



MANCHESTER ESSEX CONSERVATION TRUST

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

FALL 2021

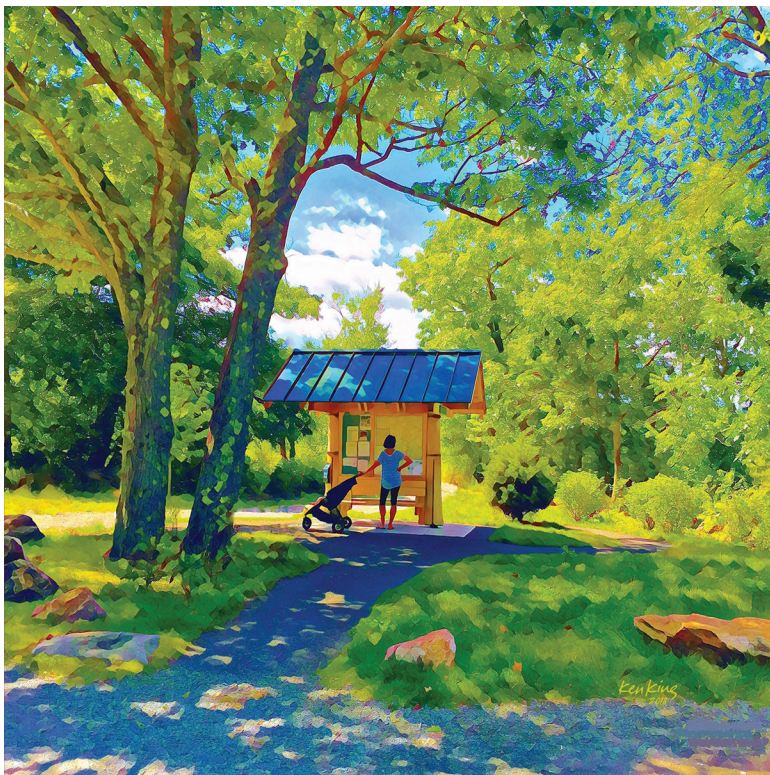
Tighten Your Shoelaces for the Next Leg of a Marathon-sized Run: Shingle Place Hill 40B is Back

The Shingle Place Hill Chapter 40B application by Strategic Land Ventures (SLV) was originally submitted to the Manchester Board of Selectmen (BOS) in September 2020, in an attempt to receive a Project Eligibility Letter from the BOS, through the “Friendly 40B” process of negotiating with the town. The applicant withdrew from negotiations, after extensive town-run public education workshops and negotiation sessions, on April 6, 2021, to pursue an alternative process through the Massachusetts Housing Finance Agency also known as “MassHousing.” Many thanks to the Manchester staff and volunteer board members and commissioners that dedicated so many hours to this informative process. SLV filed

an application with MassHousing’s New England Fund Program for site eligibility approval on April 19, 2021. MECT was pleased to contribute an eight-page [letter](#) to the Public Comments that were submitted by the BOS to MassHousing, in strong opposition to this application.

As this newsletter goes to print, we have just received word that MassHousing issued a Project Eligibility letter to SLV on September 20, 2021. The next step in the process is an application for a Comprehensive permit, to the Manchester Zoning Board of Appeals (ZBA) by SLV. The ZBA will have 30 days to hold a public hearing on the application.

Shingle Place Hill, continues on page 3



Local artist and longtime friend of MECT, **Ken King** recently donated this digital painting of the Wilderness Conservation Area kiosk to grace the wall of our office. “Twenty years ago, I developed an interest in the structures built by the Civilian Conservation Corps during the 1930s as part of Roosevelt’s New Deal,” says Ken.

The cedar structure that is now standing at the trailhead on School Street, Manchester, facing Shingle Place Hill, was directly inspired by photos and drawings of the historical structures. Ken was commissioned to build the kiosk by former MECT president Charlie Kellogg, in 2014. And it was a labor of love.

