

Featured Speakers



Benjamin C. Jones,
Chief of the PA Game
Commission's Habitat Di-
vision

Fire's Role in PA Eco- systems: History, Ecolog- y, and Habitat Resto- ration

As a natural influence, fire has played a major role in forming Pennsylvania's wild-life habitats. A fire history

study being undertaken by the Game Commission is revealing that fires burned frequently in our oak-pine forests long before European settlement. With the exclusion of fire over the past century, habitats are changing and many plants and animals that depend on fire have disappeared.

**Erik Hagan, Graduate
Researcher, USDA Ag.
Research Service Farm
Manager, Windswept Ag-
roforestry Farm**

Agroforestry systems encouraging a Casta- nea revival in back- yards and farms across the Northeast.

Erik is a graduate student in Ecology at Penn State, working with the USDA Research Service on riparian conservation for the Chesapeake Bay. Erik is also a project coordinator for the Northeast/Mid-Atlantic Agroforestry Working group, providing education and resources for agroforestry implementation specific to the region. Finally, he implements these techniques as farm manager at Windswept Agroforestry Farm in Centre County, PA.



Spring Growers Meeting

Date: Saturday, April 1, 2017

Time: 8:30 a.m. to 2:30 p.m.

Cost: \$10 at door for lunch/coffee

Location:

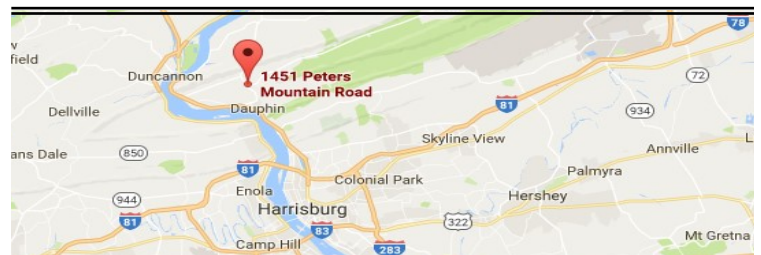
Dauphin County Conservation District
1451 Peters Mountain Rd., Dauphin, PA

Please RSVP by 3/30/2017

mail@patacf.org or 814-863-7192

Meeting Program

8:30 – 9:00 AM	Coffee and Donuts
9:00 – 9:15AM	Welcome: Clark Beebe, President
9:15 – 10:15AM	Erik Hagan Presentation / Q & A
10:15 – 10:30AM	<i>Break</i>
10:30 – 11:15 AM	Sara Fitzsimons — <i>Update: Orchard Research and on Dentatabase</i>
11:15 – 12:00 PM	Steve Hoy — <i>Controlling Ambrosia Beetle — best practices.</i>
12:00 – 1:00 PM	Lunch (Please RSVP)
1:00 – 2:00 PM	Benjamin C. Jones Presentation / Q & A
2:00 – 2:30 PM	Adjourn — Nut Distribution





President's Corner

First let me thank John Wenderoth for his leadership, vision and dedication as our president for the past two years. He has set the bar high and I will strive to be worthy as we collectively pick up the reins and move forward.

As far as my presidency, I will be a different leader than you have selected in the past. I am not a grower. I do not have a degree in biology or forestry or plant science. I come at this from the perspective of an engineer with a layman's interest in forestry, but I will do my best and try to help where my talents apply.

Therefore, my fellow chestnut enthusiasts, I want to thank you for all your personal efforts and financial contributions both now and over the years (in many cases, decades). You, our membership, are our greatest asset and I want to initiate a practice of member-to-member acknowledgement to thank you for all that you do in a more personal manner.

I propose we establish a group of members willing to take the time to call other members and personally thank them for their efforts and contributions. Let's strengthen our community and get to know each other better. Why did you join in the first place? Once we know your story, maybe we can highlight it as a reason for others to join.

Do you volunteer? If not, thank you for your membership and support. That said, would you like to volunteer but can't for various reasons? Maybe we can help. (More on that later.)

If you do volunteer, what do you do? What would you be willing to do? What are your talents? I ask these questions because maybe you are a graphic designer and would be willing to help the next time we want to update our graphics. The point is that I would like to create a data base of available talent. An organization our size can use just about any talent from time to time. It would be nice to have a list of available members when a need arises.

To start this effort I would like to ask for volunteers willing to make one or two phone calls a week to other members. This will not be a fund raising effort. These will be thank you calls to engage members more personally. You will need to be good listeners and be willing to take a few notes. If we had ten callers making two calls a week, we could reach our entire membership in one year!

