



MANCHESTER ESSEX CONSERVATION TRUST

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

SPRING INTO
SUMMER 2021

Vernal Pool Life

Vernal pools or “spring” pools provide a special environment to amphibians, insects and other creatures for a portion of their life cycle. In the state of Massachusetts, vernal pools are defined by the presence of one or more obligate species—like wood frogs and yellow spotted salamanders or several facultative species like spring peepers, green frogs and toads. An obligate species reproduces primarily in vernal pools and they are highly dependent on vernal pool protection. Facultative species have greater habitat freedom, and are able to survive in several types of wetland resources. In Manchester and Essex, vernal pools may also be home to a state listed species of special concern: the blue-spotted salamanders. Protecting vernal pools means that these ancient species, who have roamed our continent for millions of years, will continue to have a place to reproduce. Certified vernal pools have special protection offered by the Massachusetts Wetlands Protection Act, and additional protection may be offered by more stringent by-laws of municipalities. This spring,



▲ In April, the royal fern emerged with “masked” protection over the delicate fiddlehead. By June, the “mask” order is lifted, and the fern has unfurled into glorious greenery. This fern is found in Cedar Swamp and other wetland areas where it can grow 4-5 feet tall.

◀ These spotted salamanders were found in a single vernal pool in one night. Once their reproductive rituals are complete, they return to the uplands, traveling as far as a half mile, back to their homes underground. Photo: Rick Roth of Cape Ann Vernal Ponds

Vernal, continues on page 7

Manchester Essex Conservation Trust (MECT) is a nonprofit organization dedicated to preserving ecologically important land and wildlife habitat in Manchester and Essex, Massachusetts, and promoting its use for quiet recreation, education and research. MECT enhances the quality of life on Cape Ann by ensuring that lands that are vital to public health remain in their natural condition. These lands protect drinking water supplies, hold back storm waters that would otherwise threaten homes and businesses, provide educational and research opportunities, and offer quiet recreation on miles of foot trails. An informed public is essential to long-term success, and we gladly share knowledge of the special conservation values of the lands that we protect. MECT’s work is funded by concerned residents and friends of Manchester, Essex and surrounding communities. We occasionally receive grants from foundations for special projects.

Greetings from Our New Executive Director

Hello! I'm grateful for this opportunity to lead the Manchester Essex Conservation Trust and thrilled to be working in the area that many recognize as the birthplace of land trusts—an area with a culture of conservation and an advanced recognition of the importance of controlling pollutants, planting natives and planning balanced development.

I often recount that my interest in conserving land started about eight years ago in my own backyard when I helped to protect and steward 100 acres of land—land that had already received all the variances and permits for residential construction. On further examination, I think the roots of my interest in nature and land protection more accurately stem from my childhood, exploring every nook and cranny in an 11-acre “pit” as it recovered from tobacco farming and topsoil stripping. My siblings and I studied the dragonflies and damselflies, moths and butterflies through their life stages. We collected berries and flowers, and observed the killdeer distracting us from her nest.

We were fortunate to experience this patch of land with all of our senses: sounds of the peepers and green frogs; the vivid smell of cattail greens (think cucumbers) brings me back to my 8-year-old self and the glow of fireflies. I also had the opportunity to watch my parents defend this land from development—participating in town meetings, formulating plans and stating their opinions. I hope we can instill this devotion to nature and protecting open spaces in future generations through hands-on experiences on our conservation land, as well as the willingness to stand up and defend special places from fragmentation and habitat destruction. My early experiences led me to believe that we can help shape the decisions made locally, and they have helped cement a tenacity to continue the tradition.



Sketch used with permission of the artist
Deb Haas-Abel © 2021

Perhaps our new online access to town meetings will accelerate the level of local government participation, even after social distancing protocols are relaxed. These meetings may expose younger generations to the town government process happening, for now, in our own living rooms or at our kitchen tables. Connect with these local meetings, sign up for meeting notifications and agendas, and listen to the challenges that the local volunteer boards and commissions face.

I look forward to expanding MECT's protection of land through new acquisitions and donations, education and advocacy. I hope to foster sound management

practices to maintain this land with utmost respect, in its most pristine and natural state, while inviting all to share it—all people as well as the natural plant and animal communities.

