



MANCHESTER ESSEX CONSERVATION TRUST

PRESERVING NATURAL BEAUTY, WILDLIFE AND RESOURCES AT THE GATEWAY TO CAPE ANN

FALL 2022

Update On Proposed Shingle Place Hill Development

In August, the Manchester Zoning Board of Appeals (ZBA) denied the request for a comprehensive permit to build the 136-unit rental-housing high up on Shingle Place Hill. In September, the applicant appealed this denial decision to the state Housing Appeals Committee. The Town of Manchester will be the defendant for the appeal, and the proceedings will continue for months, if not years. Our board of trustees voted unanimously in October to continue our efforts to protect Shingle Place Hill, in coordination with the town of Manchester and other organizations seeking appropriate affordable housing.

During the Select Board and ZBA hearings, our team contributed expert reports and testimony on environmental impact, as well as architectural renderings of the proposed building from many perspectives. We certified two vernal pools, reviewed designs for the stormwater system and wastewater



treatment plant, municipal sewer hook-up, commented on road safety issues, and recruited input from scientists; we did it all while working hard to engage, inspire and inform the community through social media, numerous letters to the editor, letters to the Select Board, letters to Mass Housing and to the ZBA, posters, postcards and full-page newspaper ad campaigns. In the last two months of the ZBA hearings we placed special emphasis on the need for a “Denial” decision from the ZBA, as opposed to an Approval with Conditions—conditions that could be stripped away at the state level.

Shingle Place Hill, continues on page 7



Heritage Tree

There is a tree on Shingle Place Hill that was once part of an extraordinary grove and corridor known as the Cathedral Pines. The area was aptly named: the trees were so tall and majestic that people likened walking or taking carriage rides through them to visiting a cathedral. The trees would shelter them and bring them peace, like the stillness in a sanctuary. Today, very few of the Cathedral Pines remain standing. This Eastern White Pine stands in the forest at over 100 feet tall and has likely been growing for around 175 years, even though a lightning strike took off its top at some point. Its trunk is 34 inches in diameter, and you can't fit your arms around it. It sits on conservation land at the precise edge of the property line, directly adjacent to where a stormwater treatment plant has been proposed. If that were to occur, or if the trees

Beech trees brilliance haloing the
Eastern White Pine heritage tree

Heritage Tree, continues on page 7

Message From the President

by Matthias Plum

As MECT enters its 60th year conserving and stewarding critical landscape, watershed, and open space in Manchester and Essex, I'd like to look back on our successes while keeping a weather eye toward the challenges we now face. Over six decades, this organization has painstakingly assembled and protected over 1,600 acres, much of it in the crown jewel of our holdings: The Wilderness Conservation Area. We have also protected areas east of Southern Avenue in Essex, 171 acres in the Western Woods of Manchester, and more land in eastern Manchester.

While it is an appropriate time to reflect on this remarkable achievement, now more than ever MECT must look to the future and the challenges confronting our two towns (and Cape Ann in general). We have been working hard to protect and preserve Shingle Place Hill and our conservation values from the large, inappropriate chapter 40B housing development proposed there. Our top-flight team of legal minds and environmental scientists have studied and documented the many issues that could make this project a disaster from an environmental standpoint, particularly when it sits on the doorstep of our largest conservation holding. Thanks to their efforts, those of our determined staff and board of trustees, and contributions from many supporters like you, the Manchester Zoning Board of Appeals recently denied the project application. As expected, the applicant appealed the decision at the state level. Our board unanimously voted to continue

working to protect Shingle Place Hill, always in coordination with the town of Manchester to ensure that the town's affordable housing needs are met in a more appropriate way. Now more than ever, MECT needs your support.

I need to thank our last president, Mike Dyer, who had the foresight to lead MECT through an extensive governance review, leading to a new vision for our organization. As a result of those efforts, MECT has hired its first full-time executive director, Patrice Murphy. Having a full-time executive director has positioned MECT to be far more effective not only in

confronting the environmental threat of this 40B, but also to simultaneously continue the land acquisition projects which are the true focus of our mission. Many of the most beautiful undeveloped areas around us, where we walk or bike trails to enjoy nature and the remarkable beauty of Cape Ann, remain unprotected and vulnerable to large development schemes. I believe these properties in concert with the ones currently under our protection

While this is a time of challenge, it is also one of opportunity; with your support MECT can work to protect these areas in perpetuity for future generations.

help to define the character of these communities we call home. What does it mean and feel like to live in Essex and Manchester? These remaining open spaces and wild places hold a significant part of that answer. While this is a time of challenge, it is also one of opportunity; with your support MECT can work to protect these areas in perpetuity for future generations. I hope you will consider joining MECT, taking advantage of our hikes programs and other volunteer opportunities, and supporting our pursuit to defend what I believe makes this area so special. I wish you all the best and hope to see you out on the trails!

