

Project Description 2011 Update AT Mega-Transect Chestnut Data Project

Scientists and volunteers from The American Chestnut Foundation (TACF) and Potomac Appalachian Trail Club (PATC) have been training volunteers to identify and collect data on American chestnut trees along the Appalachian Trail (AT) since May of 2008. This long-term study of the American chestnut tree is part of the Appalachian Trail Conservancy's AT Mega-Transect Project, which seeks to engage the public in citizen-science efforts to collect data along the AT to raise awareness of threats to the environmental health of the Appalachian Region.

Two types of data are collected: (1) total number of American chestnut trees three feet in height or taller within fifteen feet on either side of the trail and (2) location and description of large individual trees thirteen inches or greater in circumference at 4.5 feet above ground. The data will contribute to understanding the status of surviving remnants of a species that played a key role in forests throughout Appalachia before being devastated by a blight fungus imported with Asian chestnut trees in the early Twentieth Century. Data on large individual trees with the potential to produce flowers will assist TACF in increasing the genetic diversity of its backcross breeding program, which is intended to restore the American chestnut tree to its former place in the region's forests by producing an otherwise American chestnut with the blight resistant characteristics of Asian chestnut.

2011 Tentative Training Dates and Locations:

- **Saturday, May 14 -at Nantahala Outdoor Center -Highway 74 west of Bryson City, NC**
- **Saturday May 21 Training Room at The Link, 12018 Lee Highway, Sperryville, VA**
- **Saturday, May 21, 2011, Wintergreen Nature Foundation - SW of Charlottesville, VA**
- **Saturday June 4 at Glen Alton in Gilles County, VA**
- **Saturday, June 11 at the Iron Master's Mansion at Pine Grove Furnace State Park in Cumberland County, PA**
- **Sunday, June 12 at Hawk Mountain Sanctuary, North of Hamburg, Pennsylvania**

Training Participants: Training participants will be encouraged to plan to collect data in teams in the afternoon following the training to provide practice in the identification process and prompt feedback on the training and data collection process. All members of the public are invited to participate. Participation by trail maintenance volunteers, Master Naturalist volunteers and others with interest in the A.T. and its plant communities is especially welcomed.

Timing of Data Collection: May 10 – October 31 (While trees have leaves) Primary focus of data collection will be between leaf out in early May and end of flowering in mid to late July.

Location of Data Collection: The study takes place along the Appalachian National Scenic Trail. Volunteers are instructed to limit their observations to within 15 feet of the Trail on either side, and to take care not to disturb rare or endangered plants. No specimens are collected. 2011 Data collection is expected to include portions of the trail from North Carolina to New Jersey.

Reporting of Data: GIS-based maps and corresponding report forms are used to record and report chestnut counts. These maps and report forms can be downloaded and printed at <http://sfr.psu.edu/public/chestnut/reports/mega-transect/at-maps> . Separate "Large Tree" Chestnut Report forms are used to record and report more detailed data for trees exceeding 13 inches in diameter at 4.5 ft. above ground. Data from prior years is available at <http://sfr.psu.edu/public/chestnut/reports/mega-transect/data-files> .

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