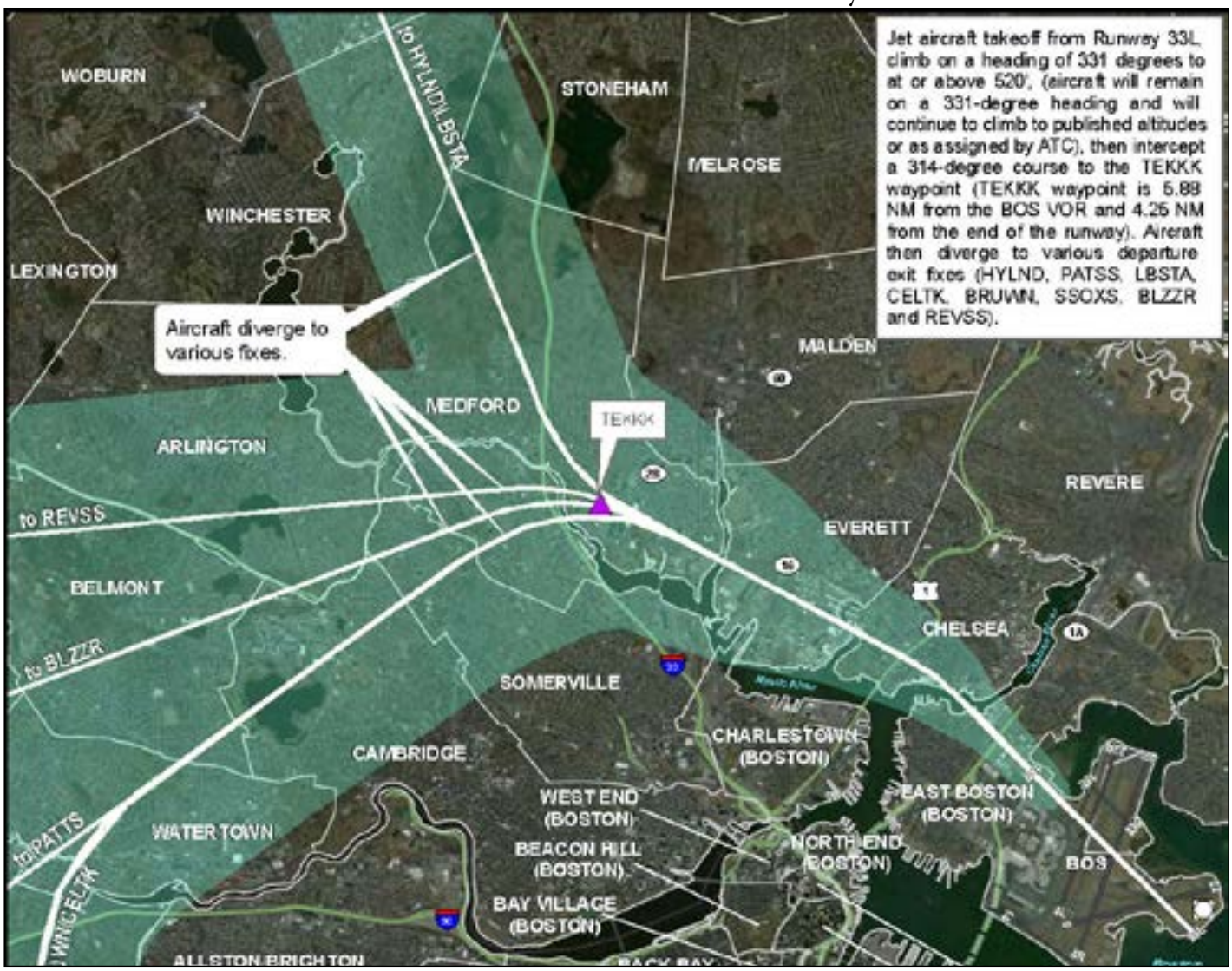
Belmont Citizens Forum

Why is There So Much Plane Noise Over Belmont?

By Rachelle Reinhart with contributions from Myron Kassaraba

Airplane noise over Belmont increased after major changes were made to air traffic control at Logan Airport in 2001, when the United States Congress authorized the Federal Aviation Administration (FAA) to modernize air traffic control under a program called NextGen. NextGen moved air traffic control from a radar-based system to a GPS-based area navigation system (RNAV).

RNAV allows aircraft to travel using a computer programmed with precise waypoints—designated flight path transitions—and GPS coordinates to control the plane's flight path. Before RNAV, air traffic control instructed pilots to make turns and altitude adjustments during takeoff and landing based on what they saw on their radar screens. This



White tracks show the dispersion of 33L flights after the NextGen/RNAV reconfiguration. Source: Massport/ Boston Logan International Airport Runway 33L RNAV SID One-Year Post Implementation Report.

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controller-based system had built-in variability so flights were more widely dispersed and noise was more equitably distributed across Boston-area communities.

In 2013, the FAA approved plans for the final RNAV change at Logan Airport: to control flights departing in a northwest direction on runway 33L. When winds blow in a northwest direction, aircraft arrive and depart on runways 33L and 27. The balance between those two runways has changed over time, with 33L being used more frequently. Runway 33L/15R, Logan's longest runway, has recently been used for more than 20% of departures, while the northwest configuration is used more than 30% of the time.

Medford, Cambridge, and Somerville bear the brunt of low-altitude departures from runway 33L, with planes continuing over parts of Arlington, Belmont, Watertown, and Winchester. Medford is the waypoint (TEKKK on the map), and flights barely reach 3,500 feet there, blasting deafening noise and pollution on Medford residents and schools. But three of the four flight paths emerging from the Medford waypoint extend over Belmont, making our town a well-traveled corridor for flyovers as low as 4,500 feet.

At the last meeting of the Massport Community Advisory Committee (MCAC) in February, community representatives learned that the high noise levels over the past six months from 33L overuse were apparently due to a construction project and building crane on runway 27. We had no knowledge of this issue until Massport divulged this information. I understand from other 33L community members that the construction work has ended, and 27 is back in regular use. More information on noise abatement and runway use decision-making can be found on the Massport website.

What has the MCAC been doing?

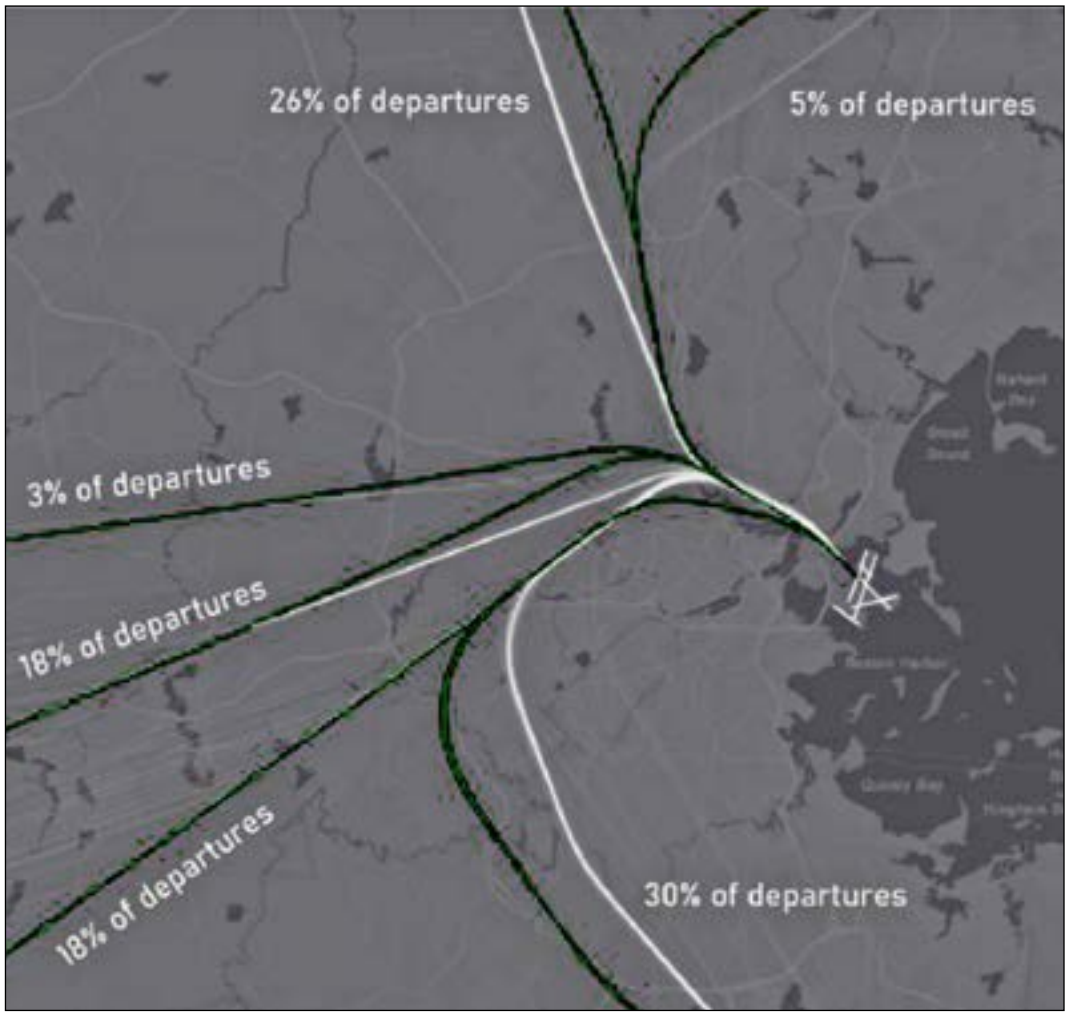
Towns affected by 33L runway changes have been advocating for a review of the 33L RNAV procedure since the fall of 2013. This effort has been supported by leadership from the affected cities and towns, state legislators, and our congressional delegation.

