

# Chestnut Tree

The Pennsylvania Chapter of  
The American Chestnut Foundation



**PA-TACF Contact Information:**

Penn State University  
206 Forest Resources Lab  
University Park, PA 16803  
Phone: 814-863-7192  
E-mail: [mail@patacf.org](mailto:mail@patacf.org)  
Website: <http://www.patacf.org>

## Fall Member Meeting scheduled for November 10 at Penn State

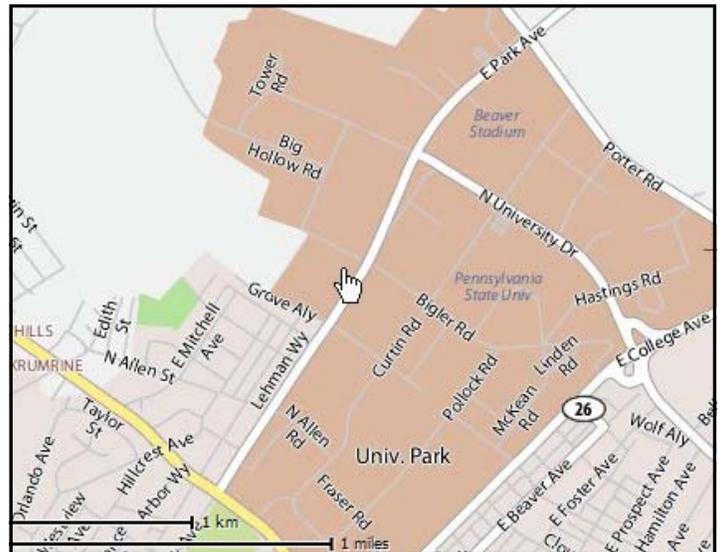
Our annual fall member meeting will be Saturday, November 10, in Rooms 104 and 105 Forest Resources Building (affectionately known as FerBie)—the new home of the Penn State’s School of Forestry Resources, University Park, PA. Join us at this beautiful facility, in the heart of Lion Country!

We’ll start our day with a coffee reception at **8:30 a.m.** The all-day chestnut meeting, snacks, beverages, and lunch will be provided for a **\$10.00 donation**

Then follow with a day of engaging information sharing and workshops.

Back by popular demand, our featured speaker is Lee R. Stover, faculty member, Penn State School of Forestry. Lee’s expertise is in the anatomical properties of wood, wood identification, lumber dry kiln operations, log and lumber scaling and grading, wood products manufacturing, and chainsaw safety training. Lee’s presentation will delve further into wood identification. This hands-on workshop will give participants the opportunity to use microscopes to ID wood.

If you have a question for our group, or wish to share an item of interest, there will be an open Q+A throughout the day. If you are a new member, or interested in becoming a member, this meeting is a great place to learn about PA-TACF and our mission. Hope to see you there!



The Forest Resources Building (FRB) is located on the corner of Park Avenue and Bigler Road on the University Park Campus. A parking deck is located next to FRB (and the new **PSU Creamery!**) on Bigler Road. Parking is free on the weekends.

For more detailed directions, please contact our office: 814-863-7192 or via e-mail at [mail@patacf.org](mailto:mail@patacf.org).

For information about what to do in Happy Valley or where to stay during your visit, contact the Center County Visitors Bureau at [www.visitpennstate.org](http://www.visitpennstate.org) or 800-358-5466



**In the event of a snow emergency, please call the Leffel Center at 814-863-7192 for an update.** The best way to keep informed is to join the **PA-TACF E-mail listserv.**

Other meeting features include:

- Regional breeding update by Sara Fitzsimmons
- Chestnut Hypovirulence by Dr. William Lord
- Silviculture preparation by Chandis Klinger
- Chestnut Biomass by Jim Walizer.

The day’s activities will conclude with a tour of the advanced hybrid chestnut orchard at the Arboretum at Penn State.

