

# News from the Connecticut Chapter of The American Chestnut Foundation

Spring 2008

## the New Leaf

Our mission is restoration of the American chestnut in the State of Connecticut



### Chestnuts in my orchard or Farming for Biodiversity

David Bingham, MD - Salem, CT

For years, I have been working to expand the biodiversity of my backyard to restore some of the balance of nature we humans have upset over the centuries. Some wags joke about "Bingham's Weed Patch" as they drive past unkempt fields in our neighborhood that teem with many different native grasses, meadow wildflowers and early succession shrubs, attracting all manner of bugs and birds. Recent sightings of harriers, short-eared and saw-whet owls suggest our local rodent population (mice and voles) is thriving as well.

*continued in following column ...*

*Below - Bluebirds nest near the protected Chestnut Orchard in Salem, CT  
(Photo courtesy of Hank Golet)*



*Right - Wildflowers in abandon protected by fence from browse - Salem, CT  
(Photo courtesy of Leila Pinchot)*



The opportunity to become involved in the restoration of the American chestnut has opened a whole new avenue of "farming for biodiversity." By pollinating a local native American chestnut tree and providing space for a chestnut orchard in my "back field," a quantum jump in the quest for "going native" has become possible. The orchard planting is bringing back a tree that once was a keystone of Connecticut's forest ecology. This is a chance to be part of a restoration effort that is national in scope and importance.

In addition, the requirement of keeping out the local deer herd with fencing has meant that the orchard can be used to restore many of the local ground-cover species that have been decimated by overbrowsing deer or over-zealous landscapers. No longer do I have to worry about planting a small shrub only to have it eaten up the next day. Moreover, it is a wonder to watch all sorts of native grasses and wildflowers appear in the orchard meadow as if by magic, out of nowhere, by allowing them to grow and flower all season.

While I do mow alongside each row of the orchard to allow easy access

*continued on following page ...*

### The American Chestnut and Restoration Ecology

*TACF's Chestnut Restoration program is perhaps the most exciting species restoration program of the 21st Century.*

*Quoted from "Toward development of silvical strategies for forest restoration of American chestnut (Castanea dentata) using blight-resistant hybrids" by Doug Jacobs, PhD, Purdue University*

"Through the efforts of a dedicated American chestnut breeding program generously supported by federal, state, private, and non-profit entities, perhaps the largest forest restoration effort of its kind is on the verge of initiation. Reintroduction of a hybrid tree that is nearly pure American chestnut to eastern forests of North America holds promise to restore the unique ecological niche that American chestnut once contributed.

... reintroduction of American chestnut to forests of eastern North America holds promise to serve as perhaps the greatest ecological and conservation success story of modern time."

for watering, cultivation and mulching, much of the orchard is otherwise available for native grassland and early succession management. Delaying mowing until late in the season after the first frost allows butterfly larvae to get under cover and fall wildflowers to go to seed, and leave a "hedge" for native shrubs just inside the fence line. Nature does the rest. Initially, invasive species such as multiflora rose and bittersweet vines were a problem, but these will tend to die back with the annual mowing (which makes it progressively harder for them to compete with other ground covers).

I also have to cut back hardwood saplings that would eventually shade out our chestnuts. Annual removal/mowing makes it harder and harder for hardwood seeds/nuts to become established in the diverse native "prairie" turf flora that begins to take over the meadow around our chestnut saplings. Highbush blueberry, winterberry, red cedar, and gray dogwood have come in as volunteers, on their own.

Tending the chestnut trees is itself a pleasure. But working there while

*Below - Sighting this saw-whet owl suggests our mice and vole population is thriving*  
(Photo courtesy of David Bingham)



*Above - a field sparrow nest was a surprise discovery in my orchard*  
(Photo courtesy of Leila Pinchot)

surrounded by wildflowers, bluebirds, and butterflies, or discovering a cottontail and a nesting song-sparrow with young, is something that most orchard managers will never experience if they keep their grasses cut neatly and tidily like a lawn. For those who just love nature, or for those who look at biodiversity as a necessity for restoring the health of our environment, managing a chestnut orchard as a nursery for a wide variety of native grassland meadow and shrubland species can be immensely gratifying.

