

The Lyme Land Conservation Trust

2015 Winter Newsletter

Return Of The Fish Hawk To The Connecticut River

By Evan Griswold



We in the lower Connecticut River valley have the privilege to live in one of the "last great places on earth," and the icon for that place is the osprey, also known as the "fish hawk."

Here is a raptor uniquely suited for catching and eating the several species of anadromous fish that migrate in and out of the Connecticut River.

Sleek and powerful flyers, with great wing-lift to haul herring or flatfish or any other finny prey from the water, the osprey is designed for fishing.

Watching an osprey catch a fish is one of the spectacles of nature. Sculling through the air over bays, rivers, estuaries or lakes, the osprey's keen eyes are constantly searching the shallows for movement.

When it spies a fish at or near the surface, it hovers, using a figure eight motion of its wings to stay in place above the spot. Then it tips forward, folding its wings behind and plunging down toward the surface.

At the last moment, the osprey

extends its outsized talons downward. With a great splash the bird disappears, only to re-emerge several moments later grasping a shining fish.

With tremendous effort, the bird rises and adjusts the wriggling prey to carry it aerodynamically. Its talons have evolved with an opposable hind claw to clutch and carry slippery fish, including eels.

During breeding season, when the females are laying and incubating eggs or feeding and protecting chicks from other predators and the blazing sun, the males are doing most of the fishing.

Male osprey are slightly smaller and lighter than their mates, but with equally powerful wings, giving them an advantage of greater lift.

But males also take on domestic duties at the nest, giving the females a much needed break from the endless sitting in cold winds and showers, stifling summer heat, pelting thunderstorms, and all other weather of coastal living.

For me, the arrival of the first ospreys to Great Island at the mouth of the River is one of the first true signs of Spring, along with peepers and wood frogs. Although we might have several more weeks of wintry storms, the birds arrive from as far away as Jamaica, Venezuela, and even the Amazon basin.

Several ospreys along the River and Long Island Sound have been fitted with transmitters, allowing researchers to track the migration routes to and from Connecticut as well as daily fishing expedi-



tions from their nests. These tracking projects have revealed areas of hunting and resting that will hopefully guide future conservation efforts.

The history of osprey conservation spans at least half a century, back to the end of World War II when the use of the "miracle" pesticide, DDT, came into widespread use across the country and across the globe.

The unintended consequence of the war on insects was the effect on the food chain, at the top of which were several raptors and seabirds.

The bald eagle, peregrine falcon, brown pelican and the osprey all concentrated the pesticide and its by-products in their tissues. This interfered with the production of calcium, which in the females was needed for egg production. This in turn, led to the thinning of the eggshells, which became so brittle that birds could not incubate them without breaking the eggs.

Osprey populations began to decline quickly, and nest numbers on the Connecticut River fell from about 150 to fewer than ten. Clearly, an environmental crisis was at hand.

Alarmed by the decline, many ornithologists such as our own Roger Tory Peterson were determined to know the cause and set about finding an answer to the problem.

Rachel Carson had sounded the alarm in her seminal book, *Silent Spring*, and was vilified and hounded by the chemical in-

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... Osprey, continued from page one).

dustry and its supporters in Congress.

A young college student from Old Lyme, Paul Spitzer, joined Dr. Peterson in his research to find out why the osprey was declining so rapidly.

His research, which led to a PhD from Cornell, helped determine the cause of eggshell thinning which eventually led to the ban on the use of DDT.

Once the ban took effect in the late 1970's, the numbers of raptors, including the osprey, began to rebound. The effects of DDT also led to research into other persistent chemical biocides such as Chlordane and the herbicide 2-4-5-T (known to many as "agent orange," widely used as a defoliant during the Vietnam War).

They have also been discontinued, but we are not yet out of the woods. Hundreds and perhaps thousands of new powerful compounds have found their way into the environment since the banning of DDT.



Osprey With Catch Of The Day

Osprey photos along Connecticut's coastline accompanying this article are by Bob MacDonnell. His complete portfolio is at: www.bobmacdonnell.zenfolio.com

Ospreys have rebounded since the ban went into effect. With the erection of nest platforms on Great Island (and elsewhere along the river) and the rebounding of fish populations, osprey numbers are at their highest levels since the early 1960s.