In October 2016, the FAA and Massport announced that they had engaged MIT's International Center for Air Transportation in what was called the RNAV Study to explore possible

modifications to the flight paths at Logan.

Over a five-year period, MIT, Massport, the FAA, and 33L communities explored several options for increasing aircraft dispersion. In 2020, representatives from the 33L communities requested the MCAC ask the FAA about feasible alternatives. The FAA only endorsed one alternative (2D-2 of the RNAV Study).

The 2D-2 alternative would have introduced several new waypoints with the most frequently used southern RNAV path turning sooner over Somerville. This proposal was reviewed and unanimously rejected by the 33L communities because it did not disperse flights to make the noise burden more equitable.



Original RNAV paths in white against the proposed new flight paths in black. Source: Massport MIT Block 2 Departure Procedure 2D-2 Recommendations Boston Logan 06-2021

In the 2D-2 case, planes flying the route closest to Fresh Pond and over the Grove Street neighborhood in Belmont would fly at an even lower altitude than before. The concentrated noise was also shifted from some communities to others.

Other ideas had been offered up by community members including using the traditional radar system of air traffic control vectors during low-peak periods. But according to MIT's study, it would be cumbersome and confusing to keep switching between radar and GPS controlled systems.

Myron Kassaraba, Belmont's long-serving MCAC Representative, summed it up at his last meeting, saying, "The FAA will only ever make changes that are good for the airlines. Communities are an afterthought to how they regulate themselves and make decisions about procedures. There's a name for it—it is called Regulatory Capture. Here's the definition: 'Regulatory capture is an economic theory that regulatory agencies may come to be dominated by the interests they regulate and not by the public.'"

The FAA has stated that they are no longer working on any 33L RNAV procedure alternatives.

Possible solutions

Faced with similar NextGen/RNAV flight reconfigurations in Europe and the United States, some city airports have responded with more thoughtful and calibrated runway-use procedures. For example, the Minneapolis-St. Paul airport has established a layered set of runway priorities based on factors beyond wind direction like peak and low usage, takeoff requirements, and parallel alternatives, to minimize noise impact on residential communities. In January 2023, Minneapolis-St. Paul airport could use priority flight paths over industrial centers and other nonresidential areas about 56% of the time; in December, this was 51%. I will be proposing this

option at MCAC, understanding fully that Logan is a high-wind coastal airport.

Another path forward is legal action. Other cities affected by these RNAV changes have filed lawsuits against the FAA. The FAA has argued in the past that the required initial 60-day public hearing period for comments about the new implementation has expired.

Scottsdale, Arizona, proved that no such public announcement took place, which advanced their case. But in 2022, the US Court of Appeals denied their petition, arguing that Scottsdale could not prove the city suffered actual injury or harm to its property from Phoenix Sky Harbor Airport flyovers. This is why documenting evidence of noise disturbance and disruption is crucial to any future remedies Belmont and the 33L communities may decide to pursue.

What can Belmont residents do?

First, it would be helpful to understand and communicate the impact of runway 33L's overuse on the quality of life for Belmont residents. Data can help pinpoint the number and location of people affected by aircraft noise and document the impact of unrestrained flyovers on personal lives, from feeling forced to relocate to experiencing changes to physical health and emotional well-being.

Please take the community survey about your experience with Logan Airport aircraft noise on the new Belmont community blog and forum, PeacefulSkiesBelmont.org. You can find news and updates on the blog, contribute comments to the forum, and learn about opportunities to bring your knowledge, expertise, and personal and professional network to help us find solutions. This website is not affiliated with either the town of Belmont or the Logan MCAC.

ANN COIT SIFNEOS

Second, please file complaints with Massport when you're bothered by flight noise, and ask your friends and neighbors to do the same. Massport and the FAA track and monitor the number of complaints made across residential communities. Note that they also track and post how many complaints come from the same household. For this reason, everyone impacted by noise should be making their feelings heard.

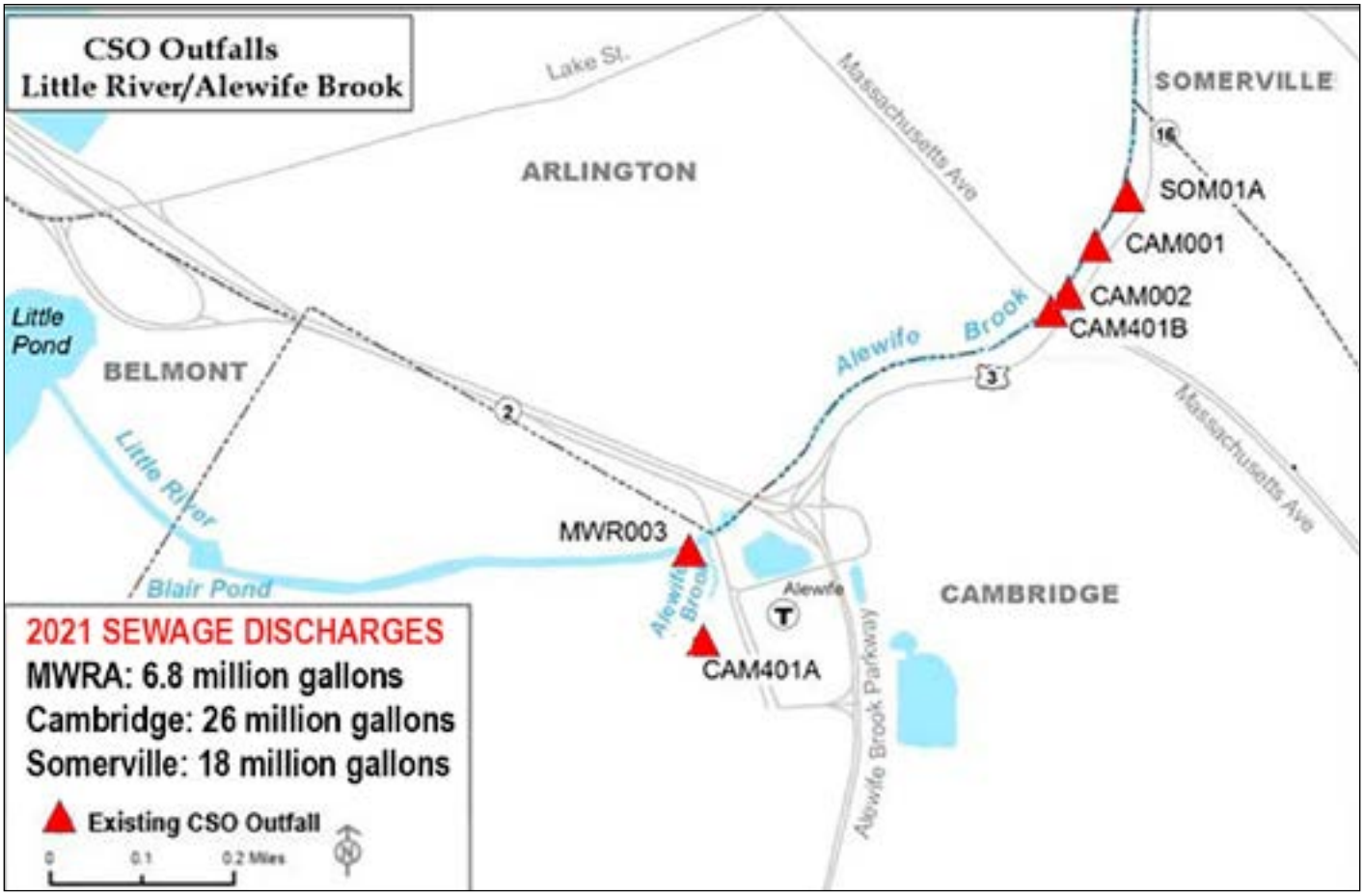
To register complaints quickly, I use Airnoise, which automatically sends complaints to the Massport website each time you press a button on the dashboard. Once you sign up and send complaints, your Airnoise dashboard shows the carrier, aircraft type, departure or arrival, and altitude.

Importantly, this dashboard also helps gather detailed information about the disruption and disturbance to Belmont residents caused by the heavy sequence of flights. I think there is a perception among those not affected by RNAV that people who complain are oversensitive to noise or reacting out of a sense of privilege and entitlement. The timing and altitude of repeated flyovers and the fact that heavier carriers use the long 33L in higher proportion make clear that this disruption places an undue burden on all unfairly targeted residential communities. Along with survey data collection, I will soon be providing space on the community blog for Belmont residents to share their Airnoise dashboards so we can better document the harmful effects on quality of life.