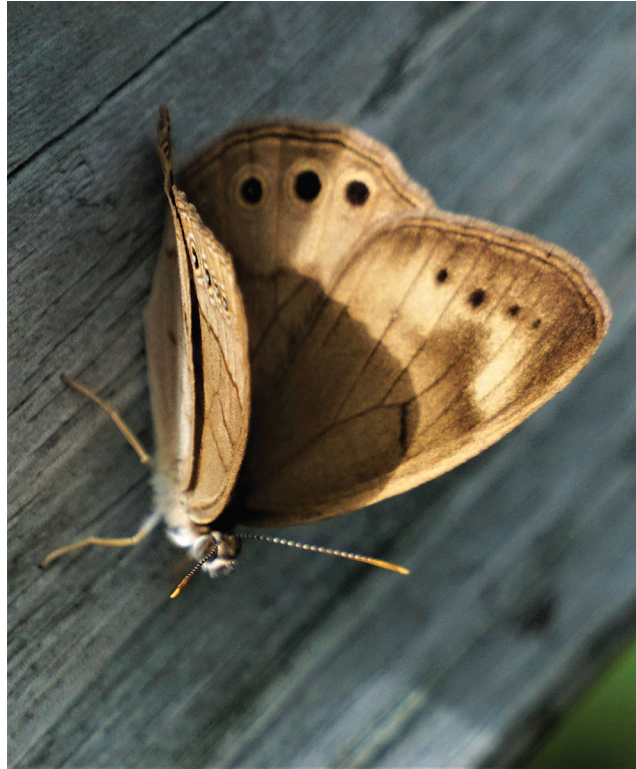
“The kiosk continues to inspire me when I go there in all kinds of weather, and I like to see people using it to sit and rest after hiking, all the while studying the trail map.”

Pollinators in Our Woodlands

Many landowners might associate pollinators with the honey bees of vegetable and flower gardens and the proliferation of native pollinator fields which attract many bee and butterfly species. With many pollinators in peril, scientists are beginning to recognize the role that woodlands play in protecting many pollinator species. Bumblebees, birds, bats, flies, moths, butterflies, beetles, and several other animals and insects help pollinate grasslands and forests.

“When these multi-story habitats have a diversity of flowering trees, shrubs, and forbs, they can deliver a much higher density of floral resources due to vertical layering when compared to meadows,” says Gary Bentrup, research landscape planner at the USDA National Agroforestry Center. “They can provide more value for the same amount of land area.” Openings in the canopy of a forest, through loss of a

This Appalachian brown satyr (*Satyrodes appalachia*) had a very friendly disposition while frequenting the Wilderness Conservation Area boardwalk, waiting and “posing” for the photographer. Their caterpillars feed on several types of sedges (*Carex*) which are prolific in the Cedar Swamp area.



large hemlock or one of our “cathedral” white pines, allows more light to reach the forest floor and allows for an increased abundance and number of pollinator species in forestland.

Kelly Gill, a Xerces Society Pollinator Conservation Specialist, suggests a list of trees for bees which includes pussy willow (*Salix discolor*), red maple (*Acer rubrum*), serviceberry (*Amelanchier* spp.), blueberry (*Vaccinium* spp.), pinxterbloom azalea (*Rhododendron periclymenoides*), Carolina rose (*Rosa carolina*), elderberry (*Sambucus canadensis*), flowering raspberry (*Rubus odoratus*), and buttonbush (*Cephalanthus occidentalis*). Many of these species also provide nesting



Bumblebees usually fly between one-third to one mile from their hive. Whether the bumblebees are visiting your backyard or our shared woodlands, we are sharing these bees—so be good to them!

- Plant a variety of natives that bloom throughout the year.
- Leave naturalized areas in your landscape. Bumblebees might choose an abandoned rodent burrow or a protected spot under a garden shed. Even a pile of old, dead leaves will do for next year’s nest. Unlike honey bees, bumblebees build a new nest annually, and they generally build their nests in the ground.
- Reduce or eliminate pesticides including fungicides and herbicides, which can reduce the biomass of a bumblebee hive by 40% through interaction with the natural yeast preservatives in their honey. Both the size and number of offspring are affected. Many studies on pesticides and herbicides have only evaluated whether the compounds kill bees directly. Other studies have focused solely on honey bees that are kept in the hive until the pesticide applications have dried.

Unfortunately, the damage to bees—such as a loss of navigation and cognitive skills, or wing size—by herbicides and fungicides may be much harder to measure.

White flowers of the downy rattlesnake plantain (*Goodyera pubescens*) rise up from the forest floor. They are one of the most common orchids native to eastern North America.

Kelly Gill, a Xerces Society Pollinator Conservation Specialist, suggests a list of trees for bees... Most of these plants have been identified in past studies in the woodlands and wetlands of our own Wilderness Conservation Area.

sites or nest materials along with floral resources. Most of these plants have been identified in past studies in the woodlands and wetlands of our own Wilderness Conservation Area.

