts are defined as those that meet any of four conditions: (a) median household income is 65% or less of the statewide household median income; or (b) 25% or more of the residents are minority; or (c) 25% or more of the residents are foreign born, or (d) 25% or more of the residents lack English language proficiency. Despite its relatively high median income and low minority population, Belmont is included among the 108 Environmental Justice Communities in Massachusetts by virtue of having 25% or more residents who are foreign born. (**www.rd.usda.gov**)

What are “nature-based solutions”?

Nature-based solutions can be as simple as planting more trees in a community. Trees cool the air on hot days, which will be needed as higher temperatures become more frequent, and they serve as windbreaks for buildings, reducing heating demand in cooler months. And, of course, trees improve air quality, most notably in the immediate vicinity of plantings. According to the Nature-Based Solutions platform created by the World Bank Group and others to assemble information about water resource and flood management projects around the world, these nature-based “green infrastructure” solutions can be more cost-effective than conventional “hard” engineering structures made of cement and metal like dams, levees, and channels. Nature-based solutions may be completely based on ecosystem elements or combined with conventional hard-engineering approaches. In this, resiliency planning may pose a challenge to business-as-usual planning assumptions.



Bluegill swimming

ANN COIT SIFNEOS

What other preparations can Belmont make?

The MVP Action Grants can be used on a wide variety of issues. In addition to developing risk assessments and community education, they can help communities develop better bylaws and ordinances for resiliency. They can fund infrastructure and nature-based solutions to address urban heat islands and poor air quality in densely built areas. Communities are permitted to use them to acquire land, improve subsidized housing, address chemical safety, or increase energy resilience, such as pairing clean energy generation with technology that sustains utility services at key facilities during emergencies. An example of energy resilience systems is solar energy plus battery storage for backup power at storm shelters. The grants can also be used to improve water quality and infiltration, address flood zones, and right-size culverts. They can also address public health issues, such as reducing vulnerability to pests and vector-borne illnesses.

The MVP Program will spend around \$1 billion by fiscal year 2022 to help communities protect themselves against the consequences of climate change. More information about the overall Statewide Hazard Mitigation and Climate Adaptation Plan is available at the state's Climate Change Clearinghouse, **resilientma.org**.

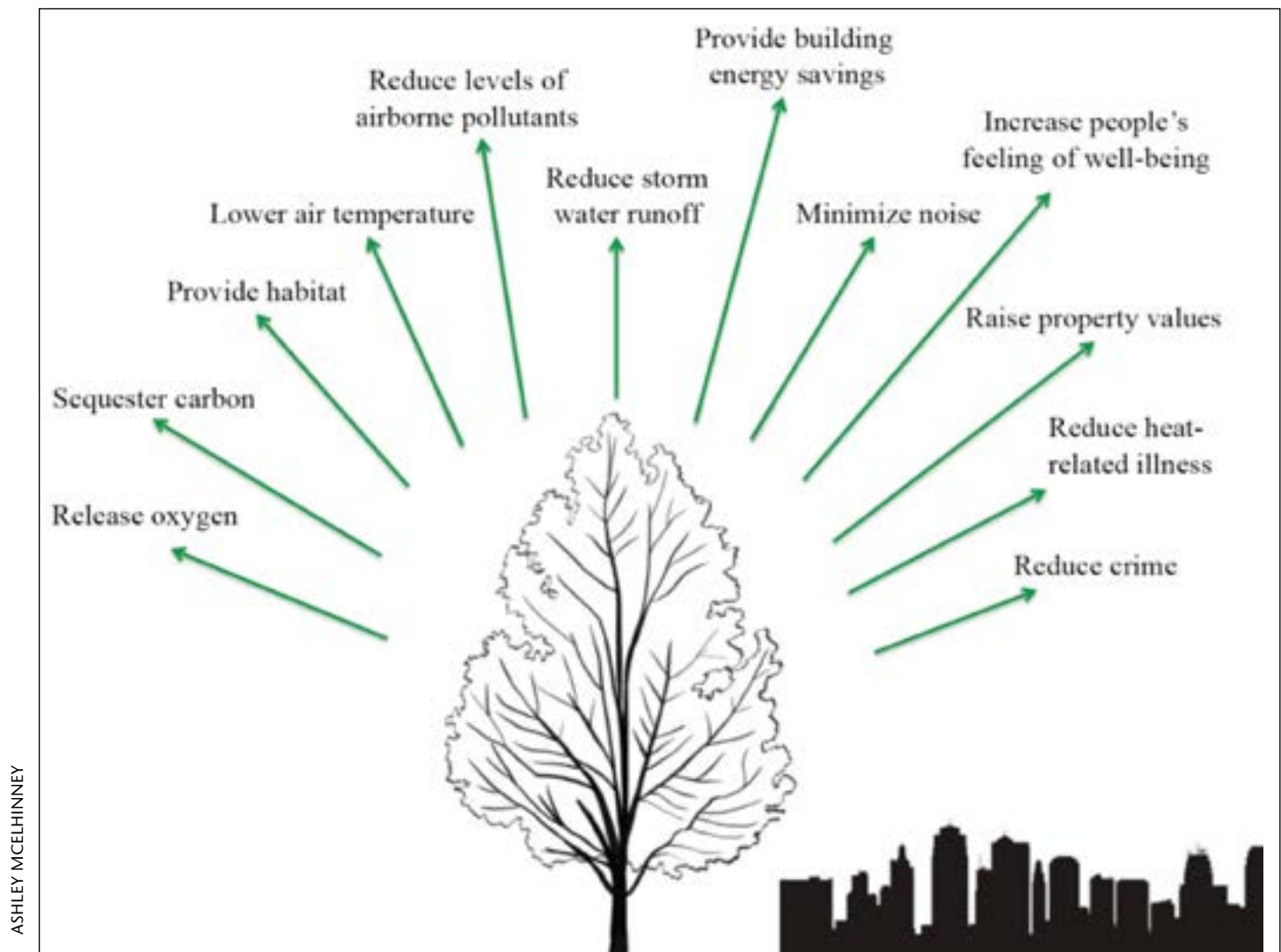
For a maps of Belmont's vulnerability to floods, visit **BelmontCitizensForum.org/Newsletter**.

