

# Vermont-New Hampshire Chestnut Notes

Volume 5, Issue I

Spring 2013

## INSIDE THIS ISSUE:

President's	2
Corner	
Member Profile	4
Pollination	4
Donations	
Deconstruction	5
of an American	
Chestnut	
Cooking with Chestnuts	6
Annual Meeting	7
Sara Fitzsimmons: Chestnuts in China	7
Calendar of Events	8

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# CHESTNUT RESTORATION AND EDUCATION AT OTTER BROOK FARM Bryn Dumas, Otter Brook Farm Manager

I grew up about five miles up the road from Otter Brook Farm, where I now work. As a kid I remember walking along the woods-lined dirt road next to my house and spying young sapling sized trees with distinctive long leaves that looked nothing like any of the larger trees around. I had to take some leaves home and look them up in a book to discover I was finding American chestnut saplings. These saplings were all that remained of what had once been one of the most common hardwood trees in the northeast. I had no clue that years later I would have the opportunity to help work towards the restoration of the American chestnut.



Eighth graders from the Conval School District help plant chestnut seedlings at Otter Brook Farm in June 2012.

Photo courtesy of Annie Card.

Otter Brook Farm is located in Peterborough, NH. We have about 1500 acres protected by conservation easement that is a mixture of pasture land, forest and wetlands. Otter Brook Farm hopes to promote responsible and environmentally sensitive wildlife preservation, agriculture and silviculture within the community via practices, education and research and to share its resources and knowledge. To that end, when we became aware of The American Chestnut Foundation's NH/VT Chapter in 2008 it seemed to us that there would be some opportunity for us to be helpful to the Foundation and to further our mission.

In late 2008 I meet with Kendra Gurney (TACF Regional Science Coordinator) and we conducted a site visit to the proposed orchard location. The location itself was an old clear cut surrounded by early successional habitat. I had been thinking of managing it to promote the growth of wild blueberries

 $(Otter\ Brook\ Farm,\ Continued\ on\ page\ 3)$ 

## JOIN US FOR OUR FIFTH ANNUAL MEETING!

The VT/NH Chapter will hold their fifth Annual Meeting on **Saturday, April 13, 2013** at the Billings Museum in Woodstock, VT. The meeting will include a keynote presentation describing TACF research expeditions to China, updates on the work of your local VT/NH Chapter and an afternoon field visit to a large wild American chestnut. Please see page 7 for more information. **Hope to see you there!** 

# "Giving time to our state chapter of TACF has been the most enjoyable thing I've done with the past five years of my life."

## PRESIDENT'S CORNER

## Grace Knight, VT/NH TACF President

I write in March from my sugarhouse, sap boiling a few feet from my laptop. Tapping sugar maples keeps me involved with the woods when chestnuts are dormant. It was the lure of the woods that led me to join The American Chestnut Foundation twelve years ago. I'd spent a lifetime going into the woods to hike, to check on a vernal pool, to look for trillium or wild columbine. TACF sent me into the woods to seek surviving, flowering American chestnut—and astonishingly, I found them. I would follow a tip from a town tree warden, county forester, hunter or arborist. After a while, I could drive down a road and those distinctive trees would almost wave at me they became so obvious. And then, TACF got me out of the woods and into my side yard, where I planted 400 backcross chestnuts for a breeding orchard. And TACF helped me meet, from across the country, some of the finest people I've ever known -- people who love the woods and tell the funniest stories.

When I joined TACF in 2001, Vermont and New Hampshire did not have a state chapter, or a breeding program, or a newsletter

such as you hold in your hands. Now we do. VT/ NH also has a vote on the national TACF board. In 2007, when the chapter charter was approved at the TACF Annual Meeting in Burlington, VT, we had one breeding orchard in our two states. Now we have five. Three more will be planted this spring. We have established the northernmost progeny test planting of B3F3 Restoration chestnut seed from the Meadowview Research Farm. We have captured genes from more than a dozen wild chestnuts in our breeding program. We have garnered the support of generous individuals and corporations, from private landowners who plant breeding orchards (a huge investment of time and resources), to utilities who donate thousands of dollars worth of employee time and equipment to pollinate and harvest wild trees. After five years as chapter President, I am stepping aside this spring. It is time for fresh ideas and fresh hands.

When Todd Ross assumes the presidency in April, he will need enthusiastic support from the board and membership. Consider whether one of these un-



Retiring chapter president Grace Knight at the Meadowview Research Farm in Virginia.

