



*Dedicated to restoring the American*

# Chestnut Tree

VOLUME 30, ISSUE 1

MARCH 2025

## PA-NJ Chapter Spring Growers Member Meeting

Saturday, March 29th  
8:30 AM—2:30PM

@ the Allen Theatre,  
36 E Main St, Annville, PA 17003

Join us for our 2025 Spring Growers meeting! There will be food, educational presentations, networking and more! Tickets: \$25 (Ticket includes: coffee, breakfast snacks, and lunch.)

Purchase your tickets online using the QR code to the right.



### Spring Growers Meeting Featured Speakers



#### Vasiliy Lakoba

Director of Research-  
The American Chestnut Foundation  
At Meadowview Research Farms

*Presenting:*

**Recent and ongoing trials: strategic science at Meadowview Farms**

*Overview:* Learn of the latest in-house research at TACF and its interfaces with collaborators' and Chapters' work, highlighting research projects and experiments at Meadowview Research Farms. Presentation to include virtual tour, science strategy discussion, and presentation of results, and will elucidate how parallel efforts are intended to provide data over multiple years, with the goal of setting the stage for an increasingly pluralistic approach to American chestnut tree improvement/reintroduction.



#### Lake Graboski

North Central Regional Science  
Coordinator-  
The American Chestnut Foundation

*Presenting:*

**Applied Science at the Chapter Level**

*Overview:* Going forward, growers in the chapter may contribute to the breeding plan! Gain insight on how growers with existing chestnut orchards, as well as new types of plantings, can help with needed research. Discussion on how to include training and outreach in our activities in breeding and conservation plantings.



#### Sue Tantsits

PCH- SLC PA Certified Horticulturist-  
Sustainable Landscape Certified  
Managing Member  
Edge of the Woods Native Plant  
Nursery

*Presenting:*

**Agroforestry and the American Chestnut**

*Overview:* Native plant agriculture (Agroforestry) is a concept that is responding to diversity loss and climate change. Sue will address the importance of bringing agriculture into our landscape restoration in the form of food production and other sustainable plant crops to support an agricultural system. Can native plants, in particular the American Chestnut, add a food source for people and animals? How can native plants be incorporated into these landscapes?

\*Opportunity to connect with presenter(s) and schedule in-person tours of Meadowview Research Farms for those interested.

## President's Corner

### **Happy 30th anniversary to the PA-NJ chapter!**



Thirty years on, it's clear we need to be in it for the long haul. After all, growing trees is not a short-term effort. Finding a solution to the devastation of the chestnut blight fungus, and carrying out the work of restoration is, at the very least, a decades-long prospect. The eastern forests have recovered from the blight and essentially moved on, so even with a robust blight-resistant American tree, forest restoration is going to be complex and slow. Add in the complications from climate change, land use changes, *Phytophthora* root rot, and uncontrolled white tail deer population, calling it "complex" seems like a gross understatement. Those 30 years have also seen the focus of TACF change from traditional breeding (the backcross breeding program), to the perhaps oversold promise of the transgenic Darling 58 tree, to the recurrent genome selection strategy just getting started.

I think there is reason to be optimistic that blight resistance in an American tree is possible. Most of the technologies that have been tried are actually somewhat old. Plant breeding has been around almost as long as agriculture. The basic practice of plant genetic modification used to produce the Darling 58 tree is at least 40 years old, with no disrespect to the crew at SUNY-ESF for working out the kinks to make it possible in chestnut. And using DNA sequencing to aid in breeding is based on a technology that expanded from the first whole genome sequence of a virus in the 1970s to the current capability to sequence an entire human (or chestnut) genome in a matter of days. In quantitative terms, the improvement in this capacity is about a million-fold! So improvements to these technologies are always coming along; I think my optimism is warranted.

On the other hand, the mission of TACF is to "return the iconic American chestnut to its native range" with "a robust eastern forest returned to its splendor". These are the long-standing goals, and merely developing blight resistance is only one step in the process. How should we go about restoring forests that have already replaced chestnuts with other species? Is it possible to plant seedlings (with deer fencing) in millions of acres of forest? Or at the other extreme, would it be better to take barrels of blight resistant nuts and throw them into the woods, and hope for the best? After all, that's how the trees got there in the first place. I don't know the answer, but even if it is possible, returning mature eastern forests to what they looked like in 1900 would take many, many years. At our Fall members meeting, Eric Oliver was describing reforestation/reclamation efforts on previously mined land, and shared some exciting progress on how one might return an eastern forest, if one has a clean palette to begin with. Start small; long haul...

