



gosa news

Candlewood Ridge: A Jewel in Nature's Crown



Photo by Sue Sutherland

Continued on page 3

Also Inside this Issue

A Message from Joan Smith, GOSA's President, p. 2

Sheep Farm Stewardship Update by Sue Sutherland, p. 6

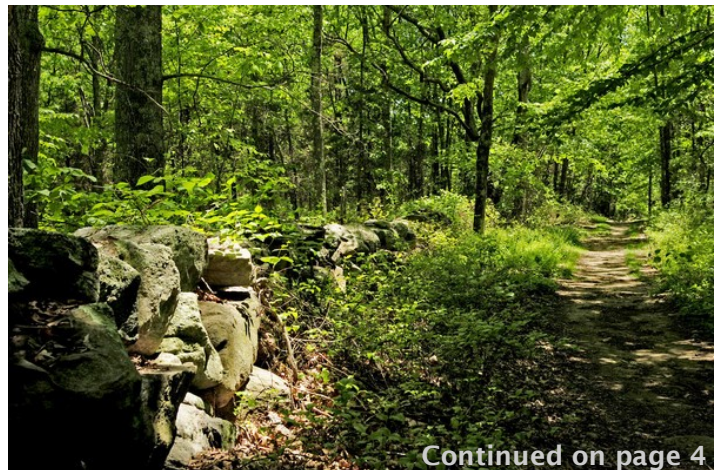
Blue Tubes and Wire Cages by Charles Boos with Patty Oat, p. 7

Great Gull Island: Strictly for the Birds by Eugenia Villagra with Larissa Graham, p. 8

Sidney's Corner by Sidney Van Zandt with Elizabeth Raisbeck, p. 10

To Leash or Not to Leash: That is the Question, by Eugenia Villagra and Joan Smith, p.14
...and more!

The Dollars and Sense of Open Space: The Other Side of the Coin by Syma Ebbin



Continued on page 4

A Message from Joan Smith, GOSA's President

Since you last heard from us in the spring newsletter, GOSA members have been spectacularly busy. We have signed an agreement to purchase a 91-acre parcel in northern Groton to be called Candlewood Ridge, we have applied for a state grant, and we have begun to raise funds. At our popular Annual Gala and Silent Auction we met record attendance and fundraising goals and presented the Spotted Salamander Award, our highest honor, to Pat Olivier for her tireless leadership of the highly organized and hard-working gala committee.

We also presented our Spotted Salamander Award to Dr. Thomas Worthley, UConn Department of Forestry, for his work on the Sheep Farm. His students helped prepare GOSA's forestry plan and he also taught a chain-saw safety workshop at the site. In return, Dr. Worthley formally recognized GOSA for our energetic efforts in forestry management. The recognitions took place at a September COVERTS program, a four-day workshop sponsored by the UConn Department of Forestry Extension Service, for large landowners interested in encouraging a "sheltering cover" for wildlife. Four GOSA members are now COVERTS alumni.

GOSA has focused on protecting Long Island Sound and its tributaries throughout the year. In April, members participated in Earth Week cleanup activities by boat, kayak and on foot at Baker Cove and Haley Farm, joining volunteers from the Navy and Avalonia Land Conservancy. EcoHuskies from UConn contributed to the cleanup on Haley Farm and showed off a mound of trash collected from Pine Island at their Avery Point Earth Day event. In July, GOSA members went by canoe to help the U.S. Fish and Wildlife Service remove invasive water chestnut plants from the Connecticut River. GOSA members participated in a trip to Great Gull Island, an isolated nesting site for rare roseate terns, and common terns, in early August. Later that month, CUSH (Clean Up Sound and Harbors) and ECCD (Eastern Connecticut Conservation District) performed water-quality sampling at GOSA-suggested sites within the Baker Cove watershed. In response to the federal government's plan to sell Plum Island to the highest bidder, GOSA advocated for preservation at a General Services Administration hearing in Old Saybrook on October 17. We were encouraged to see that the big guns—Richard Blumenthal, Joe Courtney, Rosa DeLauro, Andrea Stillman, Connecticut Fund for the Environment, Connecticut Audubon, Save the Sound, and The Nature Conservancy—were out in force and united in favor of protecting the island from development.

At our October 4 Annual Meeting, speaker Margaret Rubega, State Ornithologist and UConn professor, presented her recent research on chimney swifts. Additional Spotted Salamander Awards were presented to John Sutherland, who has managed GOSA's finances and performed forestry work, and to Erik Brown, Eagle Scout, who constructed a new trail through the upper 57 acres at Haley Farm. We welcomed Pat Olivier, Karen Lamb, and Jim

Anderson, elected as new members to the board. In addition, Pat Olivier was elected to the position of Secretary, and Joan Smith, Sidney Van Zandt and Sue Sutherland were reelected as President, Vice President and Treasurer, respectively. GOSA reluctantly accepted the resignation of Rebecca Brewer, expressing gratitude for her excellent secretarial and land care work.



Photo by Victor Villagra

In this issue Sue Sutherland has written our feature article on Candlewood Ridge and another article updating us on the meadow restoration project at the Sheep Farm. Syma Ebbin's article, also featured on the front page, informs us about the many "services" provided by open space and the economic value provided by those services that accrue to us all. The American chestnut tree project is the subject of Charles Boos' article. In "Strictly for the Birds," Eugenia Villagra and Larissa Graham will share with you what is so great about Great Gull Island. Sidney Van Zandt and Liz Raisbeck have assembled an array of photos and stories featuring GOSA members. Finally, in "To Leash or Not to Leash," Eugenia and I have detailed some compelling reasons, both environmental and legal, for observing state, local and GOSA leash regulations. I hope you will enjoy reading these articles as much as I have, and please join us at future events, tours and work parties. ■



Photo by Eugenia Villagra

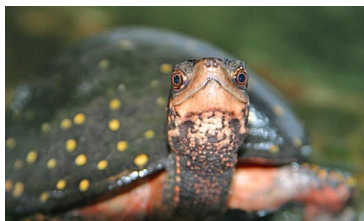
At podium, Rosa DeLauro, U.S. Representative for Connecticut's 3rd Congressional District, spoke passionately in favor of protecting Plum Island. Andrea Stillman, Richard Blumenthal, and Joe Courtney, listening in background, also spoke at the press conference preceding the public hearing.

