

Join us in Gettysburg for the TACF 36th Annual Meeting Saturday, October 19, 2019

7:00 am to 9:30 pm

Where: Wyndham Gettysburg
95 Presidential Circle
Gettysburg, PA 17325

Register Today!

www.acf.org/store/fall-meeting-2019/

Or call their office: (828)281-0047

Help us showcase our Chapter spirit at the 2019 Annual Meeting of TACF. PA/NJ is the largest chapter of TACF with around 900 members. We would love to see you all at this important event. Come to learn, socialize. give TACF a big PA and NJ welcome.

WEAR YOUR CHAPTER PRIDE! We're ordering a special blue and white long sleeve edition of our Chapter t-shirt which we hope you will purchase and wear to the meeting on the 19th. We want our Chapter presence at the meeting to visual and welcoming. Shirts will be available in two shades of blue with white printing. They are super cool and our chapter spirit will shine when we all wear them. (More details on pg. 3).

GREAT PRESENTATIONS! Its packed with **great** speakers on a variety of topics **including:**

- **Jason Holliday**, Associate Professor, Virginia Tech, Blacksburg, VA, discussing *Genomics of Local Adaptation in Trees*
- **Leila Pinchot**, Research Ecologist USFS Northern Research Station speaking on *Reintroducing American Chestnut to Working Forests*
- **Britt C. Isenberg**, Licensed Battlefield Guide, Gettysburg National Military Park, Gettysburg, PA speaking on *Gettysburg's Peach Orchard*
- **Dru Anne Neil**, Pres. of Gettysburg Nature Alliance

speaking on *Heritage + Habitat = Sustainable Future*

• **Sally M. Walker**, author of the children's book *Champion: The Comeback Tale of the American Chestnut* speaking on *The American Chestnut Sprouts in School Curricula Tree*

• **Bruce Wakeland**, Pres. of Wakeland Forestry Consultants, Inc, Culver IN and TACF Restoration Committee Chair with his talk, *There They Were With The Chestnut;*

• **Peter Lane**, PA/NJ Chapter Member sharing his banjo stylings of chestnut songs.

TACF science staff will be on hand to meet attendees and moderate sessions on Chestnut Research, Gettysburg History and Its Future, and Chestnut in Story and Song.

TREAT YOURSELF! The evening will wrap up with a delicious banquet, featuring keynote speaker Jenny Rose Carey Senior Director of the Gardens at Philadelphia Horticultural Society's beautiful Meadowbrook Farm in Jenkintown, PA.



PA/NJ Chapter Growers Workshop

Gettysburg, PA — Sunday, October 20, 2019

More details on page 3



President's Corner

We are excited to host the TACF Annual Meeting in conjunction with the SCHATZ Tree Genetics Colloquium next month. I hope that you will join us on Saturday, October 19th in Gettysburg, PA, to help us celebrate our proud history and continued commitment to restoring the American chestnut.

The TACF Annual meeting provides an opportunity to socialize with members from our own

Chapter and other Chapters. In addition to important sessions on the latest Chestnut research, we will hear talks on Gettysburg History and PA Forestry Today. Our Chapter will have tables with our display and merchandise for sale, as well as a slide show highlighting all the activities of the PA/NJ Chapter. This year's meeting will also feature the banjo strumming of our very own Peter Lane. So register today!

Some of you may also be interested in the Chestnut Growers Certification Workshop, the PA/NJ Chapter is hosting on Sunday morning, October 20 in Gettysburg. See the article in this newsletter for further information and how to sign up.

October is a beautiful time of year to see Pennsylvania so plan your weekend get-away to Gettysburg.

Board and staff have been hard at work revising the plan for our multitude of PA/NJ chestnut orchards at Penn State, Raystown Lake, etc., given the advances we've made in understanding blight resistance and the changes to the science program that will get us to our goal. You can read about these changes in the Science section of this newsletter.

In an effort to build our membership I reached out to Consulting Foresters in PA with a personal letter, to ask for their help in locating pure American chestnut survivors, in addition to asking them to join and support our Chapter. Consulting Foresters an ideal group to target for increasing our profile in PA. They spend days in the forests with clients, so can be a valuable conduit to spread the word about our work in developing a blight-resistant chestnut to individuals who like trees and forests. I'm happy to report that we have at least 5 new members from their ranks!