Expanding the Protection of the Wilderness Conservation Area

With grateful hearts, we are celebrating the addition of 17 new acres to our Wilderness Conservation Area, the culmination of an effort that spanned generations of trustees in our organization until the circumstances were just right for the seller's family. As part of the patchwork of woodlots to the west of Southern Avenue in Essex, the trails and trees will remain essentially the same on land that few people realize was still privately owned; we will sleep much better knowing its future is secured as permanent conservation land.

Patience + Persistence + Possibilities + Permanently Preserved = PRICELESS



New blazes and signs point the way

Trail Days

Many thanks to the volunteers and board members that nurture the trails we love! They remove fallen limbs, replace signage and blazes, repair the boardwalk, and trim overgrowth. We held three Trail Days events this year, and we will be looking for a few more volunteers when our beautiful new signs arrive in the next few weeks. Our trail stewardship is led by our former president Michael Dyer, and Steve Lantner. We're looking for a few volunteers to serve as Trail Stewards throughout the year: to adopt an area, and monitor trail conditions and maintenance needs. All ages and skill sets are welcome (including teens trying to fit in some community service hours). Trail Stewards work on their own schedules and at their own pace, and generally have fun while they're at it. [If you're interested please contact us at conserve@mect.org.](mailto:conserve@mect.org)



Sketching with Slow River Studio and some terrific results

Fall Hike Series

Our first two hikes were in partnership with the Manchester Public Library's Climate Preparedness Week. These well-attended hikes explored Powder House Hill and the Wilderness Conservation Area. The following week, noted photographer **Michael Prince** provided instructions on how to turn the ordinary into the extraordinary. Michael covered photographic equipment, technique, and composition while all the attendees enjoyed the autumn colors in the woods. We will be sure to invite Michael back again. *(See the photo taken by one of the attendees.)* Other fall hikes included exploration of the Western Woods with our trustees George Smith and Jeff Cochand, mushroom foraging with the **Boston Mycological Society**, and sketching on the boardwalk with **Slow River Studios**. Hikers received sketching instructions and shared the products of our "mark-making" adventures.

We are so happy to be able to meet and greet again at these in-person events, and thrilled to provide these experiences for the community while sharing our beautiful surroundings. Partnering with local talent and experts has been very rewarding to us, and hopefully to each and every attendee.



Photography on the boardwalk

Protecting a Coldwater Fish Resource

by Lynn Atkinson, Ph.D.

The only brook trout (*Salvelinus fontinalis*) known to occur in a coastal stream in the greater Boston area were recently documented in the Sawmill Brook watershed in Manchester. Their presence was detected using environmental DNA (eDNA) sampling and the positive finding of trout eDNA was confirmed by the Massachusetts Division of Fisheries and Wildlife when they electroshocked fish in 2019 and again in 2022. I was there both times to assist, and we saw trout of various sizes, indicating that they are reproducing in this watershed. Sea-run brook trout were once widespread in streams along the northeastern United States coastline, but their populations have been decimated by man-made changes to their habitat. Currently, only two coastal stream areas in Massachusetts are known to contain brook trout, of which one is in Manchester (and the other includes a few Cape Cod streams). Sawmill Brook was recently designated as a Coldwater Fish Resource to afford the watershed some protection, and, along with the adjacent and connected Cat Brook in Manchester, is the only coldwater fish resource in the north coast district, which includes coastal towns from Revere to Newburyport. The Sawmill Brook watershed is currently protected under the Massachusetts Surface Water Quality Standards (MA SWQS) as a presumed high-quality water (314 CMR 4.06(4)), and the MA SWQS regulation protects the fish population and its habitat as an existing use (314 CMR 4.06(17)). Work is underway to also classify Sawmill Brook as an outstanding freshwater resource. The trout (and smelt) habitat of the Sawmill Brook watershed will be improved by the proposed changes to the Central Street tidegate and surrounding area. It may be possible to use some of the sea-run brook trout from Sawmill Brook to repopulate the once widespread fish into rehabilitated Massachusetts streams.