Different bees have different body sizes, tongue lengths, means of extracting pollen, dietary preferences, weather preferences, and life cycles. Tongue length affects the type of flowers the bee species can extract nectar from. Bumblebees are able to extract pollen through a process called buzz-pollination. Honey bees will not forage much when the temperature drops below 55° F, when it is raining or even drizzling, or when the winds are

stronger than 20 to 25 mph. In contrast, mason bees and bumblebees will forage in inclement weather. For these reasons, changing weather patterns may influence the success of different bee species. Bees also have a variety of nesting habits. Unlike the honey bee, many species are solitary or have small colonies below ground.



The Hessel's hairstreak (*Callophrys hesseli*) is a small butterfly intimately associated with the Atlantic White Cedar tree, this butterfly's only larval food plant. They can be seen nectaring on highbush blueberry, chokecherry, and leather leaf flowers in shrubby swamps and bogs like our own Cedar Swamp. This butterfly is on the Massachusetts Species of Special Concern list and has been identified in Manchester. © Frank Model. All Rights Reserved.

Shingle Place Hill, continued from page 1

Chapter 40B law establishes a consolidated local review and approval process (one comprehensive permit) that is handled by the ZBA to cover all aspects of the local approval process. Other boards and committees can provide input to the ZBA, but the ZBA is the permit granting authority for a 40B permit. The process will likely involve numerous ZBA public hearings, as well as reviews by other boards and commissions.

While we have been waiting for the process to unfold, MECT has conducted extensive research with consultants and lawyers to be prepared for the next steps. We've discussed the project

with, and written letters to our state legislators. We've also testified on a state House of Representatives bill that would protect water resources by eliminating waivers to local wetland bylaws, H.2198. (See our [letters and testimony on our website.](#))

Thank you for your phenomenal support and engagement in the protection of everyone's "backyard"!

The attendance at the local meetings and the thoughtful citizen comments have been very impressive. We believe this is an important issue for both Manchester and Essex communities. If

built, the character and environment of School Street will be changed forever.

CONSERVATION CONVERSATION

If you would like to see firsthand what this is all about, give us a call (978-890-7153) or email conserve@MECT.org, and we will gladly take a walk with you.

Further demonstrating the power of joining together and engaging with local government is **The Citizens Initiative for Affordable Housing** (CIMAH). They raised more than \$1.5 million to provide the capital necessary for North Shore Community Development Coalition to purchase 29 existing apartments in Manchester. All 29 units will ultimately meet the affordable guidelines and will be added to the Subsidized Housing Inventory (SHI) maintained by the Department of Housing and Community Development. Unfortunately, the process of being added to the SHI is lengthy and convoluted and will take time. CIMAH will continue to work on this project until the goal is achieved and continues to work to defeat the 40B off School Street.

Annual Meeting: Sunday, November 14

More Than Just Buzz

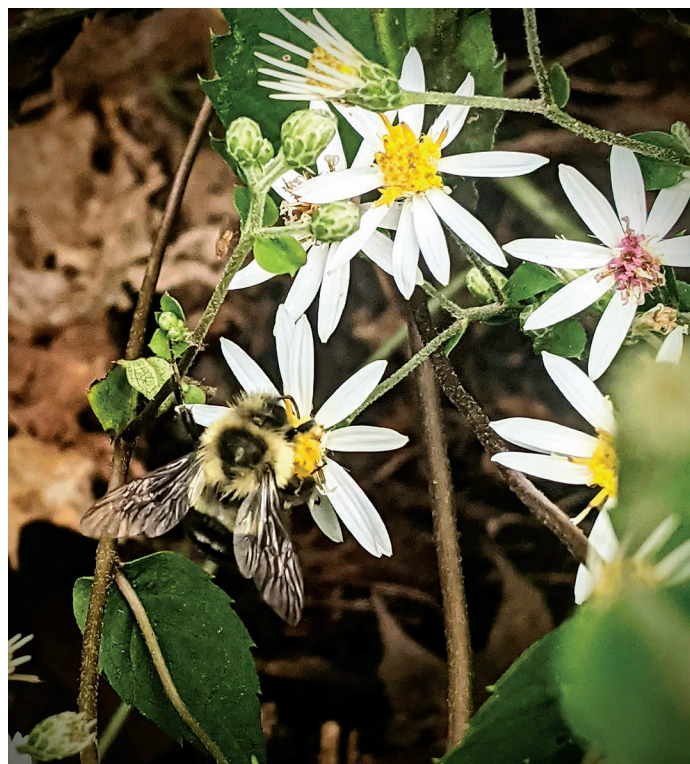
Using Ecological Data to Restore Native Pollination Systems (and Why It Matters)

