

CHATHAM CONSERVATION FOUNDATION BULLETIN

Spring
2021

*The Chatham Conservation Foundation preserves land for the benefit of
the people, plants, animals and ecosystems of Chatham.*

Frost Fish Creek: A Salt Marsh of Chatham

*by Gerry Stahl
Chair of CCF Salt Marsh Task Force*



Photos by Tina Delaney

Chatham is rich in salt marshes and CCF is committed to preserving them and where necessary restoring their healthy functioning. Salt marshes are wonderful natural environments for people, plants, animals, birds, fish and shellfish. They could also provide Chatham's most effective means for combatting both the causes and the effects of climate change.

Salt marshes act as multi-layered flood-protection systems by regulating river drainage and groundwater flow, helping to stabilize coastlines. They filter water, removing nitrates from lawn runoff that contribute to algal blooms and drinking-water degradation. Crucially, they also store quantities of carbon in their sediments, representing the largest sink for CO₂ among all terrestrial ecosystems—several fold better than even trees in tropical forests.

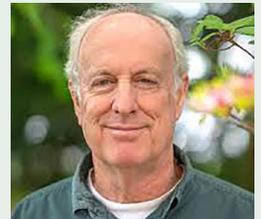
Recent analysis of wetlands in the United States suggest that there is immense potential for gains in terms of nitrate removal and water-quality improvements from targeted, modest investments in expanding wetlands. Wetland expansion and conservation aimed at locking carbon in wetland sediments can be used as an effective, natural climate-change mitigation strategy.

*CCF is committed to preserving
(salt marshes) and where necessary
restoring their healthy functioning.*

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Annual Meeting 2021 Monday, August 2 Wequassett Inn

We are excited to announce that we may be able to gather together for CCF's Annual Meeting in August at the Wequassett Inn overlooking beautiful Pleasant Bay. If not, the meeting will be held online. We are



Dr. Douglas Tallamy

equally excited about this year's keynote speaker, Dr. Douglas Tallamy, who will deliver his message virtually on a big screen. Dr. Tallamy is a professor of Entomology and Wildlife Ecology at the University of Delaware and the author of several award-winning books including, [Bringing Nature Home](#), [Nature's Best Hope](#) and [The Nature of Oaks](#).

Inside Articles

Cathy Weston has contributed two articles to this issue which reflect her expertise and interest in native plants. One is about the environmental

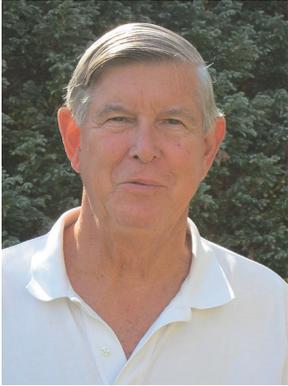


restoration by Blue Flax Design at the Nickerson dig in North Chatham (page 4) and the other is about native spring flowering plants.(page 7) Both articles explain the environmental benefits of planting more native species in our own yards.

Chatham's land trust since 1962

President's Message: Spring Forward

by Bob Lear
President of the Board of Trustees



As I wrote this in early March for publication in late April I started my day as always, with a look at the NOAA 7 day weather website. I saw that March was up to its usual lion/lamb routine: snow or maybe rain showers, temperatures over the weekend ranging from 21 to 62 and wind gusting to 48. There were comparable rapid changes in COVID and political news which led me to wonder what would

May be like. One thing for sure, it would eventually be “in Just - Spring when the world is mud-luscious...and puddle-wonderful...” (remember your high school E.E. Cummings?), and the Red Sox are playing before live fans.

In keeping with that optimistic view, in this issue we have a review of an article by Kristin Andres which provides a rationale for protecting and preserving our natural environment for the common good, a succinct explanation of why we do what we do. Frost Fish Creek and marsh are a great example of how our properties are critical to our future. Town meeting will be another reminder of how CCF is planning to improve this resource through a Community Preservation grant for water quality and hydraulic studies. We are planning

this project partially due to a slowly deteriorating culvert under Route 28 to Pleasant Bay. Fortunately our timing is good since Mass DOT is becoming more involved and, in conjunction with information we provide, infrastructure and environmental interests may both be served.

Early Spring while the vistas are open from the high trail at Frost Fish is a good time to refresh your knowledge of native plants using our new identity tags. Chatham's Americorps member, Julia Gerard, is working on a pamphlet especially for our locale which you will be able to take with you elsewhere when you are searching out the Spring wildflowers described by Cathy.