Candlewood Ridge: A Jewel in Nature's Crown

By Sue Sutherland

GOSA is delighted to report that in the spring of 2012 we signed a purchase of sale agreement with the owner of a 91-acre property in the Candlewood Ridge area of Groton/Mystic near Ledyard.

Candlewood Ridge is a jewel of a property, a rare bit of wilderness in our town. Rich upland forest, deep peat sphagnum-covered wetland forests and open tussock sedge marsh are flourishing there. This land has multiple streams which form complex wetlands that flow into Haley Brook and on into the Mystic River and Fishers Island Sound. GOSA explored this land as a potential open space acquisition after hearing numerous accounts of its unusually rich wildlife.



Spotted turtle (*Clemmys guttata*)

David Carroll spoke about at GOSA's 2009 annual meeting. Candlewood Ridge has the type of clump-grass marsh called tussock sedge these turtles love to call home. It's a place to burrow into for the winter and a breeding place in the spring. Resident beavers help to keep the water high. We confirmed this area has extraordinary habitat with an abundance of species, and we found the land a pleasure to explore.



Beaver at work

The Candlewood Ridge stream system is a nursery for many fish species such as banded sunfish [Connecticut Department of Energy and Environmental Protection (CT DEEP) species of special concern], American eel, alewife, chain and redbfin pickerel, common and golden shiner, creek chubsucker and pumpkin seed. In addition, shorebirds like great egrets (CT DEEP threatened species), great blue heron and osprey all enjoy this remote and wild land.



We went with our scientists into the deep inner

Left: Sigrun Gadwa, scientist, with soil auger, and Whitney Adams, botanist and GOSA Board member, emerging from a peat bog. Photo by Sue Sutherland.

wetlands and found remarkable plant species: lots of cranberries, insect-eating sundews, and everywhere great habitat for wildlife. Using a soil auger, we pulled up soil samples from the wetlands and to our surprise we found deep peat, which takes thousands of years to form. Because of its rarity, peat ecosystems are designated critical habitat by the DEEP. Candlewood Ridge has approximately 15 acres of peat forest and 15 acres of open peat bog.



Beavers keep water high, enabling turtles and a fish nursery to thrive. Photo by Sue Sutherland.

As you drive north on Lambtown Road into Ledyard, Candlewood Ridge is part of a larger ecosystem which has made it a birding hot spot as well as a great place to see a variety of turtles. It is also one of few places with a habitat that is supporting a healthy population of New England cottontails. The U.S. government provides grants targeting the shrubby habitat the endangered bunnies and birds need. GOSA hopes to restore about 10 acres of the Candlewood Ridge area to encourage the bunnies and the 47 other species at risk. This relatively flat area should eventually be accessible to everyone to enjoy by foot.



Tussock sedge grass. Photo by Sue Sutherland.

GOSA has applied to the CT DEEP for an open space grant, which we should hear about very soon. If GOSA receives this grant, the balance will need to be raised to complete purchase of the property. GOSA has received numerous endorsements for this purchase, including that of the Groton Town Council. Please join us on a tour of this land and send in your contribution to save this critically important open space, a jewel in Groton's crown. ■

The Dollars and Sense of Open Space: The Other Side of the Coin

By Syma Alexi Ebbin

"All God's Children have a place in the choir. Some sing low and some sing higher. Some sing out loud on the telephone wire, and some just clap their hands, or paws, or anything they got now." (Bill Staines)

I'm preaching to the choir here, I know. You all love exploring open, undeveloped areas, poking around wetlands and marshes, spotting birds and other wildlife as you traipse down the trail or hunker down with your scope or camera hoping for a glimpse of a rare or unusual species (or most likely you wouldn't be reading this article or newsletter). We all intuitively understand that open space is valuable. How could it not be? But compared with all the other competing and often more economically remunerative uses of land, how does that open space fare? How can we adequately place a value on a parcel of open space so that it can fairly compete with the value of a developed parcel?

The fact is, our society's emphasis on the market economy means that we tend to overlook and undervalue (or worse yet, value not at all) many of the services generated by our open spaces. Our environment supplies many resources and services; however, we focus mostly on those we commodify. We place dollar values on recreationally and commercially important fish species, agricultural crops we cultivate for food, trees we harvest for timber, land we clear for development, and petroleum deposits we extract for energy. But what about the soil that infiltrates and filters the rainwater, the marshes that absorb the wave energy of a winter storm and dissipate flood waters, the photosynthetic organisms that produce the oxygen we breathe, the

mental Protection Agency informed the city that to maintain the quality of their drinking water supply they would have to build a filtration plant, with an estimated price tag of \$6 billion. The problem was that the Catskill/Delaware watershed supplying New York City's drinking water was being threatened by development. So to avoid the cost of the filtration plant, the city set about acquiring undeveloped lands for watershed protection, creating vegetated riparian buffers along rivers and waterways, improving septic and sewage systems, and providing incentives for towns, farmers and residents within the watersheds to



Path by Goose Pond at Haley Farm



Barn Island's marsh land

insects that pollinate the crops we eat, the trees that stabilize soil and prevent erosion? The list of environmental services that we depend upon goes on and on.

Sometimes we don't know the value of these services until they are degraded and we're forced to replace these functions with engineered solutions. New York City experienced this situation several years ago when the Environ-

adopt best management practices. The city was able to maintain the historically high quality of its drinking water by simply protecting and fostering better management of watershed lands with an investment on the order of \$1 to 1.5 billion.

Helping to calculate the economic value of these ecosystem services has been Dr. Robert Costanza, now affiliated with Portland State University. Costanza's seminal 1997 study reported in the journal *Nature* estimated that, at a conservative minimum, the contribution of the world's ecological services averages about \$33 trillion per year with a range of \$16 to 54 trillion, far exceeding the U.S. gross domestic product of \$18 trillion. His more focused 2006 study estimated that the value of New Jersey's ecosystems generate over \$19 billion a year, roughly on a par with the state's construction sector. Of this, wetlands, in their roles in disturbance regulation, water infiltration and supply, and waste treatment, were found to contribute the largest portion providing \$9.4 billion/year and \$1.2 billion/year for fresh and saltwater wetlands respectively. Forested areas, which cover the most area of any individual ecosystem type, were found to contribute \$2.2 billion per year, not including the value of timber on those lands. The habitat services associated with these areas were found to

play a valuable role in water supply, pollination, and providing aesthetic and recreational amenities.