## My Own Backyard

Michael McGee, Tolland, CT

I've always been one to root for the underdog, so when I learned about the blight that had virtually wiped out the American chestnut tree I thought that trying to help save this mighty tree was a worthwhile cause, and one that I should get involved in. Of course it wasn't always this way for the American chestnut tree - it was once the most prominent hardwood in the forest, valued for its lumber and nuts.

I imagine no one in the early 1900's would believe these giant trees could end up in the mess they are in now - barely hanging on in the forests where they once flourished. At one time they were plentiful in the area where I live, Tolland CT. I see the stump sprouts of these former giants poking out of the ground in virtually every forest or older grove of trees in the area. They struggle to get enough sun in the forest, and they quickly grow for a period of time before they die, usually on the edge of forests that are newly cleared for development.

I first learned about American chestnut through curiosity about the lumber from which my 1819 house was constructed. I was replacing some joists that had been damaged by various construction projects done over the years. I did not recognize the wood, which looked very similar to oak but was much lighter. I replaced the damaged joists with rough-cut hemlock from a local sawmill and saved the remnants of the existing wood for other projects, but I still did not know what kind of wood it was.

I was asking questions about the construction of a gristmill in Storrs, CT that serves as a local museum and the docent told me about the chestnut lumber that was used for virtually all wood framing in the area at that time. He assured me that my post and beam house would have been

*continued on following page ...*

*My Own Backyard ...  
... continued from page 2*

constructed from this very wood. He even described the way that the small sprouts from the roots of these former giant trees could be found all around the area. Sure enough when I did an internet search on the topic "American chestnut tree", I found the website for the American Chestnut Foundation and started reading about this former giant of the local forest.

Within a few weeks I was able to find what I suspected was a chestnut sprout in the woods where I often hike at Crandall Park in Tolland. I was soon able to identify the small growths and dieback that are remnants of these former large trees. Once I was able to identify the sprouts I realized that they were virtually everywhere in my area. I began looking for that rare tree that grew large enough to produce nuts. I spent a lot of time looking for one of these trees, and it turns out there was a pair of them virtually right in my back yard. There were two American chestnut trees on either side of what appears to be a hybrid tree (F1) that had been planted along the edge of the back parking lot of the Congregational church next door. These trees were heavily blighted but produced nuts. Last year they were pollinated as part of the American Chestnut Foundation program to restore the American chestnut tree with a blight resistant tree that can repopulate the forest.

Discovering the story of the American chestnut, and stumbling upon a few viable trees, has been a great experience. It has allowed me to meet people who are passionate about saving the American chestnut. It is also wonderful to think that I am a part of a great effort to restore a native species to the forests of our country. I hope to see some of these majestic trees growing and maturing in the forest one day surviving beyond the usual shortened lifespan that they currently experience.

## **NCLT Reports Swann Farm's First Year Orchard Results**

*James Gage - Ellington, CT*

In the spring of 2007, the Northern Connecticut Land Trust (NCLT) established a chestnut orchard at their Swann Farm property on Reeves Road in Ellington, CT. An enthusiastic group of 20 volunteers prepared the soil, erected a 1,100 foot deer fence, and planted 230 chestnuts on two beautiful Saturdays in April.

The one and a half acre orchard was planted with BC4 nuts harvested from a mother tree in Stafford, CT. The orchard had a successful first year. Germination and survival rates were nearly 90% and by early fall, the average seedling was almost two feet tall.

In the spring of 2008, we plan to plant a second line of nuts from another mother tree on space remaining at this site.

Many thanks to the volunteers who planted, watered weeded, and mowed the orchard, to the Bartlett Tree Experts who pollinated and harvested the nuts with their bucket truck, to the Norcross Wildlife Foundation who

*Below - the entry to Swann Farm Chestnut Orchard. Swann Farm comprises 40 acres of farmland donated by Joan Swann. 38 Acres remains in cultivation, 2 acres are devoted to the TACF Orchard (Photo courtesy of Gayle Kida)*



*Above - One season's growth of a back-cross American chestnut at NCLT Swann. (Photo courtesy of Gayle Kida)*

provided a grant toward the cost of the deer fence, and to Conrad-Fafard Inc. and W.H. Milikowski Inc. who contributed and delivered a generous supply of peat moss.