Catherine Bowen is a School Committee member and Town Meeting member. Any opinion represented here is her own and not that of the Belmont School Committee.



Flooding at Blair Pond, March 2018.

Tree Loss Harms Urban Environments



Benefits of urban trees as listed in “Planting for Resilience: Selecting Urban Trees in Massachusetts,” a talk by Ashley McElhinney

By Florence DiTirro

The National Land Cover Database from 2001 estimated Belmont’s tree canopy was 27% of Belmont’s land. From 2003 to 2008, Boston’s urban tree cover declined from 29% to 28%.

This downward trend continues if we look at our state, our country, and our globe. The Massachusetts urban tree cover declined between 0.32% and 0.24% in the five years from 2009 to 2014, and the United States overall lost 1.0% of urban tree cover. Global loss was measured as -0.2%.

It’s a sad state that we are losing our trees. What is there not to like about trees? And they do so much for us. The loss of tree cover is

accompanied by the loss of the trees’ environmental, economic, and societal benefits.

Multiple benefits of tree cover

The urban tree canopy is the layer of tree leaves, branches, and stems that covers the ground when viewed from above. The urban tree canopy is especially important in urban environments with large impervious surfaces, such as asphalt and concrete, which store large amounts of heat during the day. These places are referred to as urban heat islands.

Trees’ shade and respiration cool the area around them, reducing the temperature of urban heat islands, lowering energy costs, and

improving quality of life. The tree canopy also intercepts rainfall that otherwise would run off pavement and wash surface pollutants into local waters.

One benefit of trees that we hear about is their ability to sequester carbon. Carbon sequestration is the absorption and storage of carbon. Plants take in carbon dioxide (CO₂) from the atmosphere and through photosynthesis use the CO₂ to produce carbohydrates. These carbohydrates are stored by the tree until they are needed for energy, growth, and other metabolic processes. Storing carbon in trees reduces the amount of carbon in our atmosphere, which helps to mitigate the greenhouse effect, a factor in global warming and climate change.

Even a young tree removes an average of 13 pounds of carbon dioxide from our atmosphere annually. By 10 years of age, a tree can absorb 48 pounds of carbon dioxide per year.

Besides carbon, plants absorb other common chemical pollutants found in the air. These include the byproducts of refining and burning petroleum products, such as sulfur dioxide, ozone, and nitrogen oxides.

Small particulate matter in the air produced by power plants and factories burning fossil fuels can also be absorbed and stored in leaf tissue. Larger particles that land on the surface of a leaf can be retained on the outside of a leaf until the next rain washes it onto the ground or the leaf falls from the tree. Even though this kind of pollution is a major factor in developing nations, the eastern United States also has a moderate level of particulate matter in the air. Both particulate matter and inhaled pollutants (nitrogen oxides, sulfur dioxide) contribute to cardiovascular and respiratory illnesses, including asthma.