A 2011 study of the economic impact of Connecticut's parks, forests and natural resources conducted by UConn's Connecticut Center for Economic Analysis found that residents and out-of-state tourists who visit these areas and engage in activities such as hiking, fishing, hunting, camping, skiing, and recreational boating generate \$427 million through permits and park fees, as well as \$544 million in general tourist expenditures. State residents who live in houses overlooking state-protected lands derive approximately \$270 million each year in amenity values. The assessed values of these homes generate \$3.1 to \$5.4 million in government revenues without accounting for the scenic vistas supplied by their proximity to the state open-space lands. A more complete assessment of the amenity values associated with their location could significantly increase property tax revenues for municipalities. Finally, the report estimates that the individuals who visit these parks derive benefits that enhance their well-being and quality of life in excess of their expenses, generating \$272 million in consumer surpluses.

These are stunning values for the state as a whole, but what about the local picture? A common way to assess the fiscal impact of development versus open-space preservation is to calculate the cost-of-community-service ratio for different types of land uses: residential, industrial/commercial and open space/farmland. The ratio compares the cost of community services to the amount of revenues collected. Research investigating the cost of community

tax revenues from these adjacent and nearby parcels. The economic value of these environmental amenities such as open space can be measured using hedonic methods of analysis¹. An evaluation of the development of Central Park in New York City provides empirical evidence to support this. Annual reports produced by the Central Park Commissioners noted substantial changes in land values occurring after the park was formed. In 1873, the Commissioners reported that after paying \$830,000 for the land and construction of the park, the city received a net profit of \$4.4 million from increased tax revenues attributable to the park's existence.

Environmental amenities also have an impact on a town or region's overall economy. In Seattle, this is known as the "Mount Rainier Effect", where the existence of scenic vistas, access to recreational opportunities and natural amenities influences people and businesses alike to migrate to and locate in the area, thereby jump-starting the local economy. Thus, places with natural beauty become economically desirable places to live *and* do business. This effect is both synergistic and creates a positive feedback loop, thereby enhancing the economic draw these places have. It must also be noted that the opposite effect can also occur: incompatible or degrading land uses can drive down the values and tax assessments of nearby properties.

So, the next time you take a stroll in the woods, pause a moment to appreciate the many ways this undeveloped spot on earth is enhancing your own well-being, physically, spiritually, and yes, even economically. ■



A father and daughter on a quiet walk in Haley Farm. Photo by Syma Ebbin

services in different areas has confirmed that open space generates more revenues than it requires in services, with values ranging from .3 to .5. On the other hand, residential parcels create a net drain on municipal budgets, using more services than they generate in tax revenues, with ratios ranging from 1.15 to 1.50. This indicates that for every dollar of taxes generated by residential parcels, they use between \$1.15 and \$1.50 in municipal services.

In addition to this, open space enhances the property values of surrounding parcels, and these greater values are captured in higher assessments which then generate more

¹Hedonic analysis is a methodology that is used to estimate the value that a given characteristic contributes to the overall value of a good. In this case, the sale prices of homes with similar features but different locations can be compared to gain an understanding of the value of location attributes (e.g., proximity to open space, water features, scenic vistas, etc.) to the aggregate house value.

About the Author: Syma A. Ebbin, Ph.D., is research coordinator for Connecticut Sea Grant, faculty member of the UConn Department of Agricultural and Resource Economics, and a member of the GOSA Board of Directors.

Sheep Farm Stewardship Update

By Sue Sutherland

Have you ever walked the Sheep Farm's blue trail past the meadows and noticed the pole-sized trees in the young uphill forest? No doubt it was a shrubby meadow not too long ago, just like the meadows at the entrance to the Sheep Farm. Open shrubby habitat is now very rare in Connecticut, and as a result many species dependent on this environment have declined dramatically.



Meadow reverted to young forest
Photo by Sue Sutherland

GOSA received a grant from the Natural Resources Conservation Service (NRCS) arm of the U. S. Department of Agriculture to extend the shrubby habitat by cutting 5.4 acres of small trees. Two hundred large trees such as white oak and beech will remain, as well as numerous native plants and shrubs.

The NRCS has targeted for conservation New England cottontails and 47 other species which require the food and hiding places from predators that shrubby habitat offers. We have not yet confirmed whether we have New England cottontail on the Sheep Farm, but many other rare species are present which are in need of shrubby habitat: American woodcock, brown thrasher (species of special concern), yellow-billed cuckoo, ruby-throated hummingbird, wood thrush, blue-winged warbler, chestnut-sided warbler, American redstart, white-throated sparrow, field sparrow, black racer snake, northern leopard frog (species of special concern). The young forest is quiet now, but over the years will be increasingly filled with the sounds of these on-site species and the insects, fruit, and seeds they require as light floods in and the valuable native plants grow.

In order to change young open forest into shrubby habitat, we are coppicing—cutting trees flat at the base—selected trees to encourage shoots and eventually a shrubby habitat. Already there are many shrubs present, such as high bush

blueberry and spicebush, which will flourish in the increased sunlight to provide more berries.



Coppiced tree, cut last year, sprouting new growth. Photo by Sue Sutherland.

GOSA's progress in the young forest is visible between the upper red trail and the blue trail. We have already cleared around the large tulip tree on the edge of the meadow and will be working up the hill. That tulip tree now stands majestically in open space and light floods into the area. Last week a large hawk enjoyed the tulip tree perch, looking down for game where previously invasive plant species such as bittersweet, Japanese barberry, Japanese spirea, multiflora rose, and pole-sized trees had choked the field.

GOSA continues to offer tours of the Sheep Farm and welcomes volunteers to help restore habitat. If you have any questions, would like to tour or to volunteer, please email: gosamail@gmail.com ■

Neighbors in Need of Habitat



The northern leopard frog (*Rana pipiens*) population has been declining steadily since the 1970s due to a combination of factors including habitat loss and fragmentation, environmental contaminants, introduced fish, drought and disease. This frog produces an enzyme that is currently being used in clinical trials to treat pleural mesothelioma and lung cancer.