Please visit the Peaceful Skies Belmont community website, register for news and updates, comment, and share your interest in bringing knowledge and skills to help. We can organize a public meeting if new developments require full community feedback. You can also email me directly with questions or comments at peaceful-skiesbelmont@gmail.com.

Rachelle Reinhart is the Logan Massport Community Advisory Committee representative for Belmont. Myron Kassaraba, former Logan MCAC representative for Belmont, contributed to this article.

EPA Pushes for Alewife Sewage Cleanup



KRISTIN ANDERSON

Map of combined sewer outfalls (CSOs) near Belmont.

By Kristin Anderson and David White

We are at an important point in the history of the Alewife Brook. The Massachusetts Water Resources Authority (MWRA) and the cities of Cambridge and Somerville are preparing a new long-term sewage control plan for the Alewife Brook/Upper Mystic River Watershed. Climate change, with its wetter rainy season, more intense storms, and sea level rise, is expected to result in more hazardous Alewife Brook sewage pollution and more flooding in the area. During some storms, the Alewife Brook floods into the houses, parks, and yards of area residents in environmental justice communities. Because of the health risk of exposure to the sewage-contaminated flood water, it is imperative that investments be made to improve water quality in the Alewife Brook and the Little River.

There are still six combined sewer outfalls (CSO) on Alewife Brook and the Little River (see p.9 for an explanation of how CSOs work.)

Let's look back to the years between 1994 and 2015 when the MWRA created and implemented its first CSO control plan. The main goal of the first CSO control plan was to reduce CSO discharges to rivers and streams that run to Boston Harbor as part of the Boston Harbor cleanup. As part of the MWRA's larger plan, the goal for Alewife Brook was to reduce annual average CSO discharges of 27 million gallons of untreated sewage pollution down to 7 million gallons.

The centerpiece of the Alewife CSO projects was the Alewife Stormwater Wetland. This public park was the largest and most beautiful example of green stormwater infrastructure in the Northeast at the time of its construction. The constructed wetlands improve water quality and slow the flow of stormwater into the Little River, which flows into the Alewife Brook and on through the Mystic River to Boston Harbor. The detention of stormwater at the wetlands also reduces area flooding.

KLEINFELDER

View of the Alewife stormwater wetland.

The Alewife stormwater wetland was completed in 2015. It was the capstone of more than $110 million spent on projects spanning more than a decade to reduce Alewife sewage pollution. The projects of the first Long Term Control Plan resulted in the closing of six combined sewer outfalls, sewer separation in two catchment areas covering 273 acres in Cambridge, nineteen small green stormwater infrastructure projects, and the large constructed stormwater wetland. When these projects were completed in 2015, common belief was that the Alewife sewage pollution problem was solved.

It was quite alarming when, in 2021, more than 50 million gallons of untreated sewage pollution were dumped into the Alewife Brook. Twenty-two million gallons came from Cambridge. Eighteen million gallons came from Somerville. And MWRA dumped seven million gallons of untreated sewage pollution from Belmont and Cambridge into the Little River immediately upstream of the Alewife Brook. The MWRA's CSO, MWR003, is connected to the Cambridge Rindge Avenue Siphon and Belmont's Relief Sewer. Belmont doesn't even have a combined sewer system, yet untreated sewage from Belmont is being discharged into the Little River by MWRA.

Why is untreated, raw sewage still flowing into a narrow brook in a densely populated, flood-prone area that includes environmental justice populations?

To understand why the Alewife Brook is still suffering from such serious pollution in 2023, we must acknowledge that the state, through the MWRA, viewed the Alewife as a small part of a more significant problem that had to be addressed when the Massachusetts was ordered to clean up Boston Harbor in a series of court orders in the 1980's. The MWRA identified where they could achieve the biggest bang for their buck. Sewer projects were prioritized by looking at how much of an improvement in water quality could be achieved for Boston Harbor, and at what price.

Because cleaning up the Alewife would not have a significant impact on the water quality of Boston Harbor, Alewife Brook received only half measures. Six of the CSO outlets into the Alewife Brook were closed, but six still remain open and are in use. In fact, Alewife Brook's poor water quality grade was weaponized by MWRA. The MWRA argued against greater investment in improving public health conditions in the Alewife because the brook is so severely polluted that eliminating CSOs would not yield a significant improvement in the water quality.

The major causes of poor water quality in Alewife Brook are combined sewer discharges, stormwater runoff, stormwater outfalls (which may also

contain sewage), and contaminated sediments. The sediment contamination comes from sewage, stormwater, and discharges from local industry. Further upstream, pollution from Belmont flows from Winn Brook to Little River to Alewife Brook.

These factors all contribute to poor water quality, but their relative importance is not clearly understood. The MWRA's 2014 water quality report shows that the CSO and stormwater control work performed from 1989 to 1991 and from 2000 to 2014 has significantly reduced E. coli counts in all conditions, especially in heavy rain as shown in Figure 4-9 of that report. But on average, wet weather level counts are about 10 times those of drier conditions. Dry weather counts are down some but are still above the violation threshold. It does not appear that stormwater is the only problem, rather that it is more complicated, and improvements are needed in many areas.

EPA provides guidance

During major floods, CSO-contaminated flood water enters the homes, yards, and parks of the area's environmental justice (EJ) populations. Twenty years ago, when the first sewage control plan projects began, EPA and the Massachusetts Department of Environmental Protection (DEP) did not have a mandate to protect EJ populations. Today, the EPA and MassDEP take seriously their responsibility to help reduce harmful environmental impacts on EJ populations.

In 2022, the EPA wrote to MWRA, asking the agency to work with the Department of Conservation and Recreation to dredge the brook. Dredging would improve water quality by removing contaminants and reducing bacterial counts in the water on dry weather days. Currently, water quality remains poor even on dry weather days when a lack of CSO and stormwater discharges should mean better water quality.

Because the Alewife is such a small and slow-moving river, nothing more than a narrow concrete channel in some places, it has accumulated several feet of CSO-contaminated sediment. During most conditions, the sediment lies beneath a foot of water. During last summer's drought, however, there were only a couple of inches of water above the sediment in places, and the stench was unbearable. High bacterial counts likely exist because the sediment contributes to the poor water quality.

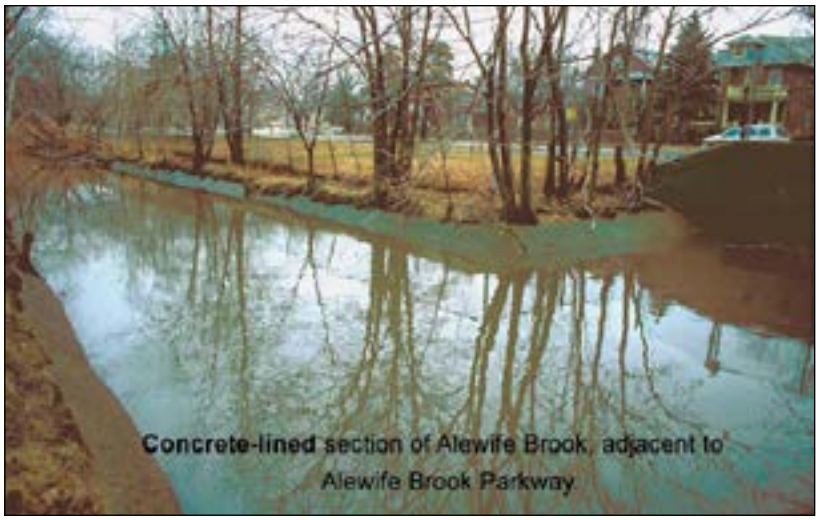
Green stormwater infrastructure

In 2022, EPA also wrote to the cities of Cambridge and Somerville, asking them to invest in green stormwater infrastructure to clean and reduce the amount of stormwater entering the combined sewer systems and the brook. Upstream remedies like rain gardens, tree trenches, and permeable pavement, and downstream projects like the constructed wetlands must be employed to clean the water and reduce stormwater flows and flooding. Removal of the concrete channel and restoration of the brook could reduce flooding by creating additional capacity for stormwater.

The cities of Cambridge and Somerville must employ green stormwater infrastructure as part of the new sewage control plan. However, there should also be a more comprehensive regional effort. For the Alewife Brook, Belmont and Arlington must join efforts to plan new green stormwater infrastructure solutions to improve stormwater quality and reduce flooding.

Sewer separation

EPA has also asked the cities to separate their sewers. To close the Alewife's six remaining active CSOs, the old combined sewer pipes in Cambridge and Somerville must be separated. This means the cities must excavate roads to access the sewer lines and separate their Victorian-era combined sewer pipes. As part of the new Alewife sewage control



MWRA

Channelized portion of Alewife Brook.

plan, both cities need to commit to an ambitious sewer separation program.

Regional sewer system upgrades

The communities in the Alewife sub-watershed cannot solve the problem without the help of MWRA because the combined sewer pipes and outfalls are tied into its aging and undersized regional sewer system, which is failing to meet current conditions. According to MWRA consultant Don Walker, there is not enough capacity in the MWRA's system to manage flows to the Deer Island wastewater treatment plant during some storms. That is when sewage pollution is discharged into Alewife Brook.

