



THE BUR

Volume 28, No. 2

Newsletter of the New York State Chapter of The American Chestnut Foundation

Fall 2022

NY-TACF's first "in person" Annual Meeting in three years

See Transgenic American Chestnut Trees Growing at ESF Field Station

By John Neumann, NY-TACF Secretary & Vice President for Education



We are excited to announce the first "in person" NY-TACF annual meeting in three years. While we did have "virtual" annual meetings through Zoom during the pandemic, nothing can compare to being there in person.

The energy and fellowship of personal contact, meeting chapter officers and directors as well as members of the SUNY College of Environmental Science and Forestry (ESF) American Chestnut Research and Restoration Project Team, will heighten your appreciation for the vitality, dedication, and hard work accomplished by kindred spirits. You can even shake hands, and thank Dr. William Powell, co-founder and director of the ESF Chestnut Project, for all that he, his staff, and his students have done in the last 32 years.

The fabulous ESF Gateway Center in Syracuse, NY will be the location of our meeting. Even if you have been there

before, you will enjoy viewing the Gateway Center's renowned wildlife display. The lively meeting moves along quickly as there is much to cover. The tour of the Lafayette Road Experiment Station will enable you to see the results of decades of transgenic effort and research. You will have the experience of seeing Darling 58 transgenic blight-tolerant American chestnut trees growing and healthy. Bring your camera and have your picture taken next to one.

Our traditional chestnut harvest exchange will take place Friday evening, and again on Saturday morning. If you have no chestnuts to exchange, you may take pure "wild-type" American chestnuts from several different trees, absolutely free, so you can plant chestnut trees next spring.

Always a delightful occasion, Saturday evening dinner options are available for those interested. We have also made arrangements with the Collegian Hotel

at a special rate for those wishing to stay Friday night and/or Saturday night.

Don't miss this enjoyable opportunity for time well spent with others who share your values and your vision.

See page 7 for registration details.

Oct. 7, 2022 - Oct. 8, 2022
Gateway Center, Syracuse, NY

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New York State Chapter
 The American Chestnut Foundation
 302 Bateman Road
 Laurens, NY 13796
www.acf.org/ny

Founded in 1990, the New York State Chapter (NY-TACF) is the oldest chapter of The American Chestnut Foundation, Inc., a non-profit 501(c)(3) membership organization. NY-TACF, in partnership with the State University of New York College of Environmental Science and Forestry (ESF), is working to restore the American chestnut tree to our eastern forests by developing truly blight-tolerant American chestnut trees through biotechnology. Membership information may be found on the back page of *The Bur*.

Officers

(Terms End at the 2023 Annual Meeting)

| | |
|------------------------------|-------------------------|
| President | Allen Nichols |
| Vice President for Science | John Dougherty |
| Vice President for Education | John Neumann |
| Vice President for Outreach | Emmett Hoops |
| Secretary | John Neumann |
| Treasurer | Fran Nichols |
| President Emeritus | Herbert F. Darling, Jr. |

Board of Directors

CLASS III (Terms End at the 2022 Annual Meeting)

| | |
|---------------|-----------------|
| Wayne Cooper | Alec Newlands |
| Thomas Deacon | John Neumann* |
| Thomas Huff | William Snyder* |
| Niko Nantsis | |

CLASS I (Terms End at the 2023 Annual Meeting)

| | |
|-----------------|----------------|
| John Dougherty* | Frank Piccinni |
| Allen Nichols* | Dale Travis |
| Fran Nichols* | Richard Wells |

CLASS II (Terms End at the 2024 Annual Meeting)

| | |
|----------------|------------------|
| Paul Ackerman | Linda McGuigan |
| James Donowick | Enrico Nardone |
| Emmett Hoops* | T. Urling Walker |
| Roy Hopke | |

*Executive Committee

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 828-281-0047 • chestnut@acf.org • www.acf.org

Linda McGuigan – *The Bur* Editor



President’s Message

It has been a busy year for almost everyone it seems, and I hope all are healthy despite COVID still being around. Many of our older members are feeling their age, including myself.