Nest production in the Lyme area is higher than surrounding areas due to the concentration of menhaden in the river.

Dr. Spitzer continues to research the

relationship of ospreys to their food supply and sees a correlation between the absence of a commercial menhaden fishery in Long Island Sound and osprey numbers at the mouth of the Connecticut River.

We hope this phoenix-like return of the magnificent bird will continue for many generations to come to awe and inspire our children and grandchildren.

But we must be vigilant and counter the many threats to ospreys and other birds of prey that include not only the indiscriminate use of chemical pesticides in our watersheds, but also habitat loss and human encroachment on prime nesting sites.

Land conservation by groups such as the Lyme Land Trust and The Nature Conservancy help ensure many good nesting areas into which new generations of ospreys may expand.

New breeding areas are critical to the long-term health of our native birds of all kinds.

Lyme Land Trust Wins Accreditation By National Land Conservation Standards Commission

In late December the Lyme Land Conservation Trust was awarded accreditation by the Land Trust Accreditation Commission, an independent program of the Land Trust Alliance.

"This accreditation demonstrates our commitment to permanent land conservation that benefits the entire community," said Land Trust President John Pritchard in making the announcement. "Our land trust is a stronger organization today having gone through the rigorous accreditation program."

It is one of only 285 land trusts in the country that have been accredited by the Land Trust Accreditation Commission. There are more than 1,700 land trusts nationwide.

"Accreditation provides the public with an assurance that, at the time of accreditation, a land trust has met high standards for quality and that the results of its conservation work are permanent," explained Commission Executive Director Tammara Van



Ryn. Each accredited land trust submitted extensive documentation and underwent a rigorous review. "Through accreditation, land trusts conduct important planning and make their operations more efficient and strategic," said Van Ryn. "Accredited organizations have engaged and trained citizen conservation leaders and improved systems for ensuring that their conservation work is permanent."

Accredited land trusts are authorized to display a seal indicating to the public that they meet national standards for excellence.

Pritchard thanked the many volunteers and staff who work to maintain the properties under Land Trust management. He expressed particular appreciation to Environmental Director Lisa Niccolai, who led the Land Trust's accreditation team, as well as Vice President Don Gerber, Treasurer Andy Baxter, Executive Director George Moore, and former President Linda Bireley for the hundreds of hours they worked in preparing and organizing the Land Trust's records and operations documentation to meet the exacting standards of the Accreditation Commission.

Pritchard also thanked and recognized the Lyme community leaders who have served as officers and board members of the Land Trust during its almost half century of preserving the town's bucolic farms, wetlands, and back country.

"They were the leaders, the visionaries," said Pritchard. "What Lyme has achieved today in preserving its beauty and natural environment was made possible by earlier generations of Lyme civic leaders who were committed to conservation."

The Lyme Land Conservation Trust Newsletter

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Would You Like to Support the Lyme Land Conservation Trust?

Use the convenient envelope bound into this newsletter to mail in your donation today.

Charitable Annuities Benefit Both Donors & The Land Trust



By Milton Walters Chairman, Lyme Land Trust Philanthropy Committee

Carrie and I moved to Lyme almost five years ago to be centrally located among our three offspring, their spouses and eight grandchildren. When we first visited Lyme,

we were awed by its scenic beauty.

But that was just the beginning. After joining the Lyme Land Trust's Board in 2012, I learned firsthand of what the Trust had accomplished in protecting our woodlands and area waterways.

Bird-filled marshes, migrating fish, soaring eagles, hawks, wildlife habitats are a tribute to the Land Trust's accomplishments, as are the recreational trails, and waterways for fishing, kayaking, and swimming -- all of which are available to the public. While the Land Trust's accomplishments are many, there is still more to do.

As the Lyme Land Trust's 50th anniversary started to lurk in our thoughts, along with mandatory IRA withdrawals, Carrie and I wanted to provide an eventual contribution to the Land Trust through investments that would benefit us during our lifetimes.

We thought some of you might also be interested in such an opportunity, so I'd like to describe how Carrie and I managed to provide ourselves both a secure source of current family fixed income during our lifetimes and an eventual gift to the Land Trust.