### Inside this Issue:



President’s Corner page . . . . .	2
Air Chestnut Launched in Mercer County page . . . . .	4
Chestnut Adoption Program page . . . . .	5
Chestnuts for Biomass page . . . . .	6
Breeding Program update page . . . . .	7



## President's Corner

By Chandis Klinger

Good news. We received confirmation that we will receive a \$50,000 Department of Community and Economic Development grant. We expect the contract to provide us the funds this fall. We thank Representative Sam Smith, Republican Leader, for giving us strong support. These funds will provide much needed support to continue with the Pennsylvania chestnut restoration.

We also received a \$5,000 grant from NORCROSS Wildlife Foundation to complete the purchase of a truck for our breeder coordinator. Our long time volunteer, Lee Saufley, has a car dealer friend, Bob Wolf of Wolf's VW and AUDI dealership, who got us a good deal at the auction. This truck will save wear and tear on Sara's personnel vehicle.

PA-TACF received \$1200 from the Hardwood Forestry Fund to purchase equipment to maintain orchards. We continue receiving grants from Exxon Mobil.

The spring growers meeting did not go quite as planned. Snow was not on the agenda. The weather report was not certain if the storm would track toward us or go east of us. It was a guessing game until the very end when it went toward us. We apologize for any inconvenience. The original guest speaker, Dr. Bob Paris, TACF Research Geneticist, agreed to return next spring. Dr. Bill Lord, a frequent contributor to *The Bark*, gave an excellent history of the blight destruction and its spread.

The next member meeting will be on November 10, in State College. Our featured speaker will again be Lee Stover and he will speak on chestnut identification with microscopes. As you recall, he spoke to us last fall on

wood identification in general. We will also have a tour of the Pennsylvania State University arboretum. While we expect some highly blight resistant nuts this year, do not expect to pick any because Sara will have already picked them and put them in cold storage for the test program.

To date, we have sown over 30,000 seeds in 150 different orchards throughout Pennsylvania with many volunteer labor hours. These volunteer hours come from the nearly 1,000 chapter members and a few non-members who just want us to succeed.

## Chapter Gains Essential Equipment thanks to Members



Look for the PA-TACF truck in a county near you! The vehicle has traveled more than 4,000 miles this summer in support of the breeding program. The chapter also found a cap in the "Scratch and Dent" section at a local dealer, keeping our orchard equipment safe and dry. Thank you one and all for keeping our mission on track!



In our last issue of the *Chestnut Tree*, we put out a call for help in attaining a storage unit for our harvest. We received a lot of calls with possible leads, but ended up having a member, Jim Ross, who's son works with KMA Remanufacturing, let us know about a unit with an attractive price tag. We ended up with a 72 cubic foot unit with great temperature control and an automatic alarm. Many thanks to long-time member Barbara Songer for donating additional funds to make the purchase of the unit possible.

WPSU-FM's Cynthia Berger covered our inoculation work this past June at our Beech Creek Orchard, broadcasting to 29 counties in PA. To listen, download the MP3 file here:



<http://www.wpsu.org/radio/features.php>

- On the right side of the page, click on "all past features"
- Scroll down to June 22, 2007, American Chestnut Foundation
- Click on "listen to feature"

## MEMBER SHARING: NOTES ON VINEGAR CONCENTRATIONS FOR HERBICIDE USE

In response to our last issue where intern Maria Nowicka covered organic weed control methods, the editorial staff here at *The Chestnut Tree* received several good pieces of information, especially with regard to organic chemical herbicide treatments.

Many of you wrote about the vinegar concoction which Chandis asked about and pointed out that all vinegar is not made the same.

Grocery store vinegar is 5% acidic and costs about \$2.00/gal. Horticulture grade vinegar, on the other hand, is 20% acidic and about \$30.00/gal in 1 gallon quantities.