Studies show that deciduous tree cover can reduce rainfall intensity by 20%, and evergreen canopy by 30%. Reducing rain intensity has two benefits. It allows water to slowly seep into the ground to renew groundwater, thus providing water for plants over a long period and reducing the threat of drought. It also slows down the stormwater, which along with the soil-stabilizing effect of tree roots, prevents erosion and runoff and ultimately can lessen flooding.

On sunny days, an evergreen tree can block 90% of the sun’s light, and a deciduous tree can

block 35% to 45%. Planted properly around a building, trees reduce the cost of cooling in the summer and heating in the winter.

Trees also lower the ambient air temperature. Heat from solar radiation has to be stored somewhere. While the wind may carry away some of the heat, tree leaves and the animals they harbor can reduce available heat via evaporation, which locks up energy in the phase change from liquid to vapor.

Urban heat islands can be 3.6°F warmer during the day than nearby countryside. At



night the difference is even greater because heat stored in urban pavements is released into the atmosphere. It has been shown that trees can reduce the air temperature in urban heat islands by 1° to 3.5°F on a summer day. Since it is predicted that our summers will become warmer, 1° to 3°F can make a difference. High temperature exposure can lead to dehydration, heat exhaustion and other acute heat-related illnesses, most seriously, heat stroke. High ambient temperatures also increase the risk of heart attack and stroke in the elderly.

Environmental scientists have determined the economic value of urban trees. Nationally our 5.5 billion urban trees are valued as:

\$5.4 billion for air pollution removal
\$5.4 billion for energy conservation
\$4.8 billion for carbon sequestration
\$2.7 billion in avoided emissions
Total: \$18.3 billion

At the rate we are losing trees, we are losing millions of those dollars annually in energy

conservation, carbon sequestration, avoided air pollution emissions and removal.

The above are the benefits of trees that can be quantified. But there are other benefits that can't be easily calculated. Trees reduce noise, because their thick branches, leaves, and wood absorb and deflect sound. Trees also increase property value: between 7% and 15% of a property's value can be attributed to the trees and landscaping.

In times of stress, trees are important.

In times of stress, like these past months, trees are important. It has been shown that interacting with nature can lower stress and increase our feelings of well-being. Green areas promote social cohesion and can reduce crime.

Belmont's trees

In 2001, Belmont had a 40% impervious surface cover. As tree cover is declining around the world, the impervious surface cover is increasing on almost a 1-to-1 basis. Massachusetts is one of four states in the United States that is projected to be over 50% urban by the year 2050.

So where does Belmont stand as part of the urban community? Are we losing trees or gaining trees? The most recent numbers I could find date from 2001. Tom Walsh, Belmont's tree warden, sees the public canopy as stable since the mid-1960s. Each year, Belmont plants 120% of the number of trees that are removed. But a young, small-caliper tree takes years to provide as much cover as a mature tree. The number of trees may be remaining constant, but there will always be a deficit in the canopy when a mature tree comes down.

Still, Walsh is only responsible for trees on public lands, roadways, and parks. A large part of our tree canopy grows on private lands. The tree canopy of private land is becoming more and more important to maintaining and increasing our overall urban forests.

The average lifespan of an urban tree is 19 to 28 years, much shorter than for a forest tree. Climate change is compounding the problem. In New England, climate change will lead to earlier

springs and shorter winters. As the Arctic also warms, the temperature difference that powers the jet stream will lessen and the jet stream changes course. That is, with less power, the jet stream begins to "wobble," making deep dips to the south that bring sharp, extreme cold temperatures to our area. A good analogy is to think of your garden hose. When it is on full blast, you get a steady straight stream. When you reduce the flow, the stream of water becomes erratic.

With warmer temperatures, and a more erratic jet stream, New England will have warmer temperatures overall, with occasional severe cold in the winter. Winter precipitation will likely be more rain and less snow. More rain means more runoff, instead of the gradual spring snowmelt to help the trees start the growing season. This decrease in water in the early spring can lead to drought, making trees more susceptible to pests.

We would all benefit from homeowners looking at their property as a part of the urban landscape and planting trees where they can. A great resource to help decide what to plant is "Planting for Resilience: Selecting Urban Trees in Massachusetts," a talk by Ashley McElhinney of the University of Massachusetts, Amherst. McElhinney explains factors to consider when choosing a tree, such as mature height, canopy cover, and growth rate. McElhinney includes a useful comparison chart of 75 trees to help you choose the right tree. She also explains why planting too many of the same or similar trees in one area can be a problem, citing the same rule Tom Walsh uses: plant no more than 10% of the same species of tree; no more than 20% of closely related trees (trees in the same genus), and no more than 30% of trees in the same family. The lecture and guide are available at www.urbanforestrytoday.org/lectures.html

So like Dr. Suess's Lorax, I hope I have spoken well for the trees, for the trees have no tongues. And remember: A greener community is a cooler community.

