



THE
AMERICAN
CHESTNUT
FOUNDATION®

CONTACT

Ruth Goodridge
Director of Communications
The American Chestnut Foundation
ruth@acf.org
(828) 281-0047

FOR IMMEDIATE RELEASE

April 27, 2015

**The American Chestnut Foundation and Owen Middle School Join Forces for
Education and Conservation**

Asheville, NC – The American Chestnut Foundation (TACF) recently partnered with Charles D. Owen Middle School in Swannanoa as part of the school's Natural Impact Initiative, the goal of which is to connect students to their natural Appalachian heritage through outdoor ecological sites designed for exploratory learning. Its main focus is to boost STEM readiness and increase proficiency in the core curriculum. This unique collaboration promises long-term opportunities for education, restoration and conservation within both organizations.

Students and teachers worked with TACF scientists and volunteers on April 16 to begin installation of a germplasm conservation orchard located behind the school. Germplasm is hereditary material, like genes. The ultimate goal of a germplasm conservation orchard is to preserve native germplasm, and in this case, native germplasm of the American chestnut tree.

The first phase of the project included planting 10 trees: 3 wild American seedlings transplanted from surrounding mountains in the area; 2 F1 hybrids which are 50% American chestnut and 50% Chinese chestnut; 3 *Castanea henryi* or Chinese chinquapins; and 2 Chinese chestnuts which will be used to provide control stock (primarily to make F1 controls). The trees are very important to the Foundation's breeding program and will eventually be incorporated into the breeding process.

TACF Regional Science Coordinator Tom Saielli worked with School Counselor Carl Firley and Seventh Grade Science Teacher Brittany Krasutsky to implement this hands-on learning experience. Krasutsky also serves as Chair of the Natural Impact Initiative.



THE
AMERICAN
CHESTNUT
FOUNDATION®

TACF's germplasm conservation orchard is a perfect fit for the Natural Impact Initiative because it not only provides opportunities for TACF to advance its breeding program, but it also provides tremendous educational opportunities for students to learn about and participate in the breeding process – helping to plant and care for the seedlings, assisting with controlled pollinations, and treating early blight cankers with mud packing techniques. Krasutsky added “this important conservation work fits in well with our school mission and vision, along with complimenting North Carolina educational standards. In 7th grade students study cell structure and function, followed by our unit on genetics. This program will facilitate a deeper understanding of these topics through being involved in an ongoing experiment designed to save a piece of their native Appalachian heritage.” In addition, the project will serve as a public demonstration orchard with informational signage, making the learning opportunity available to everyone who visits. “Owen Middle School’s partnership with TACF is beneficial to our students and the community as a whole.”

Saielli stated, “This orchard, if successful, will be very treasured. All of the genotypes planted at Owen Middle School serve a critical role in TACF’s breeding program. Having these trees in one location makes controlled pollinations much easier to accomplish and allows for tremendous learning opportunities. Over the years, we will continue to add trees to the site – especially more wild Americans – and as they grow, we will pollinate in the spring and harvest nuts in the fall. I can’t think of anything better!”

TACF will continue to work with Owen Middle School to care for and expand this project. “We are excited about a long-term partnership with TACF”, stated Dr. Heidi Von Dohlen, Principal. The goal is to plant pure species of *Castanea* (primarily American chestnuts from interesting local sources) as well as a variety of other species, such as Chinese and Japanese chestnut. By spreading the seedlings out, planting them over time and pampering them, the trees will grow quickly. All will be used in TACF’s genetic breeding program in order to make a wide variety of important crosses for the restoration of the American chestnut.

Once the mighty giants of the eastern forest, American chestnuts stood up to 100 feet tall, and numbered in the billions. From Maine to Georgia, the chestnut was a vital part of the eastern forest, provided abundant food for wildlife, and was an essential component of the economy. In the beginning of the 20th century the fungal pathogen responsible for chestnut blight, accidentally imported from Asia, spread rapidly through the eastern forests and by 1950 the fungus had eliminated the chestnut as a mature forest tree.



THE
AMERICAN
CHESTNUT
FOUNDATION®

In 1983, a committed group of scientists decided to do something about this ecological disaster while the species could still be saved. They formed TACF to initiate a complex breeding program to transfer genes containing disease resistance from Asian chestnut species to American chestnut. In just 20 years, these talented scientists and volunteers began to produce the first generation of trees that are 96% American chestnut but contain Asiatic genes for blight resistance. Now supported by more than 5,000 members and hundreds of volunteers in 23 states, the organization is planting and testing offspring of those trees as it continues to build and improve its breeding population. With the aid of many partner organizations, TACF is leading the restoration of an iconic species once on the brink of extinction.

The American Chestnut Foundation is a non-profit conservation organization headquartered in Asheville, NC, with 3 regional offices located in Charlottesville, VA, So. Burlington, VT, and State College, PA. The organization's research farm in Meadowview, VA has more than 50,000 trees planted in various stages of development. For more information on TACF and its work, contact TACF Director of Communications Ruth Goodridge at 828-281-0047, email: ruth.goodridge@acf.org. Visit us at www.acf.org or on Facebook at <http://www.facebook.com/americanchestnut> and Twitter at <http://www.twitter.com/chestnut1904>.

#