To make these acids work, one also needs a **surfactant** or something to get the stuff to stick, and stay stuck, to the leaves of the plant. Aloe is recommended for this (available in "health food" stores). One member notes success with mixing in about 1/4 cup of aloe per gallon of acid mixture.

Here is a not-so-secret mixture from one of our growers, with a few words of caution:

The 20% acidic is probably stronger than is needed for most plants. I've had success cutting this to 10%. Put 1 gal of 5% in a 1.5 gal hand sprayer, mix in 1/3 to 1/2 cup aloe, add 1/2 gallon of the 20% vinegar.

Mix-Shake thoroughly. On a nice bright sunny day, with a mild breeze blowing, you see results between a morning application and sunset. Most weeds are brown by the next day. Quite gratifying! A follow up with 5% vinegar / Aloe a week later is highly recommended. On tough weeds like dandelions with deep roots, larger plants will need a couple of applications. Try repeating the 5% applications about 2 weeks apart.

Haven't tried the lemon juice or soap, but it makes sense that they would help. A squirt of dish soap should help the mixture "wet-out" on the surface of the leaves.

20% Horticultural vinegar can irritate delicate skin. Wearing goggles and rubber gloves is highly recommended. Some prefer to use a dust mask (charcoal filter if you have it) to avoid contact with lips and / or nose.



## Your Vote Counts 2008 Election Ballots

Look for your 2008 Board election ballots in the mail. Three board member positions are available.

If you would like to be a board candidate, or know someone you would like to nominate for the board in the future, please contact PA-TACF at the Leffel Center.

The PA-TACF Board welcomes your comments and suggestions. If you would like to contact an individual Board member directly, please call the Leffel Center at 814-863-7192 for Board member phone or e-mail addresses. Or write to us at:

**PA-TACF  
Penn State University  
206 Forest Resources Lab  
University Park, PA 16802**



## THANKYOU

Steven Darhower, for providing us with a building for our spring meeting at the Milton B. Hershey School Environmental Center.

Christopher Ditlow, of Oak Park Cabinetry, for his ongoing donations of handcrafted wood products.

Timothy VanVliet, for donating reclaimed chestnut pieces.

Tom Paris, for creating chestnut wood samples for our traveling displays.

Fred Roberts, for his advocacy and ongoing support of our mission.

## Air Chestnut Program a Blast for Mercer County Volunteers

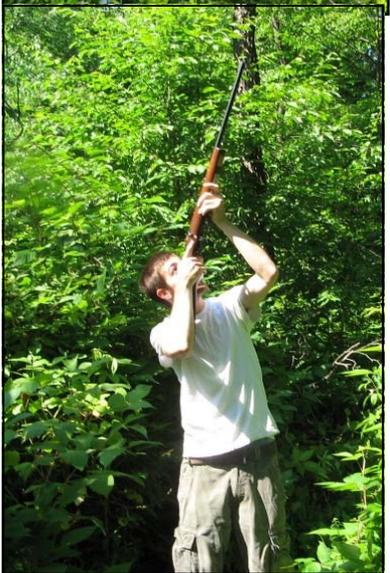
As many of you know, some trees are just impossible to pollinate by hand using traditional methods of orchard ladders or bucket trucks. Mercer County volunteer coordinator Gary Misky, Dayrl and Donna Lang, Dave Thompson, Brad and Luke Stallsmith, and Jamie Hoegerl have developed an innovative approach: **Air Chestnut:** Air mail delivery of pollen to Single, isolated, inaccessible and lonely American chestnut trees seeking pollen. Misky reported that Air Chestnut successfully delivered a massive supply of Haun's American



pollen to the Stallsmith tree, and "Our shooting percentage remains at 100% and we are really getting the hang of positioning those balloons."



"We really loaded some of them up to the point it took awhile for them to get up into & above the canopy. We could actually see the pollen disperse this time – especially the balloon that burst as Brad was filling it! We will watch him and the tree closely to determine if pollination actually succeeds."



