



September, 2014
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TREE URCHIN

Maine Chapter, The American Chestnut Foundation
<http://www.me-acf.org> MaineTACF@gmail.com

President's Message

By Al Faust

This has been a busy summer, with inoculation in three of our breeding orchards, planting and maintenance in all our seed orchards, testing a new approach to locating survivor chestnuts in Maine and ceremonial plantings of Restoration Chestnuts in seven locations. I am particularly excited to see the trees in our seed orchards growing so quickly. It will not be very many years until the fall rush to collect seeds will be a bigger project than the current spring rush to plant.

As our project comes to maturity, the volunteer time to keep it successful will increase exponentially. We hope you will join us, or if you are one of our many volunteers you will bring another volunteer on board. Volunteers have made the Maine TACF a proud part of the national program and the Board thanks all who have helped.

Special thanks go to University of Maine students Jack Clark, Danae Shurn, Austin Bragdon, Dimitrje Howe-Poteet, Hunter Manley, Theo Moore, Ben Greenwood, Tyler Wallsh, Max Miller, Jason Durant and David Sandilands. They have helped us with planting in seed orchards, inoculation of trees in our breeding orchards, an aerial survey to locate wild American chestnuts, and a field trial supervised by Brian Roth.



Danae Shurn, one of the University of Maine students who volunteered for TACF this year.

Bernd Heinrich to Speak

Bernd Heinrich, Professor Emeritus of the University of Vermont Biology Department, will be the guest speaker at our annual meeting, October 25 at the Newport Cultural Center.

Professor Heinrich's farm in western Maine has been a rich resource for environmental studies and was the location of two of his twenty books, *A Year in the Maine Woods* and *The Trees in My Forest*. His talk will focus on recent research about the role of blue jays in spreading American chestnut seeds.

Learn more about The American Chestnut Foundation at:
<http://www.acf.org> and
<http://www.me-acf.org>.

Meet Your Directors

Larry Totten



Serving as Vice President of the Maine Chapter is Larry Totten, a Maine native and resident of West Bath. Larry has a BS in Mechanical Engineering from the University of Maine and spent his first career in ship design and engineering management at Bath Iron Works.

After retiring, he became a registered Maine Guide and started the All-Outdoors Wilderness Expeditions. He takes groups on river trips in Maine, Texas, Utah, Canada, and Costa Rica. Larry is also a wonderful story-teller. Once he starts telling tales about his guiding experiences, you'll want to throw another log on the campfire so he will continue.

Within the Maine Chapter, Larry has a reputation for being able to repair almost anything. In addition to serving as Vice President, Larry manages the seed orchard at The Basin in Phippsburg. That orchard was begun in 2011 with generous support from The Nature Conservancy.

Other Board News

Because of his contributions to the Maine chapter, Bucky Owen has been nominated the Northeast Region's Volunteer of the Year. Bucky's fund-raising efforts have been invaluable to Maine's seed orchard work.

Nominating Committee Report

For one-year terms:

Albert C. Faust, President
 Larry Totten, Vice President
 Charles Hudson, Secretary
 Joseph D. Conwill, Treasurer

For three-year terms as board members:

Charles Hudson (renewal)
 Mark McCollough
 Andrew Reed
 Roger Willby (renewal)

The Bookshelf

Books by Bernd Heinrich:

An Owl in the House (1990)
 Ravens in Winter (1991)
 In a Patch of Fireweed (1991)
 The Hot-Blooded Insects (1993)
 One Man's Owl (1994)
 A Year in the Maine Woods (1995)
 The Thermal Warriors (1996)
 The Trees in My Forest (1998)
 Racing the Antelope (2001)
 Why We Run: A Natural History (2002)
 Bumblebee Economics (2004)
 Mind of the Raven (2007)
 The Snoring Bird (2008)
 The Geese of Beaver Bog (2009)
 Winter World (2009)
 Summer World (2010)
 The Eastern Screech Owl (2010)
 The Nesting Season: (2011)
 Life Everlasting: The Animal Way of Death (2013)
 The Homing Instinct (2014)

Update from the Gene Preservation Committee

By Brian Roth

The Maine Chapter Strategic Plan contains a goal to "Preserve as much native-Maine American chestnut genetic diversity as possible through both ex-situ and in-situ conservation". To this end the committee, chaired by Roger Willby, has embarked on two notable projects. The first involves discovering large flowering native trees using sophisticated cameras, software and Geographic Positioning Systems mounted under a Cessna 172. The chapter has partnered with the Maine Image Analysis Laboratory and the Barbara Wheatland Geospatial Analysis Laboratory in the School of Forest Resources at the University of Maine on this two-year project. Chapter volunteers have provided information about the timing of flowering to coordinate the flights as well as doing ground verification of promising trees observed from the air.



