



THE TREE URCHIN

Newsletter of the Maine Chapter of The American Chestnut Foundation™
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Editor's Note

By Ann Rea

If you are receiving this issue of *The Tree Urchin* by e-mail, it is because we are trying to reduce printing and administrative costs so that as much of our budget as possible goes toward planting and maintaining tree orchards. If you prefer to receive your *Tree Urchin* by regular mail, please contact us at Mainetacf@gmail.com.

If you are receiving this issue by regular mail but have access to e-mail, please consider changing to that form of delivery. We will not share your e-mail address with any other individual or organization.

A Tree Grows in Hebron

By Ann Rea

When the Oxford County Soil and Water Conservation District began its annual "Big Tree" contest in 2012, it did not expect to become part of a national news story. When one contestant turned out to be the tallest known American chestnut in the tree's natural range, things got interesting.

Ann Siekman and Roger Crockett submitted a tree on their property in Hebron, and when Jean Federico visited it for the Soil and Water Conservation District, she identified it as an American chestnut. Merle Ring, forester with the Maine State Forest Service, and Alan Markert of The American Chestnut Foundation confirmed the identification. Ring measured its circumference as 78 inches and its height as 95 feet. American chestnut trees ordinarily grow 60 to 70 feet tall in forested areas. Markert examined the tree carefully and found no evidence of chestnut



Alan Markert stands beside the Hebron tree.

blight, the disease that has decimated the species in eastern North America.

This unusual find was reported in the [Lewiston Sun Journal](#) by staff writer Leslie H. Dixon. The story was picked up next by Associated Press reporter Clarke Canfield, and from there it has been repeated in *The Boston Globe*, *Connecticut Post*, *Miami Herald*, *Charlotte Observer*, and *Burlington Free Press*. The Hebron tree story has been tweeted; it has been blogged by environmentalists; it has been translated into Spanish for Miami's *El Nuevo Herald*. California tree lovers are now eager to help preserve this spectacular tree and its species because they have heard about the Hebron tree.

This tree does not qualify as Maine's largest. The Big Tree registry goes by diameter and canopy size as well as height, so a tree on private property in Maine remains the champion American chestnut.

If you know of an American chestnut in your neighborhood, contact us to see if it is on our list of known trees. Maybe the "Big Tree" contest will help us find other American chestnut trees!

Meet the Board of Directors

By Jeanne Siviski

David Allen was first struck by an inspiration to become a forester upon seeing the breath-taking beauty of Maine's mountains when serving here with the Air Force during the early 1970's. Louisville, Kentucky, where he was raised, does not have mountains. David already had a degree from the University of Louisville in Business with a major in accounting, but he went back to school and earned a degree in Forestry at Duke University. While there, he never forgot an entire lecture devoted to the devastating loss of a vital natural resource, the American Chestnut tree. Allen advanced through the National Forest Service positions, initially as a junior Forester in the Sequoia National Forest, then later a Recreational Program Manager in the Monongahela and Santa Fe National Forests. As a new member of our board, David is zealous about the potential to reestablish the American Chestnut.



Al Faust

The son of a USDA Soil Conservation Service employee, our other new board member, Al Faust, grew up in a family immersed in outdoor life and principles of conservation. Due to allergies, Faust says he opted for a desk job in accounting. He received a bachelor's degree as a Certified Public Accountant from Northeastern University. Al is a

founding partner of Edwards, Faust and Smith, where he is a Senior Tax Partner. His professional specialties include non-profit financial planning.

Faust continued an avocational enthusiasm for conservation by serving as president of the Penobscot County Conservation Association (PCCA). He was instrumental in the planting a seed orchard on PCCA land in Stetson last spring. Involvement with conservation continues to be passed down in the Faust family. Faust reports that his eleven year old granddaughter is an active participant in activities with the American Chestnut Foundation, and is always eager for news about upcoming events.