More information can be found at the Northern CT Land Trust web site

<http://www.northernctlandtrust.org>



## Woodbridge Orchard Update!

Philip Arnold MD - Woodbridge, CT

The Woodbridge orchard is now 4 years from conception, 3 years since ground preparation and the pollination of the local American chestnut (the Calistro tree in Woodbridge), 2 years since the first 168 nut planting, 1 year since the second planting (Manchester tree nuts). Our Calistro backcross trees are now just under 4 feet tall!

The Woodbridge elementary school sent both the 3rd and 4th grade classes to the orchard for a field trip last spring. Parents and kids all were enthused about the program. We expect them back again in May 2008.

The orchard was included in a educational program in August 2007. We were the 2nd stop after a visit to the Sleeping Giant orchard in Hamden, where a lecture was given by the CT Agricultural Experiment Station's Sandra Anagnostakis.

We expect to plant another 170 nuts this April, giving us three genetic lines in the orchard. Care of the trees has become more routine as we gain experience. Please feel free to visit if you are in the area.

*arnold\_philip\_dr@sbcglobal.net*  
203/387-2098

*Below - Chestnuts at the Woodbridge Land Trust Orchard site*  
(Photo courtesy of Matt Arnold)



## Chestnut's Rot Resistance

Jason Young - Guilford, CT

Despite the efforts of members of TACF and of other chestnut enthusiasts, knowledge of American Chestnut remains an esoteric subject. Today it may be equally likely that one would be introduced to chestnut by seeing it in a building as opposed to coming across a tree or the remains of a tree in the forest. Numerous volumes praise the qualities of the wood of chestnut, and it is no wonder countless structures have been built of chestnut. Connecticut is filled with these houses and barns, for the carpenter of yesteryear, there was no shortage of Chestnut.

Settlers could not have found a more suitable building wood than chestnut. The wood splits readily straight down the grain with wedge, maul or froe, and is easily worked with any tool whether it be an adze, chisel, hatchet or plane. While chestnut is not quite as strong as oak, it is considerably lighter and will outlast most oak when exposed to the elements. Chestnut's rot resistance, perhaps its finest quality, is well known.

While a dead chestnut tree may persist in the forest for over a century before it rots into the earth, chestnut framing of a well-kept house will persist for many centuries, perhaps millenea. As long as the lumber is kept free of moisture, no boring insect will want anything to do it. And even if chestnut

is exposed to moisture and becomes infested with powderpost beetles or death watch beetles, such as in the case of a sill of a house in contact with a dank stone foundation, the lumber will continue to perform for decades and outlast all other woods except perhaps white oak or

*Chestnut Hulk in Guilford, CT*  
(Photo Courtesy Jason Young)



black locust, and locust was generally unsuitable for large timbers due to its often twisted nature. Oak was certainly preferred as the sill of a house since strength is required to support the load of a building, but it is not uncommon to find chestnut in its place. Chestnut's great abundance in the forest warranted its use where ever needed. And so Chestnut lumber can be found in a wide variety of different forms, as framing, interior paneling, siding, and occasionally flooring.

Chestnut split-rail fences ran for miles. The trains ran on rails atop a base of chestnut ties and traversed rivers and valleys over trestles framed of chestnut. And when Connecticut was electrified, the extensive grid of wires was originally hung from chestnut poles. Today chestnut wood is coveted and generally treasured by its owners. It is salvaged, reclaimed, collected, and given new life. Veteran timbers are de-nailed, brushed to clean of debris and old-time grime, re-sawn, milled and/or planed to be resold at a premium for furniture, cabinetry, paneling, and flooring. If the American chetnut is restored, not only will the squirrel bark, the raccoon chatter, and the turkey gobble their praises, but also the carpenter will be heard exclaiming thanks and appreciation.

## Message From the Chapter President

Bill Adamsen, CT Chapter President

Our goal is to produce a blight resistant American Chestnut tree that will thrive in Connecticut. To that end, we are breeding and producing chestnuts by hand pollination of individual flowers on native American Chestnut mother trees that have not yet succumbed to the blight. The pollen used is from The American Chestnut Foundation's Meadowview, VA farm collected from blight resistant cross-bred trees.

