



Heermance Trail Dedication at Rocky Top

- By Tim Mack

Clare Cain, Trails Stewardship Director for the Connecticut Forest and Parks Association (CFPA), stood in front of the newly installed trail kiosk at the Quinnipiac Blue Trail head at Rocky Top Road. The trail head is situated between pristine wetlands and a forested trap rock ridge. She addressed a group of thirty people speaking about the trail's founder Reverend Edgar L. Heermance, the father of the Blue-Blazed Trail system. Suddenly, as if on cue, a lone hiker meandered down the trail toward the group. It could have been Edgar himself coming to welcome this group to the very first Blue-Blazed Trail in Connecticut.

The group had gathered on this warm, early fall afternoon to honor and dedicate this section of the Quinnipiac Blue-Blazed Trail to Edgar L. Heermance.

In attendance were members of the CFPA: Lindsey Suhr, land acquisition manager, John Little, trail historian and Clare Cain. Clare spoke eloquently of Edgar Heermance's vision to connect people of the town and cities to the forests. Heermance had a summer cabin on York Hill, a.k.a. "Rocky Top" circa 1920. It was on this very trap rock ridge called "Rocky Top" that the first Quinnipiac blue trail was blazed in Connecticut. Heermance, the first Trails Committee chair for the CFPA, successfully advocated for a system of trails maintained by volunteers of the CFPA. He was also instrumental in writing the first Connecticut Walk Book published in 1934.

Heermance's beloved "Rocky Top" ridge, came under threat of development in 2008. Fifteen acres of mature trees



At the Rocky Top trailhead kiosk, from left to right: James Sirch, Mayor Curt Leng, Gail Cameron, Clare Cain, Tim Mack, Roberta Mack and Lindsay Suhr share in the dedication ceremony.

were clear-cut in preparation for a development that included blasting 100 feet off the top of this 450-foot trap rock ridge. Surrounding families organized themselves as the "Rocky Top Neighbors" and for eight years, defended this ridge and fought for its preservation. The developer's plan was finally halted in court, only to surface again in January of 2016. This time, a comprehensive plan to erect 288 apartments, with the same devastation of blasting and reducing the ridge to a pile of rubble. The Rocky Top Neighbors raised money, hired experts, and conducted many hours of planning, research, phone calls and meetings.

In December 2017, the neighbors were surprised to learn that the developer was in negotiations with the CFPA to create an easement that would essentially protect "Rocky Top" from further development. In the final days of December 2018, the developer, working along with the CFPA, agreed to donate the 18-acre parcel to the Hamden Land Conservation Trust. Today, the property is owned and maintained by your land trust and available for all to enjoy.

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Plant It and They Will Come

- By Jim Sirch

The Hamden Land Conservation Trust has established a wonderful pollinator habitat at the Joseph Lee Urban Oasis, located along the Farmington Canal Greenway right behind the Route 10 Restaurant, 3810 Whitney Avenue. The garden will serve as a model for homeowners who want to create a backyard wildlife oasis attractive to bees and butterflies right in their own yard. You can get started right now.

Lose the Grass

Feeling like you don't have any more room in your flower beds? It's really easy to create new beds now and get rid of more of your lawn at the same time. Just place cardboard over sections of grass and pile on mulch and ground-up leaves. By late spring you can plant right into the mix. No digging necessary. "No dig" beds preserve the soil structure, and worms and other invertebrates will improve the soil by bringing organic material further down.

Leave the Leaves

Leaves are not litter! I consider leaves brown gold that are incredibly beneficial to the soil. Wood thrushes and other neo-tropical migrants need leaves to forage for insects during their migration south, and they use our yards as fuel stops. Native, non-aggressive bees, toads and other beneficial wildlife overwinter in leaves too. Leave sections where you can rake them under trees and shrubs. In your garden beds, the key is not to leave large leaves that can get wet and mushy. Just run your mower to grind up leaves and place on your beds, or bag them to use later, even next spring. Leaves provide great nutrients that are incorporated into the soil, further eliminating or reducing the need for fertilizers. No bags at the curb necessary!

