



The Mystery of Thatchbed Island

By Kathleen Sealey

Thatchbed Island is a tidal wetland on the western bank of the Connecticut River just south of the Town of Essex. This island has been part of the history of the region as the salt meadow barrier between the river, Middle Cove, and South Cove. The earliest maps of Essex show the Island as a reed bed extending almost 30 acres in an arc from Essex to the middle of South Cove. Today, Thatchbed Island is under threat from natural and anthropogenic threats, rapid erosion, and loss of biological diversity. It is diminished in size to less than seven acres, with visible loss of vegetation each year. What is happening to this island marsh and what does this mean for the ecology of the Lower Connecticut River environs?

Riverine marshes such as Thatchbed Island are characterized by their dynamic nature. Accumulated sediments are barely above the waterline with flooding by tidal action. The marshes, sandbars and floodplains around the Town of Essex are truly estuarine and are increasingly influenced by saltwater with sea level rise. Since the Town of Essex was settled in 1635, sea level has risen over 26 inches. Glacial gravels and sands built up to a level above the waterline to support marsh plants made up of primarily grasses, sedges, and herbs. While plants can anchor and

trap sediment, parts of these marsh islands can be eroded and moved with severe floods and ice flows. The agents of change for these river marshes include major flood events, tidal storm surges, and rising sea level. All these agents of change have impacted how people have used and viewed Thatchbed Island.



Photograph of the mudflats exposed at low tide along the eastern shore of Thatchbed Island. This photo was taken in 2018, and clearly shows the erosion around clumps of vegetation.

In the nineteenth and early 20th century, salt meadows throughout the northeastern seaboard were used for grazing livestock and cutting salt grass hay. Tidal marshlands were burned to maintain a dominance of grasses and sedges. After the second world war, commercial interests eyed Thatchbed

Island as an ideal location for a large marina created by dredge and fill material. Residents of Essex opposed this marina, prompting Captain Walter Rowe to purchase the northern end of Thatchbed Island and in 1968, Captain Rowe donated his part of Thatchbed Island to The Essex Conservation Trust, now the Essex Land Trust (ELT). About this time, an invasive reed *Phragmites australis* became a dominant grass on many tidal and non-tidal wetlands in Connecticut. The State of Connecticut took aggressive action to battle this invasive species on Thatchbed Island by spraying with an herbicide for a period of four years starting in 2000. The loss of the *Phragmites*

Mystery ... continued from page 1

along with the failure of native species to recolonize may have contributed to the island's rapid erosion.

The land trust focused its stewardship on Osprey conservation with the construction of nesting platforms. The popular Osprey camera was installed in the early 2000s to introduce the Town to the wonders of Osprey parenthood from April to July each year. The nesting platforms and ELT stewardship have contributed to the recovery of Osprey on the Lower Connecticut River.

A 2018 report for the Essex Harbor Commission on Thatchbed Island brought attention to the rapid deterioration of the island. An immediate concern was the loss or movement of sediment around the island and the need to maintain navigable waterways. Thatchbed Island has been used historically for dumping of dredged materials, yet the study concluded that the island had no high marsh areas, and it lacked the distinct high and low marsh zonation seen on the Great Meadow protecting North Cove. Wash-over debris brings both natural material (logs and other loose vegetation) as well as plastic debris down the river. The report addressed the impact of boat wakes and storms on the instability of the eastern shoreline of the island, with erosion reducing the extent of the island. Why has Thatchbed Island eroded so quickly over the past 25 years, and should the Town of Essex be concerned about the demise of the island entirely?

Fortunately, in 2024, we may have some answers. The Connecticut Department of Energy and Environmental Protection has contracted a year-long research study of Thatchbed Island to be carried out by the University of Connecticut's CIRCA (Connecticut Institute for Resilience and Climate Adaptation). A team of researchers with expertise in physical oceanography and modeling river flow and sediment transport will seek to identify and understand the root causes contributing to erosion. The Research is scheduled to begin in February, 2024, and by the end of the year will publish the potential solutions aimed at mitigating the erosion issues.

Everyone enjoying the views of the river, boating, or watching the Ospreys will be impacted by the fate of Thatchbed Island. This tidal marsh is one small part of the changing environment around us, and solving the mystery of its demise will inform future actions that may be needed to preserve the beauty around us.

Kathleen Sealey is a member of the Ad Hoc Committee – Thatchbed Island. Dr. Sealey is a Professor Emeritus from the University of Miami who recently relocated to Essex. She has a long interest and passion in the ecology of tidal wetlands and coastal environments.