Florence DiTirro is a teacher-naturalist at Mass Audubon Habitat and an alumna of the University of Missouri-St. Louis master's program in Ecology, Evolution, and Systematics.

Changing Economics Alter Belmont's Recycling

By Terri Goldberg

According to the US EPA, in 2017, the latest year for which they have published data, the United States recycling and composting rate was about 35%. The country's recycling rate has been stuck in the low- to mid-30 percent range since the early 2000s in spite of the extensive efforts to improve it.

In part, the recycling system has been working to keep up with the changes in the materials generated by households, businesses, and institutions. Over the past decade, the composition of municipal solid waste has been evolving away from newsprint, office paper, and glass containers and toward more plastic and aluminum packaging and corrugated cardboard. At the same time, the trend toward

lighter-weight aluminum, steel, and plastic containers to reduce raw material usage and shipping costs is decreasing the total weight of the waste stream. Packaging innovations have produced lightweight, multilayer packaging, multi-resin pouches, and more products in shelf-stable aseptic cartons (e.g., beverages and soups). The changing waste stream means Materials Recovery Facilities (MRFs) are processing bulkier and lighter materials, which leads to higher operating costs.

Like all commodities, recyclables have always been subject to market fluctuations. For a few decades, China has been a key market for mixed paper and mixed plastic recyclables collected in residential recycling programs like Belmont's. The Chinese government's recent policies, which impose strict standards on the imports of

Recycling prices in Massachusetts

By Meg Muckenhoupt

Recycling has gotten a lot more expensive in Massachusetts in the last three years. According to reports by the ***Boston Globe*** and WGBH earlier this year, Boston's cost of collecting and carting recyclables has surged from \$200,000 in 2017 to \$5 million for the 2020 fiscal year, with processing costs increasing from \$5 to \$140 per ton.

The reason? Other countries have stopped accepting recyclable waste. In 2017, China declared it would no longer be the "world's garbage dump," and banned imports of 24 types of solid waste, including unsorted paper and plastic bottles. In 2019, Indonesia announced strict limits on contamination in recycling paper—a move which reduced US paper exports to that country by 95%. In January 2020, India stopped all imports of mixed paper. India's new policy was especially disastrous for American recycling exporters because they had come to rely on India's market after China closed its ports to paper; at the time of the ban, 40% of North American paper recycling exports were shipped to India.

Before China's import ban, Waste Management, which collects Belmont's recycling, earned as much as \$80 a ton for paper it collected. As of January 2020, that paper was worthless, and glass was selling for less than the cost of recycling it, according to the ***Globe***.

Massachusetts' consumers bad habits don't make it easy to export paper either. In 2019, WBUR reported that about 25% of the material collected from single-stream recycling bins by Casella Waste Systems, which runs a municipal recovery facility that processes recycling in Charlestown, was contaminated with food or other waste, or wasn't even recyclable. Massachusetts municipal recovery facilities are designed to reduce contamination rates from 25% to 3%—but China will not accept paper loads with more than 0.5% contaminated material.



Common materials that cannot be recycled.

recyclable commodities, are having a dramatic impact on recycling across the United States (see www.isri.org/advocacy-compliance/international-trade/china).

Chinese policy now bans the import of mixed paper and plastic unless they meet virtually unachievable contamination limits. The recycling industry has been forced to find alter-

native markets for the materials China will no longer accept. In addition, much of the plastic material has either no value or is too difficult to recycle, making some scrap plastic nonrecyclable. Flooded domestic markets have led to lower prices and increased costs to process recyclables to higher quality standards.

For packaging and paper products, the impact of the market value decline has not (with the exception of glass) generally been met with eliminating these materials from recycling programs, but program costs have increased. Certain types of plastic packaging and aluminum cans are currently the highest-value materials recycled in residential recycling programs. However, mixed paper, which constitutes the majority by both weight and volume of residential recycling programs, has dramatically declined in value. In many instances, MRFs have to pay to recycle these materials.

Apart from the market value concerns, there is a true need to collect more material to reduce the tonnage going to landfills in the State and exported to disposal facilities in other states,

especially plastic food and beverage containers and heavier household plastics, such as detergent bottles. Many large brands have made commitments to make their products more recyclable and increase recycled plastic content in their packaging and to make their packaging recyclable, reusable, or compostable in recent years (sustainablepackaging.org/goals/), which should help to improve the market conditions for these recyclables.