The theme of this newsletter is water. Even in recent droughts, we've hardly had to consider whether we will have enough water, and whether it will be the high quality water we have come to expect. How long will that comfort level last? Do you know where your water comes from or how it gets there? The water system we address may be the aquifer which supplies our town's drinking water, an Atlantic White

Cedar Swamp, a vernal pool, or the winding stream in your own backyard. Large portions of our conservation land are in the watersheds of your local water supply.

Like the ripples created from a single drop of rain, each of our conservation efforts extends outwards. Each disturbance of the water, likewise has a wide-reaching effect. Let a love of nature and the knowledge that we need to protect and defend it, move us all to advocate for protecting the water resources in our own backyards, our communities and our planet.

Respectfully,
Patrice Murphy, Executive Director
Manchester Essex Conservation Trust

Welcome Aboard!

New Board Members

Though our annual meeting was held remotely this year, we warmly welcomed two new volunteers to our Board of Trustees. **Jon Calder** started coming to Essex with his family in the 1960's and has maintained close connections with the area ever since. He has been a homeowner on Eastern Avenue since the late 90's. After attending Colorado College and the Tuck School at Dartmouth he worked in the global capital markets in London and New York City while raising four sons with his wife Cindy, a teacher of Classics at Trinity School in Manhattan and proprietor of an online and travel based education company, Calder Classics. He loves fly fishing and kayaking in the Essex Bay and hiking local woodland trails. His great love of the outdoors and appreciation for conservation goals led him to join the board of MECT.



Tom Barrieau discovered Essex 25 years ago when he came here to buy a sea kayak from ERBA. Subsequent paddling trips started a love affair that culminated in a move to Spring Street in Essex four years ago. That move transplanted a second outdoor love (hiking)

to the North Shore and led to the ongoing discovery of the many, beautiful properties under conservation by MECT, Greenbelt, and The Trustees. He and his

partner Jenn are now “dug in like ticks” (handy tip: spraying permethrin on the legs of your hiking pants keeps ticks at bay) and loving life on Cape Ann. In addition to his work for MECT, Tom is also on the Essex Conservation Commission and manages the CraneOutdoors outdoor adventure program at the Crane Estate. He's thrilled to be part of the local conservation community and, when not stomping the trails or paddling the creeks, is a marketing/sales consultant for the high tech industry.

New Part Time GIS and Conservation Data Manager Joins the Staff



Peter O'Donnell, our new part time GIS and Conservation Data Manager, is joining us from CT, where he grabbed hold of the uncertainty of the pandemic job market as a new graduate, and gained valuable experience as a volunteer and

independent contractor for municipalities, conservation groups and land trusts over the past year. He brings a fresh perspective, boundless energy and new skills to our mapping and documentation efforts. “I've always been appreciative of the green spaces in my town and community and want to work to ensure the protection and existence of similar spaces in the Northeast.” Peter decided MECT was the place for him and has been surprised by the strong collaborative atmosphere and the friendliness of the board. He fills the vacancy left by Amy Blondin, who left this winter to pursue new opportunities.

WORD OF THE DAY: Irruption

An irruption is the sudden change in the population density of an organism. When speaking of birds, irruptions refer to the movement of northern-wintering species to the south in years of low food availability. Irruption species in this area include redpolls, Evening Grosbeaks, and Red-breasted Nuthatches, among others.

Did you see an unusual number of grosbeaks, red-breasted nuthatches, red polls, pine siskins or other infrequent visitors during the past winter? They are now heading back to their nesting sites in the boreal forests, and we never know when they will return.

Please share your pictures with us!

OUR FAVORITE APPS:

With **BirdNET** and **Song Sleuth** you can record a snippet of birdsong while you are outdoors, and the app offers suggestions for the bird species. Great way to learn who is in the woods, at the beach or in your own backyard especially when you can't see them.



Watching the evening fog rolling into Cedar Swamp as Sawmill Brook gently flows through, combined with the sounds of spring peepers, provides a soothing alternative to the daily news cycle.

Thank You for a Phenomenally Successful Year!

Your generosity during uncertain times bolstered our resolve to keep the trails open for your physical and mental health, and pure enjoyment. With your support, we will continue our mission of preserving ecologically important land and wildlife habitat in Manchester and Essex.