For more information, refer to The Ad Hoc Committee's A Comprehensive Study of Essex Harbor and Thatchbed Island, Essex, Connecticut found on the Town of Essex website.



Comparison of Thatchbed Island with images dated in 1934 at left and 2022 at right. The island's surface area has declined from 30 to barely 7 acres.

Environmentally Friendly Lawn Equipment - Making the switch to quieter and safer lawncare

By Caroline Grist

Essex residents had a chance to try out environmentally friendly electric lawn equipment at an event organized by Essex Land Trust (ELT) and Sustainable Essex. With fall cleanups in mind, more than 30 people came to Cross Lots in Essex on Saturday November 4 to see and try out battery-operated leaf blowers, lawn mowers, string trimmers and a chain saw. Essex Land Trust's Tom Soboleski, and Anne Penniman from Sustainable Essex spearheaded the event.

"We are excited about the positive momentum building for electric lawn equipment, which is more convenient and user-friendly than gas-powered," said landscape architect Anne Penniman. "There's minimal maintenance, no fuel, and no exhaust." The Town of Essex has purchased electrical equipment, and Sustainable Essex is working with it to obtain more. ELT has also been purchasing battery operated equipment to replace gas powered machines.

Penniman added, "We have concerns about the health issues created by pollution for anyone using gas-powered leaf blowers especially. The 2-stroke engines emit the same toxic pollutants in an hour as driving a new passenger

car for about 1,100 miles!" Unlike vehicle engines whose emissions are regulated, two-stroke engines are not. Consumer-grade blowers (and some mowers) use a two-stroke engine, which lacks an independent lubrication system, so fuel must be mixed with oil. Burning oil and fuel emits several harmful toxic pollutants into the air,

including carbon monoxide, nitrous oxides (which cause smog formation and acid rain), and hydrocarbons (a carcinogenic gas that also causes smog).

Gas-powered blowers also create dangerous amounts of noise which compromise our quality of life in our small-town setting. They can cause hearing damage after two hours of operation. The Centers for Disease Control and others report that the typical gas-powered leaf blower emits 85 decibels of noise, far higher than acknowledged safety standards and four times as loud as an average electric leaf blower.

Anne had tips for those using a landscaping service. She owns

an electric blower, string trimmer and other landscape equipment. "I asked my lawn service to refrain from using blowers during the summer season. I've also asked my landscape contractor to use my battery-powered blower

only when necessary, such as on a gravel driveway," she said. In the fall, the leaves are left in planting beds and mulch is mowed into the lawn for added nutrient benefits. You can protect your plants for the winter, and also have free mulch which will naturally break down to rich humus that will feed the woody and perennial plantings.

The equipment is also efficient. Addressing concerns that battery-powered equipment is not powerful enough, Sustainable Essex knows of six electric landscape firms in the state of Connecticut that all use the equipment with success. One of the companies reports a 30% annual growth over 10 years.



continued on page 4

Environmentally Friendly Lawn Equipment ... continued from page 3

For more information, explore the following sites:

California Air Resources Board - Small Engine Fact Sheet

<https://ww2.arb.ca.gov/resources/fact-sheets/sore-small-engine-fact-sheet>

Electric or Gas Leaf Blowers...Neither?

<https://sustainability.wustl.edu/rethinking-lawn-equipment-2/>

CDC Too Loud! For Too Long! – Vital Signs

<https://www.cdc.gov/vitalsigns/HearingLoss/>

CDC Loud Noise Can Cause Hearing Loss

https://www.cdc.gov/nceh/hearing_loss/what_noises_cause_hearing_loss.html

American Green Zone Alliance

[https://www.quietcleanpdx.org/wp-](https://www.quietcleanpdx.org/wp-content/uploads/2019/04/AGZA_Leaf_Blower_Statement_HILITE.pdf)

[content/uploads/2019/04/AGZA_Leaf_Blower_Statement_HILITE.pdf](https://www.quietcleanpdx.org/wp-content/uploads/2019/04/AGZA_Leaf_Blower_Statement_HILITE.pdf)

Caroline Grist is a member of the Sustainable Essex Committee. To learn out more about the Sustainable Essex Committee, log on to their website: <https://sustainableessex.com/>

Essex Land Trust Submitting Renewal Application for Land Trust Alliance Accreditation



After being accredited by the national Land Trust Alliance in 2019, the Essex Land Trust is once again submitting its reapplication, required every 5-years. Accreditation is a mark of distinction that will allow Essex Land Trust to maintain public confidence by enabling the organization to review and implement policies and procedures to improve operations that lead to more effective land conservation. It also provides third party assurance of quality and permanence of land conservation and is demonstrative of a strong, effective organization that can be trusted. Essex Land Trust is one of 462 accredited land trusts out of 945 registered by the Land Trust Alliance.