The EPA has asked MWRA to improve its sewer infrastructure by employing gray infrastructure solutions such as underground CSO detention tanks, upgrades to its Alewife sewer lines, and increased downstream capacity. Perhaps MWRA could also construct an Alewife CSO treatment facility behind the Alewife T parking garage.

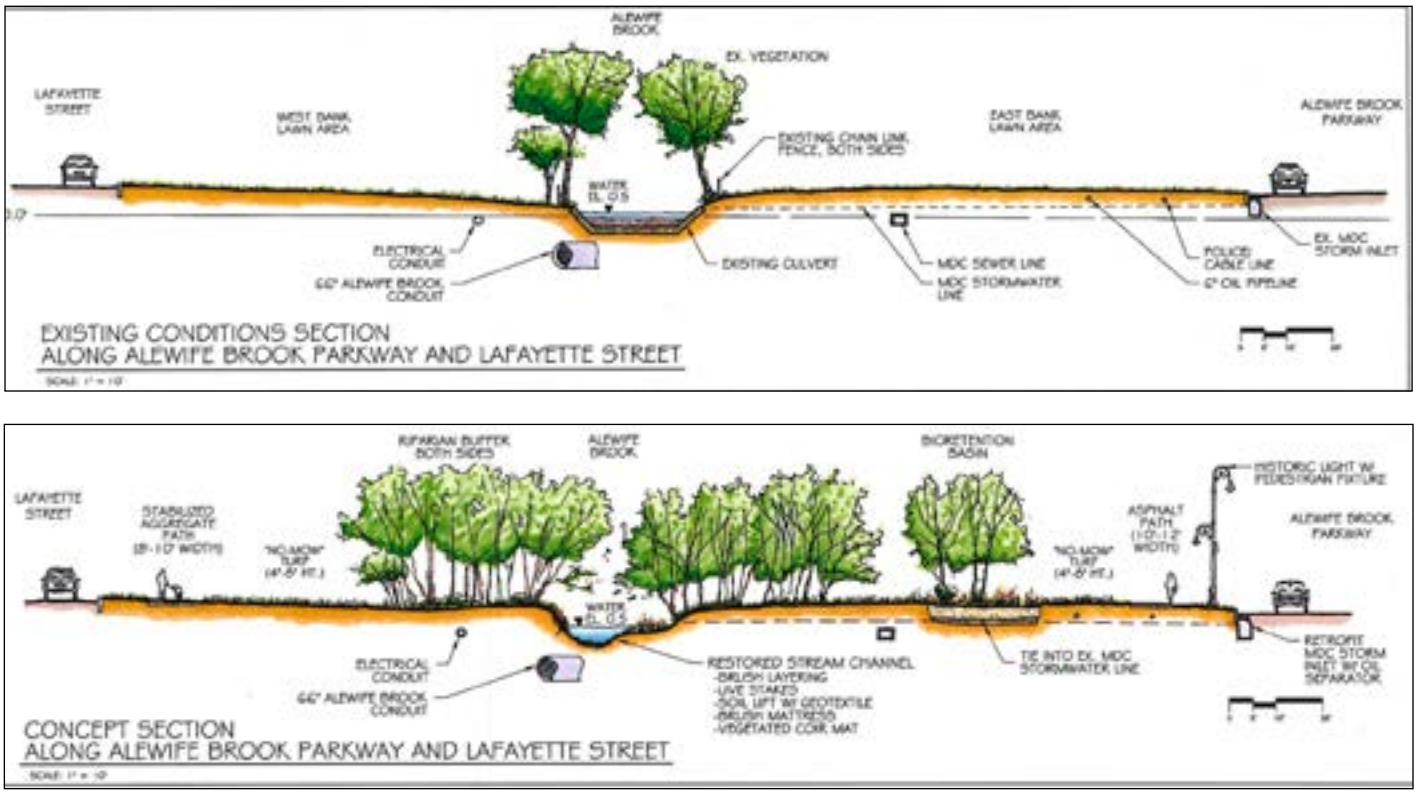
New state sewage control legislation

Where there is political will, money plus time can solve the problem. But here, political will is naturally splintered because the Alewife Brook marks the boundary between four separate municipalities: Arlington, Belmont, Cambridge, and Somerville. And the city of Medford is just yards away from where the Alewife meets the Mystic River. Historically, polluters clutched their purse strings, closed their eyes, held their noses, and sent their pollution downstream, where it became someone else's nightmare. This is why the Alewife needs help from the state.

The Commonwealth can greatly improve water quality by passing legislation to bring all combined sewer overflows in the MWRA's sewer system area to a 25-year level of control, meaning untreated sewage pollution would be discharged on average only once every 25 years. This is the standard that is currently applied to other CSOs in the Boston area. That would be a big step towards addressing the problem while the cities continue to separate their antique combined sewer lines.

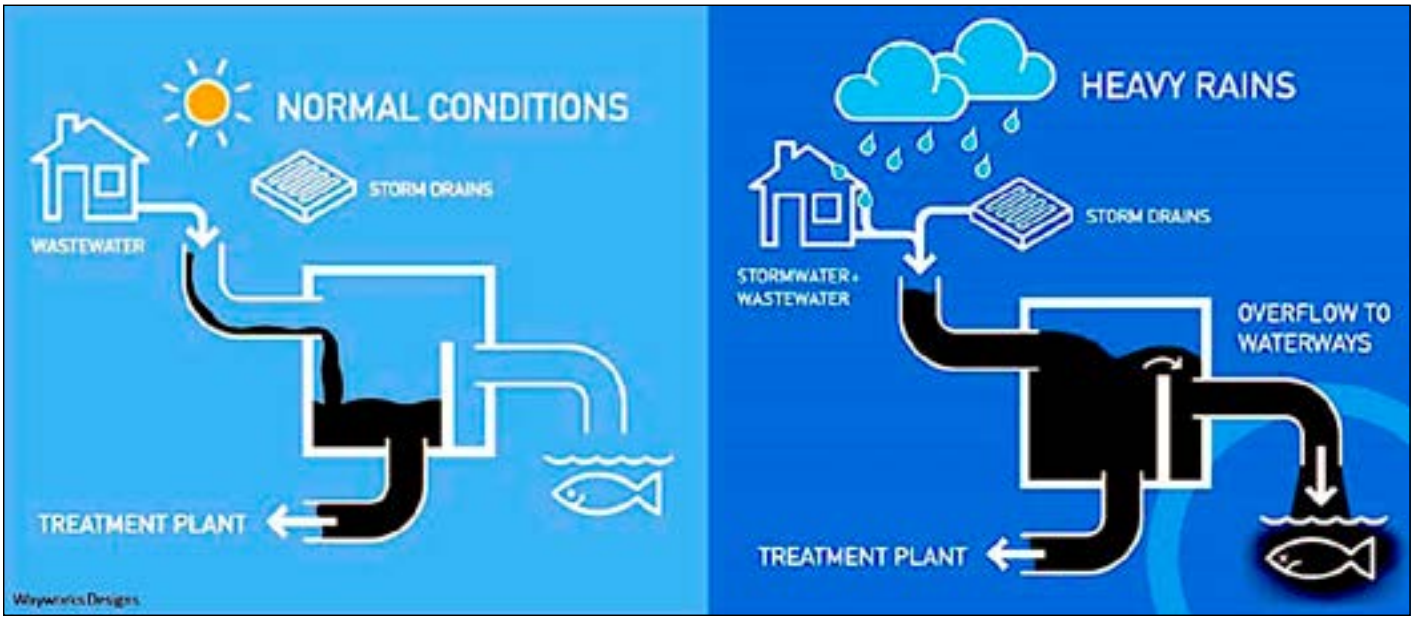
Alewife Master Plan update

While it is dated, the 2003 Alewife Master Plan contains large and small green infrastructure projects that could be constructed today. An Alewife Master Plan update could look to the future



MA DCR

Alewife Brook dechannelization and restoration sketch from the Department of Conservation and Recreation's 2003 Alewife Master Plan.



CHRIS BANKS / WAYWORKS

A combined sewer system. During dry weather (and small storms), all flows are handled by the publicly owned treatment works (POTW). During large storms, the relief structure allows some of the combined stormwater and sewage to be discharged untreated to an adjacent water body via a Combined Sewer Outfall (CSO). From U.S. Environmental Protection Agency (EPA) "Report to Congress: Impacts and Control of CSOs and SSOs."

by focusing on climate adaptation and hazard mitigation projects that would protect residents and community assets in the Alewife basin's densely settled low-lying neighborhoods in Belmont, Cambridge, Arlington, and Somerville. An Alewife Master Plan update could provide shovel-ready projects to be paid for with the ample federal and state funding soon to be disbursed from the Bipartisan Infrastructure Law and the Inflation Reduction Act.

The Alewife brook needs a hydrological study of water quality, flows, storm capacity, sedimentation, and contamination within the sediment.

