## Got Big Trees? By: John Peterson, Virginia Tech

Family legend holds that Grandpa Flinchum planted a tree in the back yard of his Virginia home the year that he proposed to Grandma. For the next 60 years, the Flinchum family could count on showy white flowers for the Mother's Day picnic and orange fruit in the fall. After inheriting the farm last year, Grandson Flinchum was determined to finally find out what kind of tree Grandpa had planted. After using the vTree App and an e-mail to Dr. Dendro at Virginia Tech, he determined that Grandpa's tree is a European mountain-ash. In fact, Dr. Dendro said that it was the biggest European mountain-ash he has ever seen.

If you have a big old tree in the back yard and are curious how it compares to other big old trees, you will be pleased to learn that information about big trees has never been so accessible. American Forests maintains the National Big Tree Program, a conservation movement to locate, appreciate, and protect the biggest trees of each species in the United States. The National Big Tree Program produces a biannual publication called the National Register of Big Trees and maintains a searchable online database (visit http://www.americanforests.org/ and look under "Our Programs"). For the record, the largest European mountain-ash in the United States does not belong to the Flinchum family. It is in Seattle, Washington.

Big trees are difficult to compare, so a points system is used to rank them. Generally, height, diameter, and the spread of the crown all contribute to the ranking. To determine how many points a tree scores, in general, follow these steps:

- Measure the circumference of the tree (in inches) at 4 ½ feet above the ground line;
- Measure the height of the tree (in feet);
- Determine the average crown spread by measuring the crown at both its widest and narrowest axes;
- Total points = circumference + height + <sup>1</sup>/<sub>4</sub> (average crown spread).

Because people (and states) are competitive, there are specific rules governing exactly how to measure. You can view these rules on the American Forests' website by clicking on "Measuring Guidelines". Measurement can be difficult, so you may want to enlist the help of your local Extension agent or area forester.

Even though Grandpa Flinchum's tree isn't the largest European mountain-ash in the nation, it may be the largest in Virginia. Virginia Tech's Department of Forest Resources and Environmental Conservation maintains the Virginia Big Tree Database and verifies



This seemingly small grey birch is actually the State Champion for this mid-story species. Photo by: John Peterson, Virginia Tech.



The tallest white pine in Virginia is in Augusta County. This tree is as tall as a 15 story building! Photo by: Jeff Kirwan, Virginia Tech.

Champion Trees across the commonwealth. This database is available to the public, and nominations are encouraged. To view the database, visit http://bigtree.cnre.vt.edu/.

A quick search for big trees in Montgomery County, Virginia, returned 51 trees, including 20 State Champions and a few National Champions. If you search for big trees in your county, you might be surprised how many you recognize... and now you can offer them (and their owners) the respect they are due. As for European mountain-ash, there are none in Virginia's database... so Grandpa Fllinchum's tree is automatically the State Champion!

Virginia has a long history of planting trees, old homes, good soils, and a temperate climate. As a result, there are 58 National Champions in the commonwealth. The largest tree in Virginia is a water tupelo in Greensville County that has a whopping 590 points. The water tupelo is not terrifically tall at 102 feet, but it has a circumference of 474 inches. That equals a diameter of 12.6 feet, or about the same size as a trampoline! The tallest tree in Virginia? An eastern white pine in Augusta County that is 166 feet tall; about the same height as a 15 story building.

So if you know of a large tree, find a tape measure or contact your local Extension agent/area forester and start measuring. You may be the proud owner of a Big Tree Champion!

John Peterson is a Laboratory Specialist, Advanced, in the Department of Forest Resources & Environmental Conservation; jopeters@vt.edu; 540/231-8942.

Editor's note: The vTree App is available free for both iPhone and Android devices. Download it from Google Play or iTunes. Dr. Dendro can be contacted at: dr.dendro@vt.edu.

Peterson. Virginia Forest Landowner Update. V. 28, No. 1. Winter 2014.