I am not sure what is happening with our membership or why. Each year it has increased until December 2021, when it peaked at 999. It dropped to 879 members in July of 2022.

Possibly COVID, our aging membership, and/or the economic environment are contributing factors.

We are getting closer to the anticipated approval for distributing

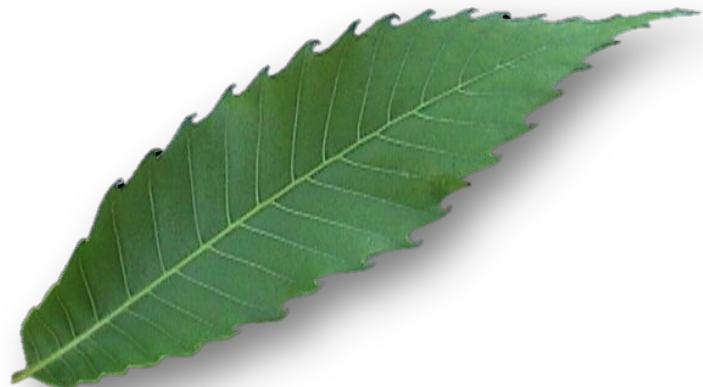
blight-tolerant material to NY-TACF members and have been working on options that may be available to them. They included handing out potted seedlings, bare-rooted seedlings, pollen, nuts, or grafting material. With possible approval in August of next year, the questions become what time of year is best to distribute certain materials, how do we get said material to members, and what will individual members want?

With the expected ability to hand pollinate members’ trees in the next year or two, we need to know who will have flowering trees available to pollinate. You should check your trees carefully for burs, as I had one tree that I did not notice any female flowers on in July, which now has five burs developing.

Thank you to everyone who has helped work on the long restoration program, and hopefully, by this time next year we can celebrate!

As Herb Darling says, “Long Live the American Chestnut”.

Allen Nichols
 President, NY-TACF
fajknichols.75@gmail.com, (607) 263-5105



District Director Reports

Niko Nantsis, District 1

I hope everyone has had a fun, exciting, and safe summer. This pollination season has been very busy. The Long Island Conservancy filmed me pollinating American chestnut trees in Bethpage State Park, in order to bring more awareness of our restoration efforts of these majestic trees. I have also been looking for more trees out east in Suffolk county; to further expand our knowledge of the current geographic range of the American chestnut tree on Long Island. My colleagues on Long Island and I are eagerly looking forward to receiving the blight-tolerant American chestnut pollen and seedlings, to help restore this species from the brink of extinction.

In addition, Dr. Bill Powell, Frank Piccinnini, and I, along with other environmental researchers from the NY State Department of Environmental Conservation (DEC) have been discussing the possibility of creating a new research team to combat the new beech tree disease. We have also discussed new funding from the DEC for the American Chestnut Research and Restoration Project. I look forward to seeing everyone at the annual meeting this fall and to hear about all the new research being done at ESF.

Dale Travis, District 2

Wave Hill garden in the Bronx has successfully grown eight nuts into viable seedlings. They will plant them in an area designated for a mother tree orchard as soon as the summer drought lifts.

The Harlem Valley Rail Trail has reached a milestone this year. For the first time, two trees blossomed and produced eight burs. Next year, at least three trees are expected to blossom, with the goal of cross-pollinating them with the transgenic blight-tolerant variety.

Historic Governor's Island, almost in the shadow of the Statue of Liberty, is planning to plant at least seven seedlings this month, which is very exciting.

Allen Nichols, District 4

I have been tending my orchard and hand pollinating with blight-tolerant pollen (under permit). Wire screen bags will be placed over the pollination bags soon, to keep any burs or nuts from being removed by squirrels or blue jays.