If you are interested in volunteering but held back by travel limitations, this could be the opportunity you have been looking for to get involved. Call or e-mail Jean and get on our caller list.

Again, I would like to personally thank each and every one of you for your generous financial support and volunteer activities but time just does not permit. I therefore wish to establish this telephone outreach as my surrogate in that effort. Please join me in fulfilling that task.

Sincerely,
Clark Beebe,
President

PA-TACF Board of Directors

President

Clark Beebe
Highland Lakes, NJ
beebeinnj@gmail.com

Vice President

Mary Ayres
Wynnewood, PA

Past President

John Wenderoth
Wilmington, DE

Treasurer

Andrew Huston
Plymouth, MN

Board Members

Don McCann
Ken Allshouse
Tim Eck
Rick Hartlieb
Robert Lingenfelter
Susan Smith
Larry Yozwiak
James Walizer

Non-Voting Members

PA-DCNR

Representative

Annetta Ayres

US-ACE Representative

Jeff Krause

PA-TACF Staff

Director of Restoration
Sara Fitzsimmons
sff3@psu.edu

Orchard Manager
Stephen Hoy
sdh177@psu.edu

Chapter Administrator
Jean Najjar
jmn173@psu.edu
(814)863-7291

Member Spotlight: Professor Mac Given

By John Wenderoth

Among the group of volunteers, who initiated and now currently maintain the American chestnut orchard at the Tyler Arboretum in Delaware County, are interesting men and women who bring many different perspectives and a variety of experience to our work.

With our need to pass an understanding of the significance of chestnut restoration, Dr. Mac Given has been doubly helpful. When his academic duties at Neumann University



Dr. Given & John Wenderoth with Neumann University Students

permit, he joins us in the routine tasks of spreading mulch, removing dead limbs and doing controlled pollination work. However, in conjunction with his ecology course, Mac also arranges for his classes to join us when we're harvesting nuts for next year's seedlings. This gives us an opportunity to share with his students an understanding of what was lost due to the blight that devastated our native chestnut during the past century.

Before joining our volunteer group, Mac also served a term on the Tyler Arboretum's board and was active in sharing his knowledge of frogs and other amphibians by leading instructive walks and lectures, during which he demonstrated the spring mating calls of many of the native species.

A few of our group have been privileged to join Mac when he collected data on some of his subjects in the field. Wearing headlamps after sunset, we stood in New Jersey cranberry bogs as he collected data on his subject Carpenter frogs. Where predators abound, this helped us to appreciate the risk taken by a frog calling to seek a mate.



Dr. Given helps with pollination at Tyler Arboretum's chestnut orchard

WV-TACF Seeking Volunteers for Boy Scout Jamboree 2017 -By Sam Muncy

TACF has been invited to operate a booth on the Conservation Trail at the 2017 Boy Scout Jamboree at the Summit Bechtel Reserve (SBR) National Boy Scout High Adventure Base near **Beckley, West Virginia**. Help TACF connect with the 25,000 to 45,000 Boy Scouts at this event to share your enthusiasm for restoration mission.

DATES: July 19th to July 27th (with set-up on July 16th & take-down on July 29th). Booths are open 9 hours each day. We hope to have four volunteers signed up for each day. Visit the Signupgenius website to volunteer: www.signupgenius.com/go/4090e4fa8aa2ea6f94-volunteer or call 814-863-7192



Connect with PA-TACF happenings!

Like our Facebook Page:

www.facebook.com/PATACF.org

Join our Facebook Group:

www.facebook.com/groups/PA.TACF

Join our listserv:
mail@atacf.org

facebook
+ join our group

Chapter News

Digitizing Chapter History

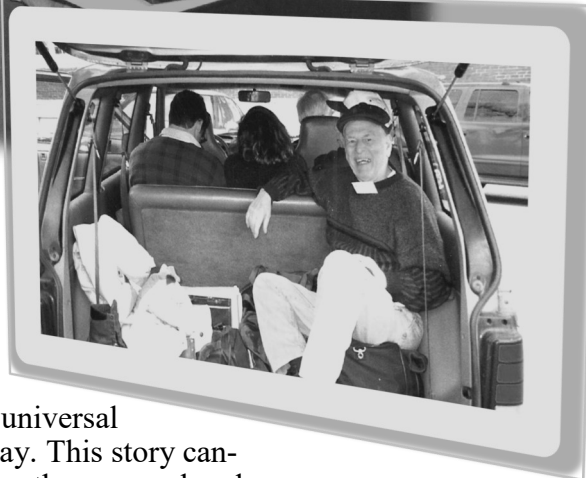
By Tracey Coulter

The 1994 annual meeting of the American Chestnut Foundation was at Charlotte and Barney Barnhart's farm in Roaring Springs, Pennsylvania. At the time, I was living in Northern Virginia and had travelled north to the meeting. I clearly remember seeing Bob and Ann Leffel sitting around a table with other PA Chestnut enthusiasts; this was the beginning of what would become one of the early drivers of the growth of PA-TACF. Less than a year later, I was unexpectedly transferred to Pennsylvania, and the Leffels and the chestnut community became a constant in my transition to my new home.