China's restrictions and the associated rise in recycling costs have inspired Massachusetts and many other states to educate residents about what is and what is not recyclable, in order to decrease contamination and thus increase the value of what is collected. The Massachusetts Department of Environmental Protection has developed a Recycle Smart Campaign (recyclesmartma.org) to help people understand how to recycle properly.

Plastic bags are the top cause of ruined recyclables. The most common contaminant in the recycling stream is any film plastic—single-use plastic bags, plastic dry cleaner bags, plastic wrap, and other stretchable plastics, according to the Recycle Smart website. These materials cannot be recycled along with paper, cans, and bottles at the curb. Plastic film gets caught in the machinery at the MRFs, causing work stoppage and worker injuries. If residents mistakenly bag recyclables in a plastic bag, all of the recyclables in it are treated as trash.

The good news is that plastic bags and wrap are collected at many grocery stores, including the Star Market in Belmont. Bring your plastic bags and put them in the labeled recycling bin—but check with the store to see if recycling has been halted due to COVID-19 concerns.

Recycling in Belmont

A Sustainable Belmont meeting in March 2020 (www.sustainablebelmont.net), had a lively discussion about the state of the town's recycling program, and what can and cannot be put into the relatively new single-stream recycling carts. One of the participants brought a bag filled mostly with packaging items, much of which cannot be recycled, to raise questions about why certain items can't be recycled.

Meeting participants expressed confusion about what can be recycled and where, particularly plastics. It's not true that a chasing-arrow symbol on a plastic container or packaging means it can be put in the recycling cart on the curb. Nor are the numbers on plastics sufficient to indicate whether an item can typically be recycled in a curbside recycling program. The Recycle Smart Campaign advises us to think more about the shape of the plastics than their numbers. Clean and empty plastic bottles, jars, jugs, or tubs are what the recycling programs accept, besides glass and paper. If in doubt, put the item in the trash.

What belongs in your bin and what doesn't? The searchable online Smart Recycling

Every Day is Earth Day Now

Unfortunately, the Belmont Citizens Forum's annual Lone Tree Hill cleanup was cancelled due to coronavirus concerns—but you can still help clear up trash from Belmont's open space. When you walk through the Mill Street parking lot, or along Pleasant Street, take one of the non-reusable shopping bags that grocery stores are compelled to distribute nowadays, and pick up some trash. Use some of the time you're spending walking in Belmont's conservation land to make a difference.



Trash collected during the 2018 Lone Tree Hill cleanup.

Belmont's recycling contracts

By Meg Muckenhoupt

In February 2018, Belmont's recycling hauler, F W Russell & Sons Disposal, gave the town an ultimatum: either start paying for the cost of collecting recyclables, or suffer "either disruption in service or litigation." Thanks to China's 2017 ban on most recycling imports, costs had shot up, turning recycling from a cash cow to a losing proposition.

With no obvious alternatives, and just a few months left on the contract, Belmont's Select Board voted to pay half the cost of recycling collection, up to \$45 a ton. At the time, Jay Marcotte, Belmont's director of Public Works, estimated that the new agreement would cost the town \$24,000.

Between FY2017 and FY2019, the cost of collecting and disposing of Belmont's recycling jumped from \$404,664 to \$741,850, according to the Belmont Fiscal Year 2020 Town Administrator's Budget Recommendation. For 2019, that was roughly 25% of the budget for Belmont's Department of Public Works.

Belmont has separate contracts for hauling waste and recycling and disposing of waste. Belmont signed a five-year contract with Waste Management in 2018 that will run through June 30, 2023, to haul recycling, at a cost rising to \$822,602 in 2023. Belmont's solid waste is collected by Waste Management, then processed by Wheelabrow Technologies, a "waste-to-energy firm" which incinerates trash. In 2019, the Select Board voted to extend Wheelabrow's contract through fiscal year 2025.



Recycling belt clogged by plastic bags.

Guide lists items accepted for recycling in every Massachusetts community. If it's not on the list, look at the Recyclopedia app (recyclesmartma.org/smart-recycling-guide) for separate drop-off locations. The top of the Belmont recycling carts that were distributed to every household also have a quick guide to what is acceptable in the cart.

It's important to make sure to keep recyclables clean and free of food and liquids. Rinse containers to remove food and drink residue. A little pizza grease on the box is okay, but pizza slices are not recyclable.