After talking to our tax accountant about gift alternatives, we decided to pledge \$125,000 through the annual purchase of charitable gift annuities over five years.

We're comfortable with the amount using Required Minimum Distributions beginning at age 70 ¹/₂. The strategy of making annual purchases provides us with dollar cost averaging protection from possible rising interest rates along with aged based payments.

Each charitable gift annuity gives us an immediate tax deduction of approximately 35% and fixed quarterly payments for life (usually representing more than 5% annually of the gift). More than 70% of each payment we receive is non-taxable. Upon our deaths, the remaining value of the annuity will produce income for the Land Trust.

It gives us great satisfaction that our gifts will help support the operating needs of the Land Trust and perpetuate the character of Lyme and the environment of the region.

If you'd like to explore the opportunity to establish a similar charitable gift annuity that would provide you with fixed payments for life, a tax deduction now, partially tax-free income during your lifetime, and then benefit the Land Trust after your death, call me at 203-485-6070 or send me an email at Milton.Walters@LymeLandTrust.org.

Banningwood Preserve's Geological History Tied To Recent Earthquakes In Eastern Connecticut

By Ralph Lewis

The trails of the Banningwood Preserve offer a wonderful chance to enjoy the woodlands, meadows and streams that have developed on the variable topography of this beautiful setting in Hadlyme.

The shape of the bedrock surface controls much of the upland topography covered by the northern portion of the Banningwood's red trail loop. The "ups" encountered along the trail represent the noses of small north-south trending ridges, and the "downs" are formed by intervening valleys that drain southward to Roaring Brook.

Roaring Brook follows a valley that has formed along the east-west "Honey Hill Fault," which marks the bedrock juncture of the remnants of the Iapetos Ocean (to the north) and an ancient island arc called Avalonia (to the south).

The story behind this combination of oceanic affinity rocks and Avalonian bedrock began about 500 million years ago.

At that time, Avalonia was an island archipelago in the middle of the Iapetos Ocean, which predated the Atlantic Ocean.

The Iapetos Ocean was bordered on the east by Africa and on the west by North

America, and these two huge land masses were gradually converging.

Between about 460 and 270 million years ago, remnants of ocean bottom sediments of the Iapetos Ocean and the Avalonian island arc were crushed between Africa and North America when they collided and formed the supercontinent of Pangea.

This continental collision is when the Taconic, Acadian and Appalachian Mountains were formed. The compression of bedrock creating the mountains heated it, making it pliable and susceptible to folding. As the Appalachian Mountains were forming (310-270 million years ago), east-west compression rumpled the bedrock of New England into a series of north-south folds.

As a result, the topography of New England now resembles a corrugated roof. Most hills were aligned north-south, separated by north-south valleys.

Then as Africa began to separate from North America about 225 million years ago, the compression associated with the formation of Pangea was replaced by tension as the Atlantic Ocean began to form.

The bedrock was relatively cool so it tended to break rather than stretch like taffy.



Retired State Geologist Ralph Lewis of Hadlyme shows where superheated bedrock was folded like bread dough 300 million years ago when the African continent collided with North America in what is now Banningwood Preserve . Photo by Humphrey Tyler

Faulting and fracturing of the bedrock occurred along pre-existing weakness zones. Stream erosion and glaciers over the intervening 200 million years enhanced the north -south grain of the New England landscape.

Locally, this north-south grain is broken by the east–west influence of the Iapetos-Avalonian contact along the Honey Hill Fault, which creates the valley through which Roaring Brook runs down to Whalebone Cove.

The Honey Hill Fault runs east to about the current location of the Mohegan Sun Casino, and then runs north roughly along what today is I-395. It is along this northsouth portion of the fault in the Plainfield area where a dozen or more earthquakes shook up local residents in early January.

At least four glaciers are known to have overridden Connecticut. As the last of these glaciers melted, it left two types of deposits.

In upland areas, deposits melted directly from the ice, which is not a good sorting agent, so these "till" deposits are a mixture of all the material the glacier was carrying; boulders down to fine clay all mixed up.