So where does conservation of land begin? Sometimes it starts with lofty dreams. Other times it starts with a nightmare of fragmentation and loss of habitat in special places. Either way, our preservation efforts require persistence, time, energy and often ... money. Preservation often stems from a profound love for the creatures of this earth who don't recognize property boundaries, roads or rights of way. Many of these creatures need more protection than our current local, state or federal regulations provide—like the wood frogs and salamanders that depend on vernal pools—yet actually travel great distances, like up to a half mile back to the uplands for the summer, fall and winter months. Or the anadromous fish who swim upstream from the ocean to reproduce, then make their journey back to the sea. Whether the birds spend their entire lives within the bounds of our Wilderness Conservation Area, or just use it as a stop over on a cross-continental journey, they remind us of our interconnectedness to ever broader circles of influence.

Other conservation projects start with the desire to pay forward a legacy, to leave something behind for future generations—a dream of forests and animals communing long after the donor has passed. Whether it is habitat for a state-listed endangered species, or a former woodlot, protecting water quality, and carbon sequestration are by-products of this dream. The permanence of a donation to a land trust can contribute to our planet's long term climate resilience. Of course, Manchester Essex Conservation Trust must trace through the steps of due diligence to assure ownership, the condition of the property, long-term stewardship needs and defense from irreparable damage in the future. Engineering drawings, surveys and title certifications are often needed. This can be costly for the donor, and for the land trust. Your donations help make this kind of dream a reality and contribute to the larger picture of climate resilience in our area.

We look forward to resuming our trail walks with expert guides, and other community activities, as health and safety allow. We're planning another scavenger hunt for families, and our photo contest will be announced soon.

Connect with us at Conserve@MECT.org and through our website MECT.org. Look for us on FaceBook and Instagram.



"Rock the Trails" Scavenger Hunt a Huge Hit!

With the pandemic came a new way of thinking about our land, and the land's role in the physical and mental health of our community. We shifted to a new type of walk program with the "Rock the Trails" Scavenger Hunt

this past fall. Participants were provided rhyming clues and maps to find painted rocks placed across conservation areas in Essex and Manchester. Adults and children alike were thrilled to hunt through the woods, many exploring new trails and landmarks for the first time or seeing them from a new perspective. The rocks were painted by our creative volunteers and depicted plants and animals in the vicinity. "Hunters" submitted answers to the riddles and were entered into random drawings for prizes. Thank you to our community businesses including Essex River Cruises, Bravo by the Sea, and Captain Dusty's Ice Cream for their generous donations of prizes for lucky participants.

Stay tuned for another scavenger hunt this year in conjunction with the Town of Manchester's 375th Anniversary celebration.



RAVE REVIEWS! "We had a blast doing it and would LOVE to be involved in more scavenger hunts like this one."

■ "We loved the scavenger hunt! I knew most of the trails from running but most were new to my kids and my husband! Discovering the rocks and the different trails gave my family a new found sense of appreciation for the wonderful resources in our 'backyard' and a love for hiking. I hope the hunt becomes a yearly tradition!" ■ "We had an absolutely fantastic time hunting for the rocks. It was a great way to get my five year old out on the trails." ■ "We had a great time with the scavenger hunt. It was right about our challenge level. It really got us outdoors and to some new places." ■ "It was great motivation to explore some new areas. My children were very motivated to find the rocks, which made walking in the woods more interesting for them. Thanks for setting this up, we'd love to do it again!" ■ "It was a perfect way to get to know some properties we were unfamiliar with and have the challenge of the hunt at the same time."

Did You Know?

In 1965 and 1966, Manchester/Essex Cedar Swamp was used as an emergency public water supply for the city of Gloucester. Some of the original wellheads are still in place, and can be seen off Old School Street. The agreement between the towns stipulated "150,000 gallons of water per day will be taken from the swamp, and such taking will cease if it should be determined that the operation affects Manchester's water supply." (*The Cricket* 11/26/1965) More water was withdrawn for Gloucester in 1982. Manchester's 2014 Open Space and Recreation Plan states Cedar Swamp "has potential as a direct source of water for Manchester." The water reportedly has high levels of manganese and iron, but was deemed of sufficient quality by the state.