Future issues of The Tree Urchin will feature other members the Maine TACF Board of Directors.

Maine Chapter Directors

Glen Rea, President

Eric Evans, Vice President

Charlie Hudson, Secretary

Joseph Conwill, Treasurer

David Allen

Al Faust

Aaron Grim

Peter Kliem

Jay Lindsay

Alan Markert

Harold Mosher

Ray "Bucky" Owen

Ann Rea

Nick Rockwell

Larry Totten

Roger Willby

President's Report

By Glen Rea

What an exciting time to be a part of the chestnut movement in Maine. Last year we started our first B3-F2 orchards on The Nature Conservancy land, at Huff Hill on land owned by the University of Maine, and at Stetson on land owned by the Penobscot County Conservation Association. This spring we will expand these orchards plus start new orchards on lands in Winthrop and Searsport which are owned by SWOAM. At the same time we are managing 13 breeding orchards which are supplying the seeds for these seed orchards. All of this activity takes a considerable amount of money and we have been fortunate to receive generous funds from the estate of Dr. Garold Thumm, who passed away in 2013, plus generous funding from a former member of the Maine Board, and also from the Spellissey Foundation.



Two restoration icons

This American bald eagle carved from recycled American chestnut wood was given to Glen Rea to thank him for his work as Chairman of the Board of The American Chestnut Foundation. The eagle was made by Gary Carver of the Maryland TACF chapter.



This Restoration® 1.0 chestnut tree is one of two trees donated to the Maine Chapter by Dr. Garold Thumm and was planted at the Maine Forest and Logging Museum in Bradley. In this June, 2012, photo, the tree was four years old.

The great fund raising techniques of Bucky Owen and Ann Rea have increased the money in our accounts, but as you might imagine, all this activity takes a considerable amount of money. Our membership has increased to the highest level ever and we hope many of these members will assist us on a volunteer basis as we manage our orchards and expand our program. In 2013 you will see an increased presence in southern and SW Maine as we have more ceremonial plantings and look for more giant trees in the Oxford/York County area. A highlight of last year was the discovery of the tallest chestnut tree that we are aware of, near Hebron, Maine. The Oxford County Soil and Water District and state forester Merle Ring will be looking diligently for more large chestnut trees in that area.

We hope you will take time to volunteer, if you are able, and keep in touch with us through our revived web site, or by mail or phone. As I mentioned earlier, this is an exciting time in the Maine chapter and I hope you can be a part of this exciting time as we look to restore the mighty chestnut to the forests of Maine.

Breeding Program Update

By Eric Evans

Back-cross Breeding Orchards We planted the first of our 3rd-back-cross (BC-3) breeding orchards in 1999, and expect to plant our last one this spring. In fall of 2011 we harvested BC-3 seeds from trees in Orono, Bowdoinham, Augusta, and Wypitlock. Last spring we planted seeds in breeding orchards in Unity and South Hope.



B3F2 seedlings grow in Stetson.

We planted the rest in a nursery, and this spring we will plant these seedlings in a new orchard on Mary Bok's farm in Hope, to raise our total to twelve BC-3 orchards.

Breeding Program Overview We often talk about the chestnut breeding program being a "numbers game". We need certain minimum numbers of trees in our breeding orchards to make sure that we can find lots of individuals with good blight resistance. And we need to include large numbers of wild chestnut trees in our breeding program to ensure the high level of genetic diversity that will give our Restoration® chestnuts the best chance of adapting to many environments and challenges in Maine forests in the coming decades and centuries. In the next few years the Maine Chapter of TACF will be filling out our seed orchards with nearly 60,000 chestnut seeds.