By way of introduction, I am Dan O'Keefe and I became president of the chapter on the first of this year. I live in suburban Philadelphia. I spent my entire working career as a biological scientist, and I retired from Dupont Central Research and Development in 2016. That same year, John Wenderoth (former chapter president) introduced me to the chestnut orchard at the Tyler Arboretum in Media, PA when I started volunteering there. The Tyler orchard is a germplasm preserve, where we grow only 'pure' American (*Castanea dentata*) trees. John is a wonderful mentor, and together we started a breeding program at Tyler, where we would take pollen from large surviving American trees in our area (southeast PA and northern Delaware) and use them to pollinate trees at Tyler. The resulting nuts have a well-defined pedigree and provide a means of propagating and conserving those large American trees that will probably ultimately succumb to the blight (as recently happened to one of our best pollen sources). Tyler has a very well-run volunteer program, and I would be remiss if I didn't acknowledge all the contributions of my fellow volunteers to this effort.

A few final words, to note some changes in our chapter organization: I'd like to thank Rick Hartlieb for his extended tenure as president of the chapter, and special thanks to our chapter administrator, Jean Najjar, who "moved on" at the end of last year (she only recently admitted to calling it "retirement"). This newsletter is coming to all of you through the efforts of our new chapter administrator, Audrey Owen... welcome to her!

We hope to see many of you at the Spring Growers Meeting in March!

-Dan O'Keefe, President, PA-NJ Chapter of TACF

# Thank you to all who work to make our mission a success!

## President

Daniel O'Keefe  
Ridley Park, PA

## Vice President

David Deaville  
West Chester, PA

## Past President

Rick Hartlieb  
Robesonia, PA

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Betsy Winch-  
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John Wenderoth

## Non-Voting Members

### PA-DCNR

#### Representative

Annetta Ayers

## Staff

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Reg' Science Coordinator**  
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Lake.graboski@tacf.org  
814-577-1587

### Orchard Manager

Noah Vincent  
nev5073@psu.edu  
(484)725-4044

### Chapter Administrator

Audrey Owen  
aso5287@psu.edu  
(814)863-7192

## Thank you to Jean Najjar for her years with our chapter!

Many of you have had the pleasure of working with our retiring chapter administrator, Jean, during her 10 years with our organization. Jean has been a driving force of our success, thoughtfully connecting the many moving parts of our mission, from board members, to outreach events, to volunteers and more. She has been a constant source of energy and support. We feel truly fortunate that she chose to share in our journey. Jean also brings her passion to the PA Native Plant Society (PNPS), where she has served as a volunteer on the board since 2009. She will continue in this role, advocating for sustainable garden practices and the use of native plants in the landscape.



Jean with Chris Ditlow at the fall meeting, receiving a plaque he made to commemorate her time with the PA-NJ TACF.

## Thank You to Castanea Township Recreation Committee!

The PA-NJ Chapter of TACF would like to thank the Castanea Township Recreation Committee for organizing the first annual Chestnut Festival at Castanea, PA. Over 200 hundred people showed up within the first hour of the chestnut-themed event that featured chestnut foods, music, vendors, and education. The chapter tabled the event, providing education about the history of the American chestnut and our mission to restore this species as a forest tree. Several new members signed up at the event and we ran out of membership forms! We also received some direct publicity via interviews with a local newspaper and radio station. We are looking forward to this event for years to come!

Castanea is also an ecologically important place for chestnut trees. Founded in the 1800s, Castanea was named for the plentiful number of chestnut trees that grew in the area. Chinese chestnut trees, likely planted as replacements for lost American chestnuts, are now found in several groves around Castanea where seedlings are regenerating on their own. American chestnuts have been found on the mountain overlooking Castanea, and nuts were recovered that have been conserved by the PA-NJ chapter in the orchard at Penn State.