Over the last few decades, there have been multiple studies of the sediments showing that it contains toxins, including polychlorinated biphenyls (PCBs) and heavy metals. Removing the toxins in the sediment through dredging would protect the health of the thousands of residents living within the Alewife's 100-year floodplain, including the area's substantial environmental justice populations. A new hydrological and dredging study will allow us to take advantage of state and federal funding opportunities around climate adaptation, flood mitigation, water quality, hazard mitigation, and environmental health. Furthermore, such a study might reveal that the Alewife Brook should be considered for a Superfund site designation.

A lot has changed in 20 years; the effects of global warming and our understanding of the possible solutions. It is time for a new assessment and new actions that look toward the future. Cambridge and Somerville and MWRA are legally obliged to make investments to reduce their sewage pollution, but that will not be enough. For the Alewife to receive the care it deserves, Belmont and Arlington must implement green stormwater infrastructure to clean their stormwater and reduce flooding. Finally, we must see state support for assessment, leading to federal support for action to remove hazardous sediment and restore the Alewife Brook to a healthy state.

Thanks to members of the Save the Alewife Brook Steering Committee who contributed comments and content to this article: Gwen Speeth, David Stoff, and Gene Benson.

Kristin Anderson is an Arlington Town Meeting member whose home was occupied by the untreated sewage flood waters of the Alewife Brook during more than one 100-year flood event within two years. David White is an Arlington Conservation Commissioner. The authors can be contacted at arlington@savethealewifebrook.org *or* savethealewifebrook.org.

Profiles in Belmont: Anne Paulsen

By Elissa Ely

Anne Paulsen.

If you walk past Anne Paulsen's house on certain days, you will notice sheets hanging in the backyard, like neighbors gathering in a friendly kind of way. If a wind is blowing, some drying towel may point its direction. It's environmental, but also practically driven: Anne has never bought a dryer.

Her parents were not conservationists or even drawn to the great outdoors, but when Anne was five and growing up in West Roxbury, her father sold the family car to support the war effort. Afterwards, they walked almost everywhere ("It was a long trip to Dorchester," she remembers). Summer was an exception. Carless neighborhood kids would ride the five-cent subway, bus, and trolley to Revere Beach. While they swam, Anne's mother and a friend lounged watchfully on the shore, smoking cigarettes in a daring and feminist fashion.

It was a childhood full of reading—"If my mother said we shouldn't read something, we ran to find it"—and doing: roller-skating, biking, those long involuntary walks, and, eventually, skiing. This led to the sport she still loves, as well as the husband she met skiing in Maine (and still loves, too). It also led to living in Belmont; her husband Fred, born and raised here, was serving on the School Board. A local address was necessary.

There was less wildlife on the streets back then. The unwelcome turkeys, more unwelcome coyotes, and most unwelcome rabbits now roaming town lived in undisturbed niches. Belmont was politically conservative, but neighbors were collegial. One was a truck company dispatcher, another a college professor, and older widows were on call for babysitting. Neighbors are still collegial. Anne recently forgot to turn off the coffeemaker, and a friend ran across the street and did it for her.

Activism began early in her Belmont life. When the Paulsens first moved to town, the head of the highway department was not a conservationist. He was "prone to asphalting over green spaces to increase parking." Yet there were no curbs along School Street, in spite of racing children and reckless traffic. Anne and another mother lobbied the Board of Selectmen. Curbstones were installed. Still, it would be wrong to say she leapt into a political career. Like her mother, Anne started as a teacher, writing a play for third graders that opened just as its lead contracted chicken pox. And like unsung women in most communities, she became an imperative volunteer: organizing sing-alongs for children, editing a newsletter for the Fair Practice Committee (now Belmont Against Racism), joining the MWRA. She left teaching after her first child, but in 1976, now the mother of four, she ran for the Belmont School Committee. Nine years later, worried about the fiscal impacts of Proposition 2½, she was elected as the first woman to serve on the

Board of Selectmen . . . immediately rendering the name a misnomer.

By the time she ran for Massachusetts House Representative in 1992, she understood a great deal about municipal government and education, water issues, and local aid. Nonetheless, her committee assignments were transportation, human resources, and criminal justice. "In a way, even though I was 57, I set out blindly into state politics," she says. "It was a steep learning curve about what happens when women are poor. We ask them to find a place to live, a job, day care, mental health help, and never to miss an appointment with the welfare department. These women's lives are in turmoil."

Over the next 14 years, she took on aspects of welfare reform. Educational and vocational training were substituted for job requirements; funding for those with mental health problems was protected. The woman who walked everywhere (and biked for many years to the State House) was in motion. "You have to keep after it all the time, to relieve some of the burden," she explains. "There are big pictures and there are details. You need people who look at the details."

Attentiveness extended beyond women's issues. One Christmas Eve, Anne and a legislator colleague traveled to Walpole prison (now MIC-Cedar Junction). A legal aid attorney was worried for the safety of his client, who had vanished from view. The two women spent the night searching for the prisoner, to the sorrow of various children waiting back home for their holiday.

They found him.

In the House, she co-authored ambitious bicycling legislation. State highway crews now need to include bike riders and pedestrians in the design and construction of every new project. Meanwhile, in Belmont, she advocated for bike lanes on Concord Avenue. "People were aghast and thought the traffic would be worse," she says calmly, "but we did it anyway, and it has survived."

Even in retirement, she is compelled by local environmental issues (not that volunteers ever retire). Belmont struggles with increasing traffic and construction. "I've watched our green space diminish slowly but surely," she says. "Inch by inch, the green space goes."

She cheers on attempts to preserve conservation land. Rock Meadow is one place not free from concern. Its paths are widening with foot use, "and the place is beginning to look care-worn." Other cheering includes protecting Clay Pit Pond and supporting Mass Audubon's Habitat's efforts to maintain itself. In 2012, still a devout pedestrian, she co-created a Walking Map of Belmont (available on the town website at bit.ly/BCF-Walk-Map). One favorite route runs up Old Concord Road to the Highland Cemetery and Lone Tree Hill. Huffing will be involved.

Being outdoors also continues, and not only for the laundry. Anne plays tennis a few times a week, which leaves a supply of balls to throw at rabbits and gophers in her perennial garden. A broken femur on the court two years ago ended bike-riding, but not cross-country skiing at Fresh Pond. She remains in motion.

In many ways—environmentally, politically, racially, socially—we live in disheartening times. But approach someone who has never stopped trying to relieve burdens, who takes on the details, and ask why she persists. "To be a person who can think and do and not be afraid is a gift," Anne says in her even, invaluable way. "I have nine lovely grandchildren, and I'm hopeful we'll have a country that provides them those opportunities."

Three words follow: "I like life."

Elissa Ely is a community psychiatrist.

Letter To the Editor

To the Editor:

I am writing as a resident of Belmont to express my personal opinion, as I recently came across Paul Joy's article in the BCF on staffing shortages ("Opinion: Staffing Shortages Imperil Belmont," BCF Newsletter March 2023). I noted an important omission in his list, which is that the Belmont Community Path Project Committee which is also staffed by Community Development.

It is a highly important project for our economic growth and community development and should continue to be prioritized, arguably above all other transportation projects that develop the community.

Best wishes,
Kate Bowen

Volunteers Plant, Clean Up at Lone Tree Hill

By Radha Iyengar

The Belmont Citizens Forum (BCF), in conjunction with the Judy Record Conservation Fund, held its ninth annual Lone Tree Hill Volunteer Day on Saturday, April 22, an overcast and cool day.

Volunteers included Girl Scouts Troop 82027, employees of Cityside Subaru, M&T Bank,and the Sai Group, and residents of Belmont and the surrounding communities. Many hands made light work.

JEFFREY NORTH

JEANNE MOONEY

BREDA ZIMKUS

At the Pine Allee, efficient volunteers planted forty white pine saplings. The new plants replaced the Allee's missing trees and some of the dead saplings from previous volunteer day plantings. At the adjacent meadow the volunteers planted slender leaf mountain mint, short toothed mountain mint, wild bergamot, white wood aster, blue wood aster, New England aster and butterfly weed — 70 plant plugs of each species.

At the other end of the property, the volunteers collected twenty bags of trash, and garlic mustard. The trash included rusted metal sheets and an old bed frame. The volunteers also closed an unauthorized bike trail and dismantled an abandoned improvised house.

BCF is grateful to David Ropes, John Craig, and Sergio Tavares of Tree Specialists, Inc. for supervising the planting and to the Judy Record Conservation Fund for funding their ongoing work and purchasing the trees. And a big shout-out goes to Joe Hibbard for purchasing the native plants and marking the location for their planting ahead of the volunteer day, and to Joe and Jeff North for supervising the plantings. We thank Leonard Katz

RADHA IYENGAR

for supervising the removal of the garlic mustard and the closing the unauthorized bike trail, and Vincent Stanton for supervising the volunteers dismantling the improvised house.

We would also like to thank Anne-Marie Lambert and Nancy Kougeas for signing-in and directing the volunteers at the bottom of Coal Road, Sandy Vorce for sending volunteers to help with the plantings, and Michael Santoro, DPW Highway Division manager, and his staff, for picking up the trash. It took a village to have a successful volunteer day.

Radha Iyengar is treasurer of Belmont Citizens Forum and the organizer of BCF Volunteer Day.

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New plantings at the Pine Allee.