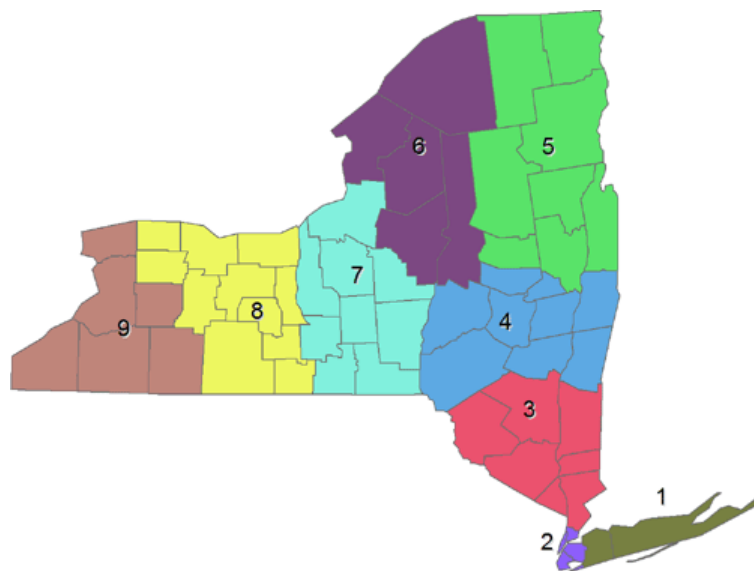
I went flying again with Jon Scott and we spotted several flowering American chestnuts. See page 4 for more details.

Tim Russell, District 7

Greetings from District 7. As is a common theme, the best news stems from the chestnut orchard established by TACF volunteers over in Sherburne. Earlier this year, Molly Jacobson, Native Pollinator Ecologist at ESF, reached out

with interest in sampling trees around the orchard for native pollinators. This interest was in part inspired by the rediscovery of *Andrena rehni* over in Connecticut, a native bee which specializes on *Castanea*. This bee was not well-studied and presumed to be possibly extinct, as for decades it had not been recorded. With the hopes of identifying this bee, and also building upon the scarce information we have about other native pollinators of American chestnut, Molly and Hannah Pilkey visited the orchard to capture native pollinators, an effort which is planned to continue during next year's flowering period. Though *Andrena rehni* was not discovered this year, *Bombus terricola*, the yellow-banded bumblebee, was captured in their sample. This species of bee is considered to have a "vulnerable" conservation status in New York State and is undergoing a severe decline in its broader national range. Special thanks to Christopher Sprague and our friends at the DEC, whose continued assistance with maintenance of the orchard has made these endeavors possible.

Other news includes additional discovery of American chestnut on private forestland. Some large saplings not appearing to have sprouted from a dead stump, were discovered this summer. Permission has been granted to search the abutting property for possible overstory trees which may have provided a source of viable nuts. That search will take place in September.



District 1 – Niko Nantsis, nikolaos.nantsis@gmail.com and Frank Piccinnini, Frank@savethegreatsouthbay.org

District 2 – Dale L. Travis, dale@daletravis.com

District 3 – Tim Termini, termini@gmail.com

District 4 – Allen Nichols, fajknichols.75@gmail.com

District 5 – Emmett Hoops, emmett.hoops@gmail.com

District 6 – T. Urling Walker, watnrotary@gisco.net

District 7 – Roy Hopke, SnowHawke1@gmail.com
Tim Russell, tim@GreenFireForester.com

District 8 – Paul Ackerman, trapman1@netzero.net

District 9 – William A. Snyder, wasynderhort@gmail.com

Transgenic Chestnut Work Growing Beyond New York State

By Allen Nichols, NY-TACF President



Doug McLane, Fran Nichols, Allen Nichols, Brian McClain, and Tom Klak

The NY Chapter of TACF has been working closely with the VT/NH and Maine Chapters of TACF to use Darling 58 transgenic material for restoration (under permit).

In 2021, the NY Chapter had a fundraiser to help support transgenic pollen production being done by Dr. Tom Klak at UNE, the University of New England, in Biddeford, Maine. The fundraiser raised over \$16,000, and one NY-TACF member agreed to finance the program for the year. Tom is working to move into a larger and better supplied room for his accelerated pollen production, where he will produce Darling 58 pollen and DarWin pollen from the newest, more advanced transgenic tree. The funds from the fundraiser can be used to cover any additional expenses that may be needed.

In the fall of 2021, my wife Fran and I went to New Hampshire, where we helped test for oxalate oxidase (OxO) in nuts from VT/NH and Maine that were pollinated with transgenic pollen. While there, we worked with Tom Klak, Doug McLane, and Brian McClain for two days. Doug and his wife Susan were gracious enough to offer us a whole house to stay in, along with food and entertainment.