Tussuck sedge starts to green up in Cedar Swamp in April. This is a special habitat, which the State's Wildlife Action Plan describes as a priority for preservation of some specialist species who depend upon it. The Northern parula warbler nests only where there is an abundant beard moss source. American Bitterns have been heard during breeding season, and the abundant red-wing blackbirds always provide a cheerful background chatter. Though the habitat has changed through the years, there are many cedar trees growing in this area.



Celebrating the Legacy of Bill Vachon

The MECT Board, staff, and membership all mourn the loss of Bill Vachon (1941-2020), trustee since 2002, and elected President in 2007. He also served as Land Stewardship Committee Chairman for many years. Bill was a distinguished graduate of Massachusetts Institute of Technology, where he earned three degrees in mechanical engineering and captained the hockey team. His career included work at the Draper Laboratory and the Arthur D. Little consulting firm. His early career was focused on aerospace, including an instrument that flew on Apollo 17, and deep ocean equipment. Later, as an independent consultant, Bill worked for many years on solar and wind energy.

Bill was, of course, a committed citizen and activist: a member of the Planning Board and other boards in Manchester, devoted member of First Universalist-Unitarian Church of Essex, the Lions Club, Common Cause, the Audubon Society, and the Council for a Livable World. He had no greater cause in life than MECT, where he was known for his energy, knowledge and passion for our mission. Bill's happiest times were cutting and maintaining trails in partnership with Charlie Kellogg. He was also our chief sign maker for many years. But it was his historical knowledge (aided by the detailed notebooks he kept!) and experience with real estate matters and local development by-laws that so often came to the fore. Bill is irreplaceable and we all miss him dearly.

Bill was predeceased by his lovely wife Donna. He leaves his children Christyne Vachon and Ryan Vachon.

Martha Hoar Bequest

Martha Hoar was a champion of conservation education and a long time Trustee and Volunteer. She helped MECT fulfill its mission to educate the upcoming generations. Martha remembered MECT in her estate plans and so it is with pleasure that we add her bequest to the Francis Q Burnett Education Fund. Our Education Committee is revitalizing our strategies to include supporting teachers with professional development grants, and researching ways to bring environmental education into the very DNA of our schools' curriculum. Martha and Sam Hoar's contributions to this effort are now memorialized.

Many thanks to the Hoar Family.

Conservation Effort Continues

Through the pandemic, our staff and trustees team was able to remain active for land donations and other acquisitions. A generous gift of 12 acres of forested woodland off Crooked Lane has been donated by our friend and MECT Trustee George Smith and family. George has been a dedicated Trustee at MECT since 2007. For 14 years, we have held a Conservation Restriction on this land, and have maintained trails, and helped to share this land with the public. We will continue many of the same efforts, but have transferred the Conservation Restriction to Essex County Greenbelt Trust as we transition to ownership of the land. We thank George for these amazing donations, and for trusting MECT to steward this land for perpetuity.

We are grateful for an anonymous donation of over 15 acres of woodland in northwest Manchester, as well as the closing costs to complete the donation. We are pleased by this opportunity to secure this undeveloped land as forested habitat.

Additionally, we have 17 acres in the Wilderness Conservation Area, in Essex, under agreement, and we are proceeding with due diligence towards closing on the acquisition. Help us to acquire this parcel:

www.mect.org/support.

We look forward to sharing these wooded parcels with you and your family in the future.