If You Just Sit Still

By David Morris

When I was young, I had an uncle who was attuned to nature. He was an artist, a hunter, a forager, and truly fascinating to an eight-year-old. Recently, after a frustrating morning trying to see some wildlife, I remembered his words. He'd said, "You need to remember that you are part of nature, too. You need to find a nice spot and just sit still. Don't wait for when it's time to move, but just enjoy the looking, the listening, and the sitting still. After a while, once you start to seem like one of them, the birds and the animals may start to show themselves."

I've come back to that advice often in the 15 years since I started doing wildlife photography. I've learned to get outside and really pay attention. When I'm outdoors, I need to consider the light and the wind and my options with the camera, and if I'm lucky—and if I just sit still—I may enjoy a moment where I can observe nature going about its business.

I like to photograph birds. We see them all the time, but often we don't really see them. I am especially fond of raptors and their details that emerge from photos: the play of feathers in the light and the wind as the hawks, owls, eagles, falcons, and other birds stake out their place in the food chain.

In late February, a female bald eagle known as MK was found struggling to fly in an Arlington cemetery. She was captured and taken to a wildlife care facility on Cape Cod, where she died from exposure to second-generation anticoagulant rodenticides ("SGARs"). She had likely eaten a rat that had eaten rat poison. (See "Law Could Prevent Eagle Poisoning," BCF *Newsletter*, November/December 2021.)

MK's story is both a remarkable success and a sad reminder that work is still needed to ensure that the nature around us has a fair chance to thrive. When I was growing up in the 1970s on the South Shore, there were no eagles flying around. Even red-tailed hawks were an unusual sighting!

With more focus on protecting habitat and restricting harmful chemicals, we have seen the raptors come back to take their rightful place in the natural chain. Now in my neighborhood on School Street in Belmont, it's not unusual to see red-tailed hawks building nests, to hear a screech owl or great horned owl calling after dark, or to view the occasional peregrine falcon or bald eagle passing by. These incredible raptors are now established neighbors.

I first photographed MK in the fall of 2018, along with some other photographers, at the Mystic Lakes dam in Medford. We viewed this young (2½-year-old) bald eagle who seemed to be staying in the area

DAVID MORRIS

MK the eagle.

rather than passing through as other eagles did on their way to watersheds further north. She was hanging around, and she was very sociable.

Her tag showed that she had been born along the Charles River in Waltham in the spring of 2016. She was a local—a bald eagle setting up shop in a busy suburban area just six miles from downtown Boston. It was incredible to see!

In the next few years, she was photographed by hundreds of people, viewed through binoculars, and noticed by people just walking by. Whether flying by the Mystic dam or sitting on the cross at the Church of St. Agnes in Arlington Center, she showed up in all kinds of places, giving many people their first-ever glimpse of a bald eagle.

While walking my dogs one morning, I saw her in a tree overlooking Clay Pit Pond by Belmont High School. She was maybe 25 feet up, watching the kids walk to school. MK would regularly sit on the football field's light poles and occasionally fish in the small pond behind Fresh Pond Animal Hospital on Brighton Road. MK was a living, breathing, flying symbol of what good policy around nature can achieve.

Bald eagles start life in mottled brown and tan hues, looking more like strangely huge hawks than eagles. At three years, the eagle's white head, tail, and yellow beak emerge, but it's not until age five when an eagle is fully mature in appearance and ready to begin raising chicks. MK found her mate at age four and had her first chicks that year. Bad luck and the same SGARs that led to her demise also took the life of at least one of her chicks.

The pandemic led to a considerable increase in folks buying hiking boots, cameras, or binoculars and heading outside to look around. While some of the enthusiasm for nature has undoubtedly led to some bad behavior, it has also created a powerful information chain about the health of local raptors. This chain of observers allows local wildlife vets to get notified when seemingly healthy raptors are suddenly sick.

Sometimes animals just get sick, but the SGAR-related poisoning of eagles, hawks, owls, and other predators now seems to be a weekly occurrence. The raptors eat the poisoned rats or bring them home to their young, and our progress is halted. Eagles' estimated mortality may be as high as 75% in the first year; statistics say that only 1 in 10 survive to adulthood (5 years of age). The story for other raptors is likely similar. Things are hard enough for these beautiful birds to survive without us making it harder.

LORI OBERHOFER/ NATIONAL PARK SERVICE

Baby bald eagle at Everglades National Park.

The loss of MK to these poisons reminds me again of the sentiment my uncle shared. These raptors aren't in a different category of life from us, and threats to their health will ultimately threaten ours. We know rats can be a nasty problem, but we can't let the solution to that problem undo the progress that has been made on behalf of our neighborhood raptors. We owe them a solution they can live with.

For more information about local efforts to ban SGARs in Belmont and Massachusetts, contact savebelmontwildlife@gmail.com *- Ed.*

David Morris is a Belmont resident and avid nature photographer

Invasive Plants Can Harm Local Birds

By Meg Muckenhoupt

May is the peak of spring migration season in Massachusetts, and thousands of birds are landing in Belmont. (You can even get radar reports on which birds are arriving overnight on birdcast.info.) But what will these birds do when they get here? Will they find the resources they need to survive, raise young, and embark on fall migrations next September? The answer may depend on what's growing around Belmont—and a lot of what's growing around Belmont is invasive plants.

Plants change birds' lives

North American birds evolved with native plants. Most bird-lovers know that different types of birds prefer seeds: cardinals love black oil sunflower seeds, while finches prefer thistle seeds. However, birds' relationships with plants extend far beyond seeds. Birds use plants for:

- Locating nests and providing nest-building materials
- Feeding their young caterpillars and insects
- Consuming fruit and flower nectar

Invasive nonnative plants can disrupt all of these functions by replacing the plants that birds used in the past. Fewer birds survive, and the birds that do survive raise fewer young and are less likely to survive fall and spring migration.

Nesting problems

Invasive plants often leaf out earlier than native plants, making them attractive places for returning birds looking for sheltered nesting spots. Unfortunately, this short-term advantage leads to long-term losses. Researchers found that when American robins nested in invasive Amur honeysuckle (*Lonicera maackii*) and common buckthorn (*Rhamnus cathartica*) bushes, their chicks were eaten by predators more often than chicks brought up in native viburnum or hawthorn shrubs. The nonnative shrubs were shorter than the natives, and their branch structures likely made it easier for predators to climb up to nests. Another study showed that northern cardinals and American robins nested five to six inches closer to the ground when they nested in nonnative honeysuckles and multiflora roses than when they made their homes in native shrubs.

Nonnative honeysuckles, common buckthorn, and multiflora roses are all widespread in Belmont's open spaces and public lands.

Food for a marathon

Migration is a marathon for birds. When they stop to rest on their thousand-mile flights, they need plenty of food to fuel their journey. Unfortunately, the fruits on common invasive shrubs are the equivalent of a low-fat diet, depriving birds of the calories they need for a long, hard journey.

Researchers in Rochester, New York, analyzed the nutritional content of the fruits of invasive buckthorn, multiflora roses, bush honeysuckles, and European cranberrybush (*Viburnum opulus*) as well as the fruit of several native plants: gray dogwood (*Cornus racemosa*) silky dogwood (*Cornus amomum*), red osier dogwood (*Cornus sericea*), arrowwood viburnum (*Viburnum dentatum*), and spicebush (*Lindera benzoin*). The native fruits ranged from 6% to 49% fat. All the invasive fruits were less than 1% fat, and had far fewer calories per

WIKIMEDIA COMMONS

American native northen spicebush (*Lindera benzoin.*)

gram than the native fruits. Unsurprisingly, birds strongly preferred the highest-fat dogwood fruits to other foods.

A study of the feces of fall-migrating birds in Plymouth, Massachusetts, also showed that birds strongly preferred native plants, even though nonnative plants like Asian bittersweet, Japanese barberry, and multiflora rose have far more berries in the late fall. However, when native dogwoods are replaced by buckthorn and bush honeysuckle, birds can't find their favorite fat-bombs to fuel their flights.

Food for growth

Invasive plants also affect birds that don't even eat berries, the insect-eating birds, and most birds' young. Most insects in the United States only eat species they evolved with because their ancestors developed ways of coping with the various chemical defenses the plants use to keep insects away. A spicebush swallowtail butterfly caterpillar can thrive on spicebush leaves, but it can't digest hostas or burning bush; those species are toxic to them.

A University of Delaware study showed that areas dominated by nonnative plants including bush honeysuckles, Asiatic bittersweet, and Japanese knotweed had 91% fewer caterpillars than areas dominated by native plants such as arrowwood viburnum. This is terrible news for birds that eat insects, like Carolina chickadees, which may take up to 6,000 caterpillars to raise a brood of five young. The more non-native plants in a yard, the less likely chickadees were to nest and breed—and the ones that did breed had fewer surviving young than birds in native-dominated yards. According to researcher Douglas Tallamy, 96% of all terrestrial birds rely on insects for food for their young, if they're fruit-eaters, or throughout their lives if they're insectivores.