The brown thrasher (*Toxostoma rufum*) is noted for having over 1000 song types, and the largest song repertoire of birds. To listen to its songs, go to the Wikipedia entry on this bird.

Blue Tubes and Wire Cages

By Charles Boos with Patty Oat

On a recent visit to The Merritt Family Forest, you may have noticed small plastic tubes and wire cages surrounding seedlings that have been planted throughout the field margins. A closer look would reveal that many of the structures are protecting seedlings of the American chestnut tree. The American chestnut (*Castanea dentata*), once so widespread that it comprised one quarter of the trees in the forests of the eastern United States, is now confined to a few stands of trees scattered across the country. The chestnut seedlings planted here represent a collaboration between GOSA and local representatives of the American Chestnut Foundation. Members of this foundation, along with scientists from several academic institutions, are seeking to develop an American chestnut hybrid that can withstand the fungus that has felled so many of these majestic trees.



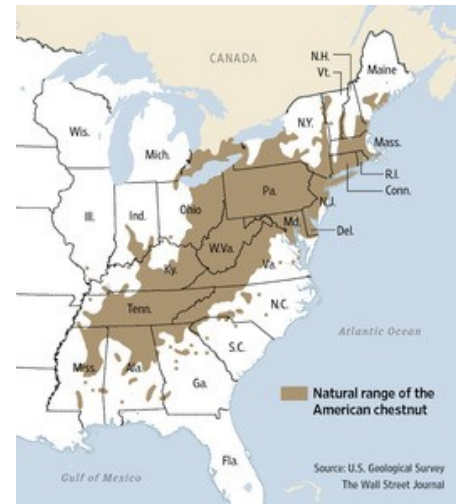
Photo by Eugenia Villagra

A little over 100 years ago, there were an estimated 4 billion chestnut trees growing in the eastern part of the United States. In 1904, the first sign of disease was recorded in New York City, and was traced back to imported Japanese and Chinese chestnut trees and lumber. The imported trees had, over time, been able to develop resistance to the pathogen that causes chestnut blight. The American trees however had no ability to fight off the powerful fungus that arrived in full force on the imported trees. By the 1940s, with rare exception, most American chestnut trees had succumbed to the blight.

Although the virus has been almost 100% effective in killing mature American chestnut trees, the roots and root crowns of the American chestnut have developed some resistance to chestnut blight. The root crowns are often able to send up sucker growth which occasionally survives long enough to produce

seeds. These seeds provide critical genetic material for plant scientists who are working to develop an American chestnut that will have strong immunity to the chestnut fungus.

One of the methods currently being used to develop disease resistant seedlings is to produce hybrids that are 50% American chestnut and 50% non-native resistant species. These hybrids are then back-crossed with American chestnut seedlings, producing a hybrid that is 75% American chestnut. From these hybrids, stock will be selected that has genetic resistance to blight and has the typical American chestnut form, which is straight and tall, unlike the shorter, broader and more extensively branched Chinese and Japanese chestnut trees.



The chestnuts growing on the GOSA preserves are pure American chestnut seedlings that are expected to succumb to the chestnut blight after a few years of growth. The value of these seedlings is that in caring for them, we will develop the cultural skills necessary to eventually grow mature chestnut trees. We anticipate that in the future we will be given some of the precious hybrid stock

and will be able to successfully grow disease-resistant trees on our properties. The blue tubes and cages, which are there to keep wildlife away from the young seedlings, represent a small but critical step forward in the effort to reintroduce the once mighty American chestnut to the eastern American landscape. ■



Great Gull Island: Strictly for the Birds

By Eugenia Villagra with Larissa Graham

What's so great about Great Gull Island? I recently discovered that it's one of the best kept environmental secrets around Long Island Sound. Area boaters know Great Gull as a small island lying between the western tip of Fishers Island and Orient Point, NY. Should a boater venture close enough to shore, a prominently- displayed sign that reads "Research Station, Do Not Land," only amplifies the mystery. Now, because Larissa Graham, Outreach Coordinator for the Long Island Sound Study (LISS), organized a trip to the island, a few more people—including four GOSA representatives¹— have discovered the island and its renewed population of terns² and a few hardy humans.



for
fol-



birds

lowing the Atlantic Flyway and a seasonal home to large colonies of nesting terns. This habitat was undisturbed until the 1850s to '90s when the entire tern colony (approximately 10,000) on Great Gull was wiped out to supply feathers to the booming millinery trade. Then, in 1897, Fort Michie was built on the island to fortify the entrance to Long Island Sound in preparation for an impending war with Spain over Cuba, finally destroying the avian habitat.

Fifty years and two World Wars later, the island was put up for sale with its never-used, entirely obsolete, fortifications. The conservation department of the American Museum of Natural History acquired Great Gull Island in 1949 with the intent of restoring the island's natural habitat. The birds, safe from hunters due to passage of the Lacey Act in 1900, had nowhere to nest because of shoreline development. The Linnaean Society of New York stepped up to restore the island's habitat in the early '50s, tearing down buildings, importing sand, and then leaving the island undisturbed in hope that the birds would return. An air survey in 1955 brought back good news: 25 pairs of common terns were nesting at the far eastern end of the island.



Common tern

Alongside the terns, the other great thing about Great Gull Island is Helen Hayes, the Great Gull Island Project director who, at approximately 80 years old—she will not reveal her age until after she turns 101—is perhaps the hardest of them all. Last May, Larissa traveled to the island and spent an unforgettable weekend there working and learning all she could in the company of terns, the legendary Helen, and a few mostly college-age volunteers. Her experience so inspired her that, with Helen's encouragement, she planned another day trip to Great Gull for fellow LISS staff and partner organizations like GOSA so that others could experience just how great it is that the "gulls" are back on the island.



Helen Hayes

Great Gull Island, Past and Present

Great Gull Island may be small, only 17 acres all together, but its strategic location at the entrance to Long Island Sound has attracted both birds and the United States military. The island had served for perhaps eons as both a major stopover



Eastern end of Great Gull Island with ruins of Fort Michie

Under the auspices of the museum, Helen Hayes first visited the island in 1963 to assess how the tern population had survived after the Linnaeans left. She concluded that the island would be an ideal site to conduct research and by the summer of 1969 she had recruited enough volunteers to launch the Great Gull Island Project—a seasonal monitoring program of the island's common and roseate tern populations. From April through September every year since, Helen has coordinated researchers, students, and volunteers to monitor and protect the growing colony of birds.