Maybe you are part of a community that would share an interest in supporting our mission. If you would like guidance or materials to share, contact Jean in our office mail@patacf.org or (814) 863-7192.

As always, thank you for supporting our mission through volunteering, membership dues and spreading the word about our organization.

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President 2019-2020

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Chapter News

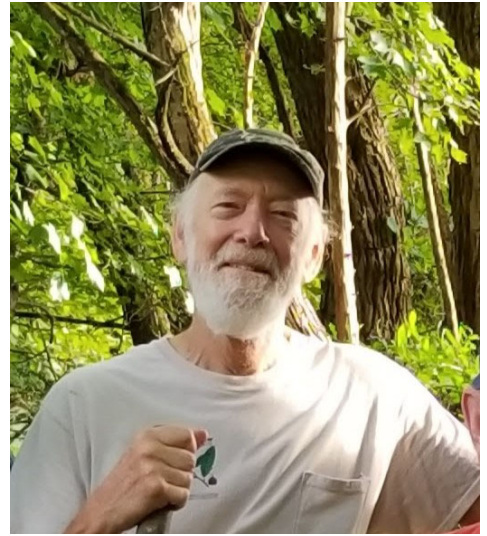
PATACF hosts a Walk in Penn's Wood

The PA Chapter is happy to be participating in Walk in Penn's Woods this October.

Walk in Penn's Woods is a project of the [Center for Private Forests at Penn State University](https://sites.psu.edu/walkinpennswoods/). It was envisioned as a day for people across Pennsylvania to visit and learn about the forests that enhance our well-being. Forests are always working for us, providing recreation, wildlife habitat, beauty, improved water quality, clean air, wood products, carbon storage, and more.

Join TACF member, Mike Aucott on Sunday, October 6th for a guided tour in the Allegheny National Forest. Mike is very familiar with this trail which features native American chestnuts.

To learn more about Walk in Penn's Wood and other hikes around the state follow this <https://sites.psu.edu/walkinpennswoods/where-are-the-walks-happening/>



Chestnut Growers Certificate Workshop Growing Chestnuts 101

Get started planting chestnuts in 2020!

If you haven't planted an orchard before, but want to plant an orchard with PA-TACF this workshop is a prerequisite. Sara Fitzsimmons will lead this work shop covering all the basics of growing chestnuts including site selection, preparation, supply lists, tree options, and maintenance as well as disease and pest concerns.



Date: Sunday, October 20th

Time: 9:30 am to 12:00 pm

Location: Adams County Ag Center
670 Old Harrisburg Road
Gettysburg, PA

Cost: \$10 for members, \$20 for non-members

To Register: Call Jean at (814)863-7192 or email her at mail@patacf.org -- Please sign up to attend by Wednesday, October 16th.



Help us make a big blue and white splash at the TACF Annual Meeting in Gettysburg, this October. Call Jean to reserve your shirt order in advance.

These long-sleeve t-shirts will be available for purchase at the TACF Annual Meeting. They feature American chestnut leaves, catkin, bur and nut block print on the front with our chapter logo on the sleeve.

Choose from true navy or a lighter tone of denim in sizes from small to 2X-Large.

They are priced to sell at \$15.

(\$25 if you want us to ship them to you directly)

Call Jean to place your order in advance of the meeting — (814)863-7192



Chestnuts Taking Root in the Erie National Wildlife Refuge

By Melissa Althouse, U. S. Fish and Wildlife Refuge

The American chestnut tree used to be a major component of the eastern U.S. ecosystem, until the arrival of the chestnut blight, *Cryphonectria parasitica*, drastically changed the character of our native forests. On April 23, 2019, a group of conservation-minded people gathered to plant seedlings of this iconic tree at Erie National Wildlife Refuge (Erie NWR) in honor of Earth Day. National Wildlife Refuges, like Erie, are a network of public lands and waters protected for the conservation of fish, wildlife, and their habitats; and to provide opportunities for the public to engage in wildlife-based recreation. Refuge staff, volunteers, and Sara Fitzsimmons, Director of Restoration of the American Chestnut Foundation (TACF), planted 1,000 seedlings in an old farm field. The seedlings were culled from TACF's breeding program, in which the Foundation is attempting to develop American chestnut backcross hybrids with the blight resistance of their Chinese chestnut parents. Though these particular seedlings are not blight resistant, they will provide perpetual young-forest habitat for early successional obligate species on the Refuge.

