



## The Decline and Future of the Monarch Butterfly

By Lily Nesco

Seeing a monarch butterfly on a warm sunny day is not as common as it once was and is a sight that future generations may never see. Changes to the environment and the loss of needed elements to sustain monarchs are threatening their ability to survive. Those who want to keep monarchs as part of our natural landscape must understand what it takes to help them survive and why their numbers continue to decrease:

- Loss of milkweed plants
- Loss of grasslands and rangelands
- Use of pesticides on public and private lands
- Destruction of wintering habitats in Mexico
- Changes in climate that disrupt migration patterns

### The Cycle of Life

Monarch males—identified by a black dot on each wing—attract females by releasing chemicals from scent glands on their hind wings. Once fertilized, a female uses visual and chemical clues to find milkweed plants—a monarch's sole source of food—to lay her eggs.

- Eggs hatch in about four days, but because so few survive, females lay many eggs. To ensure enough food for each larva, females lay only one egg per plant.
- Caterpillars (larvae) emerge and continue to feed on the milkweed plant. The caterpillar forms a chrysalis and begins metamorphosis. When the skin splits, the caterpillar wiggles out to become a pupa.
- Pupa (chrysalis) shells are soft but will harden to protect the growing butterfly within. The pupa liquefies and the sack turns black before the skin bursts and releases the butterfly.

- Monarchs emerge fully developed but must wait several hours before their wings are dry enough for them to fly.

### Migration: The Incredible Journey

Imagine a butterfly that uses its senses to navigate thousands of miles to a place it has never seen before. Now imagine that to survive on its way to reaching that destination, it must avoid large bodies of water and tall mountains. It defies belief that a monarch can pinpoint—with incredible accuracy—a remote mountaintop in Mexico where it will overwinter from numerous starting points in North America and Canada. Intuitively, the coming of fall signals hundreds of millions of monarchs to embark on just such a journey. How do they do it?



Monarchs save energy by using rising thermal waves and stored fat reserves to travel great distances each day. They are susceptible to cold and moisture and will cling to trees or bushes when it rains because their wet wings are too heavy for flight.

When they reach their destination, they rest for months without reproducing. When spring arrives, Monarch observers in Mexico announce that millions of monarchs have started the return journey north. Most monarchs do not live more than a few weeks, so they must fly to the southern United States to produce the next generation of offspring that will finish the journey. The last generation produced each year, which can live for eight months, will continue the cycle and make the journey back to Mexico.

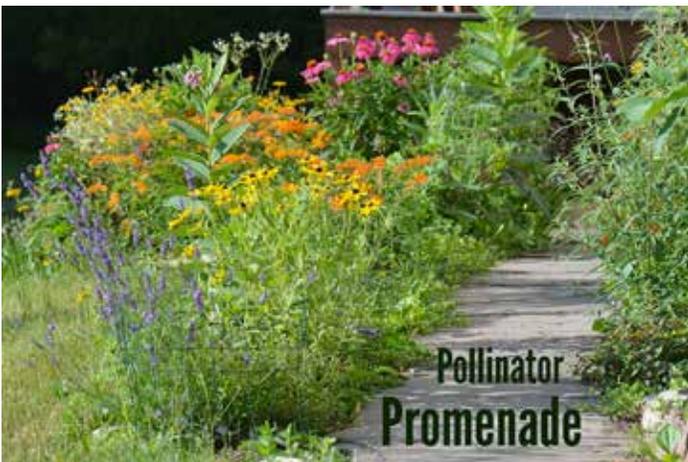
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## Saving the Monarch

### Local Efforts

The Essex Land Trust's 1200 square foot bed of nectar sources and forage, a habitat for butterflies, dubbed "The Butterfly Project," became a reality at the Cross Lots Preserve last May. Volunteers from the Land Trust and the Essex Garden Club planted 800-900 plugs and maintained the garden as it developed.

The completed garden includes 850 plants comprising 22 different varieties of perennials and shrubs, which were selected to attract butterflies and provide a good sequence of blooms across seasons: hyssops, milkweed, indigo, coneflower, asters, and many more. The garden includes forage plants for caterpillars to encourage butterflies to stay.