Plant Native Wildflower Seeds

Many native plant seeds have builtin mechanisms to prevent immediate germination in harsh conditions such as hot, dry, summer weather and cold winters. For successful germination, these seeds require to winter through a cold, moist period, called stratification. An easy way to accomplish this is to sow seeds in a homemade milk jug propagator. Clear, plastic milk jugs with the cap off allow for rain and snow to keep the mix moist and then greenhouse-like warm, moist conditions later in the spring to help with seedling growth. They keep out predators like rodents that like to munch on seedlings. Here are the steps to set up your own milk jug propagator:

- 1. Working on a safe surface, poke a few small holes in the bottom of the jug to allow for drainage.
- 2. Using a box knife, carefully cut around the jug below the handle, making sure to leave the section that includes the handle uncut.



Using a box knife, cut around the jug below the handle as shown.

- 3. Place about 2-3 inches of a premoistened seedling mix, just below the cut. Mix should be moistened just until you can form a clump with your hand.
- 4. Sprinkle seed on the surface. Some seed, often very small seeds, require light for germination, so need to be pressed into and left on the surface. The rule of thumb is for seeds to go in as deep as the width of the seed.

5. Sprinkle tiny aquarium grit, aravel. or vermiculite sand lightly on the surface. This prevents "damping off", a general term for fungal and bacterial infections that kill seedlings. Make sure to put a label inside. I have found that wooden popsicle stick labels get moldy and unreadable. Instead, cut up white plastic milk jugs into strips for labels. Use a pencil to write with instead of a sharpie. It will last longer.



Prevent damping off when you plant the milk jug propagator by sprinkling grit, tiny aquarium gravel or similar substance on the soil surface.

- 6. Put duct tape around the opening you cut earlier to reseal the container.
- 7. Place the milk jugs in an area that receives morning sun, which is key in late spring when temperatures rise. When seedlings grow their true leaves after cotyledons, thin out the plants to give them room to grow larger and stronger. Pot into larger pots or straight into your garden. Jugs can be planted and placed outside through January.

8. Certain seeds require may different For conditions. example, some need warm, moist conditions-then coldthen warm again to germinate. Two great resources are the book The New England Wild Flower Society Guide to Growing and Propagating Wildflowers of the United States and Canada by Bill Cullina and the free extensive online publication Seed Germination Theory and Practice by Norman Deno, found on the USDA website: https:// naldc.nal.usda.gov/ download/41278/PDF. You can also find germination codes on the Prairie Moon Nursery or Wild Seed Project website.



Different seeds need different conditions in order to germinate.

Bees: Bee Good

- Jim Sirch



HLCT Board Member Jim Sirch shared his pollinator expertise in a presentation he gave with Connecticut Agricultural Experiment Station Entomologist and HLCT Board Member Tracy Zarillo: "A Safe Haven for Pollinators: Creating a Backyard Oasis."

Native bees are declining throughout our area and need your help. They are such important pollinators. Late winter is the time you can hang a bee house for small, tunnel-nesting mason or blue orchard bees, *Osmia sp*. This house is made of tubes of cardboard, bamboo, or other plant stems. Purchase one online or at garden centers. You can easily tie bundles of tubes yourself using invasive Phragmites grass stems. Just make sure the holes are 8mm or 5/16" in diameter and at least six inches long. I have found that squirrels and chickadees will go after mason bee larvae, so to prevent this, screen over the front with ½" hardware cloth. Access a great online book about keeping mason or blue orchard bees: file:///C:/Users/jns26/Downloads/ How_to_Manage_the_Blue_Orchard_ Bee%20(2).pdf.

Plan for the Future

The off-season is a good time to think about your yard and create goals for changes you would like to make. There is a great app for easily making a map of your yard and deciding where you would like to add native perennials, shrubs and trees. It is called Yard Map and run by the Habitat Network: http://content.yardmap.org/.