Sawmill Brook and associated vernal pools are adjacent to the proposed SLV development. Changes



▲ Staff and board members examining the catch with the MA Coldwater Fish Resource team

◀ Native sea run brook trout found this summer on a tributary to Sawmill Brook, Manchester

to the habitat in this sensitive area pose a threat to the trout population. Trout require clear cool water with a high level of dissolved oxygen. A development near the stream is likely to change the parameters that make the stream suitable for trout. The stream is fed by spring water and naturally filtered runoff. The habitat is kept cool by tree cover and other vegetation. Adequate vegetation filters sediment, excess nutrients, and other contaminants. Natural vegetation along the stream provides necessary habitat for invertebrates and appropriate levels of algal growth. Coldwater fisheries are highly sensitive to thermal pollution and changes in water runoff. The effects of vegetative buffers around streams have been extensively studied (reviewed in Sweeney and Newbold 2014). Buffer widths of greater than 30 meters have been found to be most effective at providing buffer functions, including erosion control, nitrogen removal, and thermal stability. Buffer widths should be even wider along small streams with sloped banks; small streams are more susceptible to temperature change. The Shingle Place Hill development proposes clearcutting and road placement

Protecting a Coldwater Fish Resource, continues on page 5

Conservation of the Western Woods

The Western Woods in Manchester is located south of Route 128, and west of the ends of Rockwood Heights, Crooked Lane and Walker Road. At this time, there are approximately 500 acres of undeveloped land enjoyed for hiking, biking, and nature explorations. Right now just over half of this land is permanently conserved. There are dramatic ravines, ledge outcrops, critical watersheds, vernal pools, sphagnum moss bogs, and intermittent streams waiting to be discovered and enjoyed.

We are grateful that we've had the opportunity to acquire a critical parcel off Crooked Lane for permanent conservation and public access to the "Western Woods" of Manchester. Just under seven acres of land, this parcel has several certified vernal pools, reindeer lichen, thick moss, and both highbush

"Congratulations! A very important parcel! Particularly impressive that you got this done while leading the 40B fight. CATS is very interested in collaborating with MECT here and elsewhere."

— NICK HOLLAND, VICE PRESIDENT,
CAPE ANN TRAIL STEWARDS



Laurel Notch

and lowbush blueberries. You may be familiar with the area already as "the trails to the left of the gate," or the trails that lead to Laurel Notch and Hemlock Glen. Though hiking and mountain biking trails run through it, this parcel has been for sale for almost a year and a half. As it abuts town-owned conservation land and is near several parcels that MECT already protects, the town of Manchester had hoped to purchase this parcel before learning it was under agreement, likely for residential development, late last year. When the buyer backed out, MECT was happy to step in and offer to purchase it for conservation before another buyer/developer came

along. We look forward to creating a trailhead and parking at the edge of this parcel for all to enjoy.

We have reached an agreement with another family for a combination of purchase and donation of approximately 20 acres of land for conservation in the Western Woods. We anticipate closing by the end of the year. We look forward to announcing the locations of these additional parcels. We have several other

Western Woods, continues on page 6

Protecting a Coldwater Fish Resource, continued from page 4
ranging from 9 to 20 meters from the boundary with Sawmill Brook and its vernal pools. A much larger border of natural vegetation is necessary. Additionally, changes to hydrology, topography and sedimentation due to the development may impact the stream and its water sources (for example, Hartman and Hakala 2006). Changes to upgradient groundwater recharge zones have been shown to affect seepage temperature dynamics (Briggs et al 2018). Similarly, natural surroundings are important for maintaining suitable vernal pool habitat.

The unique presence of sea-run brook trout serves as an indicator of the current high quality of the Sawmill Brook watershed. The degradation of this healthy

watershed would eliminate one of the last remaining coastal populations from the brook trout's gene pool, the only Massachusetts population known north of Cape Cod; studies of trout from different streams have shown that populations are genetically distinct (for example, Beer et al 2019). Sawmill Brook may look like many other streams, but it is an important refuge of biodiversity for species that have been eliminated by development almost everywhere else.