If you would like to become more involved, Julie and Julia have produced a video (no, not that classic movie) presentation of how to use Landscape software to assist in monitoring the properties that CCF owns and those on which we hold conservation restrictions. On the surface the process appears simple. Use your device (iphone/pad) to locate your position on the supplied property map, identify the bounds, take pictures of any encroachments and/or changes since a prior visit, and file all in the system. My participation in the presentation has established my technical ability is not up to the task, but tutorials will be offered to any volunteers.

So, I urge you to go out on CCF properties with your families, enjoy yourselves, and, even better, document your visit so that we can continue to share our beautiful environment.



Executive Director's Report: Cultivating Conservationists

by Dorothy Bassett
Executive Director

We've braved another winter, and these warm spring days are waking up our Cape Cod world. When I was growing up I remember the excitement of finding the first snowdrops and crocuses of the season. My mother would bring out her big heavy camera with the manual focus ring, and snap a few photos. When the film roll was full we'd mail it off to be developed. By the time the pictures came back I was likely already on summer vacation and quite busy fishing, catching fireflies, and swimming. These experiences led me to pursuing conservation as a career.

Young people growing up on the Cape have a very different childhood than you or I enjoyed. Digital cameras instead of film, instant gratification, and screen time all but replacing imaginative time and observations outdoors. Without an early connection to nature, young people won't have those critical memories and nostalgia that compel them to protect it.

In order to foster a deeper connection between the education of local youth and the need to appreciate, preserve, and manage valuable local ecosystems, CCF, supported by a generous grant from the Cape Cod Foundation through the Helides Education Fund, is collaborating with local

educators to create STEM lesson plans that incorporate ecological principles and land conservation practices. The program will launch with a classroom visit on biodiversity by the Caterpillar Lab, with hands-on education stations with hundreds of native caterpillars, moths, and butterflies. Additional lesson

plans created will be built around CCF's professional land stewardship and conservation work to increase student interest in science, introduce them to future STEM careers, and foster a connection to the natural world that leads to a desire and drive to understand, preserve, and protect wild places.

Lesson plans will be available to educators for free on the CCF website, and incorporated with teachers into the public school system. We can't turn back time, but we can work with new systems and opportunities to pepper in activities rooted in nature. And as the saying goes, “the twig is bent, so is the tree inclined.”



Land Steward's Report

by Julie Baca
Land Steward



With the mid-March lengthening days, higher sun angle, beckoning bird song, and temps, at least temporarily, reaching into the 40s and 50s, the urge to abandon the computer and run outside is getting increasingly strong. Luckily, I have a job that involves outdoor work some of the time. And, the good news is, I have plenty of outdoor work to share with others!

This February, we were able to host a Property Monitoring Volunteer Training, prepared and presented by AmeriCorps Cape Cod member Julia Gerard. With over 200 properties that CCF owns or protects by Conservation Restriction, it is hard for me to thoroughly inspect every property on a regular basis. This is why we call on volunteers to help. A Property Monitor is responsible for visiting their assigned properties twice each year to walk the boundary of the parcel, visit any interior features of note, and document any changes using a monitoring app. We have a range of monitoring options, from viewing properties from the road to swimming through dense brush, and offer opportunities based on volunteer preferences.

Our hope is that volunteers may stick with properties for many years, becoming more intimately acquainted with the land and sensitive to natural and human-influenced changes. I am just at the tip of developing such a relationship with some of our properties, having been at CCF for almost 2 years. I

took a slower than usual walk at Frost Fish Creek recently, prepping for a plant tagging project, and realized there were many more swamp azalea and he-huckleberry plants along the trail than the one or two I thought existed. It is exciting to learn about a place in ever increasing detail.

This spring we are hoping to pick up group stewardship projects once again. Over the past year, with the help of volunteers and AmeriCorps Cape Cod, we have made progress on invasive species restoration projects. You really cannot turn your head on invasive species for a season and we will need help maintaining and advancing the progress we have made. Additionally, trails will need their routine care.

If you would like to learn more about becoming a Property Monitor or participating in group stewardship projects, please email me at landsteward@ccfinc.org or call the office at 508-945-4084. We would also love to hear from you if you have special skills (e.g. deed and historical research, photography, plant ID, habitat research) you'd like to share through individualized projects.



Two types of plant tags are being considered for the Frost Fish Creek Trail. The upper photo is a tag on the branch and the lower photo shows the tag placed in the ground.