A volunteer stops to take a closer look at monarch caterpillars at the Joseph C. Lee Pollinator Garden.

Event Roundup



Board members Tracy Zarillo and Betsy Gorman with other volunteers at the Joseph C. Lee Pollinator Garden

Your land trust hosted a wide range of events in 2018. We started out the year with our "Animal Tracks in Winter" presentation coupled with a short hike on our newly acquired property Winterberry Wetlands in January 2018 led by HLCT Board Member Gail Cameron. We identified some neat tracks on the new property, including fox, coyote, grey squirrels and fisher.

In February, we gathered at Hamden's own Counterweight Brewery for Pub Night. We also joined our friends at Best Video Film & Cultural Center for a viewing of a film about fireflies titled "Brilliant Darkness - Hotaru in the Night" and a conversation with Zoological Lighting Institute Scholarship recipient Avalon Owens about fireflies and light pollution.

In April, Connecticut Fund for the Environment Land Preservation Manager Chris Cryder took us on an armchair tour of Plum Island located in eastern Long Island Sound. More than 200 bird species have been documented as breeding or foraging on Plum Island and adjacent coastal waters. The U. S. government wants to auction Plum Island off to the highest bidder. Conservationists are advocating for its conservation. Also in April, we enjoyed meeting land trust friends and members at Hamden's 2018 Earth Day Celebration at the Hamden Middle School. HLCT President Jim Sirch and Connecticut Agricultural Experiment Station Entomologist and HLCT Board Member Tracy Zarillo shared their pollinator expertise in their presentation at Whitney Center "A Safe Haven for Pollinators: Creating a Backyard Oasis." Our early spring hike was co-sponsored by the Regional Water Authority (RWA) and the Hamden Land Conservation Trust along the Mill River in Hamden.

In May, members and friends of the Hamden Land Conservation Trust joined the Hamden Historical Society's Annual meeting at the Miller Library Complex, Senior Center Social Hall to hear a presentation by guest speakers HLCT President Jim Sirch and Rocky Top Neighborhood Group Leader Roberta Mack, who discussed the Rocky Top property recently acquired by the Hamden Land Conservation Trust. We had a great turnout for the third annual "Birds & Brew" event across the street from our Gargiulo Preserve on State Street. We had great views of both parents and one of the three fledglings in the nest that popped its head up periodically. Afterwards, we headed over to nearby No Worries Brewery for a chat and a pint.

In June, we joined hikers all over the country celebrating National Trails Day weekend. Our local hike took place at

our new Rocky Top property located off Rocky Top Road in Hamden. This land was originally purchased by Rev. Edgar Heermance, one of the founding members of the nonprofit Connecticut Forest and Park Association that works to protect open space statewide. About 40 hikers enjoyed the beauty of this remarkable place where the Connecticut Blue Trail began. We had a great turnout for our annual meeting at Whitney Center, also in June, with presenter Katherine Hauswirth. Katherine, the author of The Book of Noticing: Collections and Connections on the Trail, shared photos from her nature writing adventures and read from her book.

In July, we held a volunteer event at our Joseph C. Lee Pollinator Garden on the Farmington Canal Trail opposite Route 10 Restaurant. Thanks to the many volunteers who joined us to remove invasives, put down mulch and install our new sign. Thanks too to our friends at Route 10 Restaurant who donated the beautiful bench for people to enjoy. In September, a host of volunteers joined HLCT Board Members Jim and Willow Sirch at Save the Sound's clean up event at Oak Street Beach in West Haven. This event was part of the International Coastal Cleanup (ICC) that brings together people from all around the world to help clean up local beaches. In addition to removing 45 pounds of trash, we documented the kinds of trash we found and submitted the data to ICC, helping scientists and researchers better understand how plastic and other kinds of debris are impacting the marine environment.

At the September dedication for our new Rocky Top property, we were joined by Hamden Mayor Curt Leng, CFPA Staff Members Clare Cain and Lindsay Suhr, Rocky Top Neighbors leaders Tim and Roberta Mack and a host of others. CFPA staff talked about the Edgar Heermance trail on Rocky Top—where the Connecticut Blue Trail all began.