Welcome to Great Gull Island

On August 2, 17 environmental types—wearing, per Larissa's instruction, peaked hats with broad brims and carrying binoculars—boarded Sunbeam IV in Waterford, CT, and motored across a flat sea for almost an hour to Great Gull Island. As the crew labored to dock the boat in 3+ knots of swirling waters, we were warmly greeted by the famous

Helen Hayes, the undisputed queen of the island. She and her volunteers were wearing broad-brimmed hats so heavily splattered with bird droppings they resembled Jackson Pollock paintings. Behind Helen, terns swarmed over the island like honey bees around a hive. We disembarked with assistance as the boat pitched and yawed under our feet, then walked the plank-like dock to shore. With terns squawking and swooping around our heads, we walked cautiously up the path to the main building.

Our group entered the low-profile main building through the kitchen, where we sat at a long table. We were all made to feel at home with Helen in her cheerful surroundings. Though we longed to hear more than Helen's brief introduction, our group divided into several small groups and departed with a few well-informed volunteers on a highlights tour of the island.



The banding room

In the main building we toured volunteer work areas such as the banding room for recording data and a display of island land and seascapes painted or drawn by volunteers in their spare time. We walked through the volunteers' sleeping quarters in another building; marched single file up and down paths in the hot sun; examined nests, eggs, chicks and terns; felt our way through shoulder width, pitch-black corridors to gun emplacements used—swords to plowshares—for wildlife observation. We finally summited an observation tower where we strove mightily to distinguish the common terns (*Sterna hirundo*) from the roseate terns (*Sterna dougallii*) by their markings, wing shape, and flight pattern.



Our guide picked up a tern chick



Roseate terns

The quarters looked Spartan but comfortable. Although running water, plumbing, and power lines were nowhere to be seen on the island, Helen and her volunteer corps couldn't care less. What could be more important than working to rescue an endangered species? Everyone gets up with the sun to start the day's work and retires at sunset to their cots and quiet reading by candlelight. As reported in a *New York Times* article³ on Helen published last summer, "there are no escapes to the mainland. Hurricanes and big northeasters are weathered and treasured as opportunities to see rare birds blown in." Living sustainably on an island is an experience for the hale and hearty; wimps need not apply.⁴

Thanks to the combined and continuing efforts of the American Museum of Natural History, the Linnaean Society of New York, and many more organizations too nu-



Terns in foreground, Little Gull Island in background.

merous to list here, the ongoing research started and sustained by Helen, her staff, and many volunteers over more than 40 years, the island is now home to the largest common tern colony in the world (9500 pairs) and the largest breeding concentration (1500 pairs) of roseate tern in the northern hemisphere. So, the great thing about Great Gull Island is that the "gulls" are back, demonstrating that although habitat restoration takes lots of time, hard work and funding, it is feasible. Helen is always looking for volunteers to help with her summer and fall monitoring efforts.



If you are interested, visit the Great Gull Island Project's website⁵ to find out more about the research projects and how you can join the team. If you want to volunteer closer to home, lend a hand to GOSA's habitat restoration work. A lot has been accomplished, and plenty of work remains to be done. ■

¹Syma Ebbin, Joan and Douglas Smith, and Eugenia Villagra.

² Terns are seabirds previously considered to be a subfamily of the gull family.

³ Corey Kilgannon, "Character Study: A Revival, One Tern at a Time," *The New York Times*, July 20, 2012.

⁴ See <http://ne-ecological-services.blogspot.com/2012/08/a-week-with-terns-great-gull-island.html> for an intern's write-up on her week-long visit.

⁵ <http://greatgullisland.org>

We would like to begin this article on a sensitive subject by first thanking the vast majority of visitors to our state parks and GOSA properties for acting courteously, ensuring control of their dogs, and for picking up waste. Responsible dog owners make up a large part of our membership and support our mission through work and financial contributions.



Sidney's Corner

By Sidney Van Zandt with
Liz Raisbeck

work by numerous volunteers and excellent collaboration with the state and many other organizations. These green spaces are a treasure for present and future generations in the region to explore, as well as continuous protected habitat for a wide diversity of birds and other wildlife. ■

A Hike Across Groton's Greenbelt

On June 16, GOSA and the Avalonia Land Conservancy hosted the Second Annual Groton Cross-Town Hike in celebration of Connecticut Trails Day 2012, sponsored by the Connecticut Forest & Park Association. Thirty-one hikers gathered for the six-mile walk on public hiking trails, which began at Bluff Point State Park on a lovely sunny day. The trails, maintained by volunteers a few days before the trek, were in perfect shape. As you can see on the map below, we walked through Haley Farm State Park and on to the town-owned Mort Wright Preserve, then through GOSA's Merritt Family Forest to town-owned Beebe Pond Park, and finally to Avalonia Land Conservancy's Moore Woodlands and Town's End Preserve at Beebe Cove off the Mystic River. Groton's Parks & Recreation Department provided a bus for return transportation to the Bluff Point parking lot.