### Breeding and Orchards

In 2007 we planted almost 800 backcross trees in four orchards. In addition, we planted two test orchards, one of which will receive backcross nuts this spring. That brings our orchard total to five. We were successful in pollinating five trees and expect to have material to plant each of the new orchards. In addition, we discovered and tested eight new native American chestnut lines that can be pollinated for planting in 2009, and expect to find more. We are moving rapidly towards our goal of species restoration!

### Needs for 2008

You've read elsewhere about our new orchards such as the one at Great Mountain Forest (article on page 7). We expect the Great Mountain Forest Orchard's deer exclusion fencing to cost \$6000. Purchasing and installing this fence early this year would be a significant milestone and prevent damage to the young trees planted and protected by tubes last spring. Please call me if this is an area you could consider helping with a donation targeted to building that fence.

CT-TACF is a tax exempt, 501(c)(3) public charity under 509(a)1, with contributions to the organization deductible under section 170.

Bill Adamsen - Wilton, CT  
bill.adamsen@gmail.com  
203/210-7190 (h)  
917/796-4284 (m)



Rod Longley accepts award with photograph of CT flowering American chestnut (by Gayle Kida) and Chestnut Frame (by Lawrence Liggett)

## Rod Longley Honored for Service to CT Chapter

By unanimous vote, the Board recognized Rodman Longley of Litchfield, Connecticut as a distinguished and Honorary Director of the Connecticut Chapter TACF. The honor is in recognition of Rod's many years of service, unwavering commitment and contributions to the Chapter.

Rod joined TACF in 1991, and was a founding member of the CT Chapter in 1992. Rod resigned as Director in 2006 after fifteen years as a member, with many of those recently as Director and Vice President.

## Bartlett Tree Experts Supports CT Chapter

Over the past several years we've been fortunate to find and pollinate a dozen American chestnut mother trees throughout Connecticut's range, from Canaan in the Northwest to Old Lyme in the Southeast. Preventing open pollination, pollination of, then collection of the nuts from a mother tree is a task of gargantuan proportions.

We would not have been able to successfully complete this work without the contribution of Bartlett Tree Experts. Bartlett has proven their extraordinary level of support time and time again - going far beyond any of our expectations. Without the generous volunteer support of organizations such as Bartlett Tree Experts, or the many individual member contributors, we would not be reporting the amazing level of success you read here today.

Bill Adamsen - Connecticut Chapter President

## Will Kies Joins CT-TACF Board of Directors

Will Kies of Greenwich has joined the Board of the Connecticut Chapter of The American Chestnut Foundation.

Will is the Director of Education at the Stamford Museum and Nature Center and believes strongly in the importance of teaching environmental stewardship and sustainability to both children and adults to help people appreciate the natural world around us.

We warmly welcome Will's participation on the Board.

Will Kies, directs the tree planting energy of about 40 children at the Stamford Nature Center "Take a Hike"



## Chestnut as Food - a Restoration Feast

Historically, American chestnut was an important food source for man and beast. In Appalachia, and New England, hog and cattle were driven into the forest to forage on late autumn's abundant bounty of wild chestnut.

Fodder for beasts no more, chestnut serves as a winter delicacy commonly roasted but with little cunning and daring, it can provide a stunning theme for an entire menu. This was recently proven by an elegant and innovative feast hosted by the Maryland and Virginia Chapters of TACF with the following menu.

### Menu

*Amuse: Crème Marron; Black Mission Fig, Mascarpone, and Chestnut Tart; Seared Chestnut Dusted Day Boat Scallop; Roasted Fennel, Chestnuts and Cippolini Onions With Edwards Farms Virginia Ham; Apple and Parsley Vinaigrette*  
Mario Raymond (The Washington Court Hotel)

*Chestnut, Lemon Verbena, and Spinach Stuffed Rainbow Trout; Sage Butter*  
Steven Ryder (Fairfax Army Navy Country Club)

*Confit Duck Hivernale; Duck Confit with Butternut Squash Mousseline; Chestnut Gremolata; Tangerine Gastrique*  
Joe Harran (Bistro Bis)

*Cocoa Braised Short Rib; Chestnut Mole and Manchego Potato Puree*  
Jose Molina Lopez (The Comus Inn)

*Chestnut Opera Cake; Financier and Chestnut Ice Cream*  
Beverly Bates (Bistro Bis)

I hope that small sampling from last year's menu tempts you to experiment with your newfound chestnut palette. I've successfully prepared the following recipe, and thought you might enjoy trying it.