Photo courtesy of Joe Nicholson.

filled roles might suit you: events chair, to organize chapter meetings, hand weeding to do summer maintenance work. And we always need fresh reports of flowering chestnut near you.

My work with TACF has been the most enjoyable thing I've done with the past five years of my life. I am thankful to the membership and board for this opportunity to further the restoration of the American chestnut. Now it's time for me to close the laptop and get back to the sap.

Volume 5, Issue I Page 3

## OTTER BROOK FARM (Continued)

(Continued from page 1)

that already existed there. As Kendra and I "walked and talked" I realized that not only would we be able plant chestnuts but I would be able to keep the blueberries as well! This seems to be a unique orchard location as most of the other chestnut orchards I have visited, or have been told about, are planted in a field setting.

An initial test planting of 21 chestnut seedlings was put in during May 2009 by myself, Kendra Gurney, Dr. Rick Van de Poll and Meade Cadot of the Harris Center for Conservation. By fall of 2009 Kendra had good results from both our soil tests and our test planting, so we set a May 2010 planting date for 136 chestnut seeds. In May 2010 we planted our chestnuts seeds in carefully prepared holes, pressed rodent cages down into the soil, watered....and waited. After about a week I began to see little red shoots as the chestnut seeds sprouted! Unfortunately about a week after they began to sprout I went down to the orchard to weed and water and was horrified to discover that despite our best efforts some type of rodent was able to borrow below our rodent cages and make off with the chestnut seeds. In two nights we lost 119 seeds. Although disappointed I was hopeful our project would be able to continue, and thankfully it did! In May of 2011 we were able to replant

with 116 seedlings. These were not bothered by rodents and are continuing to grow very well.

Our most exciting plantings

were this past year. Through-

out the school year Otter Brook Farm, in conjunction with the Harris Center for Conservation Education, works with eighth grade science classes from the Conval School District's Great Brook School (Antrim, NH) and South Meadow School (Peterborough, NH). The students come to Otter Brook Farm to learn about aquatic invertebrates, abiotic stream attributes, forest communities, winter animal signs, maple sugaring and many other topics. One of our newest education components with the eighth graders has been to use the Chestnut Orchard to introduce them to world of genetics. In June 2012, with the help of 8th grade student volunteers, Laurel Swope of the Harris Center and Kendra Gurney oversaw the planting of an additional 85 chestnut seedlings in our orchard as part of our annual "Otter Brook Appreciation Day." The weather was perfect, and the kids were great, in fact they planted the seedlings in record time! Over the remainder of the 2012 summer I spent time expanding our orchard and orchard fencing to accommodate an additional chestnut sapling planting. In September, Kendra Gurney, Laurel Swope, Dr. Rick Van de Poll and volunteers from The



TACF Intern Daniel Hale teaches eight graders the proper way to plant a chestnut seedling in the Otter Brook Orchard.

Photo courtesy of Annie Card.

Monadnock Conservancy, the Peterborough Conservation Commission and Otter Brook staff planted 134 seedlings in the orchard expansion. In the coming year we hope to fill in the remaining handful of empty planting space in the orchard.

As I now look out the window and watch the snow banks slowly recede, my thoughts are drawn to the Chestnut Orchard and the work that needs to be done there this coming season. I am looking forward to visiting those young trees as the warm weather causes buds to swell and leaves to unfurl. I will enjoy thinking that the work that I am doing will someday result in a country dirt road lined with the straight majestic trunks of the American chestnut tree. And maybe, just maybe, there will be a young boy walking this road, field guide in hand, seeing these trees....

"One of our newest education components with the eighth graders has been to use the Chestnut Orchard to introduce them to world of genetics."

a VT/NH TACF Member

contact Grace Knight at

to be profiled in our

newsletter, please

802-738-9073 or

gsknight@tds.net

## MEMBER PROFILE: BRYN DUMAS

## Kendra Gurney, TACF Regional Science Coordinator

As orchard manager of Otter Brook Farm's Chestnut Breeding Orchard, Bryn Dumas plays an important role in the work of the VT/NH Chapter. Bryn came to chestnut orchard management through his role as Manager of Otter Brook Farm in Peterborough, NH (see front page), but growing up in Greenfield, NH, just down the road from Peterborough, he learned about American chestnut first-hand when he found saplings growing near his childhood home.

Bryn moved to Greenfield when he was six, had chickens, sheep and horses growing up and always preferred to play outdoors. After a short stint studying Business Administration in college, he "came to his senses" and transferred to the University of New Hampshire, graduating in 2005 with a degree in Earth Sciences. Upon graduation he was offered a full-time position at Otter Brook Farm, where he had been working part-time since age 15. In addition to his work on the farm, Bryn volunteers as a

member of the Peterborough Conservation Commission.