Inside a Bangor International Airport hangar, pilots David Sandilands and Louis Morin attach a CessnaCam unit to a University of Maine Cessna Skyhawk. The unit provides aerial photography, videography, and remote GPS sensing and is being used to locate wild American chestnut trees in Maine.



Volunteers rest and enjoy watermelon after inoculating trees in the Veazie orchard.

Breeding Program Update

By Eric Evans

The current focus of our breeding program is to harvest seeds (B3-F2) from the most blight-resistant trees in our third-backcross (B3) orchards, and plant them in our seed orchards, which constitute the 5th generation of our 6-generation breeding program. After evaluation and selection for blight resistance and American type, the seed orchards will produce seeds (B3F3 - the 6th generation) for chestnut restoration plantings in Maine's forests, starting in about 2020.

Last October we harvested over 14,000 seeds from 12 breeding lines in our Highmoor Farms B3 orchard in Monmouth. This April and May we drew from these to establish 58 new plots of 150 seeds each in our Phippsburg, Searsport, and Stetson seed orchards. This brought our total seed orchard plantings to over 22,000 - approaching half of our goal of 54,000 hybrid chestnut trees in our seed orchards by about 2020.

We are very pleased with the early growth of the seed orchard plantings. The survival of the trees from our first plantings in 2012 has been excellent, and some of them were over six feet tall at the beginning of this season.

This summer we inoculated trees in our Veazie, Bradley, and Unity orchards to determine their blight resistance.

Notice of Annual Meeting

The Maine Chapter of The American Chestnut Foundation
will hold its Annual Meeting at the Newport Cultural Center
154 Main Street, Newport, Maine
October 25, 2014

8:30 – 9 am. Coffee and pastries (Courtesy of Peter Kliem and Ann Wolff)

9 am. Business Meeting

Agenda:

Call to order

Minutes of the Last Meeting

Treasurer's Report

President's Report

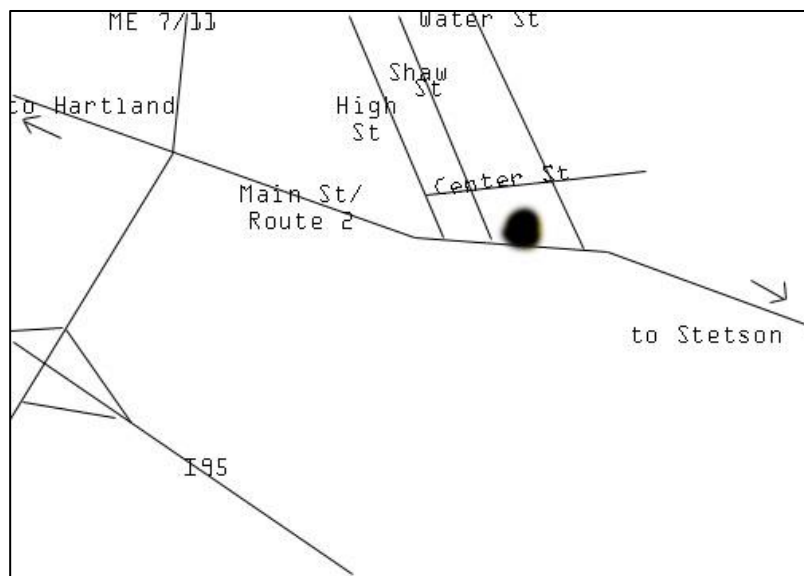
Election of Officers and Board of Directors (see Page 2)

Other Business

Adjournment of Business Meeting

10 am. Guest Speaker: Professor Bernd Heinrich

Tour of Huff Hill Orchard in Hartland, Maine



From I-95, take Exit 157, and turn towards downtown (a left turn if coming from the south, a right turn if coming from the north). At the next intersection, turn right onto Route 2. Proceed towards downtown, passing West Street, High Street, and Shaw Street on the left. The Cultural Center is on the left just before the bridge downtown, less than a mile from I-95.

There is a parking lot behind the Center. The district court parking lot and Public Works lot are also available. Use the entrance at the back of the building; the meeting room is on the second floor.