This reminiscence is about the history of the PA/NJ chapter and the importance of preserving that history. Inherent in the history and the many successes were challenges, personal sacrifice, ideological, scientific and procedural disagreements, near revolutions and failed plantings, and yet a universal passion for the mission carries the day. This story cannot be fully told without documenting the personal and institutional correspondences among those most intimately involved in the growth and development of the chapter – the Leffels and other founding members of the Chapter.

In preparing to write this article, I read over some of the early Chapter newsletters archived on our website. Such memories! (And hard to fathom how young we all were!) Although the newsletters tell some of the story – they don't begin to tell the full story.

The Leffels have retired from active engagement with the chapter after many years of dedicated effort. As they focus on those "things they have put on hold in their dedication to the tree and to the chapter", they have donated several boxes of chapter documents and slides for the chapter archives.



Photos — Top right: Tracey Coulter, 2001; Top Left: Ann Leffel and Charlotte Barnhart; Below: Bill Lord

Rocking the PA Farm Show

This year's volunteers did an amazing job representing TACF at the 2017 PA Farm Show. They engaged the public with their thorough knowledge of the American chestnut and our restoration efforts.

They signed up 20 new members and sold a good bit of merchandise, including 8 cutting boards, beautifully handcrafted and donated by our own Chris Ditlow of Laserleaf.com

(Continued on page 5)

Chapter News

(Continued from page 4)

Another creative volunteer, Eric Ulrich crafted the sign hanging by our display and painted our logo on a brand new folding table (shown in the slide show) for our Chapter. Volunteer Bruce Heindel won best in show for his Japanese chestnuts — they were huge!



Volunteer, Bruce Heindel showing off his best in show award for his Japanese chestnuts.

Visit our website to see photos: www.patacf.org/thank-you-thank-you-thank-you/

Fall Challenge Match Surpasses Goal and Raises Over \$10,000!

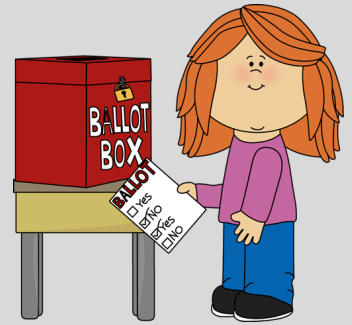
Members showed their support in 2016 with generous contributions to our **Fall Challenge Match** fundraiser. The goal was to match a donation of \$3,500 from two anonymous donors and raise \$7,000. We reached this goal within the first month and set a new goal to raise \$10,000. At the end of the year we had raised \$10,500, surpassing both our goals. The proceeds will be used to purchase equipment for our Orchard Research here at Penn State

Thank you to all of our generous donors!

Board Election

There were 120 ballots counted and tallied for the 2017-18 Board of Director's Election. Clark Beebe will move forward as President as John Wenderoth becomes Past President. We welcome Mary Ayres as our new Vice President. Returning for another term on our Board, we welcome: Ken Allhouse, Tim Eck, Don McCann, Susan Smith, and lastly, we welcome new Board Member Larry Yozwiak.

Many thanks to all our Board Members for their commitment and dedication!



Call to Cups!

Greening our Member Meetings: We are calling on members to help make our organization more green. We're starting at our member meetings with a "call to cups".

Just bring your own coffee mug and/or water bottle to the next member meeting. This simple act will help us cut cost and waste — less paper and plastic. Don't worry, we'll have cups for those who forget.

Thanks for your cuperation!

Science Corner

3BUR & New TACF Science Plan By Sara Fern Fitzsimmons, TACF Director of Restoration

Two important documents were approved at TACFs 2016 Annual Meeting, held in Louisville, KY.

3BUR

3BUR is a concept and term coined by Dr. Bill Powell, a long-time cooperator with TACF and professor at SUNY-ESF in Syracuse, NY. 3BUR stands for "Breeding, Bio-control, and Biotechnology United for Restoration". While the three B's in 3BUR have been pursued by TACF and its cooperators for many years, the three have not been formally merged into a comprehensive plan of use.