This habitat will attract butterflies and be a model for those who want to replicate a butterfly garden or use it as a source of ideas and inspiration. The Essex Land Trust will continue its work with other organizations to educate the public on saving the monarch. This year, volunteers are growing several varieties of milkweed from seed harvested last year at the Johnson Farm Preserve. They will be planted at the farm and will also be used to backfill some plants that didn't survive the first season at Cross Lots.

### Global Efforts

Natureworks Horticultural Services is one of many organizations working to save monarchs. By collecting eggs and monitoring them in a protected environment, they can produce, tag, release, and monitor numerous generations of monarchs. Information from the tagging program is used to educate the public on monarch behavior.

### Individual Efforts

Individuals can create butterfly gardens that include perennials, annuals, and milkweed to attract female monarchs. Milkweed (*Asclepias*) grows quite large, so it is important to assess garden size before choosing a milkweed type: common, butterfly, or swamp.

Below are the top ten plants that butterflies need to survive. See a complete list at [Naturework.com](http://Naturework.com) and detailed instructions for starting a garden.



Echinacea (Coneflower), Eupatorium (Joe Pye Weed), Phlox, Asters, Vernonia (Ironweed), Liatris, Verbena bonariensis, Gomphrena (Globe Amaranth), Tithonia (Mexican Sunflower) and Zinnia.

Once your butterfly garden is established, periodically check the undersides of milkweed leaves for eggs, but be aware that human interference and pesticides can hamper monarch reproduction. Although ladybugs are the biggest threat to caterpillars, nature will take its course without interference. Aphids eat ladybugs and will reverse the threat naturally.

For more information, check out the following information resources:

<http://www.monarchwatch.org>

<http://www.naba.org>

<http://www.naturework.com>

*Editor's Note: photos for this article were obtained from the Naturework website*

# Land Trust Expands Two Properties

By Steve Knauth

One of the Land Trust's goals is to acquire new properties adjacent to existing preserves, forming larger areas of open space which promote animal and plant habitat and encourage their recreational use.

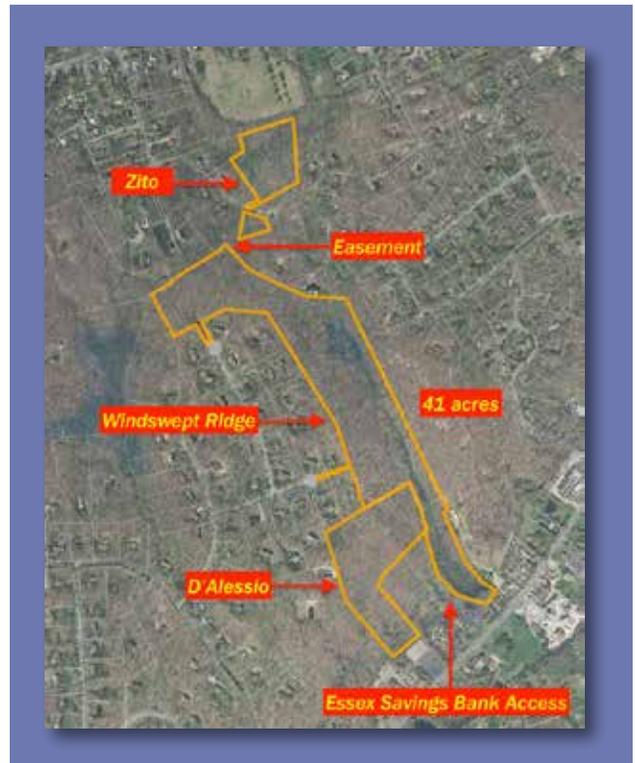
Speaking at the annual meeting on April 12, Paul Greenberg outlined some of the accomplishments in terms of acquiring adjacent lands; and it's been a good year, with the creation of two new 40-acre preserves.