Bryn and his wife Carrie currently live in Peterborough with their two young boys Oliver and Elliot. In addition, the family includes two dogs (frequent "helpers" in the chestnut orchard) and they raise chickens (both meat and layers), meat goats and pigs and maintain a large vegetable garden. His family loves to make maple syrup in

their little sugar house, and when Bryn finds himself with some spare time he likes to get out hiking, fishing, hunting and kayaking.



Bryn Dumas with a chestnut in the Otter Brook Farm Orchard. Photo courtesy of Laurel Swope.

Pollinators of the Chester chestnut: Bill Conn, of VELCO and Justin Brown and Everet Thurston, from Cumming's Tree Service (who contracts with VELCO).

Kendra Gurney.



## MANY THANKS FOR POLLINATION DONATIONS!

The VT/NH Chapter received very generous donations in support of their 2011 pollination season. A special <u>thank you</u> goes out to <u>Public Service</u> of New Hampshire (PSNH), National Grid, Central Vermont Public Service (CVPS), Vermont Electric Power Company (VELCO) and Asplundh Tree Expert Company!

This was the first year The VT/NH Chapter was able to partner with VEL-CO and we're glad we did! VELCO maintains the large transmission lines across much of Vermont and works with tree climbers and arborists more than bucket trucks. The Chester, VT tree we pollinated this year was the perfect match - not accessible by bucket truck but large enough to support climbers, which VELCO generously provided (three, in fact!). Read more about this effort at: www.acf.org/newsletter8.22.12Chestertree.php

Anyone interested in donating their services to the VT/NH Chapter should contact Kendra Gurney: <a href="mailto:kendra@acf.org">kendra@acf.org</a>, (802) 951-6771 x1350 (office) or (802) 999-8706 (cell).

Volume 5, Issue I Page 5

## DECONSTRUCTION OF AN AMERICAN CHESTNUT - PART I

### Yurij Bihun, VT/NH TACF Secretary

On the way back home from the Spring 2009 VT-NH TACF Annual Meeting in Perkinsville, Vermont, it didn't take much for Kendra Gurney, New England Regional Science Coordinator, to talk a bunch of us into a brief detour off Interstate 89 to visit one of a handful of sites in northern New England harboring the finest remaining exemplars of American chestnut. What we found was a trio of large American chestnuts scattered, like sentinels, within a few hundred feet of each other on a rural road in Berlin, Vermont. Like most visitors to the trees, it was hard not to be impressed by such big -- the largest chestnut was almost 30" in diameter -- healthy-looking, chestnut trees spreading their full crowns above the adjacent northern hardwood stand.

The tree closest to the roadside, however, had a blight canker forming, hidden from view by thick, mature bark. By summer of 2011, the tree had been girdled and was dead. At the time, I could not anticipate that nearly three years later, I would be heading-up an initiative to salvage and deconstruct the remains of the tree. Last fall, the Chapter embarked on an ambitious project to utilize the wood from what has become known as the "Berlin Chestnut."

In October 2012, after months of negotiations with the land-

owner and neighbors, everything was put in place for the salvage operation. Thanks to VELCO forester Steve Shaw, the labor to harvest the Berlin chestnut was generously donated by VELCO and Green Mountain Power, who contracted with Farr's Tree Service of Waterbury to expertly remove the chestnut with their crane. Bruce Beeken, of Beeken Parsons furniture group in Shelburne was contracted to provide consulting on sawing and storage of the Berlin chestnut. Some of the small diameter material was donated to the adjoining landowners and the salvaged logs were trucked to the Farr's log yard for storage and sawing. The logs were subsequently bucked into 8-10' lengths and rough sawn into random width boards (5/4"-12/4") with a portable Wood Mizer mill by Ed Letourneau, a local sawyer from Marshfield.

We wanted to get the wood stored "before the snow flies" and, as if on cue, Jeremy Gardner of Bartlett Tree Experts in Manchester, VT gave the goahead on a snowy December day for arborist Joshua Jarvis in Bartlett's White River Junction office to truck the material from Waterbury to Grace and Randy Knight's High Shelter Farm in Weathersfield. Eight volunteers, including Randy Knight, spent a couple hours stacking and stickering the

chestnut lumber, which is now being stored in loft of the barn where it will be left to air-dry for 18-24 months.

