

For Immediate Release
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American Chestnut Foundation To Pick Survivors

Broque, PA-The Pennsylvania Chapter of the American Chestnut Foundation (PA-TACF) will conduct tree evaluations at their research orchards in Broque, and Codorus State Park in Hanover, PA, on Tuesday, November 21.

PA-TACF inoculates healthy American chestnut trees in the spring with two strains of the blight fungus that is responsible for the demise of the species. The trees are later evaluated for natural resistance in November, and then again the following May. "Only the trees that resist the blight and survive infection are selected for the next stage of breeding--usually one or two out of any given genetic line," said Sara Fitzsimmons, Northern Appalachian Regional Science Coordinator.

During the November ratings, PA-TACF looks only at "canker phenotype", which provides a basis to rate the tree for resistance on a scale of 1-5. If the tree looks very resistant--when there is almost no canker formation-- it gets a "1". If the tree is highly susceptible--when all cankers are very large and there are no signs that the tree attempted to stop the infection-- PA-TACF gives the tree a "5". There are varying levels in between, based on relative canker size and other factors.

In May, the chapter returns to reevaluate the cankers. The blight fungus goes relatively dormant when it gets cold, and the fungus starts growing again when it gets warm, sometime in March or April. PA-TACF wants to see if the fungus is able to break through any walls that the tree might be able to put up around the infection in an attempt to stop the infection. The trees that show "breakout" are then given higher ratings (i.e. will go from a 3 to 4 or a 3.5 to 4, and are not selected).

In May, those that have been given the lowest rating scores are then evaluated for about 15 different American morphological characteristics. Those that are selected, usually one or two out of any given genetic line, are then bred through to the next generation in late June and July.

It takes at least six generations of breeding and five- to-ten years per generation to develop a disease-resistant American chestnut tree.

Using the backcross method of breeding developed by the organization's founders, the foundation is developing blight-resistant chestnuts, which will be adapted to different growth zones in their natural range and retain as many of the American chestnut traits as possible.

The mission of the Pennsylvania Chapter of the American Chestnut Foundation is to restore the American chestnut tree to the forests of Pennsylvania and the eastern United States.. Within the PA Chapter holdings alone, the volunteers maintain over 70 orchards across PA, NJ, DE, and MD, and have planted over 25,000 trees.

For more information about the return of the American chestnut, the American Chestnut Foundation or volunteer opportunities, contact the Leffel Center, at (814) 863-7192 or e-mail, mail@patacf.org. Visit the following website: <http://www.patacf.org>. The American Chestnut Foundation is a non-profit organization with more than 5,000 members nationwide and chapters in 13 states. For more information about the Foundation or the American chestnut tree please visit the website at www.acf.org.

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