# CIORGIASE Georgia Chapter

**The American Chestnut Foundation** 

**Spring**, **2**010 Volume 7, Issue 1

# SPRING MEETING TO BE HELD AT **CALLAWAY GARDENS**

THE GEORGIA SNOWS(!!!) HAVE MELTED, and at time of this writing, the maple tree buds are breaking, which COULD ONLY MEAN that it is ONCE AGAIN time for the Georgia Chapter of the American Chestnut Foundation to gear up and do our part to restore the American chestnut tree to the Appalachian forests!!!

We had a very good autumn, culminating in a strong nut harvest from our pollination efforts at Meadowview and on our own trees. We have over 700 nuts we need to do something with! To that end, we are ramping up our efforts to source, secure, establish and service chestnut orchards across the state.

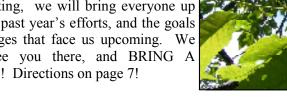
At our meeting, we will bring everyone up to speed on past year's efforts, and the goals and challenges that face us upcoming. We hope to see you there, and BRING A FRIEND!!!!! Directions on page 7!



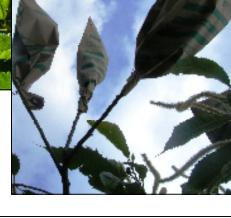
Middle: The leaves we should all look for this spring: a translucent, stained-glass green!!!

Bottom: Pollinated flowers sit in their bags and will be harvested three months later!!!

This is what we do...join us!!!!!







#### In this issue

First Georgia American chestnut somatic seedlings produced	. Page 2
New Officers Elected.	. Page 2
Outgoing President's Message	.Page 3
News from Other Chapters.	Page 4
Incoming President's Message	Page 5
Legacy Tree Update	Page 5
Chestnut Tree on Rebound, With Help from Friends	. Page 6
Announcements, Events, Officers	.Page 7
Membership Application Form	Page 8



#### BEAUTIFUL!!

This is an Aerial shot of our Backcross Orchard at Berry College!!!!! Those green dots are our chestnut trees gettin' big!!!

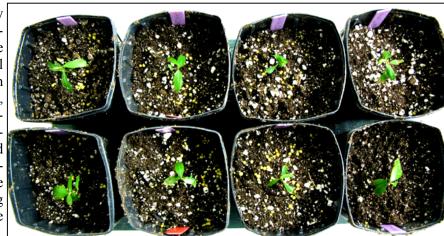


# First Georgia American Chestnut Somatic Seedlings Produced

#### Scott Merkle Warnell School of Forestry and Natural Resources University of Georgia

Over the past several years, my lab at UGA has started tissue cultures from immature seeds generously supplied to us by GA-TACF breeders and cooperators, including Marty Cipollini, Tom Pachinger, Ken McDonald and Mark Stallings. While we have initiated a number of embryogenic cultures from these seeds, up until now we had been unsuccessful at producing somatic seedlings (plantlets) from any of the cultures derived from Georgia mother trees.

However, the first somatic seedlings were recently produced from a culture initiated from an open-pollinated seed collected from GAWAL1 (the Meyers Tree) in 2008. Taryn Kormanik, a doctoral student in my lab working on improving production of vigorous somatic seedlings from our cultures, grew the GAWAL1 culture in suspension and produced dozens of somatic embryos from it. The embryos were given a 12-weeek pre-germination cold treatment and when they came out of the refrigerator, several germinated. Some were lost during the transition from tissue culture conditions to potting mix, but eight somatic seedlings survived and are now growing in the greenhouse (see photo).



CALL TO ACTION!!!! There is a possibility that the UGA MOUNTAIN RESEARCH and EDUCATION CENTER (and GaTACF Partner and orchard location) in Blairsville may be shut down due to State budgetary constraints. ALL GA-TACF members are encouraged to contact their state legislators ASAP and tell them that the center is CRITICAL to our American chestnut restoration program. Center director Joe Garner has been an invaluable contributor and soldier to our cause and we should do everything we can to make sure his efforts (and those of all other projects at the Center) shall not be fruitless!