The salvage harvest yielded approximately 450 board feet and about a quarter cord of four-foot boltwood as well as firewood and miscellaneous slabs. At some point, the lumber will be inventoried or evaluated for grade in square foot equivalents. In general, the wood quality was excellent, exhibiting fine color and texture with some character wood and interesting curvilinear shapes as well as more conventional straight boards. The remaining slabs, which could yield a few cutting boards or other material, are stored in TACF-member John Connell's Underhill barn. Two large rounds (>40") from the butt log and additional boltwood were hauled to wood turner Al Stirt in Enosburg Falls,

"...the wood quality was excellent, exhibiting fine color and texture with some character wood and... more conventional straight boards."

(Deconstruction, Continued on page 6)



Farr's Tree Service removes a large section of the Berlin chestnut using a crane.

Photo courtesy of Bruce Beeken.

The author with a stack of

lumber at Farr's log yard in

recently sawed chestnut

Waterbury, VT.
Photo courtesy of Bruce Beeken.

## DECONSTRUCTION (continued)



(Continued from page 5)

Vermont. The remainder of the boltwood is stored outside under cover at the UVM Jericho Experimental Forest. We are currently in discussion with several artisans about possibly producing fine woodworking items, bowls or vessels for display and fundraising purposes.

Where do we go from here? The next phase and direction of the project is still under consideration. The project was 18-months in the making and took considerable determination, organization, coordination of volunteers and investment of funds from the Chapter to complete. I would like to thank all involved for their contribution of time and energy in this project. I encourage TACF members to contribute ideas for a vision on how to best utilize and display this unique and precious material.

\* \* \*

Yurij Bihun, Director, Shelterwood Systems, is a Vermont-based forest resources consultant and Secretary of the VT-NH TACF.

Chestnuts waiting to be peeled for salad. To find chestnuts for cooking, check out: Route 9 Cooperative: <a href="https://www.route9cooperative.com">www.route9cooperative.com</a>
<a href="https://www.route9cooperative.com">Photo courtesy of Grace Knight.</a>

## ARTICHOKE AND CHESTNUT SALAD

Grace Knight, VT/NH TACF President

This is one of those recipes that you will be asked for every time you serve it. Fresh chestnuts can often be found in the supermarket in the fall or ordered from suppliers on-line. The TACF webpage offers links to several suppliers: <a href="http://www.acf.org/resources.php#products">http://www.acf.org/resources.php#products</a> Serves 4 for lunch or 6 as a first course. **Enjoy!** 

#### **Ingredients:**

2 dozen whole, unpeeled chestnuts

I cup olive oil

2 large leeks, thinly sliced

1/4 cup minced garlic (about 8 cloves)

I 1/2 cup artichoke hearts, rinsed and drained

1/4 cup fresh lemon juice

1/4 cup dry white wine

I teaspoon sugar

I teaspoon basil

Salt and pepper to taste

I head romaine lettuce, washed and drained ½ cup coarsely grated Romano cheese

½ cup pine nuts

#### Recipe:

Boil the chestnuts in a large pot of salted water until tender, about 3 minutes. Drain and let cool.

Peel off the shells and slice the chestnuts into thin slices. You can also use canned chestnuts, but be sure to rinse them well before you slice them. Set aside.

Heat the olive oil in a large skillet and add the leeks and garlic. Saute for 2 or 3 minutes, being careful not to brown.

Slice the artichoke hearts and add them and the chestnuts to the skillet. Saute for another 2 or 3 minutes, then add the lemon juice, wine, sugar, and basil. Simmer for 5 minutes, then remove from the heat. While cooling, season with salt and pepper.

Tear the lettuce into bite-size pieces and place in a large salad bowl. Toss in the cooled chestnut mixture, along with the grated cheese and the pine nuts.

Volume 5, Issue I Page 7

## JOIN US FOR OUR FIFTH ANNUAL MEETING!

The VT/NH Chapter's Fifth Annual Meeting will be held on **Saturday April 13, 2013** at the **Billings Farm and Museum in Woodstock, VT**(not to be confused with the Marsh-Billings-Rockefeller National Historic Park). See schedule on page 8. We hope you can join us!

#### Highlights:

This year's keynote speaker will be Sara Fitzsimmons, TACF's Regional Science Coordinator out of The Pennsylvania State University. She will be sharing highlights from two recent TACF research trips to China (more below).

The Billings Farm and Museum will be opened specially for our group and is a compelling venue in its own right. An afternoon tour is planned, along with a field trip to look at some large wild American chestnut trees recently located in the area. Please dress for the outdoors if you plan to join us.