### Braised Collard Greens with Chestnuts

(Serves 4 as a side dish)

- 4 strips bacon, chopped
- 1 small onion, diced
- 1 ham hock
- 2 pounds collard greens, washed twice and chopped
- 2 tablespoons maple syrup
- 2 tablespoons sherry or red-wine vinegar
- 1/2 cup white wine
- 1 1/2 cups chicken stock
- a pinch each: crushed red pepper, white pepper and Sazon seasoning
- 1 cup peeled, whole chestnuts

Preheat the oven to 350 degrees. Crisp bacon in a heavy pan and add onion. Cook until the onion is clear. Add all the other ingredients except the chestnuts, and cook covered in the oven for 1 hour and 15 minutes. After the first half-hour, add the chestnuts. The dish continues to cook. When the pan emerges from the oven, the greens have cooked down and the chestnuts have become soft and taken on the smoked flavor of the bacon and ham and the sweet taste of the maple syrup.

[bill.adamsen@gmail.com](mailto:bill.adamsen@gmail.com)



Volunteers plant test Orchard in Guilford. (Photo Courtesy Leila Pinchot)

## Guilford Conservation Commission Starts Chestnut Restoration!

Leila Pinchot - New Haven, CT

“Last year, the American Chestnut Foundation approached the town with a request: to use a section of a former community garden at Nut Plains Park to bring back healthy chestnut trees. Using genetics and plant pathology, a special breeding program would mate Chinese chestnuts that are disease-free and blight-resistant with native Connecticut saplings.

Last year, a group volunteered and planted a test orchard of 20 plants at the park. The initial planting turned out to be a success, according to Conservation Commission site coordinator Jennifer Allcock. “On that basis we are proceeding with the planting of 125 trees per year,” she said. At its Jan. 22 meeting, the Board of Selectmen approved Phase II of the orchard agreement with the foundation, in which the Conservation Commission will maintain the space.”

### CT-TACF 2008 Board of Directors

Bill Adamsen - President

Dr. Philip Arnold\* - Vice President

Jim Gage\* - Treasurer

Dr. David Bingham\*

Garrett Smith

Dr. Robert Gregg

Will Kies

Gayle Kida\*

Ellery Sinclair\*

John Anderson

Micheal McGee

\* denotes CT-TACF Orchard Managers



Vibrant display of roasting chestnuts from a street vendor's concession. A wintry temptation delivered on street corners from Rome to NY.

(Photo courtesy of e-Cool at [eternallycool.net](http://eternallycool.net))

# Great Mountain Forest Orchard & Education Opportunities

Ellery "Woods" Sinclair - Falls Village, CT

This first year of the Great Mountain Forest orchard on Under Mountain Road in Falls Village provides a new orchard for CT/TACF and on-the-ground education for me and local students. The most satisfying part of this experience is the inclusion of the Housatonic Valley Regional High School Vo Ag Science/Tech Department students as project partners. In late May under the tutelage of Leila Pinchot, student arrived for Leila's "Science Seminar in Restoration." Before the planting began, students were reminded that it will be their generation that sees the American chestnut reclaim the Connecticut landscape, reinforcing the importance of their involvement in this project. The students then laid out the planting, mixed soil and fertilizer, rolled tubes, and planted the nuts ... "in half the time anticipated," according to Leila. Subsequent Ag/Ed classes will follow through with chores when school is in season. Several individuals have offered summer help.