Changing the balance

Of course, not all birds are unhappy about having more nonnative honeysuckle around; plenty of birds are eating the nonnative fruits and spreading it through their droppings. In central Pennsylvania, the population of fruit-eating robins and catbirds has tripled in the past 30 years, despite the problematic nesting conditions. That may sound wonderful—more birds!—but in Massachusetts, those robins serve as hosts for eastern equine encephalitis (EEE). Robins overwintering in the wetland forests of southeastern Massachusetts serve as a reservoir for EEE. The more the bird population tips to robins, as they replace other birds, the more likely it is each summer that mosquitoes will spread EEE from robins to mammals to people.

This pattern seems to happen over and over; invasive nonnative plants benefit some species, but the overall diversity of species declines, and birds that were already in trouble have even more difficulty surviving. A 1999 study of tidal marshes in Connecticut found that invasive Phragmites reeds were preferred habitat for red-winged blackbirds, but there were significantly fewer species and rare species in marshes where Phragmites dominated over native marsh grasses.

Sometimes, invasive plants have effects on birds that are just puzzling. When cedar waxwings eat berries from invasive Morrow's honeysuckle, their tails turn orange. And when invasive spotted knapweed plants in Montana crowd out food plants for chipping sparrows, the number of types of songs the chipping sparrows sang declined by 20% because young chipping sparrows didn't have enough adults to learn all their songs from.

How to help birds

If you'd like to hear more birdsong in your yard, plant native plants. The National Wildlife Federation, Douglas Tallamy's Homegrown National Park, and the Framingham-based Native Plant Trust all have plant finders you can use to find native plants that will thrive in your yard.

Since most birds eat caterpillars and insects at some point in their lives, supporting insects means supporting birds. You can find out which plants support local butterflies and moths at the National Wildlife Federation's butterflies and moths finder. Belmont also has a great resource in the Mystic Charles Pollinator Pathways Group (www.sustainablebelmont.net/mystic-charles-pollinator-pathways-group/), which has plenty of local resources including a map of where to see pollinator-friendly gardens (online at tiny.cc/MCmap) and a Facebook group for asking questions.

Meg Muckenhoupt is editor of the Belmont Citizens Forum Newsletter.

Let Your Hidden Native Plant Garden Emerge

By Heather Pruiksma

Spring has sprung, and gardeners everywhere are itching to get their hands into the soil and among the roots. At Grow Native Massachusetts, we encourage including more native plants in your gardens, which can be less work than it might seem — if you're willing to be a little patient.

Native plants are plants that have been growing in a particular habitat and region, typically for thousands of years or much longer. Also called indigenous, they are well adapted to the climate, light, and soil conditions that characterize their ecosystem. Within this system, they have evolved important relationships with other native plants, animals, fungi, and bacteria.

Growing native plants in any garden or landscape provides food and habitat for dwindling insect populations, including beloved butterflies, fireflies, bees, and other pollinators. Many of those insects will attract birds to your backyard as an important food source. Ecologist Desiree Narango's research suggests that a minimum of 70% of your garden's biomass should be native in order to adequately support the nutritional needs of nearby hatchlings. "Biomass" means the total plant material, not the number of plants, so if you have one big oak in your yard, you're already off to a great start!

Transitioning your garden to be more native, wild, and welcoming to pollinators and birds does not need to be an overwhelming or expensive undertaking. In fact, you can get started by being a little lazy.

Sit back and wait a bit longer than you might normally do this year before attacking your garden beds with spade and hoe. Let the accumulated leaf litter linger in place as it imparts nutrients, retains the soil moisture, and safely harbors slumbering insect larvae that will soon emerge to be an important part of the ecosystem and the diet of newly hatched baby birds.

If you need to satisfy an urge to spring clean, focus your efforts on clearing the pathways for safe walking and defining your garden's shape. Some folks wait until the average daytime temperatures remain above 50°F for a week before removing leaves from garden beds, but really it is best to leave the leaves indefinitely as a natural mulch and pollinator nursery.

DAVID CAMERON

New England violet.

As you wait, you may take a hands-off approach to the "weeds" as well. Watch them grow a bit until you are able to identify them (there are some great plant ID phone apps like Picture This or iNaturalist that can help you with this tricky step). You may be surprised to learn that many of the seedlings you have been diligently removing from between your well-spaced perennials are actually naturally-seeded native plants.

When you identify a non-native plant, particularly if it is an invasive species in Massachusetts, go ahead and remove it. (While you're at it, make sure none of your existing plantings include invasive species).

BEATRIZ MOISETT/ USFS

Fritillary butterfly on native milkweed (*Asclepias tuberosa*).

But let those bonus native plants grow where they are, and see how they fill in and soften the edges of your garden and attract the attention of pollinators.

Through this process, I have discovered a love for the native violets that I had previously spent year after year pulling from my garden. Now they spread between my older plantings to form a charming ground cover that replaces expanses of mulch and suppresses invasive weeds, and is a favorite food of the caterpillars of many fritillary butterflies to boot!

Now we can start thinking about digging. Once you know where your "bonus plants" are filling in and you have removed invasive plants, you can identify spaces where you might want to fill in even more with new plants. Keep in mind that native plants really do like to be crowded together; this provides a supportive structure for them to grow in (rather than flop over) and continues to suppress those unwanted non-native invasive weeds. Find a reliable native plant source, ask lots of questions about what will work in your particular space and conditions, and experiment with a few new plants.

If you have the room, try grouping a few of the same species together. This makes it easier for pollinators to find what they like. If you can only add a few plants, prioritize native shrubs and trees which typically support more beneficial insects than flowers and grasses and offer critical habitat for birds.

Your native plant garden, once established and thriving, is going to be much less maintenance than you might be expecting, and will give you more time to simply enjoy the beauty—and wildlife—in your yard, as they are well-adapted to the conditions of this region. More importantly, watching your garden fill with vibrant life will bring the gratification of knowing you are having a positive impact in a world where environmental challenges often feel insurmountable. You can truly make a difference!

Heather Pruiksma is the executive director of Grow Native Massachusetts

Grow Native MA Plant Sale

Friday, June 2 and Saturday, June 3
Advance registration will be required at grownativemass.org/Our-Programs/plant-sale. Shopping on Friday will be limited to Grow Native members at the Advocate/ Family level and above, and Saturday open to anyone, regardless of membership status.

Can I pre-order plants?
Grow Native will have a pre-sale for a special selection of trees, which is open to members at the Advocate level and above.

When can I see your plant list?
The pre-sale catalog will be released 2 - 3 weeks prior to the sale, and our full plant species list will be posted 7 - 10 days beforehand.

Make sure you are subscribed to Grow Native Massachusetts' monthly eNews to catch the most up-to-date announcements about the sale!

Honeybees Thrive at Rock Meadow

By Sadie Forbes

Most people visiting Rock Meadow have noticed the presence of beehives. Belmont beekeepers now tend 20 hives in five locations along Mill Street and in the center of the meadow.

There are many pressures on honeybees. Beekeepers and scientists agree that two problems are largely responsible for "colony collapse disorder," where entire hives of bees die off.

The first cause is varroa mites (*Varroa destructor*). These mites were benign pests of Asian honeybees (*Apis cerana*) in Asia. Beginning in the 1980s, varroa mites began to be seen in western apiaries. They have been highly destructive to the Western honey bees (*Apis mellifer*a).

Second, a large proportion (about 80%) of all US honeybee colonies are transported by truck to do pollination work for the California almond crop, where they are exposed to extremely high levels of chemical pesticides and fertilizers. These chemicals affect bees' immune systems, making them vulnerable to disease. Unfortunately for the bees, trucking bees to California pays commercial beekeepers better than most other work.

It is also difficult to find bees and queen bees for starting local colonies that weren't raised in the southern United States and trucked nationwide. Not surprisingly, bees that succeed in southern climates do not fare as well in the northern states. To address this problem, Rock Meadow's beekeepers work with local queen breeders in western Massachusetts, and some of the Rock Meadow apiarists are learning to breed queens that will survive optimally in eastern Massachusetts.

Managing honeybees through the seasons

The natural cycle of a bee colony is to build up the hive's population in spring and into summer. When the colony has grown to the point of overcrowding, the queen leaves the hive, taking a cohort with her to "swarm" and take up residence in a new location.

Beekeepers monitor hive populations and will "split" a hive to form two colonies, simulating the swarm. At that point, a beekeeper will either rely on the remaining bees to raise a queen, or the beekeeper can purchase a new queen with desirable characteristics.

PHIL THOMAS

Rock Meadow bees in March, 2023.

A queen bee lays up to 2,000 eggs daily that mature into workers and drones in about two weeks. Many of the worker bees are assigned to care for the queen and the brood she's rearing. However, high-quality drones are just as crucial to the ongoing health of all hives in an area. Virgin queens mate with drones in "drone congregation areas." If the drones that breed a new queen are not allowed sufficient space in a hive, or if they come from a hive that is not healthy, their offspring will be weak.

Solutions for mites

Hygiene is a primary defense against varroa mites. Methods include:

- Actively creating 2-week periods for a colony to have no brood and, therefore, no place for the mites to propagate. This practice is called "brood breaks."
- Applying "natural" organic deterrents, e.g., formic acid, oxalic acid, or thymol.
- Applying synthetic miticides, the lowest-effort step. Unfortunately, mites become resistant to these agents in less than a year after application.