The upland portion of Banningwood's red trail traverses an upland glacial setting: thin till soils, vernal pools, bedrock outcrops, and boulders that glaciers "plucked" from the south sides of the bedrock hills.

The southern half of the red trail loop and the yellow trail traverse a different type of glacial deposit left by water issuing from the melting glacier. Since the meltwater was an effective sorting agent, large boulders were left behind and very fine sediment was washed away. This left layered sands and gravels to fill the valley.

The gently rolling, glacial topography surrounding Roaring Brook is often called "eggs in a basket." Blocks of ice that fell off the glacial front were surrounded by meltwater deposits and subsequently melted forming "kettle holes" that help form this topography. In contrast to the upland till setting, there are no bedrock outcrops or large boulders visible along the southern red and yellow trails.

Learning To Live With The Coywolf In Lyme

By Mary Guitar

A number of years ago, walking along the edge of a marsh near the Connecticut River, I heard soft footsteps in the trees and brambles to my right.

I stopped. The footsteps stopped.

I swung my binoculars through the brush and was suddenly looking into the yellow eyes of a beautiful reddish-grey animal about the size and shape of a small German shepherd.

A few seconds later, it silently vanished. The only coyotes I had previously seen were western coyotes in California. Scrawny and gray, they chased bugs through the tall grass and caught nothing larger than chipmunks.

This animal was definitely not one of those. I later learned that what I'd seen by the river was an eastern coyote, known alternatively as a coydog or a coywolf.

Humans in industrial societies tend to forget that for most of our existence we've been prey as well as predator, but perhaps our blood remembers. There were many unknown beasts in the dark, and they were often faster than we were and had sharper teeth. We still feel that ancient thrill of fear and fascination when we hear that there are wolves in our midst, even if they are hiding in the DNA of the eastern coyote.

Wolves provoke powerful emotions. The gray wolf has been identified by conservation biologists as an "charismatic megafauna," a keystone species that can serve as a focus for involving the public in conservation efforts. The writer and scientist Aldo Leopold in his essay about wolves, "Thinking Like a Mountain," characterized a wolf howl as an "outburst of wild defiant sorrow and of contempt for all the adversities of the world."

The eastern coyotes, or coywolves, that began to appear in New England about eighty years ago, are now found in all of northeastern US and southeastern Canada. They are often larger than their western counterparts, and it now seems likely that many of these differences are the result of interbreeding between coyotes and eastern wolves during the early 1900s, when western coyotes began to move east, and eastern wolves were driven out of New England and Eastern Canada.

Biologist Dr. Brad White of Trent University in Ontario reported that DNA sampling of coyotes in New England, New York, and southern Canada found evidence that the eastern coyote may be a hybrid between western coyotes and a small wolf species, commonly called the eastern wolf.

However, because there is so much variability in the DNA samples from the eastern coyote, scientists are a long way from being able to call this mix a new species. In behavior, habits, and biology, it still most resembles the western coyote.



Most adult eastern coyotes, or coywolves, weigh between 30 and 50 pounds, have yellow eyes and a bushy tail, often with a black tip. Unlike wolves, coyotes do not form packs other than the adult pair and their young. Mating season extends from early winter until February and gestation is about 63 days. The average litter in Connecticut is seven pups. Both adults care for the young, which disperse from the family group in the fall.

If you do catch sight of a coyote during a walk in the woods, consider, as Craig Childs does in his book, *The Animal Dialognes,* "Coyotes move within a landscape of attentiveness. (When I encounter a coyote), I have been aware for that moment of how much more there is. Of how I have only seen an instant of a broad and rich life."

Tips For Dealing With Coyotes In Lyme

Although very few attacks on humans have been reported anywhere, in the last year there have been several confrontations between dogs and coyotes in the Hadlyme area. Dogs have been stalked and attacked.

Conn DEEP wildlife experts caution that coyotes are territorial, especially in summer when raising young, and may also be more aggressive during mating season.

Small pets can be prey for coyotes. Small dogs should be on leash or under direct supervision. Cats and small dogs (under 35 lbs) should not be left outdoors unattended, especially at night. Pet food should never be put outside. Garbage cans should be secure.

