



FENCING THE NEW ORCHARD IN BELTSVILLE

The American Chestnut Foundation Maryland Chapter Newsletter *SPRING 2016*

IN THIS ISSUE

Chapter President's Corner

By Dave Gill

In my opinion, Punxsutawney Phil gave us a bad call on an early spring. The Chapter has been busy getting our orchards in shape for the spring plantings and on many of these days in very cold and windy conditions. It always amazes me to see the degree of commitment our volunteers demonstrate during our work parties.

This year the Chapter took on the immense task of planting over 4,400 seeds in three orchards. Lots of helping hands made the work go quickly.

Helping hands are always welcome but the Chapter needs help in building its membership. Dues paying members are a critical component to enable the Chapter to continue its research and development of orchards. Please

help us by renewing your membership and by encouraging family and friends to join our organization. You will find a membership application at the end of the newsletter. As the Chapter grows, so do the odds of developing that blight resistant tree that will bring our forests back to their previous glory.

Board Updates

The Board met on March 12th and approved the following items:

- Modifications to the Chapter's by-laws. The proposed new by-law document will be provided to Chapter members in August. Members will be able to vote on the new by-laws at the annual meeting on October 1st.
- A 2016 budget was approved.

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- An audit committee was formed to conduct the annual audit of the Chapters finances.
- A speaker committee was formed to select the speakers for the fall meeting.

Seed, Soil, Water and a Lot of Help

By Dave Gill



What takes:

635 man-hours;

45 bales of peat moss, perlite and vermiculite;

100 cubic yards of mulch;

and a whole lot of tree shelters and stakes?

Well of course the answer is **planting over 4,400 chestnut seeds!**

This spring, our dedicated volunteers took on the herculean task of increasing the average spring plantings by about 900%! Over a 10-day period, we managed to plant 1,350 seeds at the CMREC orchard, 2,700 seeds at the WSSC orchard, and 370 seeds at the Beltsville Agricultural Research Center. We couldn't have done this without the help of others; we had participation from groups such as the Master Gardeners of Howard County; the Washington Suburban Sanitary Commission (WSSC) staff; Montgomery College; Prince George's Community College; The University of Maryland, College Park; and the Beltsville Agricultural Research Center staff.

WSSC was particularly helpful in our efforts. They provided mulch, a pizza lunch, a water truck and a port-a-john which made our task so much easier to accomplish. They also coordinated the student volunteers from the three colleges through the Hillman Entrepreneurs Program. Other contributors were Meadtree & Landscape, LLC who provided mulch for the CMREC orchard, the University of Maryland Agricultural and Natural Resources Department which provided a water truck for the CMREC planting and the Beltsville Agricultural Research Center for providing the mulch and staff to assist in the construction of the orchard fence. It was a heroic effort by everyone involved.

They say a picture is worth 1,000 words. Assuming that is true, the collage page following this article should be considered a book. Thanks to all who participated in such a successful spring planting. Great job!



Spring Planting 2016

Chestnut Seed Orchard
Established 2016
Maryland Chapter of The American Chestnut Foundation



Orchard Manager's Corner

By Ron Kuipers

Spring & Summer Field Work

Now that the dust has settled from a very busy spring planting season, it is now time to plan for our pollination and blight inoculation schedules. The Orchard Committee will be meeting on May 18th to discuss these topics. In preparation for the blight inoculations at the WMREC orchard we will be pulling together a work party to clear out weeds near the tree trunks.



As always, we need as many volunteers as possible to help get the job done. If you think you can help, contact me at m_rkuipers@yahoo.com and I can add you to our orchard volunteer email list. I will be posting to this list as tasks are coming up. Below are the target projects for each of our orchards.

IWL-Damascus and Hashawha

- ✓ Cut down and burn all but 20-25 trees in each orchard. Host organizations have lead.

Fox Haven

- ✓ Remove final 200+ stumps.

Monocacy

- ✓ Finish tree culling and stump removal in original section
- ✓ May or June - inoculate all 150 trees in newest section

Black Hill

- ✓ Cull selected trees in demonstration section.
- ✓ May or June - inoculate the 15 B1 x B2 crosses.

Ft. Detrick

- ✓ Cull all non-B3F3 trees.

IWL-Rockville

- ✓ Remove dead trees and branches.

Southern Maryland

- ✓ May or June - Inoculate entire orchard to select for resistance.

WMREC

- ✓ Finish cleanup of dead trees and large weeds.
- ✓ May or June - inoculate entire orchard to select for resistance.