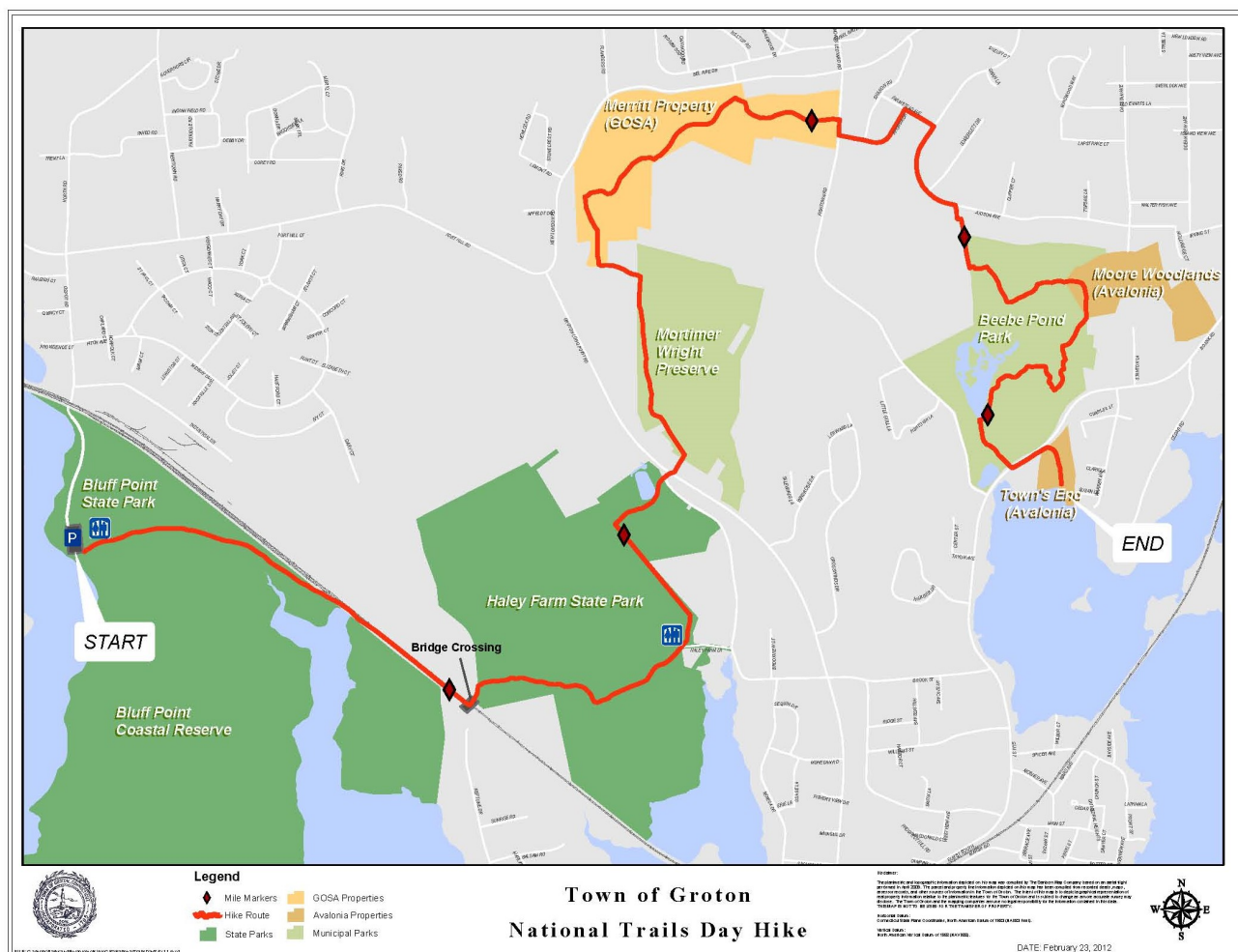
Hiking through these lovely protected spaces brings home the astounding fact that we now have a greenbelt of linked protected spaces in Groton, thanks to decades of



Above: Overlooking Fort Hill Brook, above Mumford Cove.
Photo by Gary Poe



Left: Sidney, standing by easel, reviewing history of Bluff Point before hike.
Photo by Gary Poe





Volunteers at Work



Photos to left and above by Joellen Anderson

Anne Pierson in front, and Navy volunteer Susan Gullet in back kayak.

Birch Plain Creek Cleanup: Saturday, April 21, 2012. As a result of the watershed survey reported on in our spring newsletter, Judy Rondeau, of the Eastern Connecticut Conservation District (ECCD), coordinated a cleanup at Birch Plain Creek. About two dozen volunteers attended including representatives from GOSA, Avalonia Land Conservancy, and members of the Naval Medical Corps stationed at the Naval Submarine Base in Groton. Some headed out in kayaks, returning with discarded bikes, tires and other trash; others headed out by foot along the abandoned railway spur east of the creek. The trash, piled on the side of the road, was picked up by the Groton Public Works Department the following day.



Haley Farm Cleanup: Saturday, April 28, 2012. Billed as a day to “clean up but bring clippers and liberate a tree” of invasive vines, the day turned out to be beautiful and everyone had a great time. GOSA’s Jim Anderson led over 40 volunteers, including a student group from UConn Avery Point called “EcoHuskies” as well as many from the Navy Medical Corps stationed at the Naval Submarine Base in Groton. Many of them had also been involved with the Birch Plain Creek cleanup. Sorry, no photos!

Si and Kate Borys at the GOSA Information Booth Groton Fall Festival, October 6, 2012

Kate and Si both enjoy GOSA activities. Kate helps with public outreach efforts, and Si has improved his health by performing hard physical work. He received a Spotted Salamander Award for his stewardship activities, and has attended advanced logging classes and the COVERTS program, both sponsored by the UConn Department of Forestry Extension Service. Photo to left by Joan Smith

WANTED

Dead or Alive !

Old Lawn Mowers

Call Sidney Van Zandt at 860-572-5715 for pick-up
or deliver to the Borys residence at 75 Fishtown Road

Reward

Help GOSA *and* get rid of that old mower

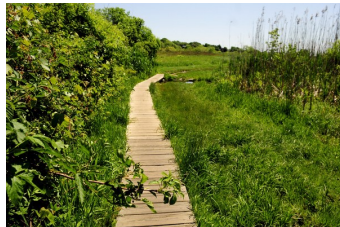


Eagle Scout Projects Improve Haley Farm Experience



Over the years, Haley Farm has benefitted from the youthful energy of the Boy Scouts who have improved this wonderful for all of our enjoyment. For his Eagle Scout project back in 2000, **Robert Neuman Jr.**, a Life Scout of Troop 2, Mystic, constructed a sturdy walkway across a marshy outflow from Goose Pond. This walkway leads us safely and comfortably to a magnificent view of the cove and the Sound beyond. Robert constructed a sign detailing the specifics of his project, and in 2007, as a Lieutenant in the United States Air Force, he returned to replace the earlier one.

In 2009, **John Sedensky**, a Life Scout of Troop 2 in Mystic, for his Eagle Scout project built a foot bridge extending the walkway built by Robert Newman, Jr. over the expanded wet, muddy area draining from Goose Pond. Also in 2009, **Peter Lewis** of Noank, a Life Scout of Troop 55 of Gales Ferry, completed the large, freestanding signboard near the entrance of the Park. He also repainted the other state signs.



