

Carolinas Chapter—The American Chestnut Foundation®

October 2010 Activities Report

Membership

The chapter has 418 total members at the end of August 2010. Of these members, 336 are residents of North Carolina; 74, of South Carolina; and 8 of several other states. New members recruited to join the TACF® at the Chestnut Saturday and Cataloochee Restoration Branch Events held September 11, 2010 are not included in the totals.

Orchards

The chapter has 44 chestnut orchards and demonstration plantings located in a band running from northeast to southwest from near the Virginia border in North Carolina to upstate South Carolina. Plantings are found on individual land holdings, commercial and industrial properties, educational institutions, and on local and state public lands. We are indebted to all of our cooperators and to Dr. Paul Sisco for continuing to organize and manage this complex operation as a volunteer. Paul Sisco has developed a map of the Carolina Chapter Orchards and updated it for 2010. The map has been shared with William White, the Southeast Regional Science Coordinator, who toured some of the Chapter orchards with Paul the summer of 2010. We look forward to working with William.

The chapter added one backcross orchard in 2010 at a site near Lake Toxaway, NC. Three chapter orchards were inoculated to test for blight resistance, one being at Joe James' farm, involving backcrossed chestnuts trees already screened for resistance to *Phytophthora* root rot.

The chapter produced its first B3F2 nuts in 2009. In 2010 the nuts were planted and seedlings eventually will be inoculated to test them for blight resistance with the better trees selected and intercrossed to produce the chapter's first B3F3 nuts about the year 2015. The chapter produced additional B3F2 nuts in 2010. One chapter orchard is a B3F3 test orchard with seedlings grown from nuts supplied by Meadowview Farms. Another orchard includes plantings of B3F3 seedlings grown from nuts provided to the chapter by Meadowview Farms as part of TACF®'s seed distribution program.

Damage to chestnut trees caused by Oriental Chestnut Gall Wasps was detected in 2010 at the Biltmore Deer Park Orchard in Asheville.

Harvest—Pure American and Various Chestnut Crosses

In 2010, chapter volunteers harvested a total of 684 open pollinated American chestnuts with 453 collected from trees located along the Blue Ridge Parkway under a Park Service Permit and 231 from two privately owned trees. Forty-two (42) F1 crosses were harvested from three locations. Twenty-two (22) B3F2 nuts were collected from hand pollinated orchard trees. Two hand pollinated mother trees produced 771 B4 nuts, which have the Graves line of resistance and which will be used in Dr. Joe James' *Phytophthora cinnamomi* (Pc) experiment. In 2010, Joe harvested 150 nuts from parent trees proven to be resistant to Pc.

Research

Phytophthora Root Rot—Joe James' Project

Joe James, who received a grant from TACF in 2010, continues research to grow, inoculate, and screen chestnut seedlings to create a population of hybrid chestnut trees with resistance to *Phytophthora* root rot for future breeding efforts. Of seedlings he will grow from the 150 nuts he collected this year from parent trees proven to have

resistance to Pc, he expects a survival rate after inoculation of six to eight times greater than compared to seedlings produced from nuts coming from unscreened parent trees. Since crosses with the Clapper source of blight resistance do not appear to have resistance to Pc, the chapter is testing lines which have the Graves and Nanking sources of blight resistance to determine if they have resistance to Pc as well. Seedlings with resistance to Pc are needed for Joe's research. A strategy for pedigree testing of trees with Pc resistance will be developed later in the year for use in Joe's research work.

Joe will be giving an update on Pc research at a workshop at TACF[®]'s 2010 Annual Meeting.

Phytophthora Management—Steve Barilovits' Project

Steve Barilovits continues his third year of experimentation using phosphites to manage Phytophthora root rot in American chestnut seedlings. Steve's article about the first year results of his experiment was published in the Spring/Summer 2009 issue of *The Journal of The American Chestnut Foundation*[®]. His article on second year results was published in the July 2010 issue of the Journal.

Chapter Meetings and Presentations

The Chapter held its Annual Members Meeting on August 21, 2010 at Gaither Fellowship Hall, Montreat College, Montreat, NC, which 34 attended. The chapter's 2010 Picnic and Orchard Tour will be held November 6 at the Pryor Farm which is located near Edneyville, NC. One of the orchards at the farm was inoculated the spring of 2010, and people attending will be able to see the effect of the inoculations and learn about the Carolinas Chapter's breeding program and how chestnut trees are selected for further breeding. The chapter's previous Picnic and Orchard Tour was held November 7, 2009 at Louis Acker's and Allie Funk's Orchard, located in Ashe County, NC. Forty-five people attended the event and forty toured the orchard which recently had been inoculated.

