

2014 Holiday Lake Forestry Camp

Want to inspire the next generation of foresters? Consider nominating a teen to attend the 68th annual Holiday Lake Forestry Camp, to be held June 16-21 at Holiday Lake 4-H Center. This field-based camp exposes teens to natural resource careers and real natural resource management skills, using the Appomattox-Buckingham State Forest as an outdoor classroom. The camp is open to any Virginia boy or girl aged 13-16 with an interest in natural resources, who has not attended before. A scholarship program keeps campers' costs low. The nomination form and more information can be found at dof.virginia.gov/camp/. Nominations open in January and close in early April.

Landowner Weekend Retreat Program Expands

The Virginia Department of Forestry and Virginia Cooperative Extension are continuing to expand their popular Landowner Weekend Retreat Program. This program was initiated in 2008. Through 2012, the Retreat was offered once a year, at the Holiday Lake 4-H Center in Appomattox. In 2013, the program expanded to include a Retreat in southeastern Virginia, at the Airfield 4-H Center in Wakefield. And in 2014, we will be offering an additional Retreat in southwest Virginia at the Matthews State Forest in Galax.

The Landowner Weekend Retreat allows family forest owners and their families to immerse themselves in a weekend full of classes, activities, and field trips all focused on providing them with sustainable forestry knowledge. Numerous natural resource professionals from the state, private, and federal sectors provide instruction as well as one-on-one interaction with participants.

Grants from the Ballyshannon Fund, the Practicing Foresters Institute, and the Matthews Foundation allow us to keep the registration fees (which include lodging and food for the weekend) very affordable. We are still working on the agendas and registration materials for the 2014 Retreats, but the dates have been set. Mark your calendars!

- Spring Landowner Weekend Retreat, Appomattox, April 25-27
- Summer Landowner Weekend Retreat, Galax, June 28-29
- Fall Landowner Weekend Retreat, Wakefield, September 5-7

Big Trees cont. from page 1

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 Flinchum's tree is automatically the State Champion!



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.

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!

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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.

VIRGINIA FOREST LANDOWNER UPDATE









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Useful Resources

- The Virginia Quail Team publishes periodic updates on its bobwhite quail recovery initiatives. View the Fall 2013 update here: <http://www.dgif.virginia.gov/quail/bobwhite-bulletin-fall-2013.pdf>.
- The Virginia Department of Forestry's 2013 State of the Forest Report is now available. This publication provides all sorts of information about Virginia's forests including heath issues, fire updates, and more! Read it here: <http://www.dof.virginia.gov/print/aboutus/SOF-2013.pdf>.
- If Alex Silva's article on white nose syndrome piqued your interest in this disease, you can learn more about it by watching this short video: <http://vimeo.com/76705033>.
- **Like the Virginia Forest Landowner Education Program on Facebook.** We have started a monthly trivia contest - on the first of each month, be the first to answer a forestry-related trivia question, and win a free VFLEP logo hat! See the Facebook page for complete rules: www.facebook.com/VFLEP.

CONTACT OUR SPONSORS AND STATE NATURAL RESOURCE MANAGEMENT AGENCIES:

					
Virginia Department of Forestry	Virginia Tech Department of Forest Resources & Environmental Conservation & Virginia Cooperative Extension	USDA Forest Service Forest Stewardship Program	Virginia Forestry Association	Virginia Sustainable Forestry Initiative SIC/Virginia Tree Farm Committee	
900 Natural Resources Drive Ste. 800 Charlottesville, VA 22903 434/977-6555 www.dof.virginia.gov	228 Cheatham Hall 0324 Blacksburg, VA 24061 540/231-6391 http://forestupdate.freec.vt.edu	1400 Independence Ave. SW Washington, D.C. 20078 202/205-8333 http://www.fs.fed.us/spf/coop/programs/loa/fsp.shtml	3808 Augusta Ave Richmond, VA 23230 804/278-8733 www.vaforestry.org	3808 Augusta Ave Richmond, VA 23230 804/278-8733 www.vaforestry.org/virginia_tree_farm.html	

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VIRGINIA FOREST LANDOWNER UPDATE

Events, news, and information promoting the stewardship of Virginia's forest resources.