## Windswept Ridge

The 30-acres-plus Windswept Ridge property has grown by 11 acres with the purchase of a landlocked parcel extending the preserve southward towards Route 153. A recently acquired easement will also provide new parking and access on Windsor Lane in Centerbrook.

Windswept Ridge is a rugged, terrain-rich piece of forested property with rocky outcrops, a logging road and a stream running down the middle with a single trail alongside. "With this new property, we will now be able to make a trail on the other side of the stream," says Greenberg. "That will make a nice loop walk." A bridge is planned, as well.

A proposed entrance from Route 153 is in the works, too. The trust is working to get a lease agreement with the



Essex Savings Bank that would allow access through the Essex Financial Services parking lot on that road. There would then be three access points in all.

Windswept Ridge is now around 45 acres, making it an impressive piece of open space. The new access points will open up the piece of forested land to more use. "It's a great property, kind of dramatic," says Greenberg. "The new purchase makes this beautiful but under-used property a major new attraction."

## James Glen

James Glen came to the land trust as a 4-acre pocket park, one of the trust's smallest, a lightly wooded preserve with a winding stream. Now, it will be part of a three-parcel park 10 times the size, extending from Navy Lane and Hudson Lane north to the Lyon Meadow Preserve in Deep River.



View of Windswept Ridge's new addition

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## Land Trust Expands ... continued from page 3

Here's how it happened.

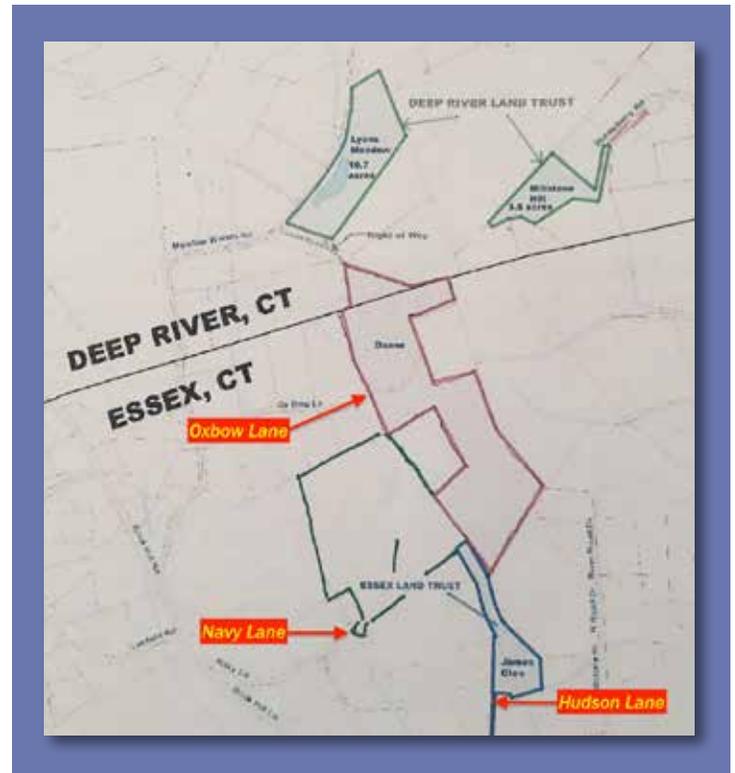
Last year, the trust acquired the adjacent Anderson property off Navy Lane, which added 17 acres to James Glen. This is "Doane's Woods", named after the late Charles Doane.

Now, the trust is in negotiations to purchase 18 more acres abutting James Glen. Going by the Native American name of Woodja Hill, the new property would be accessed via Oxbow Lane, creating an expanded preserve of 40 acres.

James Glen had been for a long time a pretty property, but small, says Greenberg. Now the trust is preparing to put together another 40-acre open-space corridor. "Both these new parcels are very beautiful land – it's a nice walk," says Greenberg. A steep climb from the glen leads to the open, level plateau of Doane's Woods that runs up to Deep River.

The trust is seeking a DEEP Grant that would cover up to 65% of the appraised value of the property. A decision is expected this fall. A fund-raising campaign is also planned.