Starting in January 2016, a committee of scientists from across multiple institutions and TACF began a series of conference calls to compile a list of objectives desired outcomes and thirteen major research objectives that would arise from improved collaboration across available methodologies that can be used to restore the American chestnut.

The document may be viewed and downloaded in its entirety from the TACF website: <http://www.acf.org/3BUR.php>

2015—2025 Breeding and Science Plan

While the 3BUR committee was creating a big picture look at how to integrate multiple research technologies toward American chestnut restoration, TACFs Director of Science,

(Continued on page 7)

!!! WARNING!! Orchard Alert — Ambrosia Beetle WARNING!! !!!

The spring of 2016 saw infestations across the state of the ambrosia beetle (*Xylosandrus germanus*). Hundreds of trees were affected, and needed to be cut and burned. The remaining trees were sprayed. Unfortunately, climatic trends suggest similar issues will arise in 2017. Control starts with monitoring -- determine if ambrosia beetle is present before you spray. Most infestations occur on stems < 3" diameter but larger stressed trees can also be attacked.

Step One -- Deploy traps on or before the first 60°F days.

- ◆ Monitor traps a minimum of twice per week or any day temperature reach 60°F.
- ◆ Monitor trees for small "pin holes" or frass tubes.

Step Two— Control

- ◆ Burn and remove any small or heavily infested trees as quickly as possible/practical.
- ◆ A pre-emptive application of a bifenthrin based insecticide, applied just before temperatures reach 70 F — follow label instructions.

For more information and BYO trap instructions: www.patacf.org/orchard-alert-ambrosia-beetle/

The Allegheny Woodrat

By Steve Hoy, Orchard Manager, PA/NJ TACF

On an early November morning I loaded two large coolers filled with over 10,000 chestnuts into the car and headed out to meet with Greg Turner of the Pennsylvania Game Commission (PGC). PA-TACF is partnering on a project with the PGC to aid and observe the Allegheny woodrat. The project site is in Ellendale Forge, 11 miles north of Harrisburg, PA. Full disclosure, on this morning I know practically nothing about the Allegheny woodrat aside from the fact that relied heavily on the consistent crops of chestnuts. At the end of a dirt road on a ridgetop we unload 100 potentially blight-resistant B3F3 chestnut seedlings. Our objective is to locate potential active woodrat sites, distribute chestnuts in concentrated piles, caches, place game cameras at each cache, and plant the seedlings in the immediate area in the hopes of providing a reliable food source in the years to come.

Supplies are loaded into backpacks or buckets and the group heads into the forest. At first the area is no different from most ridgetops in central PA: a mix of oak, maple, some birch, and scattered pines. A few hundred yards from the vehicles the landscape changes, and numerous large boulders can be seen protruding from the earth. The trees are smaller and more scattered when we reach a rocky cliff on the south side of the ridge. This is the home of the Allegheny woodrat, a labyrinth of cracks and tunnels — providing safety from would-be predators as well as the hot summer temperatures. Looking around the area I see some existing American chestnut sprouts. Numerous stems appear in clumps but none are over 20 feet in



height. Even though the sprouts are infected with chestnut blight it's an encouraging sign for the survival of the 50 seedlings to be planted in the area.

With jobs assigned the group divides to plant seedlings, and attempt to find signs the woodrat is present in the area. The latter job is an amusing version of whack-a-mole with heads dipping into the spaces between rocks only to pop up a moment later and relocate to the next potential cache or latrine area.

The best sites are identified, rigged with game cameras, and a rock is mounded with several thousand chestnuts. If woodrats are in the area they should find these manmade caches of nuts and redistribute them in their own caches for the winter. Creating these caches will also bring predators into the area, confirmed with video

(Continued on page 7)



Chestnuts piled in rock crevice, to be a woodrat food station.

(Continued from page 5)

Dr. Jared Westbrook, put finishing touches on a breeding and science plan for the Foundation. The contents of this document follow-up on the 2004-2014 Research Objectives published by Dr. Fred Hebard¹.

Several of the objectives detailed by Dr. Westbrook incorporate those of the 3BUR committee, so that they are considered for operational implementation by the Foundation within the next 10 years. Two major initiatives are:

I. Seed Orchards—Reducing effort in seed orchards by requiring a minimum of 3 blocks of replication instead of 9. Increasing efficiency and efficacy of selection by implementing the Small Stem Assay (SSA), staggered inoculation models, and genomic selection (under development).