Seed Orchard Status Last spring we planted nearly 6000 BC3-F2 chestnut seeds in our first seed orchard plantings in Phippsburg, Hartland, and Stetson. And in the next 10 years, our seed orchard plantings will swell to 10 times that much, for a total of nearly 60,000 trees. The seed orchards are planted in "units". Each unit contains 20 plots, each with 150 seeds from each of 20 different breeding lines from our existing twelve 3rd-back-cross (BC-3) orchards. So each unit has $150 \times 20 = 3000$ seeds, gradually filled in over the coming 8-10 years as our BC-3 orchards mature and produce seeds. However, one such unit is not enough - to ensure success and keep a high level of genetic diversity in our final products, we plant nine replications of each seed orchard unit. And we need to double that number of units, because we have two parallel breeding programs, each from a separate source of Chinese chestnut blight-resistance. So the whole plan is to have 18 seed orchard units, each with 3000 seeds for an eventual total of $18 \times 3000 = 54,000$ chestnut trees. The seeds are planted just 12" apart in rows 7 ft apart, so a whole unit with 3000 seeds occupies about $\frac{3}{4}$ acre. We will never have 54,000 trees to care for all at once, because we will be planting them over a 10-year span, and when each plot of 150 trees is 4-5 years old we will rogue out all but the best single tree. The time-line chart on the next page describes the progress of our breeding program in the coming years. Last fall we harvested enough seeds to expand these units with several additional plots, and start the remaining 8 units (of our total of 18) with these same breeding lines from our BC-3 orchards in Camden and China - a total of over 7500 seeds to plant this spring! These will include two more units on Penobscot County Conservation Association property in Stetson, and 6 new units on SWOAM (Small Woodlot Owner's Assoc.) property in Winthrop and Searsport. We have completed the evaluation and selection of the trees in our BC-3 orchard at Highmoor Farms in Monmouth, and this year we expect to start this process in two more BC-3 orchards. The BC3-F2 seeds from these orchards will be available for planting into all 18 seed orchard units starting in 2014.

Time-line for production of blight-resistant, American-type Restoration Chestnuts ® from Maine Chapter breeding program									
	1995	2000	2005	2010	2015	2020	2025	2030	2050
Make and plant 3 rd back-cross seeds by pollinating ME wild trees with pollen from selected VA BC2 trees		→							
Evaluate 3 rd back-cross trees for blight resistance and American type			→						
Rogue 3 rd back-cross orchards			→						
Collect B3-F2 seeds from B3 orchards				→					
Plant B3-F2 seeds in seed orchards				→					
Evaluate B3-F2 trees for blight resistance and American type					→				
Rogue B3-F2 orchards, leaving 20 trees per orchard unit					→				
Collect B3-F3 seeds from B3-F2 orchards						→			
Formal testing, systematic forest plantings of B3-F3 seeds						→			
Distribution and sale to members						→			
Sale to public						→ ?			

New Seed Orchard Sites The Small Woodland Owners Association of Maine has very generously made available some of their property for the Maine Chapter to use for our chestnut seed orchards to be planted this spring. There is one site in Searsport where we will plant two seed orchard units, and two sites in Winthrop where we will plant four units. All of these sites are currently fields with soils well-suited to chestnut culture. Last fall we applied 3-foot-wide strips of landscape fabric in rows 7 feet apart, and then we will plant the seeds through holes in the fabric this April. Thank you SWOAM and PCCA!

Volunteers Needed!

To help with planting seed orchards or inoculating trees at our breeding orchards, please contact Eric Evans at 236-9635 or belevans@roadrunner.com. We are going to have a busy spring and summer!



B3F2 seedlings sleep in the snow at Huff Hill in Hartland.

Membership Form

Maine Chapter of The American Chestnut Foundation™

WHERE DOES YOUR FINANCIAL SUPPORT GO?

Your membership in TACF supports all the Foundation's breeding, research, education, and publicity projects. For TACF membership support levels of \$40 or more, \$15 is forwarded to the Maine Chapter. Please consider making an additional contribution to the Maine Chapter to support our mission to produce blight-resistant Restoration chestnut trees most adaptable to Maine's forests by selecting a Maine Chapter Sponsorship Level in the right-hand column below. Thank you.