The Land Trust Accreditation Commission, an independent program of the Land Trust Alliance, conducts an extensive review of each applicant's

policies and programs.

The Commission invites public input and accepts signed, written comments on pending applications. Comments must relate to how Essex Land Trust complies with national quality standards. These standards address the ethical and technical operation of a land trust. For the full list of standards see <http://www.landtrustaccreditation.org/help-and-resources/indicator-practices>. To learn more about the accreditation program and to submit a comment, visit www.landtrustaccreditation.org, or email your comment to info@landtrustaccreditation.org. Comments may also be mailed to the Land Trust Accreditation Commission, Attn: Public Comments, 36 Phila Street, Suite 2, Saratoga Springs, NY 12866. Comments on ELT's application will be most useful if submitted by March 26, 2024.

Volunteer Spotlight - Glenn Jacobsen

Building from the Ground Up

The skills required of our stewards are many - experience with chainsaws, brush hogs, leaf blowers and power tools, carpentry skills, small engine repair and occasionally operating heavy equipment. Couple those with available time, determination and creativity and you have the perfect steward. Few of us possess many of those and yet we still keep the trails clear, our equipment running, install new bridges, expand access, and improve the habitat. Always rewarding work but challenging at times.

We are always looking to recruit stewards, so when Glenn Jacobsen and his wife Melissa arrived in town in 2015 having built a nationally recognized full-service landscape and design firm from the ground up, it got our attention.

Even though Glenn was still running the business 4-5 days a week back in NJ until selling it and retiring in 2021, he took on the stewardship of Osage Trails in 2018. Lucky for us, Glenn went into retirement with one of his work trucks and a trailer full of blowers, wheelbarrows, shovels, ladders, etc. He put those “toys” to work not just on Essex Land Trust (ELT) preserves but at local churches as well. Glenn often helped out stewards on other preserves. When he heard we needed access to a dump truck, his response was “what size?” If a steward needed to trim upper branches on a tree, Glenn brought out his 14-foot orchard ladder.

And when preparing for a fall cleanup at Osage Trails, Glenn brought his leaf plow. We did not know that piece of equipment existed or that we even needed one!

After graduating from high school in New Jersey, Glenn pursued a degree in Landscape Design and

Ornamental Horticulture at a local community college, while growing the landscape business he began in high school. Skip ahead 45 years and Jacobsen Landscape Design & Construction Inc. was managing all aspects of

landscape design, build, and maintenance with a staff of eighty. Glenn was heavily involved in state and national landscape associations and mentoring the next generation of landscape professionals.

Glenn was in his element when organizing ELT work parties, whether the Osage Trails fall cleanup or the annual VRHS Warriors in the Community Day. He arrived early with his truck and trailer full of every tool needed for the day. He laid out the plan, paired individuals with the

right tools, gave guidance and sent us on our tasks. When we were done, he gathered the group to commend us on our work and to socialize over coffee and donuts.

Glenn was a devoted husband and family man who relied heavily on his Christian faith. He committed a great deal of time, expertise, and philanthropy to many faith-based organizations. He enjoyed sailing and mentoring youth. Glenn was one of the key visionaries of our 50-tree American Chestnut orchard planted in Cross Lots in 2022 and he designed and helped build the new shoreline seating area at Osage Trails.

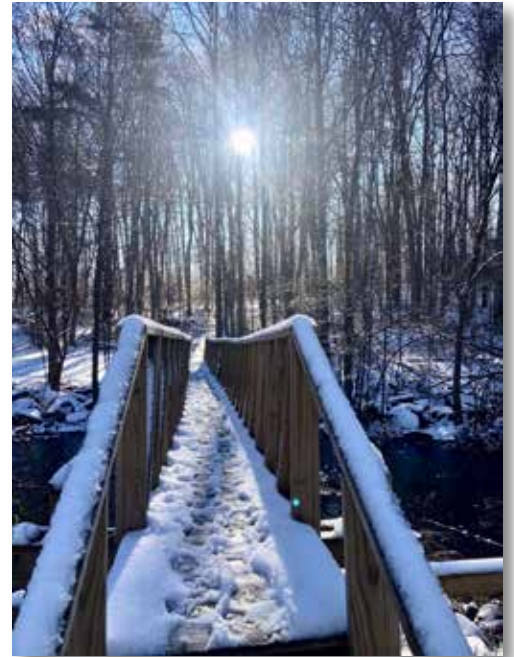
It is with profound sadness that we report Glenn passed away on January 8th after a courageous two-year battle with brain cancer. His leadership and work ethic left a lasting impression on all. We finish this Volunteer Spotlight with one of Glenn’s favorite sayings and how he lived his life: **“thankful, grateful and blessed!”**



