

# 2016 Annual Intern Report Virginia Big Tree Program

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*A note from the Virginia Big Tree Program Coordinator—Eric Wiseman*

The [Virginia Big Tree Program](#) (VBTP) is an outreach program of [Virginia Cooperative Extension](#) and Virginia Tech’s [College of Natural Resources and Environment](#). Established in 1970, the purpose of VBTP is to curate the largest trees found in Virginia and educate the public about the conservation and stewardship of trees and forests. Champion trees are curated in the [Virginia Big Tree Register](#), an online database of over 1,800 trees. The VBTP is affiliated with the [American Forests Big Tree Program](#), and Virginia currently ranks 5<sup>th</sup> in the country with 56 national champion trees.

A key player in the program is the summer student intern, who assists the VBTP Coordinator with recertifying trees, managing database records, and collaborating with Big Tree volunteers. The internship is a paid, part-time position made possible by financial support from [Trees Virginia](#). These funds pay for the intern’s wages, travel expenses, and field supplies. Each year, an intern is recruited from the student body in the College of Natural Resources and Environment. The internship is a great opportunity for students to hone a variety of technical and administrative skills, including tree identification and measurement, mapping and orienteering, data entry and analysis, public outreach, and interpersonal communication.

Our 2016 intern was Alexandria (Alex) Cassell, a rising senior from Fort Riley, KS double-majoring in Environmental Resources Management and Environmental Informatics. During her time at Virginia Tech, Alex has been a member of the Wildlife Society, an Ambassador for the College of Natural Resources and Environment, and a Dendrology Teaching Assistant. Alex will be graduating in May 2017 and is considering both graduate school and permanent employment in natural resources.

It was a pleasure having Alex as the 2016 intern. She did quality work and helped us implement several new changes in VBTP administration. I hope this report provides some insight on her internship experience and the critical role that the intern plays in the program. Any questions about the contents of this report or the VBTP may be addressed to me by email ([pwiseman@vt.edu](mailto:pwiseman@vt.edu)) or by phone (540-231-5148).

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## I. Internship Summary

I interned for the Virginia Big Tree Program (VBTP) from May 2016 to December 2016. The major responsibilities of my position were updating the Virginia Big Tree Register (VBTR), communicating with Big Tree volunteers and owners, inputting new nominations, and correcting errors in the database. At the beginning of this internship, I focused on identifying trees that needed to be recertified for 2016. In the VBTR, trees must be recertified every ten years to remain eligible for curation in the database.

The first step of my internship was identifying trees last certified in 2006 and earlier. These trees were organized in an Excel file by priority. The highest priority trees for recertification were national champions and state champions. The location of these trees was collected from the VBTR, archival documents, and other resources to create a map displaying where each tree was located in Virginia. The map and list of trees (now organized by location) was sent to our Big Tree volunteers to see who could recertify which trees.

Most of my energy went into getting information to volunteers and finding volunteers to help complete the recertification of the 136 trees that had not been measured in 10+ years. This past year was one of the highest ever for the number of trees needing recertification. Some of these trees were in very difficult locations, so we opted to postpone their recertification until winter 2016–2017 when the vegetation will be less dense and noxious insects will be inactive. There were also a number of non-native, exotic species in the 2016 cohort that we did not pursue because they may be eventually dropped from the VBTR as non-eligible species. Here's how the 136 trees broke down:

- 53: Trees recertified
- 42: Trees that await recertification in winter 2016–2017
- 22: Trees found dead upon investigation
- 19: Trees under consideration as non-eligible species

In terms of overall activity in the VBTR, there were 181 trees that were processed in 2016 (this includes the 136 trees described above). The 45 additional trees were new nominations (some of which were processed by me), trees recertified prior to the 10-year mark (this is sometimes done if a tree's condition has changed or the previous measurements were erroneous), and trees reported dead prior to the 10-year mark.

There were 33 state champion trees processed in 2016, either newly crowned champions or recertified champions. At the national level, we gained 12 new national champions in 2016 (not limited to trees measured in 2016), 13 existing champions were disqualified due to erroneous multi-stem measurements, and another 4 were dethroned by larger trees in other states. All told, our national champions decreased from 61 to 56, ranking Virginia 5<sup>th</sup> in the nation.

