



BOARD OF TRUSTEES

Chair, Lisa Rosen Vice Chair, Don Steinberg Scott Amero Trenni Casey Carolyn Dykema Meghna Eichelberger Chris Klaehn Ann Lewis David Lipman Gary Martin Sandhya Murali Emmanuel Owusu Jeffrey Porter Amy Feind Reeves James Richardson Dan Sarles Susan Smith Eve Waterfall

TRUSTEES EMERITI

Regina Wiedenski

Robert Ackerman Paul Bakstran Tess Bramhall Ursula Cliff Richard Forman Bobbie Hallig Tom Jones Pam Kohlberg David Leathers Paul Maeder Nina McIntyre Marilyn Sarles Howard Stevenson





ablished by the BBB Wise Giving Alliance The BBB Wise Giving Alliance is a national charity watchdog affiliated with the Better









HOPE FOR NATURE

MASSACHUSETTS' NEW BIODIVERSITY GOALS

Biodiversity: the variety life on earth. We need it to survive—it's the source of our food and water, clean air to breathe, a stable climate and the beauty around us. But with species extinctions on the rise, increased threats from habitat loss and climate change, it is clear we need to keep building momentum and put the planet on a path toward a healthy and vibrant future for all.

Here in Massachusetts, state policymakers have long been leaders in setting statewide climate goals. Now, biodiversity is getting similar attention. At the end of 2023, Governor Maura Healey signed an Executive Order that directed the state Department of Fish and Game (DFG) to develop biodiversity conservation goals across all of state government for 2030, 2040 and 2050.

Over the course of this year, DFG has been developing that set of goals and a suite of strategies to meet them for this first-of-its-kind approach to securing biodiversity. TNC was one of many organizations who contributed expertise and guidance to the process.

Our state's 2050 biodiversity vision is to protect, restore, sustain and connect habitat and people across all realms—land, freshwater, coast and ocean. There will be a specific focus on conserving places identified as "core habitat" and "critical natural landscape" in BioMap (mass.gov/ biomap), a tool and vision for conservation that was co-developed by TNC and MassWildlife.

"This is a milestone," says Andy Finton, senior conservation ecologist for TNC in Massachusetts. "It's an opportunity to proactively value and conserve biodiversity to ensure a future where people and nature thrive."

Printed on 100% PCW recycled, process chlorine-free paper, creating the following benefits:







Future Caretakers of Our Forests

INVESTING IN THE NEXT GENERATION OF FORESTERS AND TREES

On a hot July afternoon, an occasional breeze rustles the leaves of a forest in Huntington, Massachusetts. Miles Plitt and Phoebe Weinberg, two college-age forestry apprentices, and their mentor, forester Otis Wood, are scanning the forest floor.

They are looking for oak saplings in need of protection from the hungry deer that have been munching on their leaves. Tubing or cages around the young saplings can prevent browsing deer from having a snack, letting the trees grow taller and maintaining the species diversity and carbonsequestering power of the forest.

The apprentices are part of the NextGen Forest Project—a collaboration between The Nature Conservancy and the Forest Stewards Guild, a nonprofit organization that promotes and practices ecological and responsible forestry to sustain forest systems. As part of this mission, the Guild supports training and development for the next generation of foresters.

The project encourages climate-smart forest management techniques, which increase the amount of carbon pollution removed from the atmosphere and locked away in tree trunks and soil. This work can be expensive, requires a high skill requirement and there's a shortage of people to do it.

With funding from TNC, the Forest Stewards Guild worked with Long View Forest Management to train three forestry apprentices to protect seedlings from deer browse and

remove invasive plants at 10 privately owned forest parcels in Massachusetts and Vermont this summer. The project is a chance for the apprentices to experience life as a forester and implementing these techniques to increase regeneration of native forest trees is an opportunity to better understand any associated costs and track their effectiveness.

"It's a niche industry, so this internship is great," says Plitt, while cutting invasive autumn olive shrubs from the edge of the forest. "I wanted to work outside this summer, and I'm getting to know skills that are valuable in the job market."

Plitt, Weinberg and Myra Traves, this summer's forestry apprentices, started out in May with chainsaw safety trainings through Game of Logging and also earned their herbicide applicator licenses. Then, they spent June through August combing through trees and shrubbery to spray invasives like glossy buckthorn to give native plants room to thrive; installing plastic tree shelters around vulnerable hardwood tree species; and writing treatment

plans and reports that local forest

landowners can use to continue this

"It's a great gateway job into the world of forestry careers," says Weinberg. "I imagine I'll be doing outdoor work in the future and it's cool to be introduced to this environment and have the chance to carry out the work myself."