The Air Chestnut project required the following supplies:

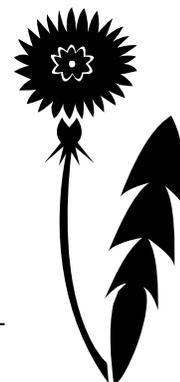
- 1 Party Time helium balloon kit
- 1 Zebco rod & reel
- Lots of pollen & Funnel
- 22 rifle with birdshot
- 2 enthusiastic retrievers who chase everything. (not critical to success but lots of fun to watch)

As Brad Stallsmith said when I asked him if he was interested: Trees, Fishing Poles, Balloons, Dogs and Guns...How can this not be fun?

**We'll report on the results next spring.**

## The Use and Efficiency of Environmentally-Friendly Weed Control (Part 2) -

by Maria Nowicka and Sara Fitzsimmons



This article is a follow-up to that published in our Spring Issue.

### MECHANICAL:

Mechanical weed control methods are generally work- and time-consuming. You can simply dig them out, which is more effective if the soil is really wet during the digging, so most of roots are removed easily. You can provide the treatment after the rain, or soak area with the sprinkler.

Very efficient in mechanical weed removal are geese and chickens. Both geese and chickens beside of food will need also drinking water. Care has to be taken, to not place birds near any grass or vegetable crops – they will first eat the crops, and after that weeds. From weeds geese prefer grasses, so they will eat them before all the rest of weeds.

Using heat can also provide physical weed control. Hot water, steam or flamers can be used. By the flamers weed control is done not directly by burning, but by heating the water contained in plant cells. To perform flaming safely, it is recommended to do it when the ground is wet, in windless conditions. The best time to observe the flame is early morning or evening. It is strongly recommended to read all the labels and instructions attached to the flamers and check the fire danger in local area.

Little less efficiency shows using hot steam, but it eliminates fire danger. The steamers are not too popular on American market, so to get one could be the problem. It is most difficult to kill the grasses and dandelions, because of their big and deep root system, so the treatment would have to be repeated up to 4 times a year.

While most growers in our Chapter tend to use the more common herbicide RoundUp, some growers may find one of these methods more to their liking, especially if their farm is organically certified.

### "PROACTIVE"

I use the term "proactive" because this

*(Continued on page 8)*

### Lancaster Area Preschool Starts Chestnut Adoption Program

PA-TACF member Robert I. Hilliard sent us these pictures of the Apostle Preschool Chestnut adoption program which he helped initiate this past spring. Each student planted and named his



American chestnut, and received an American chestnut adoption birth certificate. The trees were planted in Rader Park, adjacent to the school. The children will help care for their “babies” as they grow. Mr. Hilliard hopes to continue the program next spring. Thank you for educating our youth about the American chestnut!

### Board Votes Tracey Coulter As New DCNR Rep



PA-TACF would like to welcome Tracey Coulter as our new DCNR Board Representative. Tracey Coulter has been a member of TACF for over 15 years.

In 1995, she moved to Pennsylvania, where she served as chapter treasurer and on the PA-TACF chapter board. In 1999, she began forestry studies at Penn State, completing her MS in Forest Resources in 2005. She is currently employed by the DCNR Bureau of Forestry as watershed coordinator in the Rural and Community Forestry Section. The daughter of past TACF President, L.L. Coulter, Tracey is a second generation TACF member and is delighted that a third generation is coming on board—her daughter is planning to include an orchard at her new home!

Welcome Tracey, the chinkapin queen!

### New Jersey Members Hold Meeting and Tour

Our New Jersey members attended a meeting and tour on Saturday, June 16, at the Middletown Township Public Library. Dr. Brad Hillman, Associate Director for Research at the New Jersey Agricultural Experiment Station presented his work on chestnut hypovirulence, and Gary Lovallo of Mercer County Parks System reviewed activities within the region. The group toured nearby large American chestnuts surviving with the blight and traveled to see chestnuts at Hartshorne Park. If you didn't make the meeting, but want to become involved in New Jersey, please contact us!