Erie NWR has a strong agricultural history that, to this day, is apparent on its landscape. 1,550 of the nearly 9,000 acres Refuge were at one time farmed. Many of these old fields have stagnated in the process of ecological succession and are dominated by goldenrod. This plant is allelopathic, meaning that it releases a biochemical into the soil that reduces the germination, growth, and survival of other plants. Early successional woody plants, such as dogwoods, willows, and aspens, have a hard time taking root there. Furthermore, the fast-growing goldenrod often shades any slower woody seedlings. This is where the American chestnut's natural history comes in to make it an ideal candidate for planting in old farm fields.

Wild chestnut sprouts are hardy. They could survive years under the shade of a mature forest canopy waiting for a disturbance to allow more light in, then shoot

on up. They were fast growing. Even the interaction with the blight fungus works towards one of the management objectives of the Refuge: to provide early successional habitat. *C. parasitica* is most likely to infect trees after they reach 3-5 in. dbh – usually after they've had a year or two of actively reproducing. Also, the fungus does not affect the root system of the American chestnut. *C. parasitica* has an antagonistic interaction with certain organisms in the soil, such as the common soil bacterium, *Bacillus megaterium*, which means the fungus can't kill the parts of the tree that are underground. These surviving root masses send up sprouts that grow, reproduce, likely become infected, and die back, perpetuating a young forest system.



Healthy American chestnut seedling three-months after planting. Photo credit: M. Althouse,

Early successional habitat, such as young forest and scrub-shrub stands, is essential for more than 65 species of wild-

life. American woodcock, ruffed grouse, indigo bunting, yellow warbler, whip-poor-will, brown thrasher, eastern towhee, and many other bird species are found almost exclusively in these communities. Early successional habitat is more productive than mature forests, providing abundant fruit and insects. Even deep-wood species like hermit thrushes and wood warblers bring their young to early successional habitat to learn foraging techniques and fatten up before migration. Though this planting will not restore the chestnut-dominated forests that awed our forbearers, these trees will be working for wildlife at Erie NWR.

We're always happy to be able to reduce, reuse, recycle, and repurpose at the Refuge. The fact that we can take the culls from the TACF breeding program and make them a valuable asset at Erie NWR, while further developing local partnerships and providing opportunities for volunteer service projects, is one aspect of what makes this place so great. The staff at Erie NWR are so happy we were able to partner with TACF this past Spring and look forward to doing so again in the near future!

Chapter Specific Science Plans and Reinvigorating Historic Orchards within the PA/NJ Chapter —By Sara Fitzsimmons

At a special TACF Summer Science meeting held this past July in Abingdon, VA, TACF Chapter Science Leaders worked with staff and research partners to identify ongoing priorities for Chapter Science Plans. This winter, every Chapter will be working from a standardized template for creating their Chapter-specific science plans. These priorities are still up for final ratification, but as of now, are the following:

1. Phenotyping – This process scores all previously selected (or unselected, but surviving) backcross and other hybrid trees on the following metrics, selected because they have shown to be correlated with blight-tolerance:

- Is the main stem alive? Y/N
- Are there cankers larger than 15cm?: Y/N
 - i. About the size of your hand
 - ii. Any cankers
 - iii. Any stem
- Is there exposed wood due to blight: Y/N
- Is there sporulation of the blight fungus? Y/N
- Level of callusing
 - i. Sunken – no callus
 - ii. Sunken – callus
 - iii. Swollen
 - iv. Completely sealed over (not sunken or swollen)

2. dentataBase – ensure all Chapter orchards are documented in TACFs online database system. Locations which are not captured in dentataBase are not typically recognized as “official” planting locations.

The following table shows the relative orchard health ranking of 144 documented locations across the Chapter. Of these, 29 locations are

known to be dead, either having failed or which have been successfully and fully rogued.