Arranged by Leila, the land -- donated by Great Mountain Forest for TACF use -- is an acre and a half lot on the slopes of Canaan Mountain. This perfect setting is conveniently a few hundred yards from Chubby Bunny Farm, a local CSA (Community Supported Agriculture) operation owned and farmed by Dan and Tracy Hayhurst. I asked Dan whether he would be my back-up when I was unable to tend the orchard; his reply: "Wow! American Chestnuts! That's great! I'll help any way I can." Dan has deep rototilled to prepare the land for planting and watered when I was unavailable, as well as providing me with the watering equipment for those dry summer weeks. In addition to my initial brush hogging of this old Christmas tree lot prior to planting, I have mowed twice--with the red tailed hawks swooping from high pine perches on the sides of

the field to snatch voles and rabbits.

With seventy-five percent germination, and an average height between 17 and 20 inches this third back-cross generation is doing fine, now wintering over in blue tubes poking through the meadow snow, the tall ones with bag-caps to discourage the deer. We are working toward financing for a fence to keep the deer out, probably to be in place this coming summer. Toward that end, the Berkshire - Litchfield Environmental Council Executive Committee has just authorized a small grant, with considerably more needed.

This is not the first chestnut orchard to be planted at Great Mountain Forest. In 1947 The US Department of Agriculture together with Dr. Arthur Graves, of the Brooklyn Botanic Garden and the Yale School of Forestry, established a chestnut hybrid orchard on the property. The orchard was monitored for several decades, but was eventually abandoned, as was the USDA Chestnut Hybrid Program, as it became clear that none of the trees could successfully fight off the blight.

The new Great Mountain Forest chestnut orchard will see a better fate,



*New GMFC American chestnut Orchard (Photo courtesy Leila Pinchot)*

as some of the trees confer partial resistance, and will be used for the next step in the breeding program.

I thank, in addition to teachers Mark Burdick and Dave Moran, the community members who have taken an interest, volunteered to work, weed and wonder that the American Chestnut is on its way back to our woodlands.

*Below - students from Housatonic Valley Regional High School helped with the planting. (Photo courtesy Leila Pinchot)*





The American Chestnut Foundation  
 Connecticut Chapter  
 Yale University  
 370 Greeley Avenue  
 New Haven, CT 06511  
 Leila Pinchot  
 Regional Science Coordinator  
 203/598-5808  
 leila@actf.org

## Calendar of Events!

- |                |  |                |  |
|----------------|--|----------------|--|
| Mar 29th ..... | Presentation - Guilford from 10am-11am. Contact Bill Adamsen 203/210-7190  | Apr 25th ..... | National Arbor Day (Activities in the planning Stage)                      |
| Mar 29th ..... | CT-TACF Board of Director's Meeting - Guilford from 11am-2pm. Contact Bill Adamsen 203/210-7190                                  | Apr 26th ..... | Guilford Fence Construction Contact Jennifer Allcock 203/453-5041          |
| Apr 4th .....  | (4th-6th) TACF Board, Cabinet, and Chapters meetings in Pittsburgh, Pennsylvania   | May 3rd .....  | Norwalk Tree Alliance Tree Festival. Contact Pat van de Kamp 203/857-4887  |
| Apr 15th ..... | Take a Hike: Stamford Museum and Nature Center. Contact SMNC 203/322-1646  | May 3rd .....  | Guilford Fence Construction Contact Jennifer Allcock 203/453-5041          |
| Apr TBD .....  | Orchard Plantings Woodbridge Land Trust Northern CT Land Trust Salem Land Trust Great Mountain Forest Guilford Conservation Com. | May TBD .....  | Pollination training. Contact Leila Pinchot 203/598-5808                   |
| Apr 19th ..... | Guilford Fence Construction Contact Jennifer Allcock 203/453-5041  | May 24th ..... | Chestnut Presentation At White Memorial. Contact Bill Adamsen 203/210-7190 |
| Apr 22nd ..... | Earth Day (Activities in the planning Stage)   | Jun TBD .....  | Mother Tree Bagging. Contact Leila Pinchot 203/598-5808                    |
|                |  | Jun TBD .....  | Mother Tree Pollination. Contact Leila Pinchot 203/598-5808                |
|                |  | Jul TBD .....  | Orchard Work Parties. Contact Leila Pinchot 203/598-5808                   |

Updates on Chapter Web-Site!

Volunteers at a Salem Planting Work Party - April 2007. Everyone can help. (Photo Courtesy Bill Adamsen)