In October, HLCT Board Member Jim Sirch and President Gail Cameron led an autumn nature walk along Baldwin Drive on the northern end of West Rock Ridge State Park. The event was co-sponsored by the Hamden Land Conservation Trust, the West Rock Ridge Park Association and the West River Watershed Coalition.

Do you have an idea for an event for the coming year? Share it with one of our board members at your next HLCT event or via the Contact page on our website. Help us make your land trust all it can be.

President's Message

As the new president of your land trust, I follow in the footsteps of many wonderful individuals who have given tirelessly of their time and effort. Ours is an all-volunteer board, so your donations go directly to support our programs.

I feel fortunate to have lived all my life in Mount Carmel on property that my parents bought in 1950. It is adjacent to the Sleeping Giant and contributed so much to my love of nature and open space. I am also Vice President of the Sleeping Giant Park Association, chairman of their environmental stewardship committee, and a Master Wildlife Conservationist with the Connecticut Department of Energy and Environmental Protection. I also currently serve as a volunteer on several projects with the Connecticut Audubon Society. I recently retired from my job as a manager at the Yale School of Medicine after 44 years, and can now concentrate on all of these worthwhile endeavors.

In 2019, the Hamden Land Conservation Trust will celebrate its 50th anniversary. We owe a giant thank you to the founders of the group who had the foresight to bring like-minded people together to protect open space in our community. Studies have shown that spending time in nature benefits people in many ways-improving health, reducing anxiety, and promoting fitness and weight loss. We have to look beyond the monetary value of open space to gain a truer understanding its importance in our lives. Your land trust is planning events in the coming months to celebrate what we have accomplished and where we are headed moving forward. In the past couple of years we have been privileged to receive several remarkable land parcels, including the Henry and Irene Gargiulo Wildlife Preserve on State Street, where eagles nest in spring and summer, Winterberry Wetlands along the Farmington Canal, where we have planted the Joseph C. Lee Pollinator Garden, and 64 Rocky Top, where the historic Blue Trail runs through. We have now planted several chestnut trees at our Rocky Top property as a symbol of hope for the future of open space preservation everywhere. These are just a few of our accomplishments, but none would be possible without the support of our members.



Gail Cameron, HLCT President

You should soon receive our annual membership appeal and I ask that you contribute in whatever way you can. Financial donations make it possible for the land trust to acquire open space and offer programs. You can also help by volunteering on property workdays, hosting a display at an event, speaking up for open space preservation at town meetings, or you might consider a donation or easement of a parcel of land. In these difficult times we all struggle with balancing the needs of people, wildlife and the environment within limited budgets. Your support of the land trust is vital to keeping our organization strong and moving forward in the next 50 years. Thank you for believing in our mission and I hope to see you at our upcoming events!



Participants in our hike at West Ridge State Park in October enjoyed plenty of fall color, learning how to identify different oak trees and a host of other fun nature facts.

A Plan for the Mill River

- By Willow Ann Sirch



Stakeholders gather to provide input for the Mill River Watershed-Based Plan.

The Mill River flows from Cheshire, through Hamden and on to Long Island Sound. Like many suburban and urban rivers in Connecticut, the Mill River has been harmed by development and land use activities over time. As a result, multiple sections of the river and its tributaries have high bacteria levels and cannot support safe recreation for people or habitat for aquatic life.

Stormwater pollution, in particular, harms water quality in the Mill River and elsewhere. So what's stormwater? Impervious surfaces like sidewalks and roadways prevent rain water from soaking into the ground. Instead, rain flows over paved areas picking up grease, oil, heavy metals and other contaminants before flowing into waterways. This contaminated rain water is known as stormwater runoff. Green infrastructure is a way to combat pollution caused by stormwater. Green infrastructure in the form of rain gardens, bioswales and other practices uses plants and engineered soil to mimic natural processes, filtering and absorbing stormwater where it falls. This reduces pollution entering waterways, and improves water quality and habitat for birds, insect pollinators, other wildlife and people too.