Coffee, water and light snacks will be provided. A box lunch may be <u>preordered</u> for \$14 (for details contact Grace Knight – (802) 738-9073 or <u>gsknight@tds.net</u>) or attendees are welcome to bring a bag lunch.

We hope to see you there!

#### **Directions:**

Billings Farm & Museum Route 12 and River Road Woodstock, VT

www.billingsfarm.org

From I-89 in VT take Exit I Woodstock/ Quechee. Turn left onto Route 4 and follow for approximately I0 miles into Woodstock. Follow signs to Route I2 North. Turn right onto Route I2 and travel I/2 mile out of town. Bear right onto River Road for main entrance.

For alternate directions, please visit:

www.billingsfarm.org/visit



#### KEYNOTE PREVIEW: TACF'S EXPLORATIVE TRIPS TO CHINA

#### Sara Fitzsimmons, Regional Science Coordinator for The American Chestnut Foundation

Representatives from TACF and partnering institutions have now completed two exploratory and collection trips to China. In the first trip, the primary focus was forest ecology, trying to learn what role native Chinese chestnuts species play in their native forests. For the second trip, one of the same locations was visited, and samples from each of the three Chinese chestnut species were taken for subsequent DNA and RNA isolation. You can read more about both trips on Sara's blog at: http://

www.personal.psu.edu/sff3/blogs/chestnuts\_in\_china/

#### About Sara:

Sara Fitzsimmons started working with the American chestnut as a Duke Stanback Intern with PATACF in the summer of 2000. Then hired full-time at Penn State University in 2003, Sara has worked as a contact for chestnut growers and researchers throughout the mid-Atlantic. Born and raised in

southern West Virginia. Sara obtained her Bachelor's degree in Biology from Drew University in Madison, NI. She then received a Master's degree in forest ecology and resource management from Duke University's Nicholas School of the Environment. After a short stint as an editorial assistant of All About Beer Magazine, Sara returned to the forestry field, where she has been ever since.



Sara stands next to a large, almost 30" diameter chestnut stump in China. Species could not be confirmed, but it is certainly chestnut. Photo courtesy of Sara Fitzsimmons.

If you'd like to learn more about volunteer opportunities or report an American chestnut tree that may be useful for our breeding program, please contact Kendra at 802-951-6771 x1350 (office), 802-999-8706 (cell) or <a href="mailto:kendra@acf.org">kendra@acf.org</a> OR

VT/NH Chapter President Grace Knight at 802-738-9073 or <a href="mailto:ssknight@tds.net">ssknight@tds.net</a>



Care of: Kendra Gurney TACF Regional Science Coordinator 705 Spear Street South Burlington, VT 05403

> Check out this newsletter on-line! http://www.acf.org/ ChapterNews\_vt.php

## CALENDAR OF EVENTS

#### Saturday, April 13, 2013 FIFTH ANNUAL MEETING

9:30 am - 4:00 pm Billings Farm & Museum Route 12 and River Rd Woodstock, VT

#### **Schedule of Events**

9:30 am - 10:00 am: Registration and coffee

10:00 am - 12:00 pm: Annual Meeting, including keynote address by TACF's Sara Fitzsimmons

12:00 pm – 1:00 pm: Lunch and Raffle (lunch order available - see page 7)

1:00 pm – 3:00 pm: Tour of the Billings Farm and a field trip to view large wild American chestnuts in the area. Come dressed for the field.

3:00 pm – 4:30 pm: Board meeting to discuss spring field plans and chapter business (members welcome)

#### We hope to see you there!

#### **UPCOMING EDUCATIONAL DISPLAYS**

#### Saturday April 6, 2013 Saving Special Places 2013

John Stark Regional High School, Weare, NH Please contact Spencer Brookes for more details: <a href="mailto:sbrookes@tds.net">sbrookes@tds.net</a> or (603) 654-6771

#### OR

VT Woodlands Association Annual Meeting Judd Hall, VT Technical College, Randolph, VT Please contact Terry Gulick for more details: gulicktrees@yahoo.com or (802) 885-5405

#### Sunday May 5, 2013 Herricks Cove Wildlife Festival

Rockingham, VT

Please contact Terry Gulick for more details: <a href="mailto:gulicktrees@yahoo.com">gulicktrees@yahoo.com</a> or (802) 885-5405

#### June 7-9, 2013

## Strolling of the Heifers - Brattleboro, VT Please contact Terry Gulick for more details: gulicktrees@yahoo.com or (802) 885-5405