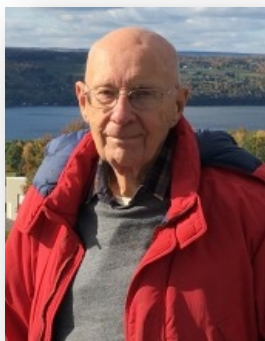
Working together on this restoration program has paid off and is very gratifying. Both the VT/NH and the Maine Chapters have pure wild-type trees planted in germplasm conservation orchards (GCOs) and anticipate accelerating blight-tolerant nut production as soon as we have government approval.

Tom recently informed me he is producing large amounts of transgenic pollen, which he can do all year in his accelerated pollen facility. His concern at this time is that we will not have enough trained people and/or wild-type trees to pollinate with the amount of pollen he has collected.

If you have flowering American chestnut trees that can be pollinated, please contact me at fajknichols.75@gmail.com or (607) 263-5105. Almost one hundred people have notified me about flowering trees, but we need to know if they need hand pollination training, assistance with pollination, and/or equipment, such as an orchard ladder to help pollinate.

Two members recently notified me that they have isolated trees with burs. Since they are isolated, those trees can be hand pollinated without bagging the flowers, which would be beneficial if we get approval for release by July 2023.

News About Our Members



Frank W. Munzer of Malton NY, New York City, Upton Lake in Clinton Corners NY, and Bedford Hills NY, passed away on April 16, 2022, at age 94. He was a beloved father, grandfather and great grandfather. Frank was a veteran of the Korean War. Since 1993, Frank served our New York State Chapter well, in many leadership capacities. He was a chapter director, district director, executive committee member and chapter vice president. Frank's extensive volunteer work was marked with excellence and dedication. He always took the time to encourage others. When failing health brought about his retirement from active leadership, the chapter honored his long and productive service by proclaiming him Vice President Emeritus. Frank Munzer was a chestnut champion. He was also dedicated to his church, boy scouting, camping, canoeing, hunting, and fishing. He will be missed by many. Our condolences to his family. Donations in Frank's name can be made to NY-TACF by sending a check to Treasurer Fran Nichols, 302 Bateman Road, Laurens, NY 13796.

Flowering Chestnut Trees Discovered by Air

In July, chapter president Allen Nichols and weekend news reporter for Fox News John Scott, discovered large flowering American chestnut trees during a mid-day, high altitude, three-hour flight over area forestlands. Allen's follow up on the ground documented a large American chestnut tree with a 16.9 DBH. There was another tree just behind it with an 8.6 DBH. Both trees can help preserve the genetic diversity of wild, pure American chestnut trees. These are needed for outcrossing with our transgenic blight-tolerant trees, for successful restoration of the species. They also spotted several smaller flowering trees in the Bear Spring Mountain Wildlife Management Area, which Allen has not had the opportunity to physically check.



The American Chestnut Research and Restoration Project

Andy Cortese
Masters Student



Much of the forest area within the native range of the American chestnut is secondary, meaning it has originated from abandoned agricultural fields. These secondary

forests are often dominated by arbuscular mycorrhizal (AM) trees like maple, ash, and cherry, which cannot share necessary mycorrhizal fungi with ectomycorrhizal (EM) trees such as chestnut or other Fagaceae family members (e.g., oak). My research is investigating if there are sufficient EM fungi within AM maple-dominated forests to support the establishment of EM tree seedlings in the Fagaceae. Between 2019-2020, I planted 240 oak seedlings in secondary forest plots that range from having no EM trees to those with a few existing EM trees. I am also testing if the addition of soil inoculum from EM-dominated forests to seedlings during planting can reintroduce EM fungi missing from secondary forests. My objective is to determine if proximity to existing EM trees or EM-forest soil inoculum will increase colonization by EM fungi and enhance their survival and growth. I am harvesting the last of my seedlings from the field later this month, and my results will hopefully inform restoration decisions to ensure that planted American chestnut seedlings have access to critical EM fungi to aid in the successful reestablishment of this iconic tree species.