## Thank you to Alan Guisewite for his posthumous donations to the PA Chapter of The American Chestnut Foundation!

In March of 2024, Alan D. Guisewite, a beloved friend of the American Chestnut Foundation passed way. The American Chestnut Foundation was a cause that was very important to Alan and he was passionate about maintaining his membership and offering a small donation here and there, whenever possible. As his time grew short, he felt strongly that a substantial donation to the foundation could do important work towards saving the American chestnut tree and provide a much needed boost to our fundraising efforts. To that end, he pledged a significant annual contribution for four years, starting in 2024. It was his sincere hope that others would take notice and consider donating some of their personal wealth to the The American Chestnut Foundation as well. If you're making estate planning decisions, remember the PA/NJ TACF!



# Science of Restoration

## Long Surviving and Large Alive American Chestnuts in the PA-NJ Chapter – Lake Graboski, North Central Regional Science Coordinator.

Word of Long Surviving American Chestnuts (LSAs) and Large Alive American Chestnuts (LAAs) is sure to pique the interest of most in our community, especially in 2024 when both a new potential LSA and the largest forest-grown LAA in the chapter were discovered. What is the difference between an LSA and an LAA? What is their importance to the restoration of the American chestnut? And what are these two new trees we're talking about?

Both LSAs and LAAs are large chestnuts that are confirmed to have either 100% American or mostly American chestnut genes, display American chestnut traits, and typically are trees not intentionally hybridized for resistance. A Long Surviving American, or "LSA", is at least ten (10) inches (2.54 cm) in diameter at breast height (DBH) and has survived in tree form with the main stem alive for at least ten (10) years. A Large Alive American chestnut, or "LAA", is an American chestnut that is at least ten (10) inches (2.54 cm) in diameter at breast height and has survived in tree form. The difference between an LSA and an LAA is that an LSA has *survived* with the blight for a relatively long time, whereas an LAA has not been fighting the blight this long; an LAA may have just recently been infected or appear to have no infection at all. While the diameter of and duration benchmarks to define an LSA are somewhat arbitrary, the point is that LSAs display some level of blight tolerance/resistance while LAAs have yet to prove the same. The persistence of LSAs in our environment suggests that there may be some genes within the American chestnut that confer at least a mild level of resistance in certain trees.

The value of LSAs has long been understood by the PA-NJ chapter growers, and we are re-vamping our approach to LSAs with new genomic tools. The Ort tree is a classic example of an LSA that was and continues to be incorporated into the breeding program. This thick-trunked survivor was the mother of many chestnuts planted by the Leffels at the Brogue orchard, and its ancestry is well-represented in some of our backcross orchards. We hope to learn what genes are responsible for the resistance that we see in LSAs. Genomic sampling and testing of LSA offspring can uncover how related different LSAs are and how much resistance can be obtained by breeding among LSAs. The hope is that we will then be able to more effectively breed blight resistant trees with minimal Asiatic chestnut traits by breeding selected LSAs with other trees in our orchards.

In 2024, PA DCNR foresters found the largest forest-grown LAA in the chapter



Continued on page 5

*Continued from page 4*

next to an old gas well in Sproul State Forest. This American chestnut measures about two (2) feet DBH and is approximately 69 feet tall! We saw some small cankers starting to form on this tree. PA DCNR has established a buffer around the chestnut to protect it from disturbance and we will be watching to see how it handles the blight in the coming years. We were able to collect only three (3) pollinated nuts from this tree because it is in an isolated location and is not being pollinated well. In 2024, a new LSA was found near Mohnton, PA.

While not as impressive as the Ort tree, this gnarly 36-inch DBH 50-foot-tall tree appears to be an American chestnut that has survived in a farm tree line for over 30 years. We were able to collect some scion wood from this tree and hope to collect pollen in 2025. Curiously, most LSAs that we know of are found in the Piedmont region from southeastern Pennsylvania and Delaware through Virginia; the exact reasons for this are unclear. Our thanks to the landowners of both the Ort and Mohnton tree who graciously provide access, to all stewards of LSAs and LAAs, and to all those searching for and preserving our precious trees!

Image 1 (page 4): Summer 2024 Photograph of the 2-foot DBH Large Alive American chestnut discovered by DCNR Forestry Staff Michelle Alexander (left) and Alyssa Peters (right), next to an old gas well in Sproul State Forest, Pennsylvania

Image 2 (page 4): Summer 2024 photograph of the Mohnton LSA in full bloom.