Of the 136 trees that needed to be recertified, I personally visited 15. I made several trips by myself to trees near Blacksburg as well as a few trips with Dr. Wiseman to measure trees that volunteers were unavailable to measure in the eastern part of the state. The majority of the 2016 trees were recertified by our dedicated Big Tree volunteers.

## II. Updates to the Virginia Big Tree Register

My main work as the Big Tree intern involved recertifying and coordinating the recertification of the trees that needed to be updated as of 2016. The trees in the VBTR are updated every 10 years to ensure that they are still alive and their measurements remain valid. This requires a qualified person to find the tree, take the height with a precise clinometer, measure the crown spread, measure the trunk circumference, take a picture of the tree, and update the tree's condition and owner information.

The VBTR lists the top-5 trees for each species, the first-place tree being the state, and sometimes, the national champion. I focused on recertifying national and state champs for the most part, but also collected information on other top-five trees if they were convenient stops during my field trips.

Of the 136 trees, I visited 15 over the course of my internship. I remeasured 11 trees, 3 of which were national champions that were sent to American Forests for review. I also nominated 4 new trees, two of which are new state champions. More details about these trees are provided below.

In the tables below, the ID # denotes the tree's unique identification in the VBTR, which is part of the URL for the specimen's individual website page. The URL for each specimen is: [http://bigtree.cnre.vt.edu/bigtree\\_detail.cfm?AutofieldforPrimaryKey=XXXX](http://bigtree.cnre.vt.edu/bigtree_detail.cfm?AutofieldforPrimaryKey=XXXX) where "XXXX" is replaced by the ID #. Specimen website pages are also hyperlinked on the common names below.

### A. Recertified Trees

Latin Name	Common Name	ID #	City/County Location	Total Points
<i>Acer saccharum</i>	<a href="#">Sugar maple</a>	160	Giles	363*
<i>Betula lenta</i>	<a href="#">Sweet birch</a>	30	Patrick	201
<i>Cercis canadensis</i>	<a href="#">Eastern redbud</a>	684	Roanoke	171
<i>Cornus florida</i>	<a href="#">Flowering dogwood</a>	1028	Mecklenburg	144*
<i>Maclura pomifera</i> <sup>^</sup>	<a href="#">Osage-Orange</a>	199	Charlotte	435**
<i>Magnolia grandifolia</i> <sup>^</sup>	<a href="#">Southern magnolia</a>	732	Sussex	358**
<i>Platanus occidentalis</i>	<a href="#">American sycamore</a>	848	Rockbridge	389
<i>Populus grandidentata</i>	<a href="#">Bigtooth aspen</a>	753	Floyd	116
<i>Quercus falcata</i>	<a href="#">Southern red oak</a>	191	Sussex	441*
<i>Robinia pseudoacacia</i>	<a href="#">Black locust</a>	719	Floyd	254
<i>Viburnum lentago</i> <sup>^</sup>	<a href="#">Nannyberry</a>	273	Montgomery	67**

\*State champion; \*\*National champion; ^Not yet updated in VBTR because awaiting review of measurements by American Forests.

## B. Newly Nominated Trees

Latin Name	Common Name	ID #	City/County Location	Total Points
<i>Acer tegmentosum</i>	<a href="#">Manchurian striped maple</a>	2426	Montgomery	86*
<i>Betula papyrifera</i>	<a href="#">Paper birch</a>	2433	Montgomery	124*
<i>Betula uber</i>	<a href="#">Virginia round-leaf birch</a>	2434	Montgomery	59
<i>Quercus alba</i>	<a href="#">White oak</a>	2435	Giles	320

\*State champion

## C. Database Quality Control

Given the sheer size of the VBTR (over 1,800 live trees) and the volume of tree entries processed annually (over 180 trees in 2016), it is inevitable that some errors creep into the database. We continuously review and spot-check the data to ensure that it is as accurate and up to date as possible. One of my big tasks was to locate errors in the database. My focus was on the national champions and the state champions of common native species. These are the trees most commonly referenced by website users, so we strive to ensure that these data are flawless. Errors that I screened the database for included mismatched measurements, missing years of first and last measurement, incomplete information about tree owners, measurers, or nominators, and missing pictures of trees. Most were easily and quickly fixed. Because of our attention to database accuracy and currency, the VBTR is considered to be one of the best in the country.