The first step in combatting stormwater is to develop a watershed plan in order to understand where the pollution is at its worst and where it is coming from. This past year, Save the Sound worked with stakeholders in Hamden, Cheshire and New Haven to develop a watershed plan for the Mill River—and your land trust participated. HLCT Board Member Nancy Rosenbaum is a retired Yale University lecturer in the School of Ecology and Evolutionary Biology, and attended planning and stakeholder meetings to help with the plan on behalf of the HLCT.

The Mill River Watershed Plan offers a concise picture of the Mill River and provides a path toward improving access and water quality. "As an important source of drinking water for the region, protection of the Mill River watershed is a priority," said Ron Walters, Senior Environmental Analyst at the South Central Connecticut Regional Water Authority. "In addition to developing the plan, this process has brought a focus to the Mill River watershed and connected stakeholders, which will benefit the watershed and the communities it flows through. The RWA is grateful to have been a part of this process and looks forward to the next step of implementation."

Projects identified in the plan include rain gardens, bioswales, and other green infrastructure practices to capture and reduce stormwater runoff to the river. Other goals outlined in the plan include connecting more people with the river, restoring safe access between residents and the river, educating residents on the connection between land use and a healthy river, and promoting sustainable land management practices throughout the watershed. One suggestion that came out of the public meetings was the idea of using the HLCT's new Rocky Top property in the plan to show an example of a successful, community led, conservation initiative. It is included as a call out box in the final plan. Down the road, your land trust hopes to partner with Save the Sound and other groups working to improve water quality in the Mill River. In the meantime, you can access the plan at: http://www.ctenvironment.org/whatwe-do/saving-sound-rivers/restorationproject-gallery/mill-river-watershedmanagement-plan/.



The Mill River in Hamden, Connecticut

American Chestnuts

- By Craig Repasz

On September 28 of this year, representatives of the Hamden Land Conservation Trust, Connecticut Forest and Park Association, Rocky Top Neighbors, Hamden Mayor Curt Leng and a host of additional citizens gathered for the dedication of the Rocky Top section of the Quinnipiac Trail to Hamden's own Rev. Edgar Heermance—founder of the Connecticut Blue Trail system. Prior to the dedication, five American Chestnut trees had been planted along the trail. A sign near the trees says it all:

The American chestnut trees planted here honor Tim and Roberta Mack for their determination and vision to organize a grassroots community called Rocky Top Neighbors, which saved Rocky Top Ridge for the people of Hamden and generations following. May these trees grow strong for years to come and stand as sentinels over Hamden's woodlands. May they continue to represent the natural spaces that were almost lost; and may they flourish throughout these Rocky Top woods so future generations can appreciate their beauty and majesty.

American Chestnuts once grew on Rocky Top, and the tree was one of the most prominent trees in the eastern United States, numbering four billion a century ago. Many of those trees reached heights of 130 feet, the height of a ten-story building. One out of every four trees was a chestnut in its 200-million-acre range. In June and through the summer the tops of the trees looked like they were covered with snow as the white blooms proliferated and powdered the air with their pollen. The nuts once sustained flocks of passenger pigeons that blocked the sky during their migration.

At the turn of the century *Cryphonectria parasitica*, the causal agent of chestnut blight, appeared. From 1908 to 1913 this disease reduced the American chestnut in Connecticut from its position as the dominant tree species in the forest ecosystem to little more than an early-succession-stage shrub. This blight has been called the greatest ecological disaster to strike any of the

world's forests. The blight was brought in on Asian Chestnuts and first appeared in the New York Botanical Gardens.