# こうこうこうこう

## New Officers Elected, Board Members Needed!!!!

At our Board meeting March 13, new officers were elected. Your 2010-2011 officers are:

President: Joe Nicholson (right-center)
Vice President: Tim Chesnut (left)
Secretary: Tom Pachinger (right)
Treasurer: Dianne Smith (left center)

At our Annual GaTACF meeting at Calloway April 24, we will need to fill six Board of Director positions that will come open. Nominations are welcome from the general membership and can be made at the meeting, or can be submitted before the meeting by emailing them to Joe at Joe.nicholson@att.net, or Tim at Tim@ChesnutForestry.com. If you email a nomination, please do so by Wednesday, April 21.



The Georgia Chapter of The American Chestnut Foundation is a 501 (c) (3) Corporation Copyright © 2004-2010 The Georgia Chapter of The American Chestnut Foundation.



# **Outgoing President's Message**

By: Mike Hinson

**2009** was our best year yet for the Georgia Chapter of The American Chestnut Foundation as we had our best nut harvest to date and 2010 should top that. Our need for orchard space and orchard stewards continues to grow and we need everyone's assistance in locating suitable orchard space as well as stewards. Land without volunteers to look after the trees does not help much.

I would like everyone to give a special thank you to Ronnie Camp and all the volunteers that helped with the pollination efforts and harvest last year. We continue to work towards developing B3F3 trees from our Georgia lines through our own backcross orchards. Georgia was the first state chapter to purchase a "Legacy Tree" thanks to 11 members who donated a minimum of \$500 towards the purchase. A "Legacy Tree" is the most advanced B3F3 tree we have and they are where the B3F3 nuts come from that are currently being tested by the US Forest Service and others. Our members that donated towards our state chapter purchase will receive some nuts from our tree.

There is a lot of work that goes on behind the scenes in our chapter that makes us successful. Without people like Dr. Martin Cipollini, Ronnie Camp, Joe Nicholson and our orchard stewards to name a few that give a significant amount of time, energy and knowledge towards our efforts, our chapter could not be successful. Our overall membership has dropped by 10 percent last year as it has in most all the state chapters. We are looking for ways to grow our membership as it takes volunteer time and money for us to continue to work towards the restoration of the American Chestnut to its native range in Georgia. You will hear more about special events to grow our membership and generate interest in our mission.

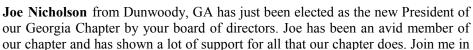
I attended the national board meeting and annual meeting of the American Chestnut Foundation in Coraopolis, PA last October. The foundation has completed its move to Ashville, NC. Some of the highlights of the meeting were the selection of the name for our B3F3 trees that are starting to be distributed for testing. The name that was selected is "Restoration Chestnut". This is our best tree thus far but is still in the testing stage with no guarantees as to blight resistance. There are several new levels of membership that allow members that give at an annual level to receive some B3F3 nuts to plant and share with their state chapter. The B3F3 trees that were planted by the US Forest Service in national forest last year in TN, NC, and VA are doing well thus far. Our national orchard in Meadowview, VA produced over 13,000 B3F3 nuts last year. Close to half of these will go to the US Forest Service for continued testing and they are still working on how the rest of these nuts will be distributed.

**Mary Belle Price** from our Georgia chapter was awarded the Dr. Charles Burnham award for her many contributions towards land and the lab at the national orchard at Meadowview, VA. She will be presented this award in April at Meadowview, VA at the ribbon cutting for the science lab there.

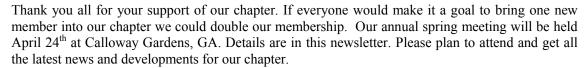


Congrats, Carolyn!!!

Carolyn Hill, a past chapter president was selected to head up the National Board Development Cabinet as the vice-chair of the board. This is a well deserved honor for her as she was instrumental in getting the Georgia Chapter well established and has continued to work hard for our mission of restoring the American Chestnut. Join me in congratulating Carolyn and thanking her for all her efforts.



congratulating Joe and thanking him for taking on this job for us. We will be electing new chapter board members at our annual meeting in April. All of our new state chapter officers and board members and their contact information will be listed on our chapter website following our annual meeting.





We ALL LOVE you, Mary Belle!!!



Joe always has two things with him...his signature hat, and his camera!!!