If you encounter a coyote, do not panic. They generally avoid contact with humans and are usually frightened away by loud noises. To frighten coyotes, shout, wave your arms, and leave the area calmly.

First Selectman Ralph Eno suggests those concerned about encountering coyotes on Lyme trails carry a container of aerosol pepper spray (available online) to use on aggressive coyotes.



Coyote Advisory Posted On Many Trails In Lyme

Hiking & Bridleways Focus of Lyme Trail Association

By Cheryl Heffernan

The Lyme Trail Association (LTA), founded in March 2013, is membership organization dedicated to the maintenance, stewardship and enjoyment of trails in Lyme and the surrounding area.

The Association supports a community of horseback riders and non-riders who appreciate the rural character of southeastern Connecticut and understand the importance of preserving its rustic nature.

To date, the LTA's efforts have been focused on the 500 or so scenic acres that make up Lord Creek Farm – an important watershed property.

Lord Creek Farm includes extensive frontage on the Connecticut River and acres of tidal marsh and inland wetlands that provide valuable and unique habitat for myriad species. It's owned by Janie Davison and her family, who have generously opened their property to local equestrians, hikers, bird watchers and artists for the past 40 years.

The Association encourages members to participate in competitive equestrian events such as the Lyme Horse Trials and Lyme Hunter Pace, educational opportunities such as a Fox Hunting Clinic scheduled for May 2015 and trail and jump maintenance activities and clinics. Association members participate in riding lessons with their favorite trainers and also gather with friends for safe trail rides on Lord Creek Farm.

During 2014 members have logged more than 800 volunteer hours and over 2,000 equestrian and hiking hours.

The Lyme Trail Association partners with other local non-profits to make Lord Creek Farm available for educational, therapeutic and fundraising events.

During 2014 partners included the Connecticut Valley Pony Club, High Hopes Therapeutic Riding, Inc., Manes & Motion Therapeutic Riding Center, Lower Connecticut Valley Driving Club and the Tanheath Hunt. LTA is also partnering with Lyme Land Trust to improve trail corridors and connections to other properties in Lyme.

The Association is a membership organization. The trails on Lord Creek Farm are open to all who pay a day-use fee or join with an annual membership. Trail use is limited to equestrians, nature walkers, hikers and cross-country skiers. No bicycles or motorized vehicles are permitted.

Anyone can join the LTA, and all donations and volunteer support is welcomed. For more information & upcoming events see www.lymetrailassociation.org



View of Lord's Cove

Lyme Trail Association President Cheryl Heffernan, right, and Susan Tyler on a Lord Creek Farm trail with a stunning view of the Connecticut River tidal marsh lands.

Tuesday's Trailblazers Gather Walkers From Lyme, Old Lyme & East Lyme To Explore Preserves & State Parks in SE Connecticut



What started in the early summer as relatively casual Tuesday morning hikes organized by the Lymes' Senior Center and the Lyme and Old Lyme land trusts, gradually grew during the year into weekly walks open to anybody who wanted to join the group. During the autumn months, the East Lyme & Waterford senior centers sent contingents to participate in the hikes.



As winter approached, many regulars didn't want to let cold weather close down their camaraderie, so they continued to gather each Tuesday to explore trails throughout SE Connecticut, led by Lyme Open Space Coordinator Wendy Hill.

If you'd like your name put on the email list announcing these weekly hikes, send an email to: openspace@townlyme.org

A New Headstone For Olive Richards

Olive Richards, who lived in Hadlyme during the first half of the 19th Century and is buried in a family plot on the Land Trust's Banningwood Preserve, got a new headstone in December.

Olive, who died in 1858, is buried next to her husband Henry, who died in 1851. Their small family burial plot is on the north side of Rt. 82 a half mile east of Hadlyme Corners and is part of the Land Trust's 100-acre Banningwood Preserve. Their home was directly across Rt. 82 from their final resting places.

Over the years, the Richards Cemetery became overgrown, and the grave stones fell over, some deteriorating to the point that little remained except a few shovels full of pebbles & gravel.

Enter Parker Lord, Lyme selectman and the town's unofficial superintendent of burial ground maintenance & restoration who has organized a loose team of cemetery caretakers that he gathers together occasionally to clean up Lyme's many graveyards and repair & reset gravestones -- a group dubbed by one of its waggish members as "Lord's Angels."