Orchard Health Rating	Number of Orchards
Dead	29
Poor	7
Fair	15
Good	43
Selected; Dead	1
Selected; Fair	3
Selected; Good	11
Unselected; Fair	2
Unknown	33
Grand Total	144

The PA/NJ Chapter would like to solicit your help in documenting those 33 locations marked “Unknown”. If you have an interest in travelling to these locations to document them, please let Sara know! (sara@acf.org)

3. Germplasm conservation – Finding and conserving American chestnuts *ex situ*. The PA/NJ Chapter has a goal to find and collect a minimum of 100 new sources of American chestnuts from across the two states, from as a diverse amount of locations as possible. These trees serve many purposes, but a primary one will be toward the diversification of transgenic American chestnuts, once those products have been approved for dispersal by the USDA, FDA, and EPA.

4. Backcross orchards – Most of PA/NJ Chapter’s backcross orchards have been successfully selected for blight-tolerance, and progeny from those orchards have been subse-

quently moved into seed orchards. All of these orchards are to be phenotyped (as in priority #1 above) so that these selections can be used for one or more of the following tasks: Genomic testing for blight-tolerance Breeding with other improved trees for improved blight-tolerance For those trees with little or no blight-tolerance, breeding with other American germplasm lines for additional representatives of American germplasm (as per priority #3 above).

5. Phytophthora root rot (PRR) resistance breeding and research

– Most of this work is taking place in TACFs Southern Chapters, as those are the locations where this disease predominates. The PA/NJ Chapter has and will continue to create seeds for ongoing analysis of PRR resistance.

6. Silvicultural trials and reintroduction trials and restoration trials

– These trials continue with improved varieties of backcross and wild American chestnuts, as well as other chestnuts created through traditional breeding. Eventually, and pending regulatory review, these trials will also include individuals created through transgenic methods.

7. Other avenues of research continue including that into hypovirulence and other biocontrol methods, as well as gene editing technologies such as CRISPR. For now, these routes of research take place largely outside of the Chapter and volunteer realm, but these will be integrated into Chapter-specific breeding plans as soon as the techniques are ready for that integration.

Chapter News

Volunteer Spotlight: Guitar Heroes

By Vicki Brownell and Jean Najjar

Vicki Brownell has been a member of the PA Chapter since 2006. As she recalls she had set out to find the PA Nut Growers booth at the Farm Show so she could buy walnuts for some cookies she was planning to bake. Fate stepped in as she passed by our display on her way. As luck would have it, Bob Summersgill was on duty. She didn't stand a chance. For those of you who don't know Bob, he had way of inspiring new members and volunteers.

Vicki took a brochure home and her membership started that January. Wanting to learn more she came out to Ag Progress Days that same year where she met Sara Fitzsimmons for the first time. Sara took her on a tour of our first orchard and Vicki was hooked.

She has been a loyal member ever since, volunteering when she can and keeping her eyes peeled for native chestnuts in the wild.

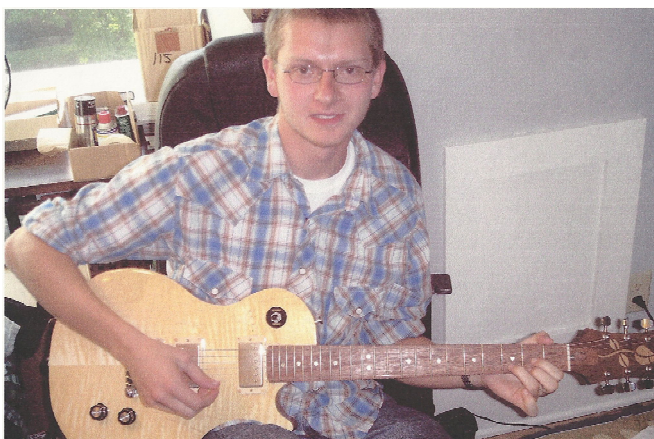
Here is the story of her guitar hero. When PA-TACF announced a chestnut craft show for members Vicki had a good lead with her son Doug. He had realized, while still in high school, that his dream guitar was unaffordable, and decided to make it himself. Because he worked summers for a few local builders, he had access to an extensive selection of scrap wood. Once completing his cherry "Les Paul," his curiosity about the tone differences of woods led him to build guitars in mahogany, black walnut, alder, maple, white oak, Brazilian cherry (never again), and even a recycled glue-laminated beam.