In 2012, **Erik Brown**, of Troop 2, Mystic, embarked on an ambitious plan to clear and restore the historic trail that led from Fitch High School to the main trails of Haley Farm. In the past the Fitch High School Cross-Country Track Team frequently ran both their practices and cross-country meets on the Haley Farm. Over the years, however, the upper 50 acres had reverted to thick, impassable undergrowth. In the spring, the Department of Energy and Environmental Protection brought in heavy brush-clearing equipment to help the scouts and GOSA volunteers reopen the trail. On a fall afternoon you might see members of the Fitch track team running past you on this improved trail. GOSA honored Erik at the October annual meeting



Sidney and Ryan Finton at work



Scott Woods and Cleon McLish



Jacob Westervelt and Amar Batra

with its highest award for volunteers, the Spotted Salamander. ■ GOSA also greatly appreciates the strong support for these projects by Jonathan

GOSA Annual Meeting October 4, 2012



Eagle Scout Eric Brown's parents, Kevin and Brigid, receive the Spotted Salamander Award for their son.
Photo by Anna Sullivan



Photo by Anna Sullivan



Photo by Anna Sullivan



John Sutherland, left, accepting the Spotted Salamander Award from Joan Smith and Whitney Adams.
Photo by Victor Villagra



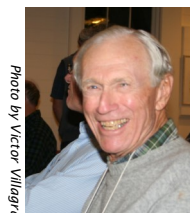
L to R: Betty and Bill Smith and Anne Roberts-Pierson
Photo by Anna Sullivan



Photo by Anna Sullivan



Rebecca Brewer



Sandy van Zandt

Above: Margaret Rubega, right, with Syma Ebbin. Margaret's dynamic lecture on chimney swifts was a big hit.

Below: Sue Sutherland, Treasurer
Photo by Victor Villagra



Chain Saw Safety Workshop

By Joan Smith

Because GOSA is in the business of creating and maintaining habitat, it is sometimes necessary to cut down trees and critically important to do it with minimal risk to our volunteers. This past July, Dr. Thomas Worthley, Professor in the Department of Forestry at UConn Extension Service, presented a basic training workshop for safe use of chain saws at the Sheep Farm. He provided three sets of five safety points to remember, using the memory aid Y.E.S.

Y stands for yourself, how you are feeling that day, and



Dr. Worthley, right, holding chain saw at the Sheep Farm

addresses personal protection such as Kevlar leg chaps, helmet, face guard, hearing protection, heavy-duty high boots (preferably with steel toes or Kevlar liners). He exhibited a pair of gouged chaps that he discovered had stopped his chain saw blade, even though he had not been aware that the blade was anywhere near his leg.

E stands for equipment, including overall inspection, use of the safety bar, chain guard, muffler spark screen.

S stands for surroundings, including removal of other people, tripping hazards, branches, vines, saplings, and establishing a clear 15-foot escape route at a 45-degree angle from the direction of the fall.



Left to right: Sue Sutherland, Joan Smith, Fred Ruszala, Jim Anderson, John Sutherland and Whitney Adams. Participants not pictures include Si Borys, Anna Sullivan, and Sidney Van Zandt.. Photos on this page by Anna Sullivan.

Dr Worthley demonstrated a **wedge and plunge-cut technique** which leaves a hinge and safety trigger to stabilize the tree. This technique provides the operator with time to look around, make adjustments, and position himself for escape before he makes the final cut.

Every chain saw user needs a spotter to watch for surrounding hazards, to keep other people away, to watch the canopy, and to warn the operator as the tree begins to fall.

Dr. Worthley and his students at UConn also helped GOSA draft its Sheep Farm Forestry Plan. ■

For information about future classes, contact:

Thomas.worthley@uconn.edu

Dr. Thomas E. Worthley

Assistant Extension Professor, Middlesex County Extension Center

1066 Saybrook Road

Haddam, CT 06438-007

860-345-5232



Gouged chaps!

To Leash or Not to Leash?—That Is the Question

By Eugenia Villagra and Joan Smith



There have been two recent and unfortunate events involving dogs in local state parks that are relevant to people who also walk with their dogs on GOSA properties. In July, an off-leash dog bit a young man in the hand at Haley Farm in Groton. Again in September, a young woman jogging in Harkness Memorial State Park in Waterford was bitten on the leg by an off-leash dog. In the latter case, reported in *The Day*, the owner and her dog ran into the woods after the incident and were never apprehended. As a consequence, the dog was not identified, and after two visits to the emergency room, the woman had no choice but to undergo a series of painful rabies shots. Because GOSA's goal is to protect people and pets, wildlife, plant communities and waterways, we thought it important to communicate clearly about what the regulations are and why they exist.

A Summary of State and Local Law

At the entrance to every state park, leash-law signs are prominently posted for all to see. However, as anyone who walks regularly at Haley Farm State Park knows, there are probably as many dogs off leash as on. It is confusing to see so many dogs off leash despite the signs. Though the Department of Energy and Environmental Protection (DEEP) is charged with enforcing these regulations, the reality is that they do not have the staff they need to ensure regular enforcement. Connecticut is one state (of very few) that does not mandate that a dog be leashed when off his owner's property. Connecticut law requires the following: "A dog's owner or keeper must not allow it to roam on another person's land or on a public highway, including sidewalks, if it is not under his control. Local governments may also create leash ordinances. Violating the state roaming law is an infraction punishable by a fine of \$92 (CGS § 22-364). Additionally, DEEP requires that owners keep their dogs leashed in state parks."

Local ordinances governing dogs vary if they exist. The Town of Groton, according to Donna Duso, Groton's Animal Control Officer (ACO), does not have a local ordinance governing leashes so Connecticut law comes into

play. The City of Groton and Groton Long Point do have regulations. However, the key to Connecticut law is that "the owner...must not allow it to roam...*if it is not under his control.*" "Ay, there's the rub," as Hamlet would say.