Photos by Dorothy Bassett

Frost Fish Creek *continued from page 1*

About half of CCF's land parcels are around salt marshes. CCF has established a Salt Marsh Task Force to study the health of Chatham's wetlands. The initial focus is on Frost Fish Creek. CCF's most popular and scenic walking trail runs through there. You can view a video of it at: <https://www.chathamconservationfoundation.org/trailguide>. Occasionally, we lead group walks on the trail.

Our next project at Frost Fish Creek is to install improved signage and plant tags along the trail to help walkers recognize native trees, shrubs and plants. This project is generously supported by an anonymous donation.

In 2019, we collaborated with APCC to conduct initial studies of the land and water in the Frost Fish area. This led to a recommendation to conduct more detailed water quality and hydraulic studies to assess the consequences of tidal restriction removal. A grant proposal to fund this has been approved by Chatham's Community Preservation Committee (CPC) and the Town. It is awaiting final approval at Town Meeting in June. Please support this to help us maintain Chatham's salt marshes to best serve the environment and the Chatham community.



Vernal pools are a sure sign of spring as they fill with water which nurtures frogs and salamanders each year. This pool is located on CCF land off Crowell Road adjacent to Monomoy Regional Middle School. Students helped to create the pool in 2016.

Photo by Carol Odell

Restoring the Nickerson Site with Native Plants

by Cathy Weston
Trustee

Photos by Cathy Weston except where noted

No doubt you have noticed the changes happening at the property adjacent to the Nickerson Family Association. Two years ago CCF, supported by CPA funds, engaged Blue Flax Design, LLC. to remove a sea of invasive plants and restore a native shrub and grassland. While it has taken two years to be confident the invasives are under control, it is finally time this spring for planting.

The front half-acre is being planted with over 300 shrubs and trees, a winding path back to the site of the Nickerson archeological dig is being created, and a grass and wildflower mix is being sown. We hope you will visit this site and get to know some of the wonderful native plants that line the pathway.

Photo compliments of the London Times



Serviceberry (*Amelanchier canadensis*). This small tree, which grows 10'-18', has showy white flowers in June and sweet berries later in the summer – try to get some for yourself before the birds eat them all. An understory tree, it can grow in either sun or part shade. Pollinators are attracted to the flowers, and the tree has lovely fall foliage.



Sweet fern (*Comptonia peregrinis*). A low shrub of 2'-4', this shrub resembles a fern because of its densely arranged, long, lobed leaves. It prefers full sun in upland soil or part shade on the edge of a woodland. This is a tough plant, both drought and salt tolerant, that will colonize over time.

Sweet pepperbush (*Clethra alnifolia*). A fan of moist soils, this 6'-8' shrub has fragrant 3"-6" flowers at the ends of its twigs in mid-to-late summer. The dried fruits stay on the twigs all winter and look like peppercorns. It prefers part shade but will grow in full sun as long as the soil is moist. It will colonize over time into a thicket.



Inkberry (*Ilex glabra*). This shrub stands out because it is evergreen. It can grow from 3'-12', has small shiny leaves and small white flowers in June and July, followed by black fruits. It is common in damp places and is shade-tolerant.



Photo compliments of Spring Meadow Nursery



Arrowwood (*Viburnum dentatum*). A tall shrub of 10'-18', arrowwood has many arching stems and noticeably toothed leaves. Flat-topped flower clusters 4" wide attract pollinators, and birds seek out the blue-black fruits. This plant grows in both upland and damp soils, full sun or part shade, and in salty and windy conditions.

Chokeberry (*Aronia arbutifolia*). A multi-stemmed shrub growing 5'-8' tall, this shrub has masses of white flowers in spring, red fruits in late summer, and deep red foliage in the fall. It prefers average or moist soil, although it is drought-tolerant, and prefers sun or part shade. It may colonize over time.



Bayberry (*Myrica pensylvanica*). Often found growing in patches of several plants, this 5'-7' shrub is distinctive because of its 4" wavy leaves. The flowers are not noticeable, but the waxy bluish white fruits, used to make candles, are sought after by birds and people alike. It prefers growing in sun or the part shade of a woodland edge, and is both salt and drought tolerant.

Happily, these shrubs also do well in our home landscapes. If you are considering a wildlife border or other spot to support your local ecosystem, any of these would be wonderful additions. They are generally available at the larger nurseries in the area.