VIRGINIA FOREST LANDOWNER EDUCATION PROGRAM

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Sign up to receive the Virginia Forest Landowner Update at: <http://forestupdate.freec.vt.edu>

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 + ¼ (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 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/>.



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

Big Trees cont. on page 5

EVENTS CALENDAR			For the most complete listing of natural resource education events, visit the on-line events calendar at http://forestupdate.frec.vt.edu		
Contact	Date	Location	Event	Time	Fee
DCR	Jan., Feb., & March	Virginia's State Parks	A variety of events and activities For a complete list, visit: www.dcr.virginia.gov/parks .	Varies	Varies
AC	Year-round	State-wide	Virginia Master Naturalist Volunteer Basic Training www.virginiamasternaturalist.org/chapters.html	Varies	Varies
MM	Feb. 6	Washington, VA	Estate Planning for the Next Generation Are you concerned about the future of your working farm or forest? Julie King, Esquire, and Rebecca McCoy, CPA, estate planning professionals with extensive experience facilitating the transfer of rural land to one generation to the next, will provide a comprehensive overview of available legal and financial mechanisms and explain the advantages of planning ahead.	5:30 - 8	\$10*
AD	Feb. 15	Culpeper	11th Annual Woods & Wildlife Conference Join Virginia Cooperative Extension for a full day of presentations and workshops geared to help both large and small acreage landowners become better stewards. On-line registration available; http://forestupdate.frec.vt.edu .	8:30 - 4:30	\$40*/person; \$75*/couple
HM	Feb. 19	Blackstone	Farm Transition Workshop: Overview of Farm Transition This workshop will help farm owners and their families plan for the successful transfer of the farm and forest lands and business. The speaker panel will include a nationally known attorney who has expertise in ownership succession issues.	8:30 - 3:30	\$15*
JG	March 4	On-line	On-line Woodland Options Registration opens Jan. 2. Learn the basics of forest management, from setting goals and objectives to developing a management plan in this 12-week class. On-line registration is available at: http://forestupdate.frec.vt.edu .	Varies	\$45/family
ZO	March 15	Galax	Galax Go Green! Attend classes on a variety of natural resource topics, and interact with natural resource professionals.	10 - 3	Free
SC	March 18	Boyce	The Sounds of Spring See and hear Wil Hershberger's high-quality images, sonograms, and sound recordings of the birds, frogs, and insects of spring. For naturalists of all ages.	7 - 8:30 p.m.	\$10 State Arboretum Members; \$12 Nonmembers
JG	March	4 locations across Virginia, TBD	Landowner Woodland Certification Dinners Learn what woodland certification is, what it entails, and what the potential benefits and costs to private landowners are. Details at: http://forestupdate.frec.vt.edu	4:30 - 7:30	\$20*
JG	April 25-27	Appomattox	Landowner Weekend Retreat - Central Virginia See article page 5.	All day	Varies
If you are a real estate professional or Commissioner of the Revenue, please visit the Landowner Update website for a schedule of our continuing education classes, Real Forestry for Real Estate (www.forestupdate.frec.vt.edu).					
*meals included					

EVENT CONTACTS			
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U.S. Fish and Wildlife Service Listing Decision for Northern Bat Could Impact Forest Management in Virginia

By: Alexander Silvis, Virginia Tech

As a forest landowner in Virginia and a consumer of global agricultural goods, you should be thanking bats for their invaluable ecosystem services, even though they are easy to overlook. Worldwide, bats are important pollinators, seed dispersers, and voracious consumers of insects. In North America alone, bats provide an estimated \$3.7 billion of agricultural pest control per year (Boyles et al., 2011). Although the economic benefit of bats to the forest industry has not yet been formally evaluated, bats consume a variety of insects that affect forest health and tree condition, including the eastern tent caterpillar (*Malacosoma americanum*), various leaf rollers, and roost, stem, and fruit borers (Dodd et al., 2012).