If you are still confused about what to put in your recycling cart, check out the town's website (www.belmont-ma.gov/dpw-highway-division/pages/recycling-trash-information).

Extended Producer Responsibility

The Sustainable Belmont meeting participants discussed some new policy directions designed to assist towns, like Belmont, with improving recycling. One of the most effective, Extended Producer Responsibility (EPR), describes laws that mandate responsibilities for manufacturers/brand owners for the end-of-life management of their products, including:

- Shifts end-of-life financial and sometimes

- physical responsibility upstream to the producers and away from the public sector
 - Provides incentives to producers to incorporate environmental considerations into the design of their products and packaging
- Under an EPR system, consumers purchase products from brand owners, and these entities finance collection, recycling, and, if

not recyclable, management of their products. There are different models for implementing and funding such a program, but a common strategy in Canada, Europe, and parts of Asia is the use of an intermediate Producer Responsibility Organization. The Producer Responsibility Organization develops a plan for running the EPR system, including collection, recycling, education, management of the materials, and any other mandated activities and, upon approval by government authorities, implements it.

At least 25 EPR laws have been enacted in the northeast US, covering products such as mattresses, paint, pharmaceuticals, mercury-containing products, electronics, batteries, and others. Connecticut, Maine, New York, Vermont, and Rhode Island have been leaders in enacting and implementing these programs. While plenty of bills have been introduced in Massachusetts, our state remains way behind our neighbors. The one major EPR program in Massachusetts addresses collection of pharmaceutical waste; you may conveniently drop off used medicine bottles in a bin at the Trapelo Road CVS.

Many European Union countries and at least five of Canada's provinces manage packaging through EPR programs, with its many benefits, including:

- Dedicated non-taxpayer funding from the manufacturers and brands to sustainably support recovery, recycling, and disposal,
- An opportunity for increasing recycling and the use of recycled content,
- Relief for taxpayers who are now burdened with the high costs of recycling and disposal,
- A more consistent and predictable system that enables states and regions to take a more unified approach to strategic planning around recycling,
- Increased investment by the manufacturers and brands in end markets and recycling infrastructure.

Under the traditional Massachusetts waste management system, brand owners/manufacturers sell products to consumers but have no responsibility for recovering or recycling products or packaging. In most areas, taxpayers bear the burden for managing waste, including the cost of recycling, regardless of how much manufacturers produce. That would change if EPR were implemented in the state.

The following are some of the EPR bills before the Massachusetts legislature:

- Electronics: malegislature.gov/Bills/191/S518 and malegislature.gov/Bills/191/H797
- Packaging: malegislature.gov/Bills/191/H745/ and malegislature.gov/Bills/191/H750
- Paint: malegislature.gov/Bills/191/H796
- Mattresses: malegislature.gov/Bills/191/S2388

Contact your state legislator if you want to discuss any of these proposals with them. For more information on EPR, check out the Product Stewardship Institute (www.productstewardship.us/) and MassRecycle's Product Stewardship Council (massrecycle.org/initiatives-events/massachusetts-product-stewardship-council/).

Commonly Asked Questions About Recycling

Can I put black plastic items or Styrofoam in the recycling cart?

According to RecycleSmartMA.org, black plastic cannot be seen on the black conveyor belts by the optical sorters at the MRFs, so black-

colored plastics do not get captured for recycling. If the black container has a clear plastic lid, rinse the lid and put it in the recycling cart without the black plastic part. Black plastic containers should be reused or disposed of in the trash.



Polystyrene and Styrofoam containers or packaging should never be put in the recycling cart even if they have a chasing arrow symbol.

As a rule, all unmarked plastic materials should be put in the trash.

What about the lids on jars and containers?

Lids can be confusing. There are so many shapes and sizes and different materials.

Plastic jar lids should be placed back on the plastic jar and put in the recycling bin.



Loose lids (smaller than a credit card) are too small to be recovered at the recycling sorting facility. They fall through the cracks and are disposed of as trash. If you do not have a jar to put it on, put it in the trash.

Metal lids on glass jars should follow the same directions as those on plastic containers: replace the lid on the jar and put it in the recycle bin. For food cans, rinse the container and put it and the lid in the recycling bin. Coffee cup lids are trash no matter what color or whether they have a chasing arrow symbol.

Which types of plastic bags are accepted at the drop-off location at Star Market?

Film plastic manufacturers through the American Chemistry Council created a public awareness initiative, the Wrap Recycling Action Program (WRAP) (www.plasticfilmrecycling.org/), designed to encourage plastic film recycling. Plastic film—also known as plastic film packaging—is soft, flexible polyethylene packaging, including grocery, bread, zip-top, and dry-cleaning bags. It’s also the wrap around many products, including paper plates and napkins, bathroom tissue, diapers, and more. To recycle plastic film, first make sure that it is clean (i.e., no food residue) and dry.