May is membership month

We realize that last year was difficult for many of our members because of Covid-19. CCF was unable to open the Mayo House and, like so many others, the staff has had to work from home and committees have had to meet over zoom. Nevertheless our work continues and we are optimistic that the Mayo House will reopen by summer and that the Annual Meeting will be held at Wequasset Inn.

The work of the foundation goes forward rain, shine or Covid-19 but not without your help. Since 1962, members have been loyal supporters of the foundation's efforts to preserve the land for the benefit of the residents, the wildlife habitat and the quality of the salt and fresh waters. And so much has been achieved! Next month renewal membership forms will be mailed out to all CCF members and we hope you will be as generous as you've ever been.

We would like to show you how valuable your contributions are to furthering our mission with some examples of the projects you support:

- Tools used to keep trails clear
- Expenses for volunteers working to clear invasives
- Purchase of native grasses, wildflowers, shrubs, and trees to restore cleared property to a natural condition
- Technology to monitor the land we already conserve
- Reserve of funds to acquire the next piece of conservation land that becomes available
- Expenses to study key habitats, such as salt marshes, in light of rising sea levels and climate change
- A new conservation education program for local middle school students using CCF land as inspiration

Next month when you receive your membership letter, we hope you will realize the important role you play in making your part of Cape Cod a better, healthier place for you, your friends and neighbors now and in the future.

We at CCF are constantly aware of and grateful for your support.



Left. Fisher caught on CCF wildlife camera sponsored by My Generation Energy.

Right. Fisherman at Barclay Pond

One of the best informative nature writers we have on Cape Cod is Kristin Andres, who we are proud to have as an Honorary Trustee of the foundation. She is currently the Director of Education at APCC and regularly contributes articles for the Cape Cod Chronicle entitled "Conservation Conversations".

In the December 31, 2020 issue of the Cape Cod Chronicle she wrote an article entitled "An Invitation" which was one of the clearest and well-stated arguments for conserving open spaces and wild lands on Cape Cod. She begins by stating how varied and valuable open space is to people for recreation, food and reflection especially in this time of Covid-19.

"Each shoreline offers its own breathtaking scenery, not to mention the salt air. Walking trails through pine and oak offer discovery at every turn, and sometimes surprising vistas. The Cape's freshwater ponds are one of the best kept local secrets for a summer swim, an early morning of fishing or just quiet reflection. We enjoy access to coastal waterways for boating, fishing or to gather some oysters."

Most importantly, her article recognizes and thanks elected officials and local land trusts for their efforts which have preserved a range of property across the Cape from fractional acres to the 43,607 acres of Cape Cod National Seashore. She continues to state that local land trusts, like CCF, exist in all the Cape towns and rely on donations and membership dues to support their efforts to acquire and manage land.

Andres states most clearly the real value of conserving land as habitat for wildlife and preservation of the aquifer by explaining that forested areas purify the groundwater, and conservation of salt marshes, coastal dunes, flood plain areas provides resistance to the effects of climate change. She argues that we must endeavor to save as much as we can,

"Once it is developed, for all intents and purposes, it is gone forever.... Would it not be a great thing for us to leave Cape Cod in a way that our grandchildren's great grandchildren might still experience what we love about the Cape today? If you agree, then give to your local land trust today and support their work. And remember, it's an open invitation to get outside with nature, so go and enjoy every moment you can spare."

Kristin's complete article appears on our website, <www.chathamconservation.org> under the Bulletin Tab under News.



Photo by William Hayes

Volunteer Opportunities and Business Supporters

By Dorothy Bassett
Executive Director

There are many ways to help an organization grow and thrive, and volunteering is one of the cornerstones. It is also rewarding and fun for our supporters like Scott Tappan, who has been a key volunteer for the past five years. Scott's favorite type of volunteering is after storms: "Going down with rakes and chainsaws and opening a trail back up. It's also helpful if a volunteer goes out and just finds a tree that goes down. Just knowing where a trail needs to be maintained is very important." We welcome you to learn more about our programs. Here are some positions we're looking to fill right now:

Educators: Part of CCF's mission is to offer environmental learning opportunities to the community. This can take the form of school programs, lesson plans, and classes for all ages.

Public Speakers: CCF is always interested in meeting people with experience and expertise in various facets of the natural world. If you enjoy public speaking and would to share your knowledge then please reach out!

Stewardship and Property Monitoring: Assist the Land Steward with routine monitoring of CCF owned parcels and trails, restoration efforts, and one-day projects. Training is provided and help is much appreciated.

Volunteer Management & Coordination: This role involves interviewing and welcoming new volunteers, and helping them to become familiar with the organization and its goals. Once new recruit skills and interests have been identified, connect them to committee moderators who can explain the roles that need to be filled.