Winter 2024

Winter 2024 is the first time in several years that Essex has experienced measurable snow. So, programs chair Tom Gezo scheduled a “If it Snows, it Goes” hike at Canfield Meadow Woods preserve in late January. On a typical January winter day, full of sun and temperatures in the low 20s, a hardcore group of hikers explored snow-covered Canfield Meadow Woods Preserve. Steward Tom Soboleski led the way in a two-mile hike reaching the summit of Canfield where we were able to enjoy a clear vista of the lower Connecticut River valley and distant views of Plum Island and Long Island Sound.





Land Trust board member Chet Arnold took advantage to explore some other land trust preserves and shared these three memorable images.

Coming Events – Mark Your Calendar!



Full Moon Hike

Saturday, February 24, 5:00 PM

Johnson Farm, Reed Hill Road, Ivoryton

“There’s a moon out tonight” at Johnson Farm. The moon will rise at 5:00 PM as we begin our hike and we’re hoping for a crystal-clear night so the moon can light our way. Following the hike, head over to the Tap Room at the Blue Hound for socializing. Dress warmly with appropriate footwear. Bring flashlights as well as binoculars or scopes for some stargazing. This hike is weather dependent. Register or drop a note to elt.programs@essexlandtrust.org so that we can contact you directly as plans change. Register at: <https://bit.ly/ELTFullMoonHike>

Planting in a Time of Climate Change

Monday, March 4, 2:00 PM

Essex Town Hall Auditorium, 29 West Ave, Essex

Christine Darnell of Christine Darnell Gardens in Old Lyme will address the ecological processes that sustain and help to regulate the changing environment and will discuss making appropriate choices in planting design with regard to soil and migrating pollinators and wildlife. Refreshments will be provided by the Essex Garden Club Hospitality committee. The Essex Land Trust is pleased to co-sponsor this event with the Essex Garden Club.

Aquatic Invasives Workshop and Hydrilla Update

Thursday April 4, 2024, 6:00 PM

Essex Town Hall Conference Rm A, 29 West Ave, Essex

Join the Connecticut Agricultural Experiment Station’s Office of Aquatic Invasive Species workshop to discover which invasive aquatic plants are threatening waterbodies and how they are being managed, including the new strain of hydrilla in the Connecticut River. Learn key identification skills. The Connecticut River Conservancy will discuss the importance of partnerships, education, and outreach in the work of preventing and managing invasive species. Legislative duties permitting, Christine Palm

will join us to discuss the process of getting the Aquatic Invasives bill passed which led to the creation of the department at CAES. This event is co-sponsored with the Essex Harbor Commission.

Essex Land Trust Annual Meeting

Thursday, April 25, 5:00-7:00 PM

Essex Meadows, 30 Bokum Road, Essex

Join us for an evening of camaraderie and celebration. The program will feature a review of the past year’s accomplishments, plans for the upcoming year and the election of board members. Parking is limited. Carpooling recommended. Attendance at the Annual Meeting is free but there will be a charge for the social gathering.

Birding and Nature Walk

Wednesday, May 8, 8:30 AM

Essex Meadows, 30 Bokum Road, Essex

ELT Board member Jim Denham will lead a walk on Essex Meadows’ grounds to explore peak bird migration and breeding season. You will see and hear many species around this diverse landscape. All levels of knowledge are welcome. Refreshments will be provided at the conclusion of the walk, courtesy of Essex Meadows. Bad weather cancels.

Essex Land Trust Community Concert

Saturday, June 22, 5:00 PM

Main Street Park, 14 Main Street, Essex

Enjoy an evening at the Essex Main Street Park with friends, live music, and views of South Cove. The event will feature Malaena, a 6-piece cover band whose sole mission is to perform music that "makes you want to dance." We’ll be grooving to songs from every decade, from Top 40 to Motown to classic rock to current hits. Bring family, friends, picnic baskets, blankets, your choice of beverage, and be prepared to sip, dance, and have some fun. Face painting for kids of all ages. Free admission.

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