Lynn Atkinson is a member of the Biology Department at Emmanuel College, a member of the Manchester Coastal Stream Team (since 2011), a member of the Board of Trustees of Manchester Essex Conservation Trust (since 2010), and a member of the Water Resources Protection Task Force (2022).

Western Woods, continued from page 5

conservation conversations with owners of additional Western Woods parcels ongoing and we hope to rapidly secure permanent protection for more of this beautiful landscape. Your monetary contributions to our organization make these permanent protection projects possible. If you or your family have land you wish to conserve, please contact us at conserve@mect.org.



George Smith

Exploring the Western Woods

On Sunday, October 15, we hosted an informative walk in the Western Woods led by MECT trustees **George Smith** and **Jeff Cochand**. The hikers met at our new parcel at 25 Crooked Lane and traveled along established trails named

Laurel Notch and Hemlock Glen Loop. George, who donated a portion of this land to MECT, introduced more than 60 people to some of the history of the land. Highlights from his talk follow.

Evidence of Two Forest Fires

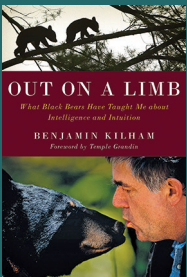
“There were two serious forest fires, 1957 and 1995. The famous one in 1957 burned the high points but never touched either ravine. However notice the second-growth forest, especially on the right, after the notch, when entering from Crooked Lane. There hot southwest winds blew up-slope with crown fires consuming whole trees and much of the organic soil.

In 1995, the fire started coming down the ravine as a ground fire. I stopped it partway. In fact, I made the front page of the Gloucester and Salem newspapers showing me wielding a wet broom, a bucket of water (water still in the ravine), and mask with flames leaping behind me. I always point out the scraggly [mountain] laurel between the wall and the stone causeway as contrasted to the tight thick bushes farther up the ravine. The latter were burned to the ground, only to come up better than ever, being adapted to fire. Look high on the slope on Wyman Hill, and you will see a few fifteen to twenty-foot white pines. They are survivors of the 1,000 seedlings I planted on Wyman Hill in 1963-64. They look healthy but most will eventually die from fire scars they are unable to heal. Pines on the other areas of the hill have done much better.”

Manchester Commons Wall

“This wall appears on the Laurel Notch Trail, on the right before the trail rises a bit and then dips down into the ravine. It divided individually-owned woodlots on the town side from land open to exploitation by all. It continues, off and on, to Route 128 and reappears on the other side. Also known as Coy’s Line, it probably dates back to the 1700s. Walls like this tend to be disturbed by falling and uprooted trees, but as it traverses a bare rock portion of Wyman Hill, it retains its original well built form, looking a little like the Great Wall of China as it traverses up and down bare bones of the hill.”

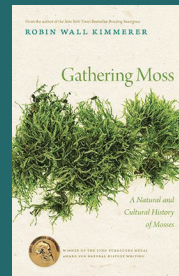
BOOKS I’M READING by Executive Director Patrice Murphy



Out On A Limb: What Black Bears Have Taught Me About Intelligence and Intuition by Dr. Benjamin Kilham. I stumbled across this book in the library of a summer rental in New Hampshire a few years ago. Once I opened it, I couldn’t put it down. Not only is it filled with amazing photos of baby bears,

the journey of the author and the bears was both engaging and informative. Humans raising bears to survive in their wild habitat is more difficult than it sounds: the author studied bear interactions in the wild from a nearly-bear perspective, then taught the young cubs accordingly. Once I heard there were bears moving into our corner of Massachusetts I knew Dr. Ben Kilham was exactly who I wanted to talk

to, and we were so excited that he was our keynote speaker at our Annual Meeting.



Gathering Moss by Robin Wall Kimmerer. Neither an identification guide nor a scientific treatise, this book is a series of linked personal essays on how mosses live and how their lives are intertwined with the lives of countless other beings, from salmon and hummingbirds to trees and squirrels. Kimmerer clearly and artfully explains the biology of mosses, while at the same time reflecting on what these fascinating organisms have to teach us. Your eyes will be opened to the unique shapes, changes during drought, and critical functions of mosses as you walk through our woodlands.