Pollinators are declining at an unprecedented rate worldwide for unknown reasons. To date, public concern over these declines has focused mostly on threats to crop pollination. However, pollinators also play an important functional role in maintaining the function and diversity of terrestrial ecosystems. For example, the “products” of native plant pollination provide food, shelter, and nesting sites for wildlife and ultimately, provide humans with important ecosystems services. The consequences of pollinator decline for our planet therefore go well beyond crop production and the agroecology.



Join **Dr. Robert J. Gegear** from UMASS Dartmouth for a discussion on what you can do to help pollination systems at risk of local extinction in your own backyard. Dr. Gegear will also discuss his Beecology Citizen Science Project, highlighting

recent examples of how communities from across Massachusetts have used his research-based native plant list to successfully restore pollination systems at risk in areas with high levels of human disturbance, including parks, golf courses, old fields with invasives/non-natives, agricultural areas, conservation lands, and school campuses.



Bumblebee on one of the many varieties of woodland asters.

Dr. Robert J. Gegear is a Professor in the Department of Biology at University of Massachusetts Dartmouth. He has been studying the neuroecology and conservation of pollination systems native to North America for over 25 years. Dr. Gegear’s research has been supported by multiple federal grants and has been published in books, numerous prestigious scientific journals, and popular press articles. He is also the founder of the Beecology Project, a citizen science effort to rapidly collect ecological data on threatened pollinator species in New England. For his community

outreach activities related to wild pollinator conservation, Dr. Gegear was awarded the 2018 Regional Impact Award by the Native Plant Trust (formerly New England Wildflower Society).

The MECT Annual meeting is scheduled for Sunday, November 14 from 4:00 to 6:00 pm. Out of an abundance of caution for our members and guests, we will host our Annual Meeting online this year. Please [register at MECT.org](https://mect.org) to receive connection information.

Bumblebees still foraging on goldenrod in cold, wet fall weather.



2021 Fall Hike Series

Sunday, October 3, 2:00 to 4:00 pm
Forest Bathing with Nadine Mazzola

Sunday, October 10, 11:00 am to 1:00 pm
Introduction to Hiking with Dylan Ellis

Sunday, October 17, 2:00 to 4:00 pm
Professional Photography with a Prince

Saturday, October 23, 11:00 am to 1:00 pm
Introduction to Orienteering with Zach Delmar

For health and safety reasons, we are limiting the number of attendees. Preregistration is required. See our events page at [MECT.org](https://mect.org).

Be Safe Be Seen: Please wear blaze orange in the woods, especially in the fall. Check the [MA Wildlife Hunting calendar](#) to learn more about the hunting seasons.

Pine saps (*Monotropa hypopitys*) is a semi-parasitic plant, and feeds through a mycorrhizal network. It does not have chlorophyll to make its own food.



With hazy, hot and humid weather predominating this summer, we held a "Pop Up" Mushroom Walk. Inspired by Mike Dyer's "Can we do this in a week?," volunteers and staff made it happen! **Gary Gilbert**, local resident and expert mycologist, was a riveting walk leader. We were thrilled to have over 25 people join us (and many more mosquitoes).



A great egret skims the water surface in early morning sunrise light with reflection and Motif No. 2 in Essex by Richard Seeley/Shutterstock.

Spotlight On: Conservation Commissions— Understanding What They Do and How They Do It

by Tom Barrieau, Essex Conservation Commissioner and
MECT Trustee and Kevin Cooke, Essex Conservation
Commissioner

Conservation Commissions (Con Comms) are probably one of the least understood parts of town government. People can live their entire lives in a community without encountering the work they do or attending one of their meetings. Misconceptions about their charter range from the overly optimistic (e.g., They're in charge of any and all environmental issues and are highly-empowered stewards of the environment) to the terribly pessimistic (e.g., They're a bunch of tree huggers who get in the

While the charter, authority, and actions of Con Comms vary between towns, their primary responsibility is to provide local administration of the Massachusetts Wetlands Protection Act ("WPA"). Activities or rules not specifically spelled out pursuant to this law only fall under Con Comm purview if a community has enacted by-laws that extend its authority.

way of development and make your life difficult). The reality—like most things—lies somewhere in between.