The nearest drop off locations are Shaw’s, including Belmont’s Star Market, and Whole Foods. To find other nearby drop off locations, check the WRAP website (www.plasticfilmrecycling.org/recycling-bags-and-wraps/find-drop-off-location/). However, as off press time, many sites are not accepting plastic bags for recycling due to coronavirus concerns. Call the store before you go.

According to WRAP, plastic film can be used to make composite lumber for making decks, benches, and playground sets. Plastic film can also be reprocessed into small pellets, which can be made into new bags, pallets, containers, crates, and pipes.

Thanks to the COVID-19 pandemic, though, many stores have stopped accepting used plastic bags for recycling due to concerns about spreading disease. Call your store before you go. The COVID-19 pandemic is having widespread impacts on recycling. For example, the bottle redemption program (commonly called the

bottle bill program) has been suspended in Massachusetts. To track these impacts, visit: www.wastedive.com/news/corona-virus-us-waste-recycling-disruption-tracker/574324.

What about putting cartons in the recycling cart?

Cartons are defined as milk, juice, or soup containers. According to the Recycle Smart website, most of the MRFs in Massachusetts, including the one servicing Belmont, no longer accept such cartons. Paper ice-cream containers and water boxes are also trash. Paper and plastic egg cartons can be collected for recycling in your recycling cart.

However, according to the Belmont Department of Public Works (DPW) webpage, “beverage cartons, spiral cans, and aseptic boxes (i.e., juice, broth cartons) of any size should be rinsed, flattened, and included in your recycling cart with other materials. Milk cartons with plastic pour spouts are acceptable.” Because of this conflicting advice, there remains confusion about these materials. Follow the town’s instructions until they change.

Where can I take textiles and other items that can’t be put in the recycling cart in Belmont?

Check out the Beyond the Bin Recycling Directory that provides searchable results for where to send materials for reuse and recycling that cannot be collected in your recycling cart recyclesearch.com/profile/ma.

What’s the status of the recycling program in Belmont?

For years, the Belmont DPW has had a dedicated, hard-working, part-time recycling coordinator, Mary Beth Calnan. She is retiring, and the DPW is seeking a replacement. The town website maintains information and resources on the local recycling program. For news and updates, check out bit.ly/Belmont-Recycling.

Terri Goldberg is a longtime Belmont resident and executive director of the Northeast Waste Management Officials’ Association (www.newmoa.org).

Belmont Roots

Environmental News, Notes, and Events

By Meg Muckenhoupt



As of press time, many wonderful events and presentations have been cancelled this spring, and it isn’t clear when they will begin again. Habitat is closed, even to casual walkers, as the meadows and wetlands resound with the calls of wood frogs and warblers, woodcocks and owls. There are green shoots swelling, and nests filling with young. The evening air grows warmer, and the sunsets stretch into the night.

But we humans are stuck inside. Instead of a list of classes, walks, and seminars, here are some intriguing local webinars and sites that

might keep you occupied until a freer, easier time.

The **Belmont Historical Society** has several videos and slides from past presentations, including a talk on the **Spanish Influenza in Waltham** and a video about **the history of the Baker Chocolate Company**. There are even more Historical Society videos available in the **Belmont Media Archive**, including a talk on **the origins of McLean Hospital** and a **history of Boston restaurants** for all of us who grow weary of eating at home.

Grow Native Massachusetts, which seeks to “inspire people to action across the Commonwealth, on behalf of native plants and the diversity of life they support,” has past “Evenings with Experts” talks on their site. You can view videos with intriguing titles such as **“The Challenge and Promise of Restoring Urban Landscapes,” “More than Just the Buzz: Finding Real Solutions to Native Pollinator Declines,”** and **“Sugar, Sex, and**

Lone Tree Hill Volunteer Day Postponed

Belmont Citizens Forum’s Eighth Annual Lone Tree Hill Volunteer Day in conjunction with the Judy Record Conservation Fund scheduled for April 24, 2020, at the Lone Tree Hill parcel has been postponed to the fall due to the current Coronavirus shelter in place order. A big shout out to the good Samaritans who picked up the trash at the bottom of Coal Road, along Pleasant Street and at the Mill Street parking lot. Later this year we plan to complete the planting of trees along the Pine Allee.