COVER View of Mount Tom from TNC's Greene Swamp Preserve in Sunderland © Jerry Monkman/EcoPhotography PREVIOUS PAGE CLOCKWISE Sundew plant © Cheryl Rose; Dead Branch Preserve in Chesterfield © Jerry Monkman/EcoPhotography; Monarch butterfly on a goldenrod © Cheryl Rose; Common yellowthroat © Paola Rexach/TNC Photo Contest 2021 THIS PAGE TOP TO BOTTOM Miles Plitt removes invasive autumn olive branches from the edge of a forest in South Hadley; Forester Otis Wood shows a map of a NextGen project site to apprentices Miles Plitt and Phoebe Weinberg; Weinberg installs a plastic tree shelter around an oak sapling. © Jerry Monkman/EcoPhotography

work.

COLLABORATING WITH COMMUNITY

RESTORING HEALTHY COASTS

Watershed-Wide Community Resilience



The Nature Conservancy's 2030 goals are ambitious, and how we work is just as important as what we do. Centering communities is essential to meet those goals so that people and nature can thrive together. In Massachusetts, TNC is building relationships with communities to help restore healthy waterways and sustain livelihoods in both the Merrimack River and Assawompset Pond Complex (APC)-Nemasket River Watersheds.

Rivers, lakes and the wetlands around them are lush with plants, animals and insects; can provide drinking water and food for people; help absorb floodwater; and serve as places to swim, boat or relax. However, these frehwater systems are in peril around the world. Watersheds—the landscapes around bodies of water that drain rainfall, snowmelt and runoff to them—fundamentally shape freshwater health and the health of all that rely on it.

People who live, work and play within these watersheds often have deep knowledge about their surroundings and the changes they're witnessing. Their input and ideas are important for building lasting, sustainable solutions for a wide range of challenges. So, we're making space for residents to share their thoughts through public meetings, surveys, events and conversations in community centers or parks. We recognize that the lived experiences of community members are critical for shaping a sustainable future.

Along the Merrimack River in Lowell and Lawrence, TNC is meeting with city governments, planning boards, community-based organizations, and others rooted in the community to hear their thoughts about the future health of the river. We're also showing up at community events to learn directly from residents. It's part of creating a Merrimack Watershed conservation plan that reflects problems and solutions highlighted by community members.



"Including relationship-building and community input in the process is absolutely worth the added time," says Emma Gildesgame, climate adaptation scientist for TNC in Massachusetts. "When we plan in collaboration with communities, we come up with solutions that are more creative, durable and likely to succeed."

In southeast Massachusetts, the APC-Nemasket Project Team, under the guidance of the APC Management Team, created an updated Watershed Management and Climate Action Plan in 2022, which engaged the community at key intervals. The Project Team is made up of organizations and stakeholders in the region, but to get perspective from residents, they brought on a consultant to facilitate engagement. It has been an important part of understanding the major community issues at play within a system that suffers from both flooding and drought while also providing clean drinking water and vital fish and wildlife habitat.

"The project team, which includes the Southeast Regional Planning and Economic Development District, TNC and other partners, held public sessions both as part of an initial study of the Nemasket River hydrology, and then again while building recommended actions for the watershed plan," says Marea Gabriel, freshwater manager for TNC in Massachusetts. "We wanted to be sure that the final plan resulted in positive outcomes for both the community and natural systems."

Now that the plan is complete, the project team continues to engage the surrounding communities in the priority actions that take shape.

"Being in relationship and conversation with communities helps build shared goals," says Gabriel. "And it's just the right thing to do."

THIS PAGE LEFT TO RIGHT Residents fish on the Merrimack River downstream of the Lawrence Dam. © Emma Gildesgame/TNC; Houses along the shore of Long Pond, part of the Assawompset Ponds Complex © Jerry Monkman/EcoPhotography

GROWING OYSTERS FOR REEF RESTORATION

At a meeting in Fairhaven, oysters are on the table—literally. Steve Kirk, coastal program director for The Nature Conservancy in Massachusetts, and Amanda Cutler, ocean program fellow, are at a cafe with four South Coast Massachusetts oyster growers. One of the growers swings a giant bag of shell onto the coffee table, where it lands next to the muffins, dirt from the bag blending in with the pastry crumbs. The group is ready to talk official oyster business.

The growers are part of the Supporting Oyster Aquaculture and Restoration (SOAR) program, initiated by TNC and Pew Charitable Trust during the pandemic to create a new restoration market for oysters that were no longer going to restaurants (nature.org/SOAR). The program has dual benefits: providing growers with additional income and aiding oyster reef recovery. TNC has worked with 16 growers in Southeast Massachusetts and Martha's Vineyard since 2020 to direct farm-grown oysters to restoration sites.

"Shellfish are not just delightful additions to the dinner table, they also enhance coastal ecosystems," says Kirk. "They filter algae and nutrients from the water and form reefs that offer habitat for other marine life, and they reduce coastal erosion and storm damage, which is why both reefs and oyster farms are important elements of healthy estuaries."

This year, TNC in Massachusetts' coastal team met with growers to discuss how to grow oysters specifically for restoration, an expansion from just using their oversized oysters and less aesthetically pleasing "uglies." It's a new direction for the



SOAR program locally—a spat-on-shell pilot where oysters are intentionally grown in clusters, unlike the growing method for individual ones destined for the half-shell market. After being grown on the farm, the oyster clusters are then transported to the restoration site, where they continue to mature. This method adds complexity to the reef structure and enhances natural oyster recruitment to the reef.