Membership in TACF includes a subscription to The Journal of The American Chestnut Foundation and enrollment in the Maine Chapter.

TACF and ME-TACF are 501©3 non-profit organizations. Except for the member services (valued at \$15) of your membership dues, your gifts are tax deductible.

Send these forms and your check(s) to: ME-TACF, 231 Buck Street, Bangor, ME 04401.

For additional information, you may contact us at Mainetacf@gmail.com or 207.945.6945.

Your name _____

Mailing Address: _____

City/State/ZIP _____

Telephone _____

E-Mail _____

<p>JOIN The American Chestnut Foundation TACF Membership Support Levels</p> <p><i>Enclosed is my membership support of:</i></p> <p>_____ Gold Leaf, \$1,000 _____ Silver Leaf, \$500 _____ Bronze Leaf, \$100 _____ Regular, \$40 _____ Student, \$15 _____ Other, \$ _____</p> <p>Make membership check to: TACF</p>
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<p>Maine Chapter Sponsorship Levels</p> <p>Enclosed is my contribution to the Maine Chapter of TACF:</p> <p>_____ Seed Orchard, \$5,000 _____ Breeding Orchard, \$2,000 _____ Woodlot \$1,000 _____ Mother Tree, \$500 _____ Sapling, \$250 _____ Seedling, \$100 _____ Seed (other) \$ _____</p> <p>Make Maine sponsorship check to: Maine Chapter -- TACF</p>
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Maine Chapter, The American Chestnut Foundation™

Volunteer Form

We need your help! As our program grows and our activities expand, we very much need the assistance of our members and friends. Whether or not you have a particular talent or skill, we would like to hear from you. We will provide training!

Name _____

Address _____
 Street City State Zip Code

Telephone number _____
 Home Work or Cell

E-mail address _____

I am available (check all that apply):

- Weekdays
- Weekday evenings
- Weekends
- On short notice (For some tasks, such as pollination and harvesting, we are at the mercy of Mother Nature and therefore cannot plan very far ahead.)

I would like to help at the following orchard(s):

- Basin Preserve seed orchard, Phippsburg
- Bok breeding orchard, Hope
- Highmoor breeding orchard, Monmouth
- Huff Hill seed orchard, Hartland
- Korth orchard, Lovell
- Mosher breeding orchard, Hope
- Merryspring breeding orchard, Camden
- Rowe breeding orchard, Hope
- Dutton breeding orchard, Morrill
- Reed breeding orchard, Unity
- PCCA seed orchard, Stetson
- Bradley breeding orchard
- Veazie breeding orchard
- SWOAM seed orchard, Searsport
- SWOAM orchard, Winthrop

I would like to help by:

- Working at events such as fairs and garden shows
- Giving formal presentations
- Fundraising
- providing secure storage for
 equipment/supplies near an orchard

I would especially like to do:

- collecting seeds (autumn)
- planting seeds/seedlings (spring)
- testing for blight in orchards (summer)

Please return this form to Glen Rea, 231 Buck Street, Bangor, ME 04401

Calendar of Events

March 22–23 TACF Meeting,
Abingdon, Virginia.

April 3 TACF Maine Chapter
Board Meeting, Viles
Arboretum, Augusta.

May 3 Planting of Restoration® 1.0
chestnut trees in Portland,
Maine. Please join us! Contact
Mainetacf@gmail.com or
207.945.6945 for details.

May 19–25 Arbor Week in Maine.

Coming Soon!

An all–new web site is being
designed for the Maine Chapter! If
we have your e–mail address, we
will notify you when it is available.

In April and May, the Maine Chapter
will plant seeds in Hartland,
Stetson, Winthrop, Searsport, Unity,
and South Hope. We need your
help! Call 207.236.9635 or contact
belevans@roadrunner.com or
Mainetacf@gmail.com to volunteer.

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Return Service Requested