Computers & IT: Running a Land Trust means keeping the office hardware and software in tip top shape. Our computers, printers, and other equipment continually need loving care, and technology assistance is always welcome.

Social Media: We'd love a hand posting and sharing content on Facebook and Instagram, especially with all of our wonderful wildlife camera content!

To learn more about our Volunteer Program, take a look at our website ccfinc.org and go to the Join Our Team tab. We hope to welcome you to the team!



By Dorothy Bassett
Executive Director



Photo by R. Sranger

Thadd Eldredge of East-SouthEast LLC and his family: wife Marija, son Luke and daughter Emma.

For decades local business owners have helped the Foundation's land saving mission by donating their time, expertise, and materials. Thadd Eldredge, owner of East-SouthEast, LLC, a land surveying and mapping firm has donated his time, drone imagery and digital map files in what has become a beneficial partnership.

Thadd's grandparents Ned and Marge Jacob were very active CCF members and Ned served as President from 1972 to 1980 and remained on the board for almost 20 years. Ned and Marge encouraged Thadd to give tours of the Mayo House and Thadd even appeared in costume as Josiah Mayo during winter strolls. Ned created and maintained the trails at Barclay and Mary's Pond, and Thadd carried on the family tradition with an Eagle Scout Project that included the repair of the trails, handrails, and benches.

East-SouthEast, LLC has performed several surveys for CCF. Thadd changed the methods used because he felt it was not right for the Foundation to pay to prove that others were encroaching. He began training the Land Steward in use of survey grade GPS and updating the CCF mapping layers for much greater accuracy to their correct geo positions. This results in a cost-effective means to identify likely encroachments and allows CCF to save our resources for restoration projects, land purchases, and trail maintenance.

When asked why he has partnered with the organization Thadd stated, "The environment is an important cornerstone of our economy. The primary attraction of the Cape has always been the natural environment and the Foundation is preserving land for our shared ecological heritage. I am glad to do what I can to help with these efforts."

We thank Thadd and all of our local business partners for their important contributions to the Foundation. To learn more about partnering with CCF please reach out to us or visit our website's Local Business Sponsorship page under the Support tab.

Scott Tappan (left) assisted by the late Nat Mason installed fence at Barclay Pond Trail.

Spring Treasures

by Cathy Weston
Trustee

Late May through early June is the perfect time to explore Chatham's woodland trails in search of glimpses of spring flowers. Taking advantage of sun that filters to the woodland floor before the oaks leaf out, they bloom just in time for the earliest bees, and to signal to us that spring is here.

Here are some of the gems you might find, but please remember to take only pictures, leaving the blooms for the pollinators and for others to enjoy.



Canada mayflower (*Maianthemum canadense*). The single-leaf stalks blanket the woodland floor, unremarkable until they send up a delicate white flower. Its cousin, false Solomon seal, has a similar flower but multiple, narrower leaves.



Black huckleberry (*Gaylussacia baccata*). The edges of our oak-pine woods are often covered in thickets of this low shrub, a relative of the low-bush blueberry, with its bell-shaped flowers. Bees will hover under the flowers, and the vibrations from its wings will release pollen onto their backs.



Pagoda dogwood (*Swida alternifolia*). Growing in the moister areas, this small tree features fluffy white flower clusters on tiered branches that resemble a pagoda.



Wild columbine (*Aquilegia canadensis*). One of the few spring wildflowers with bright colors, this short-lived perennial spreads by seed, so you never know exactly where it will pop up.



Lady's slipper (*Cypripedium acaule*). This member of the orchid family is one of our rarest spring wildflowers, so it is a lucky treat to spot one. They like the rich soil and dappled shade of an open woodland.



**Chatham
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www.chathamconservationfoundation.org



Izzy with Bella the Butterfly, she hatched from a kit.

OPEN SPACE PROTECTED TO DATE		
Parcels	Classification	Acres
149	Gifts	377.21
42	Purchases	243.83
47	Easements & Restrictions	215.12
238	TOTALS	836.16

**Due to the Covid -19
the Mayo House is still closed
but staff can be reached at
945-4084 • ccfinc@comcast.net
executivedirector@ccfinc.org**

We hope to be able to reopen soon!

Look closely at nature. Every species is a masterpiece, exquisitely adapted to the particular environment in which it has survived. Who are we to destroy or even diminish biodiversity?

-E.O. Wilson