Membership Form Maine Chapter of The American Chestnut Foundation

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.

Please send this form and your check(s) to:

Joseph Conwill, Treasurer, PO Box 829, Rangeley, ME 04970.

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

Your name _____

Mailing Address: _____

City/State/ZIP _____

Telephone _____

E-Mail _____

**JOIN The American Chestnut Foundation
TACF Membership Support Levels**

Enclosed is my membership support of:

_____ Silver Leaf, \$1,000
 _____ Bronze Leaf, \$500
 _____ Chestnut Leaf, \$300
 _____ Regular, \$40
 _____ Student, \$15
 _____ Other, \$ _____

**Make membership check to:
TACF**

Maine Chapter Sponsorship Levels

Enclosed is my contribution to the Maine Chapter of TACF:

_____ Chestnut Sapling, \$5,000+
 _____ Chestnut Burr, \$1,000-4,999
 _____ Chestnut Blossom, \$100-999
 _____ Chestnut Leaf, \$1-100
 _____ Other \$ _____

**Make Maine sponsorship check to:
Maine Chapter -- TACF**

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. 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

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

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

I would like to help by:

- ____ working at events such as fairs and garden shows
- ____ giving presentations to groups
- ____ fundraising
- ____ maintaining the Chapter website
- ____ providing secure storage for equipment/supplies near an orchard
- ____ providing an acre of land for a Restoration orchard

I would especially like to do:

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

Please return this form to:

Glen Rea
231 Buck St.
Bangor, ME 04401

____ Please send a membership application



Al Faust, Glen Rea, Bob Baross, Councilwoman Jessica Sullivan, and Tree Warden Mike Duddy plant Restoration trees in Cape Elizabeth's Fort William City Park. Portland Head Light can be seen in the background.

Legacy Seeds Planted

Each year, the Maine Chapter receives about twenty B3F3 seeds from its legacy tree at the TACF farm in Meadowview, Virginia. These Restoration 1.0 trees are usually planted in locations open to the public, as a way to educate others about the work of The American Chestnut Foundation.

This year, Restoration 1.0 Legacy trees were grown by Eric Evans and planted in seven different locations in Maine. The sites are as follows:

- Bangor City Forest
- Bath Regional Forest
- Bradley's Maine Forest and Logging Museum
- Bridgton's Camp Pondicherry Girl Scout Camp
- Cape Elizabeth's Fort William Park
- Dover-Foxcroft's Blacksmith Museum
- Portland City Park Department

For suggestions for where 2015 legacy trees could be planted, contact Ann Rea at annrea44@msn.com or 207.945.6945.

Seed Sale

Seeds from wild American chestnut trees in Maine will be on sale next spring. For more information and to place an order, contact breeding coordinator Eric Evans at 207.236.9635 or orchard manager Glen Rea at 207.945.6945. We will begin shipping seeds in April, 2015.

Science and Data Committee News

By Brian Roth

In support of the day when large quantities of B3F3 seed become available for restoration plantings, we have taken on several projects to learn more about growing these trees in the wild. In April a small field trial was established in Steuben to test the performance of various planting stock types and seed sources in the wild with the presence of browsing animals. Early results show differences between trees planted from seed, seedlings in small pots and large bare-root whips. Another project, conducted by University of Maine student Dalton Herrick-Wagman, is looking at the variation in the timing of spring leaf flush at the Huff Hill Seed Orchard at Hartland. This is important as if leaves flush too early in the spring they may be susceptible to damage from late frosts. Future projects include a northerly progeny trial and a chestnut seedling herbicide (glyphosate) tolerance trial.



Glen Rea and David Lockwood plant Restoration trees in Dover-Foxcroft.

Calendar of Events

September 19-21	Common Ground Fair, Unity, ME. Look for our booth and program.
September 22-30	Seed harvesting at Highmoor orchard, Monmouth. (Exact dates depend on weather.)
October 11	25th Anniversary Celebration of Glenn C. Price Research Farm, Meadowview, VA, 2 pm - 6 pm.
October 17-19	TACF annual meeting, Northern Virginia 4H Center, Front Royal, VA.
October 25	Maine Chapter Annual Meeting, Newport Cultural Center, Newport, ME (see page 4).
March 6-8, 2015	Eastern Maine Sportsmen's Show, New Balance Field House, Orono, ME. Look for our display.
April 15	Order wild seeds from the Maine Chapter.

Maine Chapter, TACF
231 Buck Street
Bangor, ME 04401

Return service requested