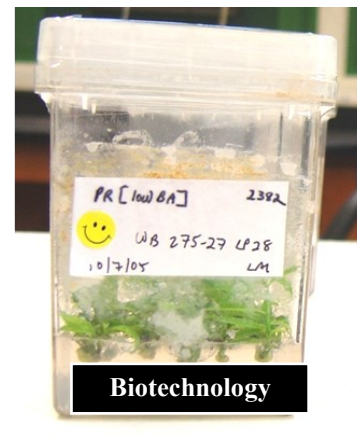
II. Germplasm Conservation Orchards (GCO)—TACF aims to integrate as much diversity in its disease-resistant materials as possible. We need people to find American chestnut trees and collect nuts from them to go into GCOs.



Breeding



Biocontrol



Biotechnology

The document will be reviewed and adapted on an annual basis. Various parts of the plan will be elucidated in upcoming issues of TACF's magazine. In the upcoming winter issue, find out more about SSA and genomic selection techniques which should greatly accelerate and improve selection in TACF's seed orchards.

¹ Hebard, F.V. 2004. *Research Objectives of the American Chestnut Foundation, 2004-2014; Summary of TACF's 10-year Plan. Journal of TACF. 18(2):13-21.*

(Continued from page 6)

of bear, raccoon, possum, and while not a predator even a porcupine

This process is repeated three more times. A few weeks later the caches have disappeared along with one camera a bear decided to relocate. The images from the remaining cameras



Typical Allegheny Woodrat habitat

confirm active Allegheny woodrat populations in the area. Future plans with the Game Commission are to continue planting potentially blight resistant American chestnuts and to design an experiment comparing the preference of different hard masts including chestnuts, acorns (white & red), and beech nuts.

***Videos of chestnut piles and critter feedings are on TACF's YouTube channel!**

About the Allegheny Woodrat: The Allegheny woodrat is a shy solitary nocturnal rodent, also known as a packrat. It lives in large rocky areas, typically on southeast and southwest facing slopes. It measures 12-18 inches in length with a gray/brown body and a hairy tail. This small rodent has an important relationship with the American chestnut. The habitat of the Allegheny woodrat overlaps with the historical range of the American chestnut tree.

The historic range of the Allegheny woodrat once extend from New York south to Alabama, from the western Connecticut to Kentucky. Currently, populations have been declining throughout New York and Pennsylvania. It is thought some of this decline is due to the loss of the American chestnut, more recently from habitat fragmentation, as well as the raccoon roundworm.

Dependable crops of sweet chestnuts each fall were important to the woodrat's ability to stockpile enough food for the winter months. The decline of American chestnut has also seen the decline in the Allegheny woodrat population. While the loss of the crops of American chestnuts is notable, other factors have contributed to the declining populations of Allegheny woodrats. Human alteration of habitat through logging, and construction have made it difficult for the woodrat to travel between suitable habitats to mate or for juveniles to establish their own territory. In addition, raccoon roundworm, has proven to be quite problematic.



The Chestnut Newsletter

Nonprofit Org.
U.S. Postage
Paid
State College, PA
Permit No. 234

Pennsylvania Chapter

The American Chestnut Foundation

206 Forest Resources Lab
University Park, PA 16802
mail@patacf.org
Phone: 814-863-7192


RETURN SERVICE REQUESTED

EVENT CALENDAR

- * **March 16 — New Jersey Forestry Association - Annual Meeting**, New Brunswick, NJ
- * **March 24 -25— Enriching Woodland Values Pennsylvania Forest Landowners Conference**, Altoona, PA
- * **April 1— PA/NJ TACF Spring Growers Meeting**, Dauphin, PA
- * **April 30—Lancaster Native Plant and Wildlife Festival**, Manheim, PA
- * **June 7-10 — Native Plants in the Landscape Conference**, Millersville PA
- * **July 19th to July 27th — Boy Scout Jamboree 2017**, Beckley, WV
- * **August 6-7—Festival of Woods at Grey Towers**, Milford, PA
- * **August 16-18— Penn State Ag Progress Days**, Rock Springs, PA
- * **September 9-10— New Jersey WILD Outdoor Expo**, New Egypt, NJ

THE NPC DIFFERENCE
Listening. Understanding. Delivering.

www.npcweb.com | 800.847.5757

 **NPC**® | Integrated Print & Digital Solutions

13710 Dunnings Hwy | P.O. Box 373 | Claysburg, PA 16625
Printing compliments of NPC, Inc.

For more complete details on events and happenings in our chapter, visit our website:
www.patacf.org