-Mike Hinson



One Vision - One Voice - One Tree

Many hands - Many hours - One Tree





#### NEWS FROM OTHER CHAPTERS

# Citizen-Scientists Needed to Test Potentially Blight-Resistant Chestnut Seeds

ASHEVILLE, NC. (February 4, 2010) The American Chestnut Foundation (TACF®) has taken an unprecedented step toward the restoration of the American chestnut tree by offering a limited number of its most advanced and potentially blight-resistant seeds to both new and existing sponsor members for planting and testing.

This is the very first time any of these seeds have been made widely available to members and it comes on the heels of over 26 years of intense evaluation by scientists throughout the natural range of the chestnut. Members can test these seeds for blight-resistance and American growth characteristics.

When the chestnut blight came through the eastern US in the first half of the 20<sup>th</sup> century and killed nearly four billion American chestnut trees, all seemed to be lost for this once mighty species. Since 1983, TACF has remained focused on a seemingly impossible goal: to restore the American chestnut to the eastern United States. With this seed distribution program, TACF is one step closer to the restoration of this crucial species but there is much more to be done.

TACF President and CEO Bryan Burhans said, "TACF wants to share this milestone with our members that have worked so tirelessly to get us to this stage. For too many years we've had members call us, wanting the opportunity to plant these trees in their fields and backyards. We now have a limited number of seed available for testing and evaluation. By planting these chestnuts, you become a citizen scientist for TACF. It is such an exciting time to be a member."

Burhans notes, "This is just an early stage in a very long process. There is no guarantee that these seeds will have adequate resistance to the blight, although we are hopeful. Testing by our members will help the organization evaluate resistance across a wide geographic range under diverse planting conditions."

In spring 2008, TACF, in partnership with the U.S. Forest Service and University of Tennessee-Knoxville, planted five hundred potentially blight-resistant chestnuts on three national forests in the southeast. After one year, the seedlings are thriving in a forest setting. The availability of these very same seeds to both long-time TACF members as well as new sponsor members is another step in a \$16 million program that includes over 57,000 trees and encompasses six generations of breeding.

For information on becoming part of this exciting new venture, please visit our website at <a href="www.acf.org">www.acf.org</a> or call (828) 281-0047 regarding membership particulars and benefits.



# American chestnut now potentially resistant to blight and root-rot

GREENVILLE, SC—Dr. Joe James of Seneca, SC may not have been a Boy Scout himself, but when the Scouts came calling last year about getting an American chestnut tree planted in Greenville, they knew that Joe was their man. Joe, a longtime member of The American Chestnut Foundation (TACF) and retired orthopedic surgeon has spent much of his time helping bring back the American chestnut tree since retiring several years ago.

Nearly 500 Boy Scouts from the upstate area, family members and troop leaders recently attended the planting of two American chestnut trees at the Upstate Historical Museum to help celebrate the 100<sup>th</sup> anniversary of the Boy Scouts.

James is helping lead the effort in South Carolina to return the chestnut to its native forests in the Upstate. The American chestnut once thrived in the Greenville area and was the dominant hardwood in local forests. However, a deadly blight accidentally imported from Asia in the early 1900s killed nearly four billion American chestnut trees in the eastern part of the United States in the short span of 50 years.

The trees planted are two of just 85 survivors of a scientific experiment that involves breeding American chestnut trees for resistance to several diseases. James selected these 85 from an initial 1,500 trees. The young saplings planted are expected to resist not only the deadly chestnut blight but also *Phytopthora cinnamomi* (root-rot), a disease that is especially deadly to the American chestnut tree. The American chestnut was once abundant in upstate South Carolina but chestnut blight and root-rot teamed together to decimate the chestnut tree population.

"Phytopthora is actually a bigger threat to the chestnut tree in our area," said James. "It has been around since the early 1800s and attacks the entire root system of the tree. It's very common in the southeastern region. Chestnut trees that have been bred for resistance to the root-rot only have about a 3% chance of long-term survival once they are infected with the disease."

James has screened trees for root-rot every year since 2004 and his work is beginning to pay off with the planting of these saplings at the museum.

TACF is continuing to support James' work on producing American chestnut trees that can fight off root-rot.