Earlier this year, Parker and Lord's Angels cleared brush and

repaired & re-erected two fallen headstones in Richards Cemetery, but they found that Olive's headstone had deteriorated to the point

that it couldn't be reassembled.

So Parker asked the Land Trust for funds to have a new headstone made to mark Olive's resting place, a request that was approved (with the help of a special donation by Board Member Milton Walters).

With the help of Lord's Angels, it was erected on Dec 22.



Lord's Angels at Richards Cemetery From left to right:: Bill Denow, Parker Lord, Lou Mildrum, Jerry Ehlen, & Dave Sutton.



Arthur Howe 1921 - 2014

Past Land Trust President Arthur Howe Dies; Served As Director & Officer For 10 Years

With sadness, we report that Arthur Howe Jr., 93, a former president of the Lyme Land Conservation Trust, passed away peacefully on Tuesday, Dec. 16, 2014, at his home in Essex, following a brief illness.

A long-time resident of Lyme, he was the third President of the Land Trust Board of Directors from 1976 to 1984.

He joined the Board in 1974 and established relationships with Lyme residents, which resulted in the acquisition of valuable open space. Art Howe was a true volunteer in Lyme. He was on the Planning & Zoning Commission and was an officer of the Lyme Fire Company.

There will be a memorial service at 3:30 pm, Saturday, August 8th at the Chocorua Island Chapel, on Squam Lake, in Holderness, NH, with a private interment ceremony at the Trinity Church, in nearby Plymouth to follow.

In lieu of flowers, the family asks that you make a gift to a charity of your choice in memory of Arthur Howe, Jr..

Art Exhibit "Celebrating Lyme's Beauty" Showcases Banningwood Preserve At New London's Lyman Allyn Art Museum Through March 22



The exhibit features landscapes by artists who participated in the "Celebrating Lyme's Beauty Paint-Out," an annual *plein air* painting event co-organized by the Lyme Art Association, the Lyme Land Conservation Trust and The Lyman Allyn Art Museum.

This year's Paint-Out was Columbus Day Weekend at the Land Trust's Banningwood Preserve. For more info on the exhibit, go to: www.lymanallyn.org

At left an artist works next to Roaring Brook during the Paint-Out. At right is a painting produced by Trenton Youngs.





Lyme Land Conservation Trust, Inc.

PO Box 1002, Lyme, CT 06371

Lyme Land Conservation Trust Calendar of Events

All events subject to change. Dates & times will be announced by press release & e-mail, and will be posted on the Land Trust website and Facebook page. Consult the Upcoming Events page at www.lymelandtrust.org/news/events/ for the latest information. To reduce costs & paper, the Land Trust no longer mails postcard notification of all events. To receive email notifications, send an email to: info@lymelandtrust.org with a request to be added to the events email list.

Paint-Out Exhibit "Celebrating Lyme's Beauty"

When - Jan 16 - March 22

What - 25 original paintings of the Land Trust's Banningwood Preserve produced during the 4th Annual Paint-Out Columbus Day Weekend. See story inside back cover of this newsletter. For more info on the exhibit, go to: www.lymanallyn.org

Where - Lyman Allyn Art Museum, 625 Williams Street, New London, CT.

Land Trust Photo Contest Awards Presentation & Reception

When - March 6, 6 to 8 PM

What - Celebration for the ninth Annual Land Trusts Photo Contest jointly sponsored by the Lyme, Old Lyme, Essex, Salem and East Haddam Land Trusts. All photos entered & winning photos will be on display. Reservations required: photocontest@lymelandtrust.org

Where - Lymes' Senior Center, 26 Town Woods Road, Old Lyme, CT.

Earth Day 2015

When - Wednesday, April 22 and throughout the month.

What - A series of events on Wednesdays in April planned and coordinated with the Lyme Consolidated School & its Parents Association and involving Land Trust staff & volunteers. For more info contact LLCT Events Chair Angie Falstrom at: Angie.Falstrom@att.net

Where - Lyme Consolidated School, Rt. 156, Lyme, CT.