Honeybees and native pollinators

Western honey bees (*Apis mellifera*) naturally occur in Africa, Europe, and the Middle East. They have been domesticated for nearly 9,000 years. They have been selectively bred by humans as managed livestock. They are also a domesticated species tied tightly to small- and large-scale agriculture.

Native bee species include bumblebees, carpenter bees, and various butterflies and wasps. Native pollinators tend to be specialists, and are most effective in pollinating specific plants.

Most people know that monarch butterflies are highly specialized in pollinating milkweed and migrate up to 2,500 miles. Bumblebees are essential pollinators of rare and imperiled wildflowers, including native monkshood; they're also highly effective for tomatoes, peppers, raspberries, and other row crops.

In contrast, European honeybees are generalists and the most efficient honey producers—hence their wide domestication. In addition to competing for resources, they can have indirect albeit adverse effects, especially on bumblebees. High levels of varroa in honeybee colonies often result in high rates of deformed wing virus in the bees, which will effectively kill a colony. Bumblebees are also prone to this infection, and poorly managed honeybee colonies harm local honeybee colonies and the local bumblebee population.

Honeybees forage and breed over a wide range, flying up to three miles. We tend to think primarily about our hives' immediate environment, which is Rock Meadow. However, the bees of Rock Meadow likely travel west as far as Route 95/128, east across most of Arlington, north into the middle of Lexington, and south as far as the Charles River.

The beekeepers of Rock Meadow work together for consensus on how best to be a positive presence for the community gardens, for people enjoying this beautiful space, and for hives in the larger region.

Sadie Forbes is a research scientist working at MIT.

MARY BRADLEY

Bumblebee on a Rock Meadow Victory Gardens dahlia.

Book Shows Best Bike Rides in New England

By David Sobel

If you're a casual bike rider who likes 10- to 15-mile rides on backroads around New England, I encourage you to check out my new book, *Best Bike Rides in New England: Backroad Routes for Cycling the Northeast States*. I'm 73, and my wife is 63, so we're into reasonable, not ardent, exercise. And we aspire to doing some outdoorsy sport four or five times a week—biking in the summer, skating, Nordic and downhill skiing in the winter.

The book includes descriptions of 30 bike loops in all six New England states. I originally wanted to write a guide to backroads biking in the Monadnock region (my home neighborhood), but I couldn't find a publisher interested in a book with that limited geographic scope. The publisher I found, Countryman/Norton, said they'd like me to do a bike book, but they wanted it to cover all of New England.

That task was initially daunting, but the more I thought about it, the more I realized I did have good bike loops in all the New England states. During the pandemic, going off to redo rides, take new pictures, and ferret out new loops was a great way to be outdoors in socially distanced places in the summer of 2021. A good number of the rides in the new book are located in central New England, but there are good rides close enough to Belmont. One of my favorites connects Concord, Bedford, and Lexington, just a hop, skip, and a jump away.

I've been working on this book for the last 20 years as I've designed bike rides that explore old New England. It's been great fun to poke around on bikes in search of historically preserved town centers, not-maintained-in-winter roads, rural corners of Massachusetts, and tucked-away urban pathways.

I like arriving in a new village for the first time on a bike, rather than in a car, to see how the landscape and architecture unfold. First, a scattering of houses, an old schoolhouse, the Congregational church, a cemetery, and maybe a store. In larger ones, a pizza place and a tattoo parlor. They provide glimpses into New England's history and evoke dreams of what it would be like to live here. And I like figuring out where the local swimming hole is for post-ride cleansing and renewal.

JOHN PHELAN

Reformatory Branch trail, Bedford, MA.

This book recreates some of those explorations for you. Some of these rides are now part of our annual regimen. A few are new, recent discoveries in the constant search for perfect bike rides. Luckily, some of these lost villages are being

found—found enough so that there are little cafes, bakeries, bistros, and pubs tucked into restored mills and renovated opera houses.

Take Petersham, Massachusetts, for instance. It's not on a main road, but the Petersham Country Store is a destination lunch spot. That's the idea of this book. Off-the-beaten-track biking on back roads, rail trails, maybe some mellow single track, followed by suggestions of great places to wash away the road dust and sweat, rounded out by lunch or an early dinner at one-of-a-kind, homegrown cafes. Bike, swim, nosh. The simple pleasures.

JOHN PHELAN

Skatutakee Lake, Harrisville, NH.

Here are two of the rides within 90 minutes of Belmont that are described in the book and have become favorites.

"The Reformatory Branch and Battle Trail" ride uses three bike trails to make a loop from Concord through Bedford to Lexington and back to Concord. A couple of sections of the ride give you that remarkable lost-in-time feeling, and you get that sense of being far away from the metropolitan area.

"The Land of Lakes" ride takes you from Chesham to Nelson to Harrisville to Dublin, New Hampshire, on quiet backroads and along the shores of at least seven different ponds and lakes with a few marshes in between. Nelson was the first lost village I came to in New Hampshire for a February contradance way back in 1972.

The rides vary from about 10 to 28 miles, with the majority being around 15 miles. They're all loops, avoid busy roads, and have all been vetted. I was initially opposed to calling the book Best Bike Rides because that sounded kind of self-congratulatory. But when I re-ride them after being away from them for a year or more, I think, "Wow, that is a great ride!" I think you'll find some rides to your liking in this book.

David Sobel is a professor emeritus in the education department at Antioch University New England in Keene, New Hampshire. The Best Bike Rides in New England is his first biking travel guide.

Belmont Conversation Volutneers

Belmont Conservation Volunteers will lead group efforts to control non-native plants that disturb our native plant communities, starting with spring garlic mustard pulls at Lone Tree Hill, Rock Meadow, and elsewhere. Most events will take place on Saturday mornings. Learn to know, love, and protect our local native plants and share the experience with others!

To sign up for timely e-notices (including for after-rain knotweed pulls/digs) and for further information, see www.sustainablebelmont.net/belmont-conservation-volunteers/

BHA Plans for the Future of its Senior Community

By the Belmont Housing Authority Board of Commissioners

In 2018, Belmont Housing Authority (BHA) was awarded Community Preservation Act (CPA) funding by the town of Belmont to embark on an ambitious project: planning for the modernization of its Sherman Gardens apartment community. Situated between Sycamore Street and Thayer Road in Waverley Square, the 80-unit state-funded public housing community has provided critical shelter for seniors and persons with disabilities since 1971. After more than 50 years without a major renovation, the apartments are now expensive, difficult to maintain, and energy inefficient. Designed 20 years before the Americans with Disabilities Act was passed in 1990, the cramped apartments are inaccessible to seniors who use walkers or wheelchairs or otherwise have limited mobility.

According to Gloria Leipzig, a member of BHA's board, "Our senior residents have a particularly hard time with the staircases at Sherman Gardens. Half of the units are located on the second floor, and elders consistently have trouble with how steep and narrow the stairs are."

This year, BHA has requested CPA support from the town; the BHA previously received CPA allocations for Sherman Garden redevelopment planning in fiscal years 2018 and 2022. The authority says it has made significant advances in planning for Sherman Gardens' future. Its designer, the architectural firm Bargmann Hendrie + Archetype, and its consultant, the Cambridge Housing Authority, have created a concept plan for the transit-oriented site.

The plan replaces five of Sherman Gardens' six existing walk-up buildings with a single mid-rise building with elevators, offering seniors larger, more accessible apartments. The sixth existing building at Sherman Gardens will be comprehensively renovated. The conceptual plan envisions a variety of enhancements, including inside and outside gathering spaces, environmentally friendly Passive House design, and additional parking concealed from view in the building's first floor.

At recent tenant meetings, current residents of Sherman Gardens have been optimistic about the new building design. One Sherman Gardens resident commented: "I like how this option preserves green space." Residents also voiced approval for the redesigned units being larger and offering more storage.

The redeveloped Sherman Gardens will have approximately 135 apartments. Expanding BHA's portfolio for new generations of Belmont residents will help the town meet its need for affordable housing. In Belmont, more than 29% of households experience a housing cost burden, paying more than 30% of their income on housing, according to 2020 census data. This burden is more common among renters (32.9%) than owners (27.6%), but both groups have seen their costs increase in recent years. The senior population in Belmont is also disproportionately cost-burdened, representing 58% of all cost-burdened households.

BELMONT HOUSING AUTHORITY BOARD OF COMMISSIONERS

The Sherman Gardens Apartments.

The redevelopment of Sherman Gardens with 55 new units will help Belmont meet its goals for Subsidized Housing Inventory on a site that already provides multifamily housing. Rezoning the 1.8-acre Sherman Gardens site to support multifamily housing would help to meet the town's approximately 27-acre goal for multifamily housing set by the MBTA Communities Law.

BHA's application for CPA funding will be in front of Town Meeting in May and June. The funding will facilitate the creation of detailed architectural plans during the summer and fall of 2023, with BHA having set a goal of appearing before the Planning Board in 2023.

Residents interested in learning more about the redevelopment project can contact Matthew Zajac, senior planning project manager with the Cambridge Housing Authority (mzajac@cambridge-housing.org).

The Belmont Housing Authority Board of Commissioners are Sarah Bilodeau, Charles Laverty III, Gloria Leipzig, Anne Mahon, and Cassandra Page.

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