

2013 Final Report (submitted 12/24/2013)

Engaging Citizen Scientists to Re-survey Champion Trees and Search for New Occurrences

Investigators:

Frank Henning , Dr. David Shelley, and James Howard and the NPS Old-Growth Bottomland Forest Research and Education Center at Congaree National Park.

Objective:

Congaree National Park. The park is home to three known National Champions and 27 State Champion trees. These trees provide unique opportunities to further scientific understanding of old-growth ecosystems and are of increasing interest to park visitors. The distribution and status of the park's champion trees have not been systematically surveyed since Jones (1996, 1997). Objective of this project is include: 1) collate existing Congaree Big Tree Data 2) partner with the University of South Carolina and Clemson to enhance scientific integrity and validity of big tree education and data collection 3) partner with volunteers to re-survey known champion trees and search for new occurrences, increase involvement and enhance appreciation for CONGs big trees. This effort will combine new GIS/GPS technology with traditional field work.

2013 Activities Summary:

Maps and Materials

Cong scientists compiled geographic and big tree GIS data from various sources including data from Robert Jones (1996) and unpublished data from Tyler Phillips (personal correspondence 2013). Arc GIS 10.1 was used to subdivide the park into 49 manageable sections based on hydrologic and geographic features. A base map and 49 section maps were created that show hydrologic features, roads, trails, existing big trees. These maps are being paired with a volunteer self-assignment sheet that allows volunteers to select sections of interest and coordinate surveys for those sections.

Big tree cooperators met three times in 2013 to develop Big Tree project plans. Products that were developed as a direct result of these efforts include: 1) volunteer safety material and training, 2) tree measurement training (D-tape, clinometer, hypsometer, GPS, and other tree measurement tools), 3) tree identification training, 3) potential champion/most-wanted trees information, and 4) data management tools and training.

Big Tree Training Workshops

- Dec. 2, John Cely coordinated a Big Tree Bark ID training workshop
- September 25, Comprehensive Volunteer Training Program was delivered that provided basic skills (canoe, backcountry, radio, etc.).
- November 4, Coordinated a second Big Trees partner meeting. This meeting provided training on big tree VIP requirements, big tree measurement, and big tree data management.

- June 20, Coordinated Big Trees partner meeting. Project Maps, Nomination Forms, Volunteer tracking forms, Equipment List, VIP Job Description, and a VIP Training Manual development were discussed.

Project Timeline

The big tree project was initiated in 2013, but this project will continue through 2014.