Magical Mystery Orchard Tour

By Dave Gill



Black Hill Regional Park in Germantown, MD is home to this edition's featured Orchard Tour. This one-acre orchard is sited on a picturesque knoll overlooking the Park's 500 acre lake and the Park Police offices. Here are some stats on the orchard:

Started: 2010

Orchard Steward:

Stan Fisher

Purpose: Originally a demonstration orchard, now being converted to a mother tree orchard

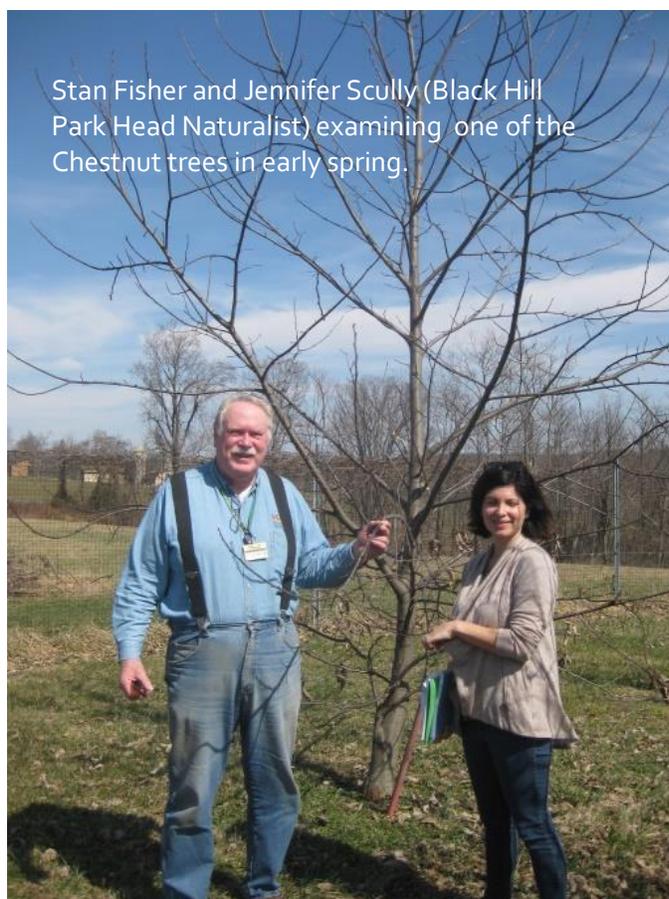
Number of trees: 185 (see list of trees at:

<http://www.mdtaf.org/blackhill.shtml>)

In 2010, The American Chestnut Foundation, in cooperation with Black Hill Regional Park, established a demonstration orchard with the primary intent of educating school children and naturalists visiting the Park. Individual rows of pure American, Chinese, F1's, B1's and B4's were planted, and identifying signs were placed at the top of each row, giving observers the opportunity to identify the differences between each of the trees. The orchard has become one of the Chapter's busiest orchards and provides a very helpful approach to explaining the history of the chestnut tree as well as the breeding program.

The success of the program could not have been achieved without the strong partnership that has formed between Black Hill and our Chapter. The park's head naturalist, Jennifer Scully, took a keen interest in the orchard and

has championed our mission within the Montgomery County Department of Parks. The Park has provided a number of services to support the maintenance of



Stan Fisher and Jennifer Scully (Black Hill Park Head Naturalist) examining one of the Chestnut trees in early spring.

the orchard such as installing the deer fencing, mowing and removal of debris. Furthermore, our orchard steward, Stan Fisher, has been an excellent ambassador for the Chapter. He has fostered a great working relationship with the Park staff and provided numerous presentations at the Park. Stan also

volunteered to monitor the Ambrosia Beetle trap at the orchard which has benefited a number of groups across the State.

Demonstration orchards are wonderful places to observe the differences between American, Chinese and hybrid chestnut trees, but over time, the resistant Chinese trees grow large while the American trees succumb to blight. The Black Hill orchard has reached this point, and so MDTACF has decided to remove the Chinese and hybrid trees and convert the site to a mother tree orchard, a place where we plant and care for pure American chestnuts to keep a diverse American genome alive, and provide new breeding material for our program.

In anticipation of the conversion of the orchard, the Park has initiated discussions with us to create a smaller demonstration planting closer to the Park's Visitor Center. This will open the door for a wider spectrum of the general public to learn about the efforts to restore the American Chestnut. Black Hill is a

very popular park in Montgomery County and this opportunity will greatly enhance our efforts to get our message out to the public. We will keep you updated as details become available and a timeline for planting the orchard is established.

What Is a Chapter Patron

By Emilie Crown, Chapter Treasurer

A Chapter Patron is an individual or organization that makes monthly contributions to the Chapter Via our Patron program. There are a lot of expenses in maintaining our chestnut orchards. The annual income the Chapter receives from memberships is not adequate to meet these needs. That is where a Chapter Patron helps.