The American Chestnut Foundation is a 501(c)3 non-profit organization headquartered in Asheville, NC. It has nearly 6,000 members and chapters in 17 states. The demise of the American chestnut tree due to chestnut blight has been called the greatest ecological disaster of the 20<sup>th</sup> century. TACF was established in 1983 with the sole purpose of restoring this majestic tree to its native forests in the eastern United States. Today, TACF's research farms encompass nearly 160 acres and more than 60,000 American and Chinese chestnut trees which are part of its national breeding program. For more information about TACF or volunteering to help restore the American chestnut, visit our website at <a href="https://www.acf.org">www.acf.org</a>





I have been interested in the American chestnut tree since I was a teenager. My father first taught me about the demise of the trees on hikes in the mountains. He and his father grew up among American chestnut trees around Hiawassee and Clarkesville, Georgia.

I retired from my work with the United Methodist Church in Georgia three years ago and should have time to help our Georgia Chapter carry out its mission and work. In addition to helping restore the American chestnut tree I like photography, nature hikes, and gardening. I enjoyed my class in botany at Young Harris College where I got my first college degree.

I received my bachelor degree from Carson-Newman College and finished graduate studies at Emory. I have lived most of my life in Atlanta.

I will work hard to help GATACF grow and harness its membership to carry out its mission and work to restore the American chestnut trees to our forests. Thanks to all our members who serve so well and work so hard. Let me know how I can serve you.

Best wishes.

Joe



# Georgia First Chapter to Sponsor a Legacy Tree

(first printed in the *Sprout* Spring, 2009)

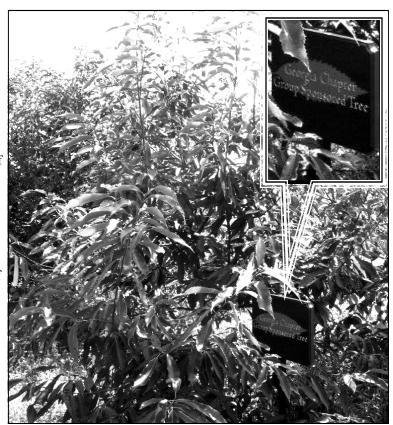
It began with a dream – that the American chestnut could be restored to our nation's forest. Now that dream is taking root in The American Chestnut Foundation's (TACF) first Legacy Tree seed orchard. The Georgia Chapter members proved their dedication to the restoration efforts by being the first to sponsor a Legacy Tree during TACF's 25th Anniversary year celebration.

At our research farms in Meadowview, Virginia this fall Dr. Fred Hebard, TACF's lead scientist, selected the first 200 most blight-resistant 4 year old candidate trees from over 30,000 seeds. These special trees are the sixth generation of research work, the result of 25 years of backcross breeding. They are approximately 15/16 American chestnut and 1/16 Chinese chestnut. In a few years, seeds from this legacy tree orchard will be planted throughout the former chestnut range.

Now that our state chapter has reached its goal a plaque will be made that will note the Georgia Chapter and "Group Sponsored Tree". All nut distrition from this tree will be sole responsibility of the chapter's officers.

Many thanks to our contributors: Mary Belle Price, Ronnie Camp, Tim, Abigail and Lillian Chesnut, Martin Cipollini, Don Davis, Carolyn Hill, Mike Hinson, Ken McDonald, Tom Pachinger, Jerry and Diane Smith, and Mark Stoakes.

FAST FORWARD ONE YEAR.... AND HERE IS OUR TREE!!!!! (only it's green...)
Way to Go Georgia TACF!!!!!

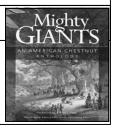


# とうこうこうこうこうこう

"This majestic and useful tree...no other tree received such respect."

—Jimmy Carter—(an excerpt from Mighty Giants)

Support us in our effort to restore the King of the Appalachian Trees to the Throne of the Forest!! Purchase





# Chestnut Tree on Rebound, With Help from Friends Brenda Cummings, Birmingham News, September, 2009

Think of a thing you had given up for "lost" and then found.

A major loss to America and its forests was the magnificent chestnut tree that once populated the mountain ranges from New England down into the South. These trees grew to be veritable giants, reaching heights of 120 feet and diameters of 4 to 10 feet. They lived for centuries.

Their wood was lightweight and harder than the poplar most often used now to replace it. It was used for railroad ties and construction beams as well as for making furniture and musical instruments. The giant umbrella formed by the living tree served as shelter from sun and rain. For over 300 years Americans roasted chestnuts as a special treat and their animals survived by grazing on the nuts.