Unfortunately, a lethal infectious disease called white-nose syndrome (WNS) has been decimating the populations of seven bat species in eastern North America. Caused by the fungus *Pseudogymnoascus destructans*, WNS was first discovered in 2006 in a cave near Albany, New York. This disease, with a mortality rate of approximately 90%, infects hibernating bats and causes them to prematurely deplete the fat reserves necessary to survive the winter. To date, the U.S. Fish and Wildlife Service (USFWS) estimates that over 6 million bats have died as a result of WNS. Due to severe reductions in populations, the USFWS proposed in October, 2013 that one species, the northern bat (*Myotis septentrionalis*) be listed as an endangered species under the Endangered Species Act (ESA).

Many people associate bats with caves, but most bats in eastern North America use caves only for hibernation and spend April through October (this is broadly referred to as the active season by bat biologists) in forests. The northern bat, in particular, is closely associated with forests, day-roosting and foraging in conditions ranging from mature forests to newly regenerating stands. The exact distribution of northern bats in Virginia is unknown, but prior to 2006 the northern bat was common and widely distributed across eastern North America and probably occurred in almost all of the commonwealth. As a result of their wide distribution, once the northern bat listing process is finalized, many forest landowners in Virginia may learn that they own and manage habitat occupied by the northern bat. For those interested in a quick initial assessment of this, my research and that of my collaborators suggests that northern bats key in on forests with successional conditions that have resulted in an abundance of snags (standing dead trees) and decaying live trees.



A sassafras snag used as a northern bat maternity day-roost in Kentucky. Photo by: Alexander Silvis, Virginia Tech.

WNS cont. from page 3

restrictions to caves and conservation of surrounding forest habitat. Given that many caves have already been closed to protect other bat species and to prevent the spread of WNS, access restrictions seem unlikely to have a significant impact on most landowners. Because few landowners other than public agencies such as the U.S. Forest Service have identified northern bat day-roost areas, being required to protect known roosts is likely a non-issue for most. However, measures that seek to project possible or likely day-roosting habitat could be an issue for private forest landowners.

Generally, protecting possible day-roosting habitat consists of limiting the size of forest clearing projects, conducting operations outside of the bat active season, and in some instances giving consideration to the creation or maintenance of future habitat. Available to state, corporate and non-industrial private landowners, the USFWS has a Habitat Conservation Planning process that can be used to develop long term management plans that minimize legal liability. Although private landowners are legally required to comply with protections for endangered species, in practice without a direct federal "nexus," indirect or unknown impacts from habitat modification typically do not meet close scrutiny under ESA.



Adult female northern bat with numbered arm band. Photo by: Alexander Silvis, Virginia Tech.

Nonetheless, it is prudent to comply with clearing restrictions and hibernacula protection measures. In fact, federally supported programs like the USDA NRCS cost-share program may require participants to demonstrate compliance. Individuals owning large acreages may want to consider developing Habitat Conservation Plans. In cases when large forest clearing projects, or projects that cannot take place outside of the bat active season, are unavoidable, the most economically viable management option may be to assume northern bat presence and take mitigation actions. It is unclear what mitigation activities might be approved for the northern bat, but it will be incumbent upon the USFWS to devise guidelines.

Virginia forest landowners will have to wait to until next fall when the USFWS makes a final decision about the proposed rule to list the northern bat to know if or how they will be impacted. Knowing that prior to WNS, forest habitat supporting the northern bat was not limited, overly restrictive habitat protection measures probably are not going to help recover the species or win the fight against WNS. Still, how the reduced numbers of northern bats on the Virginia landscape respond to habitat change and disturbance is unknown, a factor the USFWS is likely to take into consideration. My collaborators and I are conducting an experiment to determine how northern bats respond to disturbance; our initial results suggest disturbance has minimal impacts. Forest managers in Virginia and elsewhere are a resourceful and resilient group prepared to meet new challenges in constructive and proactive ways. Harvesting restrictions may be a nuisance, but we are confident that forest managers in Virginia will be able to continue to manage our forests and wildlife in economically and ecologically viable ways.

References

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