In all, the trust added 29 acres of new land in 2016, bringing the total to around 650 acres of protected open space in the three villages. Said Greenberg: "Without the support of our members, none of this would be possible."



View of the new Woodja Hill parcel

# Annual Meeting Report for 2016

The Essex Land Trust held its annual meeting on April 13. Once again, we have been very fortunate to be able to host this meeting here at Essex Meadows. We thank Essex Meadows, Susan Carpenter, Jennifer Rannestad and all of the Essex Meadows staff. A special thank you also to Judy Saunders for her efforts in organizing this event.

2016 marks our 49th year in pursuing the Land Trust's mission. We thank all our members and donors for the sustained support you have provided over many years.

## Highlights – Nancy Rambeau

The past year was another successful year for the Essex Land Trust.

We have also received many positive comments about the street signs directing people to our preserves. We hope, as a result to help folks find and visit our less well-known preserves.

## Membership

Essex Land Trust Membership continued strong. At the end of 2016, you were part of our community of 383 individual and household members.

We are very grateful for the support and commitment we receive from the community.

We are kicking off our annual membership renewal campaign this next week so I encourage you all to submit your renewal envelope as soon as you can. We will also be reaching out to potential members by sending letters to new town residents and neighbors of our preserves. I encourage you to invite any of your neighbors to join the Land Trust.

I would like to thank our corporate members for their continued generous support in the form of not just their membership, but also their services.

## Programs & Events:

The Essex Land Trust events for 2016 began with an

update by Steve Gephard on the condition and future of the Connecticut River, ecologically, environmentally and historically a central force in our town. During the year we provided opportunities to explore our properties with a specific focus in mind, such as learning about the vernal pools or naming trees in the Preserve. We walked new and old properties including the Pond Meadow Preserve in Ivoryton and Canfield Meadow Woods in Essex. We introduced the Johnson Farm to the community.

Past favorite events remained on our calendar: the winter raptor field trip, the May birding and nature walk at Essex Meadows and the annual kayak trip and concert. As ELT frequently does, we collaborated with several other organizations to provide fascinating lectures and fun activities and outings for all. This past year, these organizations included the Essex Garden Club, the Ivoryton Library and Bushy Hill Nature Center.

## Finance Report – Mike Carlucci

2016 Operational Income of \$167,000 came from membership dues (\$28,000) with the remainder from donations and grants. Special thanks to The Community Foundation of Middlesex County, MRB Foundation, and Essex Savings Bank's Community Investment Program.

Total expenses of \$ 94,000 are principally for mowing, tree removal, and treatment for invasives on several of our properties along with other core expenses covering our communication activities, programs & events and our annual membership drive.



**Nancy Rambeau, ELT President**



**Annual Meeting greeters: Leslie Barlow, Adrienne Brochu and Augie Pampel**

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We continue to be fortunate in receiving in-kind support and sponsorships from local businesses. Thanks to Essex Printing, Bartlett Tree Experts, Giroux Landscaping, Ann Penniman Associates and Tree Tender.

Our investment portfolio generates income for property maintenance and development, and is drawn on for new property acquisitions. Our investment portfolio at year-end 2016 was \$ 1,780,000 of which \$ 500,000 is restricted for stewardship expenses of our properties and another \$ 500,000 is committed for property purchases now underway. The balance of funds is retained for our Line of Credit, secured in order to retain timing flexibility for acquisition opportunities that may arise.

Overall it was quite a successful year in the preservation, generation and use of funds.



**Paul Greenberg, ELT**  
**Acquisitions Chair**

## Land Acquisitions – Paul Greenberg

Last year I mentioned that we had reached an agreement to purchase a 25-foot easement that would provide access to Windswept Ridge from Windsor Lane in Centerbrook. Also, I mentioned that we had reached an agreement to purchase the Anderson property, which is a 17-acre parcel off of Navy Lane that connects to James Glen. I am happy to report that last summer we closed on both items.