Unfortunately, a blight from Asia reached our chestnuts, and moving down the mountains from New England, the fungus stalked the native chestnuts with no resistance at all. The fungus spores are dispersed through the air from tree to tree, and they are transported by birds and animals from a sticky substance that exudes from an infected tree. In the first 50 years of the last century, the American chestnut all but disappeared. The fungus still lives.

Fortunately, in the past 25 years, groups of people in the affected states have worked to bring back the tree that enabled early Americans to survive. The American Chestnut Foundation http://www.afc.org) began by cross breeding American chestnuts with the blight resistant Chinese chestnut, resulting in a 50-percent American, 50-percent Chinese hybrid, and then back-crossing those trees so that the next generation was 75-percent American and 25-percent Chinese. Backcrossing has continued until the present seedlings are 94-percent American and resistant to the blight.

In February 2009, 1,200 such hybridized trees - each about four feet tall - were planted in national forests in North Carolina, Virginia and Tennessee. There their growth will be monitored by the U.S. Forest Service, the University of Tennessee and the American Chestnut Foundation.

A few years ago, hybridized trees in the mid process were planted in various sites in several states, including a research plot in Muscle Shoals and on reclaimed surface mines in Kentucky. Their fast growth makes them desirable for the reclamation process.

Knowing what we do about the plight of the American Chestnut tree, it is a thrill to encounter a native one growing naturally in our Alabama woods. So howthen, can new chestnut trees appear at all? Its because the roots of the old tree do nit die with the trunk. From these tenacious roots gros sprouts, trying yet again to attain their genetic possibilities.

Two such stumps have produced young trees near the Cold Springs Loop trail at Monte Sano State Park. One grows beside a trail near Clear Creek Recreation Area in the Bankhead National Forest, and most likely, there are others on mountainsides all over the state. After all, 60 years ago they made up one quarter of the entire forests of America.



#### Chestnuts...

Chestnuts have played an important role in human and wildlife health for thousands of years. It has been found in middens at archeological sites in eastern Michigan, dated 3000—1000 BC. The renaissance scientist Thomas Harriot wrote in 1590 that the native Americans in Virginia made loaves of bread from pounded chestnuts to eat with a type of bean that they grew. Many early settlers to the U.S. quickly found out that chestnuts made "commendable nourishment". A folk medicine was made from the leaves to cure whooping cough. In 1880 near Seymour, Indiana, a tree was recorded that had a 22ft. diameter trunk. —From the Oikos Tree Crop Catalog



#### **UPCOMING EVENTS and ANNOUNCEMENTS:**

#### Georgia Chapter Officers, **Board of Directors and Committee Chairmen**

#### Joe Nicholson

President

GaTACF.President@yahoo.com

#### Tim Chesnut

Vice President Program/Publicity Chairman Tim@ChesnutForestry.com 706+936-0699

#### **Tom Pachinger** Secretary

#### **Dianne Smith**

Treasurer

#### Mike Hinson

Immediate Past President

#### Ronnie Camp

Tree Breeding and Tree Preservation Chair

#### Mark Stoakes

Fund Raising Chair Atlanta Area Orchard Chairman

#### Ken McDonald

N. GA Orchard Chairman

### Dr. Martin Cipollini

**Board Member** 

#### **Jerry Smith**

**Board Member** 

#### Scott Merkle

Board Member

#### Dr. Donald Davis

Board Member

#### **Mickey Cummings**

Board Member

#### Mary Belle Price **Honorary Board Member**





# **GA-TACF ANNUAL MEETING**

# MARK YOUR CALENDARS!!! APRIL 24TH, 10:00 AM, DISCOVERY CENTER, LILY ROOM

#### **Directions to Callaway Gardens:**

-The main entrance to Callaway Gardens is on GA Highway 18.

- -From Atlanta: take I-85 South to I-185 South. Continue on I-185 to the U.S. Highway 27 exit. Turn left on U.S. Highway 27, and drive south approximately 10 miles to Pine Mountain. Turn right onto GA Highway 354 West (which will become GA Highway 18). Turn left into Callaway Gardens.
- -From the south on either I-85 or I-185: take the GA Highway 18 exit. Proceed east on Highway 18. Turn right into Callaway Gardens.