Members or organizations can make annual gifts or donations to the Chapter as they wish, but I have found that the easiest way to do this is to pledge an amount each month through a credit card. For example, even a \$5.00 donation a month adds up to \$60 a year. If even half of our members did this, we would raise thousands of dollars a year. You can discontinue your support at any time by submitting a letter to The American Chestnut Foundation (TACF). The credit card

information is handled by TACF, not the Maryland Chapter, and you will receive a letter for your 100% tax deductible contribution each year. If this method of helping the Chapter appeals to you, please contact Emilie Crown at ecrowncen@gmail.com and she can assist you in getting started as a Chapter Patron.

TACF Spring Meeting Summary

By Bruce Levine

Three members of the Maryland Chapter's Board attended the Spring meeting of The American Chestnut Foundation. Listed below are highlights that we took away from the meeting.

Board Meeting:

The TACF Board made a couple decisions, namely:

- Kim Steiner (former TACF Chairman) as Senior Science advisor to replace Alan Ellingboe, and to make that position an executive Officer of the Foundation.
- Revised the rules to make seed distribution a function of the Restoration Committee
- Endorsed a proposal from the Education Committee to begin offering grants (subject to availability of funds) for K-12 teachers who

want to prepare chestnut education programs. The Committee will prepare a request for proposals.

Science Oversight Committee:

- Jared Westbrook (staff geneticist) outlined some new technologies he would like to use to help speed up breeding and make selection more accurate. This may include growing nuts in a greenhouse in large numbers and pre-screening them with micro-inoculations, saving only the high performers to plant outdoors, the use of infrared spectroscopy of tissue samples to detect indicators for blight resistance (preliminary work suggests that this can distinguish highly resistant trees from non-resistant trees), changes to the breeding program design, perhaps intercrossing at the B2 level, or using controlled pollinations between B3F2s instead of open pollination, and finally using (as yet unavailable) genetic markers to make final selections.
- Jared stressed that we should keep doing what we are until



Meadowview has developed these new methods and knows they work.

- Now that there are a large number of B3F3s planted at various test sites, we are now in a position to say that the variation in resistance in the B3F3 population is more than expected. There are several possible reasons for this, including that the original assumption that three genes are responsible for this resistance does not appear to valid. It will take additional generations of more precise breeding and/or genomic tools to achieve Chinese levels of resistance.
- The new "dentatabase" database of breeding information is up and running, and TACF has hired short-term staff to enter our historical and some state chapter data. They expect 80% of info to be entered by August. This is not just a question of tracking individual trees, but is also essential for making inferences about the genetic basis for blight resistance and other traits

Chapters committee

- Chapters have many issues in common, particularly: stagnant membership, a lack of young members, and a lack of expertise in fundraising. The committee will organize a subgroup to discuss best practices from the various State chapters in terms of attracting and keeping members.
- Ruth Goodridge gave us a peek at the new TACF website and the portal to State Chapter pages. They will provide some training and help migrating our content to the new State chapter page for Maryland
- Insurance: Heather, the new accountant will collect info from each chapter to determine whether there are gaps in our insurance coverage, and get us quotes from the company that covers TACF national.

Restoration Committee:

- The Committee is trying to get a better fix on the timeline for when TACF would be ready to start full-scale restoration, and what the role of the committee should be in the meantime. The answer depends on what one means by "restoration." i.e. if test

plantings of current restoration 1.0 trees constitute restoration, we are already doing it. If we want to wait until we have a higher percentage of highly resistant nuts, we need to wait a few years until we have finished selections in the Meadowview seed orchards. If we want to wait until the product is reliably highly blight resistant, no one can put a timeline on that yet.

- For now, the Committee will focus on site selection and preparing reference resources for site selection.
- They will also work for a template for state-level restoration.

These Beetles Don't Sing

By: Dave Gill

The Ambrosia Beetle is singing its battle song this spring, and the Chapter is ready to join the chorus. We have partnered with



Stanton Gill, a University of Maryland Extension Service Regional Specialist, to help in

monitoring for the early signs of the emergence of the beetles. Mr. Gill has provided us with two bait traps that utilize an attractant made from rubbing alcohol. Through the efforts of Stan Fisher, our Black Hill Orchard Manager, and James Becker at our Ft. Detrick orchard, we have been providing weekly trap captures to Mr. Gill for identification.



Ambrosia Beetle
Trap at Black Hill
Orchard.

These efforts will prove to be beneficial to both us and other growers in the State since the Extension Service, through its weekly bulletins, will be able to alert growers of where the Ambrosia Beetle has emerged. Hopefully these cooperative efforts will eventually be the swan song for this aggressive beetle. For more information about the damage that Ambrosia Beetles do to American chestnut trees go to <http://www.acf.org/newsletter2.24.12ambrosia.php>

One Person's Junk is Another's Treasure

By: Dave Gill



In a never ending effort to stretch the Chapter's limited resources to accomplish its mission, the Chapter has recently been approved to participate in the U.S. Government Service Administration (GSA) surplus property program. We obtained this access through Maryland's Department of General Services State Agency for Surplus Property which has a program for qualified non-profit organizations within the State.