Chapter members conducted presentations or attended a display booth at six community functions during 2010, providing information to hundreds of people about the work of TACF[®] and the Carolinas Chapter to restore the American chestnut tree. The dates and locations of the events are listed below.

- February 2, 2010, Society of Foresters, South Carolina Chapter, Rock Hill, SC—Doug Gillis presented a program about the history and culture of the American chestnut tree and TACF[®]'s and the Carolinas Chapter's efforts to restore the American chestnut.
- April 3, 2010, April Fools Trail Days Event, Franklin, NC—Doug and Russell Regnery tended a booth and talked to locals, vacationers, and people hiking the Appalachian Trail.
- April 21, 2010, Tri-County Community College Earth Day Event, Murphy, NC—Doug spoke to teachers, staff, and students attending the Community College, which included local high school students taking courses at the college.
- August 16, 2010, International Wood Collectors Society Annual Meeting, Ridgecrest Conference Center, Black Mountain, NC—Paul Sisco spoke to a group of about 40 people from all over North America.
- September 25, 2010, Local Sustainability Festival, Sandy Ridge, NC— Doug presented a program about the history and culture of the American chestnut tree and TACF[®]'s and the Carolinas Chapter's efforts to restore the American chestnut.
- October 2, 2010, Fall Forest Event at the Cradle of Forestry near Brevard, NC—Doug tended a booth and talked to locals foresters, vacationers, and people attending the event about TACF[®]'s and the Carolinas Chapter's efforts to restore the American chestnut.

Carolinas Chapter Cataloochee Restoration Branch

The Cataloochee Restoration Branch held its inaugural Chestnut Saturday and Branch Events on September 11, 2010. Cataloochee Ranch, Maggie Valley, NC was the site for the events. Chestnut Saturday (10:00 AM to 4:00 PM) attracted families and other guests who spent the day enjoying Blue Grass music, crafts, vendor displays, fishing and food. Paul Sisco conducted numerous tours of the Cataloochee orchard during the event. It is one of the Carolinas Chapter's best orchards, a B4F1 planting of over 300 trees which includes pure American and Chinese chestnut control trees and two native, blighted, survivor American chestnut trees left in the orchard to demonstrate the effect of naturally occurring blight. The Chestnut Saturday event was well attended despite heavy rain at times. TACF[®] greeted people at one of the cabins at the Ranch and distributed membership brochures and other printed material to folks and answered questions about work of the organization and the purpose of the Restoration Branch. The Cataloochee Restoration Branch Event, 6:00 PM to 10:00 PM, included a social hour, an excellent meal prepared by Ranch staff, music by a local musician who was accompanied by a vocalist, and an auction of donated items to raise funds. A hundred tickets were sold for the event.

The events were presented by Cataloochee Ranch, the Waynesville Council of Garden Clubs, and TACF[®]. Cataloochee Ranch owners and staff and volunteers are commended for the excellent event and attention to detail necessary for its success.

Chapter Members Using Wood Working Skills

K. O. Summerville, an excellent wood worker, used American chestnut wood from Indiana to make two beautiful conference tables for use in the conference room at the new office and laboratory building at Meadowview Research Farms. K. O. recently made the first of several American chestnut wood chairs to accompany the tables.

Jon Taylor, a cabinet maker by trade and excellent wood worker, made a Shaker box which included a burly chestnut wood top for auction at the Cataloochee Branch Event, September 11, 2010. Jon also makes picture frames using recycled American chestnut wood. He made the frames for pen and ink drawings of American chestnut trees produced by TACF[®] member, Dr. Fred Paillet, which will be auctioned October 16 at the 2010 Annual Meeting in Shepherdstown.

Don Surrette uses recycled American chestnut wood to frame certificates presented to Carolinas Chapter members.

Doug Gillis uses recycled American chestnut wood to make Bluebird boxes patterned after the design developed by his wife's uncle, Jack Finch, founder of Homes for Bluebirds, Bailey NC, Inc.