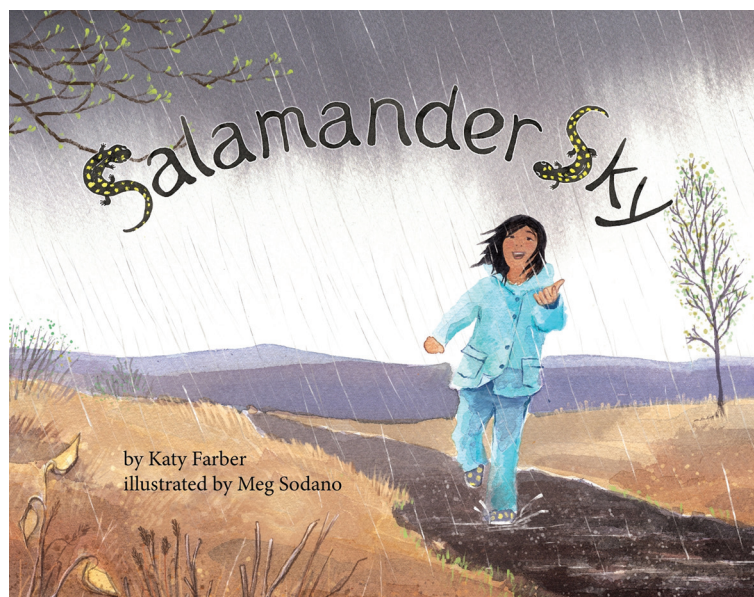
Extended through June 30! Enjoy MECT Spring Story Trail "Salamander Sky"

Walk along one of Manchester's iconic woodland trails in Powder House Hill Reservation and read a lovely story about a girl's quest with her mother to help salamanders stay safe during their annual Spring nighttime journeys. We've chosen this particular story as it relates to our very woodlands in Manchester and Essex, home to many vernal pools and a variety of species including salamanders.

This special Story Trail will be available to view through June 30. To note, the trail starts near the Fire Road trailhead behind Newport Park.

Make sure to also check out the Manchester Library for a complementary activity kit, and after participating in the Story Trail return to the event page and enter a drawing for a copy of the book.

We hope everyone enjoys this wonderful story and unique activity that combines entertainment, exercise, and education about the environment together.



by Katy Farber
illustrated by Meg Sodano

Go to [MECT.org/StoryTrail](https://mect.org/storytrail) to find out more about this program and the award-winning book "Salamander Sky" written by Katy Farber and illustrated by Meg Sodano.

A special thank you to our partners and sponsors, including the Manchester Library with the Hooper Fund, Stonybrook Water, and Nest Real Estate.



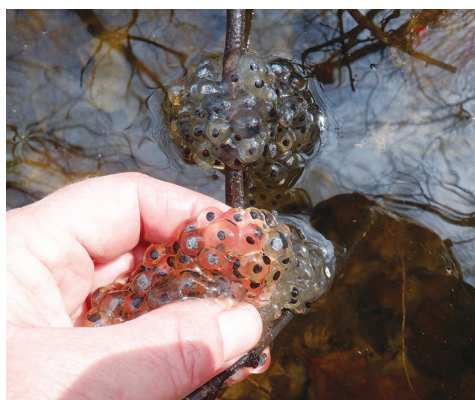
▲ Underwater photo of spotted salamander egg masses attached to twigs in a vernal pool.

► Right: The rounded surface, or individual bubbles, of the individual eggs helps differentiate these wood frog eggs from salamander eggs that might also be found in vernal pools. In both cases, their social distancing bubble is built-in during their early stage of life.

► Far right: These wood frog eggs have matured for a few weeks, and the tadpoles will soon emerge, then feed on the jello-like encasing. They are born with gills, and breathe underwater for the aquatic phase of their amphibian life.

Vernal, continued from page 1

MECT supported the investigation of several areas that may be vernal pools. We hired Rick Roth, of Cape Ann Vernal Ponds, who has state permission to trap the amphibians, to get a close view of the life in the ponds, wetlands, and brooks. In addition to the salamanders, we found predaceous diving beetles over an inch in length, bullfrog tadpoles, red-backed salamanders and pickerel frogs. The Wilderness Conservation Area has had several vernal pool studies conducted under MECT, and the reports can be found on our website.





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@manchesteressexconserv



Conservation works! Featherfoil, *Hottonia inflata*, is an unusual and uncommon aquatic plant in Massachusetts. It is a state-watch listed plant, and is having a strong showing in our area this year according to state botanists.

Join us as a member to learn more about conservation volunteering and opportunities to contribute to positive changes right here in Manchester and Essex. Explore the Manchester Essex Conservation Trust lands and trails. Provide support for our conservation and defense efforts right in your own backyard. Start a "conservation conversation" with us today to learn more about the potential tax benefits of donations of land, bargain sales or bequests. To contribute, use the envelope included in this newsletter, go to www.mect.org/join or email us at Conserve@MECT.org. *Thank you!*