**SPONSORED BY . . .**

One of the smartest ways to give is through a matching gift program, where a company - or individual - will match donations to charitable organizations. These matches are often dollar for dollar, which doubles your charitable-donation power. Check with your company ' s human resources or payroll department to see if it has a matching gift or grant program, and help us restore the American chestnut.

## Chestnuts for Biomass by Jim Walizer



The new buzz word for developing renewable energy and heat sources is "biomass". One of the best examples of sustainable biomass we have in Pennsylvania is our Pennsylvania forests.

Wood is carbon neutral. The carbon released by burning a 20-year-old tree is recaptured by a new tree growing in its place in the next 20 years. Wood smoke emissions do not add to the Carbon Dioxide part of global warming.

According to the federal EPA "residential wood heating with new technology appliances and the direct use of natural gas are the most sound environmental options."

Some people are suggesting that willow trees, because they are fast growing, could be planted in rows and harvested at the sapling stage for biomass. The stump sprouts would then regrow for another harvest in a few years.

The Pennsylvania State University tried this in the 1970's with hybrid poplar (Aspen), but cheap oil made it unprofitable.

I think we could do better with chestnut trees. willow and aspen are very low in BTU's but chestnut is as high in BTU's as oak per ton.

Chestnut trees are now grown in rows in Italy and are mechanically harvested every 17 years for biomass.

We have tried this experimentally at Walizer Farms. We cut down 3-year-old chestnut trees and let them resprout. They grew 6 to 8 feet tall in the first year. Some, in the third year, are 12 feet tall with a circumference of 8 inches.

Bootleggers used chestnut wood to fire their stills in the woods during prohibition because it burned almost no smoke.

I think we need to look at chestnuts for biomass.

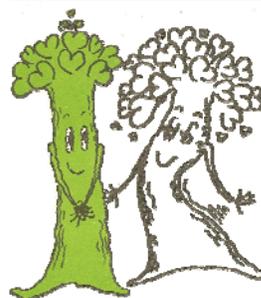
Editors note: for more information about Biomass visit:

<http://www.25x25.org/>  
<http://www1.eere.energy.gov/biomass/>  
<http://www.nrel.gov/biomass/>



### **Mark Your Calendars:**

- Sept. 27-28:** Wild Resource Conservation Program Symposium, Annville, PA.
  - Oct. 9:** Presentation to the Nutley Community Tree Conservation Partnership (NJ)
  - Oct. 20:** Presentation to Essex County Master Gardeners (NJ)
  - Oct. 26-28:** TACF Annual Meeting, Burlington, VT
  - Nov 10:** PA-TACF Fall Meeting, University Park, PA. Will be preceded by PA-TACF Board meeting on November 9.
  - Nov. 29:** Presentation to Master Gardeners, Carlisle, PA.
  - Jan 5-12:** Pennsylvania Farm Show, Harrisburg, PA
  - Feb. 28:** Western PA Nature Center Roundtable
- Check our website for additional presentations and volunteer opportunities in your area.*



### **BREEDING PROGRAM UPDATE SARA FITZSIMMONS**

<sup>1</sup>For basic information on TACF's breeding program, visit: [http://www.acf.org/r\\_r.htm](http://www.acf.org/r_r.htm) and <http://www.acf.org/O&A.htm>

As compared with previous years, activities around the state were mild. With both the regional breeding program and CMS programs in full swing, most attention was drawn toward upkeep and maintenance at our

*(Continued on page 7)*



## VOLUNTEER SPOTLIGHT: TONY ROSATI



The chapter would like to congratulate Tony Rosati of Middletown, New Jersey for his support of the chapter's mission through countless hours of volunteering. Tony has become one of our most dedicated members, enjoying all aspects of our work finding, planting and growing chestnuts.