With these new acquisitions in hand, we started looking for ways to expand the under-utilized Windswept Ridge Preserve and the new James Glen/Doane Woods parcel. Fortunately we found two new opportunities, and we are currently in negotiations to purchase both of them.

The first piece of land is listed by the town at 5.79 acres and extends Windswept Ridge Preserve southward. We have just completed the appraisal and survey and have discovered that it is actually 11 acres, not 5.79. We hope to close on this property shortly. In addition, we are working with Essex Saving Bank on a license agreement that will provide another access to the Windswept Ridge Preserve from Route 153. It goes through the Essex Financial Services parking lot and then through some land owned by Herb Clark. This, along with the Windsor Lane easement, will greatly improve public access to Windswept Ridge. The new purchase will increase the acreage to over 45 acres and make this beautiful but underutilized property a major new attraction.



The second land acquisition is adjacent to our new Doane's Woods/James Glen Preserve. This land, also a Doane family parcel, is over 18 acres and is accessed from Oxbow Lane. This purchase, when combined with what we currently own, will create an expanded preserve of 40 acres and will extend from Hudson Lane and Navy Lane all the way to the 10.7 acre Lyons Meadow Preserve in Deep River which is located on Meadow Woods Road. We thought that this acquisition, which connected two existing open space preserves in two towns, was attractive enough to seek a DEEP grant. DEEP stands for Department of Energy and Environmental Protection. Bob Nussbaum and Chet Arnold prepared and submitted the grant in early February. The grant has the potential to pay up to 65% of the appraised value of the property. We will hear from the DEEP if we are successful this fall. In addition, we have requested \$50,000 from the Town of Essex Open Space

Sinking Fund and also plan to do a fund-raising campaign to help pay for it.

## Stewardship – Tom Rutherford

Our Stewardship team has been very busy absorbing preserves acquired in 2015. Development of trails and access points and installation of signs and kiosks preceded the inaugural opening of Johnson Farm last summer. Completion of a boardwalk through the bog at Pond Meadow Preserve was enhanced by the installation of informative signs identifying many of the trees along the way.

A team of 30+ stewards and volunteers maintains the Land Trust's 22 properties. Activities include trail maintenance, developing plans for the future and, increasingly, attempting to control the presence of invasive plants, the most notable of which are Japanese Barberry and Knotweed. The stewardship team has also been acquiring equipment (tractor mower, brush hogs, etc.) needed to keep the properties accessible to the public.

## Recognitions

This year we would like to recognize some of the volunteers who work behind the scenes, making things run smoothly for us all.

- **Kathy Messier** helps with Communications/publicity distributing posters and keeping brochure displays well stocked.
- **Stephanie Gatto** works with Bob Nussbaum on development and technology.
- **Chris Hill** arranges meetings at Centerbrook Architects, setting up the A.V. equipment and arranging the room for the periodic all stewards meetings, showing up on

the weekends to open and close the room for us and to clean up afterwards.

- **Cynthia Field** has served the Operations Committee meetings as recording secretary for the past year.
- **Lana Westgate** works with Jim Denham on photo archiving and helps coordinate the photo contest with Lyme Land Trust.
- **Michael Tagatac** works on the Programs Committee, helping to create and coordinate the ELT calendar.

## Looking To The Future

With our 50th anniversary coming up in 2017, the Board has begun the process of evaluating where we have been and how best to continue to manage and conserve the land in Essex which we hold on your behalf and have committed to hold on your behalf forever. A very long time!

During the past year, we completed a detailed assessment of the Essex Land Trust with guidance from the national Land Trust Alliance. We evaluated four areas: governance, finance, acquisitions and stewardship. A new strategic plan is nearing completion. Overall, we received a very good evaluation and sound recommendations that we are implementing to ensure that we will continue to be responsible stewards in perpetuity of the land we hold for your benefit.

The Annual Meeting concluded with the election of Cynthia Field to the Board of Directors for a 3-year term and reelecting Chet Arnold to a two year term and Bob Nussbaum, Joel Anik and Nancy Rambeau to new 3 year terms.