Adriana Del Grosso
Tree Distribution Manager



The American Chestnut Research and Restoration Project at SUNY Environmental Science and Forestry (ESF) is preparing for the first stages of

distributing the Darling 58 blight-tolerant

transgenic American chestnuts, once the trees are granted a deregulated status. Some of the first Darling 58 plant material will be reserved for the longest active members of the New York Chapter of The American Chestnut Foundation. Because NY-TACF has supported us since the beginning, we would like to give back to those who have supported us the longest.

Blight-tolerant Darling 58 plant material will be available for NY chapter members who have been active since January 2017, which is three years prior to the date the first documents were submitted as a part of the regulatory process. Eligible members will be contacted closer to our anticipated date of deregulation. If you know of anyone who would be eligible but has passed away between January 2017 and now, let us know. Their family will be eligible.

Once we receive deregulated status and can freely distribute our trees, potted Darling 58 seedlings will be available to pick up at ESF in Syracuse, NY for free to eligible members. A limited number of seeds and bare root seedlings will be available to ship at a cost, at a later date. Eligible recipients can also elect to donate their seedlings to the project to aid our goals with further research and restoration.

For questions information about distribution plans, please contact Adriana Del Grosso at ardelgro@esf.edu or 315-470-6828.

Andrew Newhouse, PhD
Assistant Director



The Darling 58 has been submitted for regulatory review by the USDA, the EPA, and the FDA. Reviews are in progress by all three agencies, and we expect regulatory

approval to allow for initial public distribution to begin in 2023. Natural cankers have been observed on Darling 58 and related sibling trees, and Darling 58 cankers are consistently small and not lethal (in contrast to lethal cankers on related trees). Replicated intentional inoculations

were initiated in the summer of 2022, which corroborate results observed with natural infections: Darling 58 trees with OxO have consistently smaller and less severe cankers than their non-transgenic relatives. Discussions are underway to enable effective distribution of trees (seeds, seedlings, and/or pollen) to various stakeholders next year pending regulatory approval. ESF researchers are also discussing how the chestnut project will proceed into the future, potentially addressing both other chestnut disease questions and threats to unrelated trees such as the American elm.

Dakota Matthews
Molecular Lab Manager



Since finishing my master's degree with Dr. Powell in 2020, I have been assisting with testing transgene expression levels in our new transgenic lines. We have been outcrossing the

Darling 58 to increase genetic diversity, and I have been testing these next generations to determine their OxO expression levels. Comparing those to our original Darling 58 line helps determine if expression is consistent, as well as identify new male parent lines for generating transgenic pollen.

We have also been working to integrate hypovirulent strains of the chestnut blight into our mother tree orchards, to increase the longevity of our mother trees. Finally, we are optimizing protocols for mass testing chestnuts from transgenic crosses. All this work was done with our former undergrad employees Kyra LoPiccolo and Sydney Ostlund, who are both now entering graduate level environmental programs at Penn State!

For more information about the American Chestnut Research and Restoration Project, visit:

www.esf.edu/chestnut

or join our Facebook group:

www.facebook.com/groups/esfchestnut

New York State Chapter of The American Chestnut Foundation, Inc. 32nd Annual Meeting - October 7 & 8, 2022



Meeting: ESF Gateway Center, 1 Forestry Drive, Syracuse, NY 13210

Hotel: Collegian Hotel and Suites, by Wyndham
1060 East Genesee Street, Syracuse, NY 13210, (315) 701-2617

Meeting Agenda

Friday, October 7

Collegian Hotel

- 6:00 pm **Dinner** – On your own
Meet in lobby to discuss dining options
- 7:30 pm **Chestnut Harvest Exchange** (Collegian Hotel)

Saturday, October 8

Meeting: ESF Gateway Center

- 8:00 am Registration / Coffee, Tea, Donuts / Silent Auction
Chestnut Harvest Exchange Continues
- 9:00 am Welcome & President’s Report by *Allen Nichols*
- 9:15 am District Director’s Reports

| | |
|-----------------|--------------------|
| 1 Niko Nantsis | 6 T. Urling Walker |
| Enrico Nardone | 7 Roy Hopke |
| 2 Dale Travis | Tim Russell |
| 3 Tim Termini | 8 Paul Ackerman |
| 4 Allen Nichols | 9 William Snyder |
| 5 Emmett Hoops | |