Under the program, the Chapter is given access to an on-line web site where the GSA lists surplus property for a 21 day window in which States may request offered items. If we see an item that would help our program we notify the State Agency and they put in a request for us. These items are not

entirely free. To help maintain the State's program a small administrative fee is charged for each item.

As we delve into this new world of surplus equipment we have high hopes that there might be items such as mowers, water tanks, sprayers, ladders and the like waiting for us to claim.

As always, if you have such items you would like to donate to the Chapter, please let us know.



We Need Your Help!

As the Chapter develops seed orchards to help with future reforestation efforts, we need more help.

Volunteers are needed in a variety of areas within the Chapter. Contact Ron Kuipers or Dave Gill at MDTACF@outlook.com if you can help. If you have the time

and/or the talent we could use your help in these areas:

- **Orchard Work** – Whether planting, weeding, watering, harvesting, cutting down trees, building fences, or harvesting nuts, we will need large work parties this coming year. Most efforts will focus on the Washington Suburban Sanitary Commission orchard at Triadelphia Lake and the new orchards near Columbia and College Park.
- **Presentations** – Do you enjoy developing slide presentations, manning information booths at events, or speaking to small civic groups? We need your help!
- **Newsletter** – We need article writers, editors, and those with experience in building e-newsletters.
- **Grant Writers** – If you have experience writing grant requests, we could use your skills.

Donations of either funds or services are always in short supply. In the past, the Chapter has worked with a number of generous members and organizations to meet these needs. Through those efforts we have been able to expand

our orchards and get closer to restoring the American Chestnut. The coming year will be challenging with the establishment of two new orchards as well as the wrap-up of several other orchards. In particular we are looking for funds or services in the following areas:

- Fence materials
- Use of bucket trucks during pollination and harvest times
- Stump grinding equipment for clearing stumps from rogued trees in the orchards
- Potting materials for starting seeds in the spring

If you can help in any of these areas or know someone who would be willing to lend a hand, please contact any of the Chapter officers listed at the end of this newsletter.

MDTACF Calendar of Events 2016

Membership Meetings

- October 1, 2016 – 11AM – Annual Meeting

Board Meetings

- June 11, 2016 – 10AM
- September 10, 2016 – 10AM

Orchard Work

- Orchard Inoculations – Monocacy; Southern MD, Hashawha, Black Hill and WMREC orchards on June 7th & June 8th

Information Booth Events



- **May 26, 2016** - Master Gardeners and Master Naturalists Annual Conference at the Stamp Student Union in College Park – 9:30 AM to 6:00 PM
- **August 20, 2016** – Great Outdoor Event at Little Bennett Park campground – 10AM to 2PM

Chapter Board of Directors

President – Dave Gill
Vice President – Bruce Levine
Secretary – Barbara Knapp
Treasurer – Emilie Crown

Board Members

Armin Behr	B. James Benton
Dennis Bittinger	Dr. Gary Carver
Ron Clements	Ed Crawford
Jim Curtis	Stephen Dodge
Katia Engelhardt	Paul Eriksson
Stan Fisher	David Jacobson
Darryl Johnson	Ron Kuipers
Karl Mech	Robb Newman
Shelley Packard	Stephen Peck
Susan Proper	Andrew Ralowicz
Tom Scrivener	Dean Yap
Mark Vollero	

Chapter Information

Stay up to date on Chapter activities by going to our WEB site – www.MDTACF.org

Membership Renewal

Renew your membership support for The American Chestnut Foundation

Please return to:

The American Chestnut Foundation

50 North Merrimon, Suite 115

Asheville, NC 28804

Additional gift to the MD Chapter: \$ _____

Name: _____

Address: _____

City: _____

State: _____

Zip: _____

Phone: _____

E-Mail: _____

To renew online visit: www.acf.org/join.php

Membership Levels:

Individual Membership -- \$40.00 Receive all TACF publications and car decal

Organizational Membership -- \$100.00

Annual Sponsor Memberships

Includes Restoration Chestnuts 1.0

CHESTNUT (\$300 and above) All membership benefits PLUS 4 Restoration 1.0 seeds

BRONZE LEAF (\$500 and above) All membership benefits PLUS 6 Restoration 1.0 seeds

SILVER LEAF (\$1,000 and above) All membership benefits PLUS 12 Restoration 1.0 seeds

Help the Maryland Chapter Grow in 2016

Please help us spread the word about our work to restore the American chestnut. We want to grow our membership in 2016 and you can help. If you know someone who may be interested in the restoration of the American chestnut tree, send them a personal invitation to consider joining. You might even consider purchasing a gift membership to help to get someone interested. Or invite them to our Annual Membership Meeting so they can learn about our efforts. Help us grow the Chapter to be as strong as the American chestnut.