## Volunteers needed!

### **Can you lend a hand? We are looking for volunteers for the following events:**

- 3/29/25 Spring Growers Meeting, Allentown, PA (sign-in and nut distribution)
- 4/19/25 Boyd Big Tree Planting, Harrisburg, PA
- 4/26/25 Manheim Township Earth Fest, Lancaster, PA
- 4/26/25 Middletown Earth Day Celebration, Langhorne, PA
- 6/8/25—6/30/25 (exact dates TBD) Controlled Pollination, multiple locations
- 7/19/25 Castanea Community Day, Lock Haven, PA

More to come! Opportunities will be posted to our website [PATACF.org](http://PATACF.org).

**\*Email Audrey at [ASO5287@psu.edu](mailto:ASO5287@psu.edu) if you are interested in participating!\***

***Speaking of volunteers...*** We'd like to give a big thanks to our volunteers for the PA Farm Show, Chestnut Festival, and PASA Conference.

Our volunteers play a huge part in the success of restoring the great American Chestnut Tree and we are very appreciative of your efforts!

*Farm Show volunteers:* Jay Brenneman, Brad Seitz, Rick Lantz, Tim Eck, Judy Milliken, Steve Delp, Craig Zumbrun, Brodie Pomper, Steve Schoonover, Jen Schoonover, Rick Harlieb, David Deaville, Mary Ayres, Kimberly Baldwin, Dan Baldwin  
*Chestnut Festival volunteer:* Mary Winton  
*PASA Conference volunteers:* Tim Eck, Judy Milliken, Rick Lantz, Christopher Hondru, Andrew Phillips, Brodie Pomper

# A Special Tribute

## Join Us in Remembering Past Chapter President Alex Day

Ralph Alexander Day, known to many as Alex, passed away on Tuesday, October 29, 2024, at the age of 81. Born in Huntingdon, Pennsylvania, Day was a dedicated conservationist, public servant, and tireless advocate for the restoration of the American chestnut. Alex served on the PA/NJ Chapter board from 2002 – 2013, including the Chapter President from 2009-2010. In April of 2000, still in his role as Nursery Manager at Penn Nursery, Alex gave a presentation to the Chapter at their spring meeting at PSU Mont Alto. From there, he began his role as DCNR representative to the Chapter Board, then as Vice-President, President, and Past President\*\*.

Alex completed his studies at Huntingdon public schools in 1961 and earned a degree in forestry from Penn State University in 1966. Following his education, he served in the Peace Corps through 1968 and subsequently completed a three-year enlisted assignment in the U.S. Army, with his final posting in Karlsruhe, Germany. Alex's career with the Pennsylvania Department of Conservation and Natural Resources (DCNR) spanned almost 40 years, beginning in 1971. His tenure included postings in Coudersport and Spring Mills at the state's extensive seed nursery. Throughout his career, Day served in various field locations within the DCNR, and including completing his career as the Penn Nursery Manager.

In recognition of his significant contributions to forest conservation, Alex received the prestigious Dr. Joseph Trimble Rothrock Conservationist of the Year Award from the Pennsylvania Forestry Association in 2006. The award honored his "unselfish labor of love as few men have given in support of the land and forests of Penn's Woods" and recognized him as a "Forestry Ambassador in the Rothrock tradition."

Alex's commitment to the American chestnut restoration efforts extended beyond his professional life. He served as Vice President (2007-2008) and later as President (2009-2010) of the Pennsylvania Chapter of The American Chestnut Foundation (PA-TACF).

Alex had a special interest in his family's cabin in Spruce Creek, where he enjoyed many friendships and introduced youngsters to the wonders of the surrounding forest. He will be remembered by those who knew him as a quiet, knowledgeable, and humorous ambassador for the care and protection of Pennsylvania's forests. In his memory, please take the time to listen to Alex's Interview about his memories about the American chestnut here:

<https://scholar.utc.edu/american-chestnut/39/>

\*\*The PA/NJ Chapter has a 2-2-2 process for their presidents, allowing for training and retention of institutional knowledge prior to and during leadership transitions.