"We have been busy co-designing the spat-on-shell program with growers, using their industry expertise for input on optimal seed and shell sourcing, growth and price," says Cutler. "The growers in Fairhaven brought the bag of shell to the meeting as a visual, since we were working through logistics and best practices."

With rainfall runoff affecting water quality and leading to temporary harvest closures this year, the restoration market is an increasingly important source of income for these growers. The SOAR program provides them with additional revenue, while the future of the program depends on their input and expertise. Growers are eager to test out this innovative method alongside their ongoing contributions. The addition of this pilot not only has the potential to boost oyster numbers at restoration sites but also aims to expand Massachusetts' restoration market into a larger and more diverse program.

THIS PAGE TOP TO BOTTOM Baby oysters, known as spat, grow on an oyster shell © Megan Latour/TNC; TNC's Amanda Cutler (left) and Steve Kirk (right) assist with dropping oysters at a restoration site in Fairhaven. © Hayley McManus

YEAR IN PHOTOS

YEAR IN PHOTOS

2024 Highlights From This Year



PROTECTING AND CONNECTING | Thousands of plant and animal species call the forests of the Berkshires and Taconic Highlands of western Massachusetts home. Ten years ago, TNC and several partner organizations came together to form the Berkshire Wildlife Linkage Partnership to protect, connect and manage this key wildlife corridor within the Northern Appalachians. In March, partners gathered to celebrate a decade of these collective efforts to ensure that wildlife can move freely through this connected habitat.

Policy & Partnerships team hosted their first-ever State
Lobby Day. Along with Trustees Gary Martin, Jim
Richardson and Don Steinberg, they met with staff and
legislators from eight offices to discuss two TNC
priorities: the Green Budget and a drought management
bill. We're grateful they joined us as constituents to
represent issues important to their districts and for their
contributions, insights and enthusiasm!





HONORING HERRING | Also in April, we celebrated connected and healthy rivers at the 2024 Herring Run Festival at Oliver Mill Park in Middleborough. We watched thousands of river herring make their incredible journey upstream and even saw an osprey dive into the river to catch a herring. At TNC's table, our interactive watershed model captivated eager children, teaching them about water pollution and the vital role clean rivers play for fish and people.

Park Service declared Hawley Bog a National Natural Landmark. In June, TNC in Massachusetts and the Five Colleges Consortium, who co-own the preserve, celebrated the 50th anniversary of the designation with a gathering and walk through the bog with community members, staff and supporters. This unique ecosystem supports rare plants and animals and serves as an easily accessible green space and outdoor classroom for exploration and research.





ERADICATING INVASIVES | This summer, the Middleborough-Lakeville Herring Fishery Commission used an eco-harvester along the upper Nemasket River to remove Eurasian watermilfoil and fanwort. These invasive plants crowd out native species, reducing biodiversity and water quality. This effort is just one part of the APC-Nemasket Watershed Management and Climate Action Plan that aims to restore water quality and flow and benefit the ecology and people of southeastern Massachusetts.

coastal challenges | TNC manages and restores properties across Cape Cod and the Islands that are some of the last remaining parcels of unique ecosystems, like sandplain grasslands. Unfortunately, climate change is putting pressure on these special places. In August, several TNC staff embarked on an annual monitoring trip to Tuckernuck Island, just off the southwest coast of Nantucket. Several properties TNC looks after are on the shore and eroding right before our eyes—this year's data show 50 feet of erosion.





FUNDING CONSERVATION In September, TNC joined Congressman Jim McGovern and partners at the recently renovated Amherst Town Common to celebrate the 60th anniversary of the federal Land and Water Conservation Fund (LWCF). It has helped preserve some of Massachusetts' most iconic natural and historic places, as well as countless state and local parks, trails and playgrounds. Massachusetts has received over \$250 million from LWCF over the years, thanks to advocacy by TNC and many of our partners.

WILDLIFE WONDERS | Our Coles Brook Preserve in Washington, Massachusetts is bustling with adorable wildlife! Thanks to wildlife cameras placed by a neighbor of the preserve, Matthew Watson, we've captured scenes of bears, deer, raccoons and even a playful bobcat frolicking through the landscape. These wildlife sightings are a great reminder of the importance of protected and connected habitats. Visit our Instagram (@conserve_ma) to check out some of the videos!





The Nature Conservancy Massachusetts Chapter 20 Ashburton Place, Suite 400 Boston, MA 02108 nature.org/massachusetts NON-PROFIT ORG
US POSTAGE
PAID
EUREKA, MO
PERMIT NO. 40

Massachusetts newsletter



- f facebook.com/ConserveMA
- instagram.com/Conserve_MA
- x.com/ConserveMA

Planting native plants at Bamford Preserve on Martha's Vineyard © Nick Giliberto