The Massachusetts Department of Environmental Protection administers the law at the state level, develops regulations and policies local Con Comms follow, and hears appeals of local decisions.

Con Comm jurisdiction includes “coastal resource areas” (beaches, dunes, salt marshes), “inland resource areas” (bordering vegetated wetlands, floodplains, ponds, vernal pools, intermittent streams), land within 200 feet from any river, and the “buffer zone”—

typically a 100 foot border that surrounds resource areas. Other entities may also have oversight within this jurisdiction (MassDEP, the EPA, etc.), but local Con Comms assess the impact any proposed activity might have on a resource area, and ensure that the activity will not alter it. Impermissible alterations could include runoff from disturbed soil

getting into a wetland or changes to the buffer zone that reduce its ability to absorb rainwater. While these changes may not sound like a big deal, their impact can seriously degrade the quality of wetlands and the diverse biology that depends on them.

While the full process by which Con Comms do their work is beyond the scope of this article, it's vital to understand that it rests upon the premise that protecting wetlands from degradation is in the public's interest. Given the importance of resource areas to the economy and lifestyle of Cape Ann residents, this is generally a non-controversial objective. Where things get tricky is how Con Comms strike a balance between protecting our wetlands and facilitating the development of personal property that individuals desire. A Con Comm's objective is to help applicants find the right path for obtaining approval of their plans within the confines of the WPA.

Sometimes this is as easy as ensuring people are utilizing proper erosion controls for a project; at other times it may require modification of plans so that a

project does not create problems. In all cases, everybody benefits when there is a shared goal of protecting wetland resources while facilitating smart development.

Finally, it's important to understand that members of the commission are all volunteers. Commissioners bring diverse backgrounds and skill sets to the group, including, for example, building and construction, legal, or conservation and ecology expertise. Working as a group, they leverage this diversity, along with the guidance of a professional Conservation Agent, to render decisions that comply with the WPA and serve the best interests of the community.

Stay Informed!

Sign up for meeting notices with "Notify Me" in Essex or Manchester on the towns' websites:

www.essexma.org/subscribe

www.manchester.ma.us/list.aspx



Keep in touch with us on Facebook.
Share what you have seen on the trails.

A BOOK WE'RE ENJOYING:

Swimming to the Top of the Tide by local resident Patricia Hanlon. She provides fascinating lyrical descriptions of her and her husband's swimming exploration of local waters in Cape Ann, including quarries, Conomo Point, and Ebben Creek, woven with science and advocacy.

AN APP THAT'S MAKING US HAPPY:

With **iNaturalist** for iPhone and Android, you can take a picture or video clip and learn more about what you are seeing and hearing out in nature. Document it so others can learn and enjoy. Explore the flora and fauna in our woodlands as seen by others this time of year, then chart your own adventure.

A PODCAST WE'RE LISTENING TO:

Conservation Tribe by Blane Edwards of Earth Offline—Interviews of a range of conservationists and natural world enthusiasts. Covering a wide range of topics around the world, the interviews share many common themes with the challenges in our own backyard in a down to earth, uncomplicated manner.



**MANCHESTER ESSEX
CONSERVATION TRUST**

**375
CELEBRATE**

**Manchester's 375th
Anniversary Scavenger Hunt**



During the month of September, enjoy many of Manchester's historical conservation landmarks. Explore trails and follow clues. Match letters to solve a message. Fun for all ages for a day or month-long adventure. Download a list of places to visit with maps and clues at: mect.org/event/hunt375.





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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Manchester Essex Conservation Trust

Annual Appeal

MECT is your local land trust, but the woods are ours to share! Our Annual Appeal provides 80% of MECT's funding for the upcoming year. This funding allows us to protect and defend more land to share with you and nature. Your help is critical! Please donate using the enclosed envelope or through our secure online process at www.mect.org/annual-appeal.



Spaces to Grow. Spaces to Love.

Grow a love and appreciation for the environment with simple games like measuring a tree's diameter in "hugs" or mitten-lengths, or observing the heights of trees along a path. Bring along a crayon and paper to capture the various textures of tree bark, leaves or sticks. Growing an appreciation for the differences that make up a forest is a valuable lesson for children of all ages.