If you cannot guarantee that your dog will remain under control, you are taking a substantial risk as Connecticut law does provide a form of strict liability: "If any dog does any damage to either the body or property of any person, the owner or keeper shall be liable for such damage." If your dog bites, and the victim decides to sue for damages, there are any number of personal injury lawyers on call 24-7 to take the case against you. Penalties for bites can be severe, including a fine for \$1000 and up to six months in prison. Can you afford to take this risk? Also, be aware that in the event your dog bites, Connecticut law requires that "an Animal Control Officer... quarantine a dog that has bitten someone off its owner's property. The dog must be quarantined for 14 days in a public pound, veterinary hospital, or place approved by the Department of Agriculture commissioner. The purpose of the quarantine is to assure the animal does not have rabies and to examine the dog's demeanor. The owner must pay all fees associated with quarantining the animal." (CGS § 22-358 (c))

According to Donna Duso, in the Town of Groton there are, on average, four "pretty bad scenarios" per year involving people getting hurt trying to separate fighting dogs, dogs injured by other dogs, and people getting bitten. Many more go unreported. The next time you are tempted to remove your dog's leash, try to keep these statutes in mind.

GOSA Dog Policy

There are other, equally important reasons to keep your dog on a leash: habitat and wildlife protection. GOSA's primary mission is to promote conservation, environmental preservation, open space and recreational areas in southeastern Connecticut. GOSA owns and maintains two beautiful properties that are not governed by the state park system: The Merritt Family Forest and the Sheep Farm. These private properties have their own set of rules designed to protect the native wildlife and vegetation. GOSA welcomes dogs provided owners:

1. obtain a permit. A permit is free and can easily be acquired by contacting Sidney Van Zandt at svanzandt3@aol.com.



A more accurate sign would read "Leash Laws Strictly Prosecuted"

2. keep dogs on a six-foot leash at all times. GOSA's properties host rare species of ground-nesting birds, such as ovenbird and brown thrasher, which are extremely sensitive to impacts from humans and pets. Furthermore, GOSA is diligently restoring habitat for the New England cottontail, a candidate for federal endangered species status. Uncontrolled dogs are likely to go off-trail and chase wildlife.



Don't forget birds, frogs and rabbits!

3. pick up and properly dispose of waste. Pet waste contaminates waterways, providing e-coli and other pathogens similar to those found in human waste. In addition, nitrogen is imported through pet waste, unlike the balanced intake and output of nitrogen associated with local fauna. Palmer's Cove and Mumford Cove are already vulnerable to high nitrogen levels, associated algal blooms, hypoxia and loss of eel grass—a critical component for fish and shellfish. Contamination is compounded by large numbers of dogs. Tossing waste, bagged or unbagged, into the woods or fields does not resolve the problem.

4. keep dogs out of waterways, unless a trail crosses a stream. The water, wildlife and plant communities need protection from trampling. Streams are fragile resources hosting rare and sensitive species such as four-toed salamanders, spire-shelled snails, and fingernail clams. Vernal pools are an ephemeral habitat required by wood frogs, spotted salamanders, state-listed marbled salamanders, and fairy shrimp. They contain large numbers of fragile egg masses during the spring and vulnerable juvenile amphibians in the muddy bottom later in the season.



Finally, we want to alert dog owners that dog-coyote incidents have been reported at Haley Farm in recent months. We encourage vigilance and advise that you quietly leave the area and do not pick up your dog if threatened.

Control of your dog protects you, your dog, other dogs, other people and vulnerable wildlife, waterways and plant communities. Though we all know that a leash is not a guarantee that a dog will remain under control at all times, there is less risk to all if we all observe the law. ■



The Town of Groton's Beebe Town Park goes by Connecticut state law and requires only that you keep your dog under control. Because Haley Farm is a state park, your dog is required to be on a leash. Photo by Victor Villagra.



A variation on the leash theme in Africa: baboons and hyenas.



Believe it or not...the giant pet Burmese python is slithering along a road somewhere in the U.S. on a leash!

Wild Ones at GOSA Sheep Farm

By Charles Boos with Patty Oat



Photo by Charles Boos

On a swel-
August
several

Pictured left to right: Wild Ones Claire Calabretta , Sandy Morse, and friends.

tering
morning,
members

of the Connecticut Chapter of the Wild Ones endured the high summer heat for their second hike on the GOSA Sheep Farm. Wild Ones, a national group dedicated to reduction in the size of the traditional American lawn and landscape, has a particular interest in the Sheep Farm. The efforts dedicated GOSA volunteers have made to reestablish native habitat on the former farm and home sites is an inspiration to them. Their goal is to encourage the transformation of urban and suburban landscapes to support native wildlife.



Photo of male kingfisher from internet.

Wildlife Sighting in Groton

By Bonnie Castellani

For the past week I have tracked a kingfisher couple through Groton Long Point. The female, who has a distinctive brown band around her neck, can be seen in the afternoon sitting on a wooden perch, which extends out from a recently abandoned osprey nest. The platform with nest is located in the marsh area along the Mumford Cove side of Island Circle. She likes to dive down from her perch into the estuary below, grab a small fish, and swoop back onto the roof of a white bird-house that is also in the marsh a short distance from the osprey nest. I saw the male (he is only white and blue gray) perched on a wire near a telephone pole on East Shore Avenue. I love kingfishers! They are really cool looking, have an interesting flight pattern, and they have a wonderful voice.

Many More Volunteers Needed!

Would you like to help too?

Call Sidney Van Zandt

860-572-5715



GOSA News supports the mission and purpose of the Groton Open Space Association by publishing electronic newsletters that inform the public of past, present and future GOSA activities and threats to the health of open space. *GOSA News* also serves as a link to the GOSA website <http://gosaonline.org/> for additional information and as a link to other key sites. Our mission is to inform and inspire the public to become actively involved. We welcome letters to the editor. Letters should be sent with the writer's name, address and daytime phone number via e-mail to: gosamail@gmail.com.

GOSA Mission and Purpose

To work to promote conservation, environmental preservation, open space and recreational areas in Southeastern Connecticut.

To educate the public about the value of open space, conservation and environmental preservation.

To enlist public support and funding to promote, acquire or maintain open space for public use, alone or in cooperation with local, state or federal agencies, or with other nonprofit organizations. GOSA is a nonprofit tax exempt organization under IRS Section 501(c)(3).

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Membership

To join, send a check to GOSA and include your name, address and e-mail. Annual dues are \$10 per year.

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