THANK YOU TO OUR CORPORATE SPONSORS

Gold Level Sponsors

Ann Mahon Realty, Belmont Land Trust, Cityside Subaru, East Boston Savings Bank, and Watertown Savings Bank

Silver Level Sponsors

Cambridge Savings Bank, Middlesex Savings Bank, Renaissance Realty, and The Great American Rain Barrel Company

Community Cosponsor

Belmont Land Management Committee for Lone Tree Hill.



Lone Tree Hill’s Coal Road entrance off Pleasant Street

RADHA IYENGAR

Poison: Understanding the Vital Powers of Plants.”

If you’re curious about why it’s important to protect Little Pond and the Little River, you can see other residents of the Mystic River Watershed (which drains more than 70% of Belmont along with the Alewife Brook) on the **Mystic Herring Count Cam**. Between now and mid-to late June, you can volunteer to count herring appearing on camera from the comfort of your own home.

Let’s keep Belmont’s water clean so our little spawning friends can stay healthy. One way to do that is to learn more about managing stormwater and protecting wetlands. The Massachusetts Department of Environmental Protection has published a **series of videos on vulnerable wetlands**, including headwaters and vernal pools. Knowledge is power.

For views of more warm-blooded creatures, the **Waltham Land Trust** has pictures and videos of a variety of critters sighted nearby. The Trust’s site also features a page of **maps of local trails** that you may not have visited, including the entire **Western Greenway**.



Finally, to cure quarantine wanderlust, you can take a real or virtual visit to **Lone Tree Hill by mountain bike**, or tour the **Connect Historic Boston Bicycle Trail**. In the meantime, pump up your tires, grease your chain, and adjust your brake cables; when the all-clear comes, you’ll be ready to ride.



ANDREW JOSLIN

Send Us Your Wildlife Photos!

Are you taking more walks, and seeing more wildlife around town? We’d love to publish your photos!

Snap a picture of any critters you encounter in Belmont or bordering communities, and we’ll feature it on the Belmont Citizens Forum web site or the **Newsletter**—like the picture of great horned owl chicks at Habitat near 178 Marsh Street (left).

Send your submissions to **BCFProgram-Director@gmail.com**. Any image format is fine, but let us know when and where you took the photo, and how you’d like your name to appear in the photo credit.

If you have a moment, tell us the story behind the photo: how did you discover this creature? What was it doing? Have you seen it again?

Farmers’ Market Opening June 4!

Just before press time for this issue, the Belmont Select Board decided that the **Belmont Farmers’ Market** could open for the season on June 4 safely.

Join the Belmont Farmers’ Market from 2-6:30 PM Thursday, June 4, at the Belmont Center municipal, at the intersection of Cross Street and Channing Road.



Thank you to our contributors

WRITERS
Catherine Bowen • Elizabeth Harmer Dionne • Florence DiTerro • Terri Goldberg • Anne-Marie Lambert • Vincent Stanton, Jr.

PHOTOS/GRAPHICS
Radha Iyengar • Andrew Joslin • Allegra Mujica • National Archives • Ann Coit Sifneos • Spencer, Sullivan & Voigt

COPY EDITORS
Sue Bass • Virginia Jordan • Evanthia Malliris

NEWSLETTER COMMITTEE
Sue Bass • Virginia Jordan • Evanthia Malliris • Vincent Stanton, Jr.

MAILING MAESTRO ON SABBATICAL
Ken Stalberg

Thank you for your continued support.
Your contribution makes a difference!

Each **BCF Newsletter** issue costs about \$4,000 to publish. **Thank you for your support!**

☐ \$50 ☐ \$100 ☐ \$150 ☐ \$250

Name _____

Address _____

Phone _____

Email _____

- ☐ Check here if your employer has a matching gift program.
- ☐ Check here if you would like to learn more about volunteering.

Make checks payable to Belmont Citizens Forum and mail to:
PO Box 609, Belmont, MA 02478

Or give securely online:
belmontcitizensforum.org

Contact us:
info@belmontcitizensforum.org

The Belmont Citizens Forum is a nonprofit 501(c)(3) organization. Your donation is deductible from federal taxes to the full extent provided by law.

Belmont Citizens Forum
P.O. Box 609
Belmont MA 02478

Address Service Requested

Nonprofit Org.
US Postage PAID
Boston MA
Permit No. 56393

May/June 2020



Belmont’s Pandemic Past..... 1

Belmont’s Water Needs Work 6

How The CPA Works7

Belmont Tackles Climate Planning .. 10

Tree Loss Harms Local Environment 12

Economics Alter Recycling 15

Belmont Roots and Shoots 21