Through the Appalachians and into New England the chestnut played a key role in the American life: Infants were rocked to sleep in cradles made from chestnut wood; people lived in houses built from chestnut post and beams; they ate chestnuts sitting at chestnut tables and sipped tea sweetened with chestnut honey; finally, people were laid to rest on hillsides shaded by the longtoothed leaves in coffins constructed from the rot resistant chestnut wood. As the trees died they were left standing as white ghost trees across the forested landscape. Most of us will never see a mature, native chestnut tree in the wild. Those who have seen these trees are now in their 80s and 90s.

One can see small native chestnuts saplings on a trip up the Blue Blazed Quinnipiac Trail to the top of Rocky Top. Such small growth springs from the old stumps and root stocks of the ancient trees that once towered over the forest. Unfortunately, these trees will hit a height of 25 feet and then succumb to the blight killing the young trees back to their old roots. The blight lives on in oak trees ready and waiting to attack the susceptible chestnuts. Few of these trees ever bloom and produce nuts.

The chestnuts planted on Rocky Top in honor of the Macks were donated by the Connecticut Chapter of the American Chestnut Federation. Chapter President Jack Swatt explains that the trees are a result of back breeding. For three decades, TACF has pursued backcross breeding to generate hybrids that combine the pathogen resistance of Chinese Chestnut (*Castanea mollissima*) and the timber-type growth form of American Chestnut (Castanea dentata). The backcross method to introduce blight resistance from Chinese chestnut into American chestnut was first proposed by one of TACF's founders, Dr. Charles Burnham, a renowned maize geneticist. Burnham's rationale for backcrossing was based on the hypothesis that a few genes from Chinese chestnut are responsible for its blight resistance. Thus,

it should be possible to dilute out most of the genes inherited from Chinese chestnut except for those involved in blight resistance and recover hybrids that are morphologically indistinguishable from American chestnut. Our trees on Rocky Top have a genealogy that first originated in the chestnut grove on the side of Sleeping Giant developed by biologist Dr. Sandra Anagnostakis of the Connecticut Agricultural Experiment Station.

There are many reasons to restore chestnut trees. They could again be a food source for wildlife, help the reclamation of depleted forest soils, and bring back a timber product that has been lost, but most importantly they would restore a forest legacy. Time will tell which of the five trees on Rocky Top have inherited the blight-resistant genes. Non-resistant trees will be removed and replaced with new saplings in the hope that they might be blight-resistant. In time, resistant trees should eventually cross-pollinate and produce a generation of resistant nuts. This seed crop could be used to propagate more trees or allowed to spread naturally through the area.



American Chestnut leaves in late spring



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Sustainable CT

Sustainable CT is a voluntary certification program to recognize thriving and resilient Connecticut municipalities. An independently funded, grassroots, municipal effort, Sustainable CT provides a wide-ranging menu of best practices. Communities choose Sustainable CT actions, implement them, and earn points toward certification. Learn more at https://sustainablect.org/

Hamden is officially a participating municipality. We are in the process of identifying specific Sustainable CT Actions; each Action successfully completed and documented according to the program guidelines will be awarded a number of pre-determined points. When we achieve at least 200 points in one program year, we will be certified! Of course, sustainability is a long-term process; in subsequent years, we will be required to take additional Actions to retain our certification.

We are on track to become certified in 2019 with the action-focused support of town departments, boards and commissions and non-profit groups like the Hamden Land Conservation Trust. The HLCT is well positioned to provide educational programs eligible for points toward certification. Please watch for more information on our educational events and their relationship to Hamden's sustainability certification.

Several boards and commissions are poised to take leadership on specific Actions aligned with their mission. Town Department heads are also engaged with Sustainable CT Actions, in some cases garnering points for Actions already underway or already accomplished. HLCT Board Member Kathleen Schomaker is the contact for Sustainable CT in Hamden. Kath serves as Hamden's Energy Efficiency Coordinator. For more information on Sustainable CT in Hamden, please contact kschomaker@ hamden.com or call 203-287-7036.



Did you know your holiday purchases can make a difference? AmazonSmile donates to the Hamden Land Conservation Trust when you do your shopping at smile.amazon.com and name the HLCT as your chosen charity.