*All Annual Meeting photos courtesy of Dick Levene.*



**The ELT Board (l to r): Bob Nussbaum, Judy Saunders, Mike Carlucci, Goody LeLash, Paul Greenberg, Jim Denham, Chet Arnold, Tom Rutherford, Nancy Rambeau, Geoff Furtney and Cynthia Field.**

# ELT Briefs

## Valley Regional High School Community Service Day



Once again, Valley Regional High School has come to the aid of the Essex Land Trust as part of its annual Community Service Day. Three teams, totaling more than forty high school students and some of their teachers descended onto three ELT properties. The mission: attack the infestation of invasive Japanese barberry

in a section of The Preserve and in James Glen while picking up debris accumulating on the Great Meadow. Since 2013, the Essex Land Trust has benefited from this community outreach. Thank you Warriors! A special note of thanks to Essex Hardware for contributing the work gloves for this day.



### Membership Renewal Time

**Membership renewal reminders were sent out at the end of April. This note is a gentle reminder to those who have not renewed yet that we count on everyone's continuing support for the Land Trust. Membership dues and individual donations are important components of our annual operational budget. We'd also be very grateful if you could keep your eyes and ears open for other potential Land Trust members. Whenever you find a candidate, just send us an email ([info@essexlandtrust.org](mailto:info@essexlandtrust.org)). Your support really does make a difference!**



By Steve Knauth

Who knew there were so many kinds of birds around?

We're all familiar with our Cardinals and Chickadees, sparrows and Blue Jays. But Cedar Waxwings, Eastern Kingbirds and Indigo Buntings?

We saw and heard over 30 different species all during the Birding and Nature Walk held May 20 at Essex Meadows. Former Essex Land Trust president and ardent birdwatcher Jim Denham led the way through the facility's varied landscapes and around two dozen "birders" saw and heard myriad species of Eastern songbirds.

In his introduction, Denham explained that we'd be "birding by ear," listening for calls from the different species. But the group was rewarded with many sightings, too, including a few rare and beautiful birds.

Bird calls began while we were still on the Essex Meadows driveway. "Sweet, sweet, I'm so sweet!" The call of the Yellow Warbler came clearly, and then the little yellow bird flew around the trees where most people got a good sight of him. More calls joined in: the "Peter, Peter" of the Tufted Titmouse and the "see-zee" of the Black-capped Chickadee, the high-pitched "chip-chip" of two Chipping Sparrows, feeding on the ground. "An early arrival," Denham said. "The first nesting sparrows of the season."

Down a path into the woods, Catbirds, noisy relatives of the Mockingbird, added to the serenade. Relatives of the Mockingbird, the Catbird produces a cacophony of imitative, repetitive sounds. "These are the birds you're likely to be hearing at 4 AM," Denham explained.

This time of year, birds are nesting or preparing to nest, and so are staking out their territory, says Denham. "Later,



when they have eggs in their nest, they are not so active and noisy." As if to prove his point, a Cedar Waxwing flying overhead with nesting material in its beak.

Essex Meadows' varied landscape includes ponds, wetlands and swampy areas, open meadows lined with tall trees and old farm fields with trees interspersed. It all combines to attract a wide variety of birds, and opportunities to see them.

Crossing a boardwalk over wetlands, we came to a field where Denham "called in" a Great-crested Flycatcher using an app on his phone; technology meets the bird watcher. An Eastern Kingbird landed high atop a dead tree, making an

impressive sight, easy for all to see.

But the "Bird of the Day" was an Indigo Bunting, an uncommon, deep-blue-colored chest. His calls were heard, and he was spotted flitting from tree to tree while staying just out of sight as we followed with craning necks.

Then, he landed in a small tree in plain sight, where all could see and admire him. (Author's note: Ever since I was a youngster reading my mother's *Golden Guide Book of Birds*, I've wanted to see an Indigo Bunting; and there it was. A childhood wish come true!)