#### Directions to the Discovery Center once you turn in the main entrance:

-Continue straight (through the stone gate). You will eventually come to the ticket ing plaza. Continue past the ticketing plaza until you approach a 4-way stop. Pro ceed straight through the 4-way stop – the Discovery Center will be directly ahead of you; parking will be to your right. The meeting will be in the Lily classroom within the Discovery Center.

- -Those attending the meeting will have their admission fee waived. If they are bring ing guests/family members/etc. that are not attending the meeting, one other person may enter for free as well. The rest will have to pay Gardens admission (\$18 for adults, \$9 for children ages 6-12, children under 5 years old free).
- -Meeting attendees need to identify themselves as GA TACF members to the gate attendant upon entering.

FIND A TREE? Go to our website, www.GaTACF.org and click on the "how can I help" tab. There you will find detailed instructions on how to identify a tree, phone numbers of who to call, and how to submit a sample for verification. You can also call a board member to help out! Contact us and we'll get you materials to help you, your scout troop, your hiking buddies or even your dog to ID the Trees!

#### National Headquarters

160 Zillicoa Street, Suite D Asheville, NC 28801

828+281-0047

Email: CHESNUT@ACF.ORG

Website: WWW.ACF.ORG

The Georgia Sprout is a publication of the Georgia Chapter of the American Chestnut Foundation.

DRESS CHANGES!!!!! EMAIL ALL TO TIM!!!!

Tim Chesnut—Editor (706) 936-0699

Tim@ChesnutForestry.com www.ChesnutForestry.com

Hard Copies Published by

Fast Printing and Copies

1019 Broad St NE.

Rome, GA 30161

#### **OUR ACTIVITIES:**

Primary activities of your Georgia Chapter of TACF:

- Finding and identifying surviving trees
- Pollinating them
- Harvesting nuts
- Planting American Chestnut Trees throughout the state of
- Identifying potential sites for breeding orchards within the state.
- Preserving local genetics
- Breeding blight resistant and regionally adapted trees
- Public outreach and education
- Organizing members and volunteers in those activities.

PLEASE VOLUNTEER!!! CONTACT US!!!!





Georgia Chapter The American Chestnut Foundation

11952 Huntington Hall Court Dunwoody, GA 30338 WWW.GaTACF.ORG

Signature:

Yes! I want to help restore the American chestnut.

Enclosed is my membership support of:		
Regular Memberships (does not include annual seed option)	Annual Sponsor Levels	
Regular Membership (\$40.00) Receive all TACF publications and car decal	CHESTNUT ANNUAL Sponsor (\$300 and above) All membership benefits PLUS yearly access to 2 Restoration chestnut seeds'	
3-year Regular Membership (\$120.00) Receive all TACF publications and car decal	BRONZE LEAF ANNUAL Sponsor (\$500 and abov All membership benefits PLUS yearly access to 3 Restoration chestnut seeds'	
Student Membership (\$15.00) Receive all TACF publications and car decal	SILVER LEAF ANNUAL Sponsor (\$1,000 and above All membership benefits PLUS yearly access to 4 Restoration chestnut seeds*	
Additional gift to State Chapter: \$Circle one: AL, CT, GA, IN, KY, MA, MD, ME, NC/SC, NY, OH, PA, TN, VA, VT/NH, WV		
Name:		
Address: State: Zip:		
Phone: E-Mail:	- T	
Check enclosed Please bill my credit card (Visa/Mastercard only)		
Please make check payable to The American Chestnut	Foundation Send your contribution to:	
Name on card: Exp:/	160 7illicon St. Suite D	

\*Because our Legacy Tree orchard is very young, seed production is low. Supplies for sponsorship level distributions are limited and are subject to a shipping and handling fee of \$50 in addition to the cost of your membership. This is a first-come, first-serve offer. Should demand exceed seed inventory, those wishing seed will be placed at the top of the distribution in first for next year. The American Chestuate Foundation (TACF) is providing these seeds for besting and evaluation purposes only. Seed distribution information and order form will be sent to you once your membership application has been processed. Seed is shipped annually each March. For more information, call (828) 281-0047 or email us at

Mark Stoakes stands underneath a very large (@4'dbh) American chestnut located in a cemetery in Traer, Iowa. One of three planted in the 1880's (one killed by lightning a few years ago), still thriving and blight free!

Submit your pictures, stories and any other contributions for the Sprout to Tim@ChesnutForestry.com