- 9:45 am Science Reports – ESF Staff & Students
- 10:30 am Coffee and Roasted Chestnut Break
- 11:00 am Science Reports (cont.) – ESF Staff & Students
- 12:00 pm Lunch at the Gateway Center

Business Meeting

Required for Board Members, Recommended for Attendees

- 1:00 pm President’s Report by *Allen Nichols, President*
- 1:10 pm Annual Meeting Minutes
by *John Neumann, Secretary*
- 1:20 pm Treasurer’s Report by *Fran Nichols*
- 1:25 pm Election of Directors
by *John Neumann, Nominating Committee Chair*
- 1:30 pm Open Discussions, Q&A, and Proposals
- 1:45 pm Announce Winners to Silent Auction/50:50
- 2:00 pm Tour – ESF Lafayette Road Experiment Station
- 4:00 pm Afternoon session closes
- 6:00 pm Dinner (TBD) – Please bring money for dinner
After Dinner Closing Remarks by Allen Nichols, President





Room Reservations:

Collegian Hotel in Syracuse, (315) 701-2617, tell them you are with the “2022 American Chestnut Foundation NY”. Please make reservations by Monday, September 26, 2022.

Booking: <https://www.wyndhamhotels.com/trademark/syracuse-new-york/collegian-hotel/rooms-rates?&checkInDate=10/07/2022&checkOutDate=10/09/2022&groupCode=100722FAL>

Meeting Registration

By Credit Card: <https://www.esf.edu/chestnut/meeting/>

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By Check:

Name(s): _____ Address: _____

Cell phone: _____ City: _____
 E-mail: _____ State: _____ Zip: _____

| | <u>Cost</u> | <u># Attending</u> | <u>Total Cost</u> |
|-----------------------------|--------------------------------|----------------------------|-------------------|
| Friday | | | |
| Chestnut Harvest Exchange | Free | _____ | Free |
| Saturday | | | |
| Regular Registration Rate | \$20 each | _____ | \$ _____ |
| Student Registration Rate | \$10 each | _____ | \$ _____ |
| ESF Staff Registration Rate | Free | _____ | Free |
| Dinner (TBD) | Please bring money for dinner. | | |
| | | Total Registration: | \$ _____ |

Checks should be made payable to “SUNY Research Foundation.”
 Please include a copy of your email confirmation with the check and mail to:

SUNY-ESF ATTN: Katherina Searing
 ESF Open Academy
 1 Forestry Drive, 228 Gateway Center
 Syracuse, NY 13210





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 The American Chestnut Foundation
 C/O Fran Nichols
 302 Bateman Road, Laurens, NY 13796

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Join the New York State Chapter of The American Chestnut Foundation

Visit www.acf.org, call 828-281-0047, or mail the form (below) to:

The American Chestnut Foundation Inc.
 50 North Merrimon Avenue, Suite 115, Asheville, NC 28804

Enclosed please find my \$40 membership in support of NY-TACF.
 I also make an additional gift of \$ _____ to the New York State Chapter.
 A total of \$ _____ is enclosed.

All memberships to TACF include TACF publications, a car decal, membership to one of the state chapters as well as opportunities to participate in local chestnut activities. Visit www.acf.org or call (828) 281-0047 for more information.

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ E-Mail: _____

Check enclosed Please bill my credit card (Visa/MasterCard/Amex/Discover) This is a gift

Please make check payable to The American Chestnut Foundation

Name on card: _____ Card #: _____

Exp: ____/____/____ CVV# _____ Signature: _____

NY Chapter membership includes the Newsletter *The Bur*. The NY Chapter helps guide research at ESF and maintains plantings to keep the American Chestnut gene pool. TACF & NY-TACF are 501 (c) (3) non-profit organizations. Except for the membership services portion of your contribution (valued at \$15) your gift is tax deductible to the full extent allowed by law.