(Chandis was also a past president of the PA-NJ TACF)



Alex with Cherry logs



Chandis Klinger, Alex Day

# Podcasts

## Music To Our Ears; Multi-Channel Focus on The American Chestnut

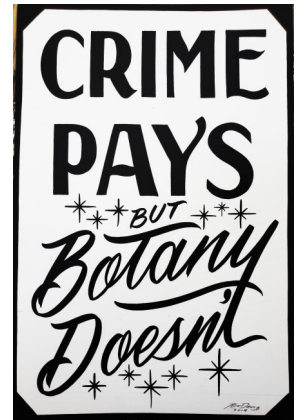
### Listen While You Work!

The American Chestnut has seem some recent attention in the podcast world. These are a few episodes we found of particular interest:

#### Crime Pays But Botany Doesn't podcast by Joey Santore

[www.patreon.com/crimepaysbutbotanydoesnt](https://www.patreon.com/crimepaysbutbotanydoesnt): Potential Problems With Blight-Resistant Chestnuts featuring Jared Westbrook, aired January 6, 2025.

“Jared Westbrook is a geneticist with the American Chestnut Foundation. In this episode we talk about what went wrong with the initial round of trials for blight-resistant chestnuts, how to combine targeted genetic approaches to hybridizing American and Chinese Chestnut trees for blight resistance, thousands of years of human selection in the Chinese chestnut genome as an agricultural species, problems with inheritance for the OxO gene that breaks down oxalic acid, why oxalic acid production might not be all that's involved with the virulence of Chestnut blight, and more. This is a good episode, even for laypeople who may not be familiar with basic genetic science. To learn more about the American Chestnut Foundation and to join a local chapter, check out [www.tacf.org](http://www.tacf.org) “



#### NPR Shortwave: What Happened to the American Chestnut Tree? By Emily Kwong

NPR.org

What happened to the American chestnut tree? : Short Wave : NPR, aired December 25, 2024

“Short Wave host Emily Kwong dives deep into how scientists are trying to resurrect the American chestnut tree - and about the controversy over a plan to plant genetically modified chestnuts in the wild.”



#### Wild Turkey Science (#106)

The American Chestnut: Restoring Ecological Function

The American Chestnut: Restori - Wild Turkey Science - Apple Podcasts, aired November 18, 2024

“Delve into the ecological significance of the American chestnut tree with (our own) Sara Fitzsimmons, Chief Conservation Officer for The American Chestnut Foundation. Join as we explore its history, ecological importance, challenges faced due to habitat change and disease, on-going conservation efforts, and how you can get involved in its ecological restoration. “



**PA-NJ Chapter of The American Chestnut Foundation**  
**The Chestnut Newsletter**



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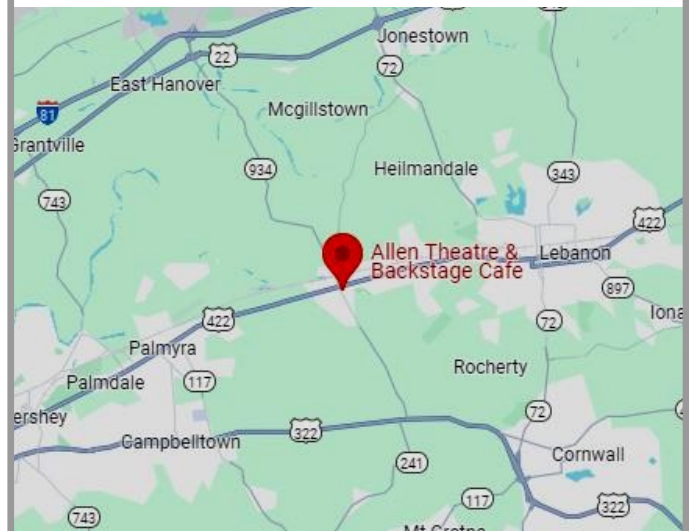
*The PA-NJ Chapter of TACF is grateful for the continued support of NPC through their pro-bono printing of this newsletter. NPC has freely printed every issue of The Chestnut Tree since 1995.*

**Don't miss the Spring Growers Meeting!!**

**3.29.25**

**MEETING LOCATION:**

Allen Theatre -36 E Main St, Annville, PA 17003  
40.329892755019316, -76.5143550313699



**NUT DISTRIBUTION:** We will be distributing wild American seed nuts at the meeting, but there are limited supplies. If you would like to join the queue for nuts please email Noah Vincent at [nev5073@psu.edu](mailto:nev5073@psu.edu)