Shingle Place Hill, continued from page 1

We have been so impressed with the response from Manchester and the surrounding communities and their engagement in this process since the fall of 2020. During the past few months, particularly during the summer, citizens spoke at the public hearings, wrote letters to the ZBA, organized community petitions, and constructed an award-winning float in the Town of Manchester Fourth of July parade.

WHAT CAN YOU DO?

■ **CONTRIBUTE:** This project already has a long history, and we have a long way to go. That's why we urge you to support our important work by contributing to our Annual Appeal **TODAY**. You can earmark a portion of your gift towards the continued defense of Shingle Place Hill.

■ **VOTE:** Manchester Special Town Meeting has an article on the warrant relating to the town's defense of the 40B appeal. The request is for funds to cover expenses related to the ZBA's review and now the subsequent appeal to the state of the 40B apartment complex proposed for Upper School Street. Voters are being asked to appropriate \$130,000 from the Town "Free Cash" or undesignated fund balance account to pay for the legal and expert witness expenses that the Town of Manchester has or will incur. **Special Town Meeting is scheduled for November 14, 2022, 6:30PM at the Manchester Essex Middle/High School, Manchester.**

Could Essex Be Next?

The Town of Essex is vulnerable to future applications for large and inappropriate 40B developments, much like the large development that Manchester ZBA recently denied. Chapter 40B law incentivizes developers to build in cities and towns that have not met the "safe harbor" (a minimum number of affordable units for their community) threshold. Essex recently approved an Affordable Housing Trust, which can advance the Town's local affordable housing goals. By establishing designated funds and creating a board to oversee their use, Essex can provide a local way to advocate for and facilitate the development of affordable housing.

Despite the fact that Essex is planning to convert several buildings for affordable housing, the town has a large number of units to provide before it reaches "safe harbor." Under Chapter 40B, "affordable housing" developments must offer a minimum of 25% of the units at affordable rates (which, in reality, often remain out of reach for those who truly need affordable housing) and they must be rentals. The remaining units are often market rate, and in Essex, that means they'd be quite expensive. The citizens of Essex should remain cognizant of the need for sensible affordable housing, to provide for the needs of the community, and to meet Chapter 40B thresholds, and Manchester is not out of the woods either. Until the minimum thresholds are met, both towns could face (more) very large and inappropriate 40B applications.

Heritage Tree, continued from page 1

around it were clear-cut, disturbing the balance it has enjoyed for centuries, well, our heritage tree would be on borrowed time. Its girth measurements qualify it for protection in Manchester.

But it's not just historic trees we need to focus on in Manchester, it's all the trees that provide a cooling canopy.

Our community is so fortunate to have groups like Friends of Manchester Trees, a team dedicated to the preservation and proliferation of trees in town for nearly 50 years! It's easy to imagine how the town of Manchester would look without tree shelter; it would be hotter, for sure.

"There is no finer tree."

— HENRY DAVID THOREAU ON
THE EASTERN WHITE PINE

The past two decades have seen unprecedented housing growth nationwide, often at the expense of trees; then, municipalities scramble to replant trees along roads to mitigate "heat islands." Friends of Manchester

Trees have never wavered in protecting the trees in our community, and we look forward to celebrating their 50th with them soon.

"Please help us conserve these gentle giants, who've been here since the days of your great-great-grandparents.

They are remarkable, living tributes to nature's power and resilience," contributes Su-Yin Mittermaier, President of Friends of Manchester Trees.



MANCHESTER ESSEX CONSERVATION TRUST

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Our Annual Appeal is Now Open!

OUR WOODLANDS AND WETLANDS DEPEND ON YOU!

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Your Gift to the 2022 Annual Appeal

MECT's efforts to safeguard Shingle Place Hill continue at the state level, and the lessons we've learned this past year drive us to accelerate our permanent protection of other lands in our communities through acquisition and conservation. Your gift is vital to our mission! The Annual Appeal provides funds for our operating expenses for the next year, and our small staff works hard to make each dollar count.



Double your impact!

Our board members have taken it upon themselves to commit to a \$25,000 matching grant. Whether you are a brand new contributor and are able to give \$1,000, or you're a continuing supporter choosing to increase your giving to \$1,000, your gift will be matched 100%. Use the enclosed envelope or make a secure transaction at www.mect.org/annual-appeal.

YOUR GIFT MEANS THE WORLD TO US!



Manchester Essex Conservation Trust

Leaf from the red oak family of trees