Vicki and David Brownell with the wormy chestnut electric guitar built by Douglas Brownell

Vicki set about recruiting Doug to put his talents to work for PA-TACF. She bought reclaimed barn chestnut from a gentleman in the New Milford area. But surprisingly, by that time Doug had found much more interesting things to do at Penn State and the chestnut wood went into storage. So, it was a huge

surprise when the completed chestnut guitar arrived at the door Christmas 2014, all the way from Tulsa, Oklahoma. As our children will do, Douglas had moved to the mid-west to work for John Deere and taken the wood with him. And with a little "coaxing" from his grandmother, had made it, and shipped it east.



Douglas Brownell, PSU '08

With one thing and another the guitar has sat quietly in a closet since then and has never been played.

Until now! The Brownells have donated this one of a kind instrument, to the Chapter and we plan to use it as a fundraiser this winter.

Look for more details on our website: patacf.org

Chapter News

Seeking Volunteers for Educational Outreach and Leadership

The PA and NJ Chapter is seeking to infuse our volunteer outreach and leadership with new volunteers. We love our experienced volunteers, but it's important to regularly bring new volunteers on board to carry on our work. We'd like to see more hands and voices being lifted for this important task.

Our outreach efforts include tabling at community events and making presenting out power point slide show to groups upon request.

Volunteers at big events like **Penn State Ag Progress Days, NJ Wild Outdoor Expo**, and **PA Farm Show** reach thousands of attendees each year. Having a presence at these and smaller outreach events in Pennsylvania and New Jersey, allows us to educate the public about the American chestnut and our restoration mission. These one-on-one interactions really make a difference in getting folks to care about the work we do. In addition to tabling at various outreach events, we periodically get



Left: Clark Beebe and John Neuman at Green Day NJ State Fair; Above Fred Heagy talking with folks at the 2019 PA Farm Show.

requests for speakers to make presentations to groups interested in our work. If you enjoy public speaking and feel confident about your knowledge of our organization this may be a good way for you to help. We have a ready-to-go, PowerPoint presentation and handouts to make sure we are sharing a consistent message.

As the living memory of the American chestnut recedes, these educational outreach opportunities are critical for the recruitment of the next generation of members and citizen scientists who will be needed to continue this work. Our interpretive display and FAQ cards make it easy to get started. We can also pair you with an experienced volunteer if you want a bit more training.

Check out the dates for Outreach events in 2020 to the left. Maybe there is one near you! To learn more call Jean at (814)863-7192.

All of what we do depends on strong leadership from volunteers on our Board and Advisory Committees. We owe a great deal to these members who make the commitment to serve in this capacity. They guide our work in a variety of areas including, operations, outreach, and science. They provide expertise and guidance in addition to being some of our greatest advocates.

If you would to learn more about joining our leadership team please call our office. Jean will do her best to answer your questions and can also put you in touch with current Board members who can share their experience.

Become a volunteer and help restore the American chestnut!



Proposed Outreach Events 2020

Date	Event	City	State
1/4 thru 1/11	PA Farm Show	Harrisburg	PA
4/25	Lancaster Native Plant and Wildlife Festival	Lancaster	PA
5/2	Central PA Native Plant Festival and Sale	Boalsburg	PA
June	Earth Fair Burlington County Parks	Eastampton	NJ
8/1 thru 8/2	Festival of Wood at Grey Towers	Milford	PA
8/3	Green Day at NJ State Fair	Augusta	NJ
8/18 thru 8/20	Penn State Ag Progress Days	Pennsylvania Furnace	PA
9/12 thru 9/13	New Jersey WILD Outdoor Expo	New Egypt	NJ
October	West Milford Autumn Lights Festival	West Milford	NJ



The Chestnut Newsletter

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Pennsylvania Chapter

The American Chestnut Foundation

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

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EVENT CALENDAR

September 7-8, 2019 — New Jersey Wild Outdoor Expo, New Egypt, NJ 08533

October 6, 2019 — Walk in the Penn's Wood, Merrill Creek Reservoir in Warren County, NJ.

October 12, 2019 — West Milford Autumn Lights Festival, West Milford, NJ

October 19, 2019 — TACF Annual Meeting, Gettysburg, PA

October 20, 2019 — PA-TACF Chestnut Growers Workshop, Gettysburg, PA

January 4-11, 2020 — 2020 PA Farm Show, Pennsylvania Farm Show Complex, Harrisburg, PA

August 18-20, 2020 — Penn State Ag Progress Days, Pennsylvania Furnace, PA

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