## III. Collaboration and Outreach

A big component of my internship was collaborating with [VBTP Volunteers](#) to coordinate recertification of trees. They are a network of about a dozen individuals who live around the state and freely share their time and expertise to nominate new trees and recertify existing trees. They come from various walks of life and are dedicated to ensuring that the data in the big tree register is accurate and up to date. I also spent a lot of time contacting property owners to request permission to visit trees to recertify them. This was a great opportunity to educate the public about big trees.

### A. Big Tree Volunteers

At the beginning of my internship, I compiled a list of all trees that needed recertification in 2016 and distributed this list to our volunteers located around the state. The following volunteers contributed to recertification of trees in 2016:

Byron Carmean  
Jeff Kirwan  
Jon Rockett  
Kevin Sigmon

Rod Simmons  
Harry Van Guilder  
Robert Vickers  
Nancy Weiss

Gary Williamson  
Greg Zell

Below are some examples of how these Big Tree volunteers helped out in 2016:

**Byron Carmean and Gary Williamson** are volunteers in Hampton Roads and Southeastern Virginia. After 30 years hunting big trees together, they continue to nominate dozens of new trees and recertify many more. They go on regular trips to discover new trees and locate difficult trees to be recertified. This year they nominated 56 new trees (13 were new state or co-state champions), recertified 28 trees, and reported 5 deceased trees. Without Byron and Gary, we would have a difficult time tracking down trees in the wild and woolly swamps of southeastern Virginia.

**Jeff Kirwan** is emeritus coordinator for the Virginia Big Tree Program and volunteers in the Blacksburg and Roanoke area (sometimes even further afield). Jeff recertified 5 trees (the [\*Pinus taeda\*](#) is a national champion), found 4 that were deceased, and nominated a new [\*Hamamelis virginiana\*](#). He also accompanied Byron Carmean and Gary Williamson on a trip to southwest Virginia that netted 14 of their newly nominated trees.

**Jon Rockett** is a volunteer in the Charlottesville area. He nominated a new [\*Quercus palustris\*](#) in Charlottesville.

**Kevin Sigmon** is a volunteer in Abingdon and Southwest Virginia. This year he recertified an [\*Aesculus flava\*](#) and a [\*Quercus coccinea\*](#).

**Rod Simmons** is a volunteer in northern Virginia. This year he nominated a new [\*Acer pseudoplatanus\*](#) in city of Alexandria.

**Harry Van Guilder** is our main volunteer in the Roanoke area. He helped me recertify a [\*Cercis canadensis var. canadensis\*](#), and he recertified a [\*Quercus shumardii\*](#). He also nominated a new [\*Castanea mollissima\*](#), which is the new state co-champion.

**Robert Vickers** is a volunteer in northern Virginia. This year he recertified 2 trees, found 2 deceased trees, and nominated 8 new trees (the [\*Asimina triloba\*](#) is tied as the current state co-champion).

**Nancy Weiss** is a volunteer in the Charlottesville area. She helped to recertify a [\*Carya alba\*](#) in Charlottesville.

**Greg Zell** is a volunteer in Northern Virginia. This year he recertified a [\*Carya tomentosa\*](#).

## **B. Big Tree Owners**

Before going to the field to recertify a tree, I would reach out to the tree's owner. Most of the time this meant looking for a phone number or email address. Sometimes there were difficulties contacting the owner due to time passing and many trees having new owners. Everyone I reached out to was excited about their trees being measured and curious about the Virginia Big Tree Program, if they were not already aware of the program. Without cooperation and enthusiasm from the tree owners, the big tree register would not contain such rich information about big trees and the

program would not be nearly as vibrant. Specific information for owners can be found either on the Virginia Big Tree Program website or in the archival documents stored at Virginia Tech.

#### **IV. Personal Reflection on Internship Experience**

Having worked as the Virginia Big Tree Intern, I appreciate what I gained and learned from this experience. This was an incredible opportunity to strengthen my communication skills and manage a project. The volunteers I worked with were fantastic and taught me about taking better measurements. The owners I spoke with added to my enjoyment due to their passion for the trees in the Virginia Big Tree Program. This internship was a great opportunity for me to test myself in the field and working with a database. I enjoyed the field work and getting hands-on experience. This was a great way to see behind the scenes what makes a good program—the volunteers. Without the diligent work of the volunteers, this program would not be nearly as successful or enjoyable. I couldn't have asked for a better internship. It was a pleasure working with the Virginia Big Tree Program.