A member since 2004, Tony has toured orchards in both PA and NJ, and has found trees with little or no blight, as well as some highly resistant trees surviving with blight. Tony is the "New Jersey Tree ID person." Tony and his friends at the Monmouth County Parks system have found and identified the most American chestnuts in New Jersey—many located in the Atlantic Highlands, within site of New York City and the ocean!

Tony and his wife, Carol, planned and organized the New Jersey member meeting in June of this year, which featured a tour of the largest American chestnut in New Jersey surviving with blight (located in Tindall Park, Monmouth County). Tony has also developed a partnership with the Monmouth County Tree Commission to supply bucket trucks for harvesting. The 2007 New Jersey harvest is expected to yield the largest number of chestnuts the state has ever had.

Thank you, Tony for your tireless efforts and contagious enthusiasm.

The chapter relies on volunteers like you!

(Continued from page 6)

many orchards around the state. I also don't have a lot of room in this issue, so I'll keep my column brief this time.

### GYPSY MOTHS

Gypsy moths have been affecting a few locations around PA for the past two years, but have become even more wide-spread in 2007. This year, our many orchards around Penn State were attacked and look to be larvae food for next year as well. Be on the lookout for these pests, as large populations can damage young trees and growth.

### INOCULATIONS

We got a lot of inoculating done this year – I can't wait to see the results! We're well on our way to having tested about half our Clapper lines, and started testing our first PA-derived B3F2 lines by testing over 600 trees at the PSU Arboretum. Next edition I will report on the preliminary results.

### NEW PLANTINGS

A couple of new plantings were established this year. One of the most exciting plantings is a test set-up by Jim Walizer. Additional novel plantings include Graves x Clapper BC3F2 plantings by Blair Carbaugh in Danville and by Ken Oden in Cross Fork.

### STRATEGIC PLANNING

The Chapter is in its first phases of strategic planning. We hope to have a draft by the fall meeting. We welcome your input and ideas!



*Tony points out a large surviving chestnut tree to Dr. Brad Hillman, research professor at Rutgers University.*



*As a treat in return for a hard day of inoculating at the PSU Arboretum, we treated ourselves to meal at The Green Bowl in State College. Hope to see you at an upcoming volunteer activity! Call the Leffel Center and join our listserv to see what opportunities await you! Many thanks to Jim Egenreider, Alan Tumblin, Sue Oram, (not pictured), me, Sam Grinstead, and newcomer Anna Kochersperger for coming out to help at the Arboretum.*

Pennsylvania Chapter  
The American Chestnut Foundation  
206 Forest Resource Lab  
University Park, PA 16802

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

The Chestnut Tree Newsletter



*Robert Strasser of the Maryland Chapter checks on weed control under heavy black plastic at the Foxhaven orchard in Jefferson, MD.*

method works to stop weeds before they happen. This can take a lot of energy -- and perhaps a good deal of money -- in the beginning, but might save one a lot of trouble later on.

This method typically relies on laying down some sort of "weed suffocation" material. I've seen people use most anything from garbage bags and cardboard to commercially available black plastic wrap and

landscape fabric.

A great first step is to plow before you plant. Do it a couple of times to get rid of currently established weeds.

Then you need to decide what sort of covering you will use. Cardboard and grocery-grade garbage bags degrade very quickly. So does cheap landscape fabric. You need to find a product that is UV-resistant and can stand up to several years of wear and tear. Typically, you'll be looking to spend about \$20-\$30 per 3'x100' per roll of good fabric or plastic. Our office has several names of suppliers. Please just get in touch if you are thinking about pursuing these methods of establishment.

Are you a web developer, designer, or trainer? We'd like to modernize our website to reflect the spirit of our volunteer breeding program, while maintaining the science and professionalism that drives it. If you would like to help the Chapter, or know someone that can, please call or e-mail the Leffel Center, [mail@atacf.org](mailto:mail@atacf.org).