Birdwatching rewards patience with a glimpse at one of nature's wonders: the songbird. It may be elusive, you may not see it and you can't call it up like Google. So, when you do see a Kingbird, an Oriole – and Indigo Bunting – sitting in a tree and sounding its call, it's a thrill.

*For those interested, Denham recommends [The Sibley Guide to Birds](#) book and its accompanying app, that can be purchased from one's App Store.*

# Coming Events – Mark Your Calendar!



## Trail Blazing Invasive Plants on Johnson Farm

**Saturday, July 8, 9 am**

Join Stewards Geoff Furtney and Dana Hill in identifying, managing and clearing invasive plants on Johnson Farm. This is a work project so bring loppers, clippers and heavy work gloves. Meet at parking lot for Johnson Farm, off of Read Hill Road, Ivoryton. Rain date July 9.

## Butterfly Garden Party

**Thursday, July 20, 5:30 pm**

**Cross Lots Preserve, 40 West Ave.**

Join us for an early evening exploration of ELT's butterfly habitat with Anne Penniman. Bring your favorite beverage. Snacks will be provided. Rain date: Thursday, July 27

## Hike Turtle Creek Preserve

**Saturday, August 12, 9am**

**Watrous Point Rd., Old Saybrook**

One of the coolest places to hike on a warm summer day, these 92 forested acres, on both South Cove and The Connecticut River, are owned by The Nature Conservancy. Easy to moderate hiking. Leashed dogs welcome. Access off Watrous Point Rd. (Rt.154), Old Saybrook. Bad weather cancels.

## Challenging Hike in the Preserve

**Saturday, September 9, 9am**

**West Parking Lot off Ingham Hill Rd.**

Join us for a fast pace, challenging hike through the Preserve, starting in Essex to Old Saybrook with Chris Cryder who will guide you through the history of the Thousand Acres Preserve. Leave from the second/west entrance off of Ingham Hill Rd. 2 hour duration. Easy to moderate terrain. Hiking boots suggested. Bad weather cancels.

## Great Meadow Source to Sea Clean Up

**Saturday, September 30, 9am**

Join in helping us clean the shores and marshes of our beautiful CT River. The event, coordinated by ELT and sponsored by the CT River Watershed Council, will also be conducted simultaneously by volunteers along the

length of the river from Old Saybrook to Canada. Meet for your assignment at the Essex Boat Club (access dirt road between #143 and #145 River Rd.). Wear waterproof boots and come rain or shine. Refreshments will be served. All ages and abilities are welcome.

## Connecticut River Valley Indigenous People

**Wednesday, October 4, 7:00 pm**

**Essex Town Hall, 29 West Ave.**

Learn about the rich histories of Connecticut's first land stewards, vibrant Native Indian cultures just before and after European contact. Dr. Lucianne Lavin, anthropologist and archaeologist is the Director of Research and Collections at the Institute of American Indian Studies in Washington, CT. Her lecture will focus on the Wangunks, a populous, powerful tribe with homelands on both sides of the Connecticut River Valley. This lecture is co-sponsored by the Essex Historical Society, Deep River Historical Society and the Deep River Land Trust.

## 8th Annual Ivoryton Pumpkin Chase

**Saturday, October 21, 7:30 am**

Co-sponsored in part by the Essex Land Trust, the Ivoryton Pumpkin Chase will benefit the Library and its programs. The 5K-race course winds through Ivoryton Village and the Essex Land Trust's Falls River Preserve. 5K prizes awarded in 10 age groups. Registration begins at the Ivoryton Village Green at 7:30 am. Race starts at 8:45 am for children and at 9:15 am for adults. Parking is available in designated lots. Rain or shine.

## Geology Cruise on the Connecticut River

**Wednesday, October 25, 1:30 pm**

**Eagle Landing State Park, Haddam CT**

Enjoy a fall cruise with Ralph Lewis, former Ct. state geologist, who will lead our trip down the Ct. River to explore ancient geological formations. BYO picnic/beverage. Reservations required: \$30/person. Limited spaces available. Email Judy Saunders: judith.saunders@comcast.net. Bad weather cancels.

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