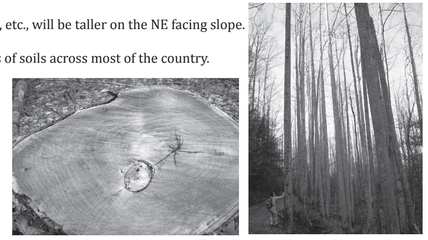
Foundation cont. from page 1

similar history and soil type, the tulip-poplars, red maples, oaks, etc., will be taller on the NE facing slope.

The second approach is to consult a soil survey. These are maps of soils across most of the country. If you have internet access, the easiest way to locate your property's soils map is with the Web Soil Survey, available at: www.websoilsurvey.nrcs.usda.gov. Or you can use the free SoilWeb App on your iPhone or Android device. Search for "SoilWeb" in the App store. Hard copies of soil surveys may be available from your local Virginia Department of Forestry or Natural Resources Conservation Service office. These are powerful tools for learning about your soils that can help you make sound decisions about what to grow on your land.



A count of the rings on this yellow-poplar stump indicates it was about 30 years old. The wide width of the rings indicates it was increasing in diameter rapidly (above). This, and the fact that the remaining stand (right), had an average height of 75, both suggest that this was an extremely fertile site.
Photos by: Jennifer Gagnon, Virginia Tech.

Soil Conservation

I hope by now you have an appreciation for the important role your soils play in the health and productivity of your land and the importance of keeping it in place. Soil conservation, the protection of your soils, is perhaps the most fundamental of all conservation initiatives. Born out of the dustbowl era, the Natural Resources Conservation Service's (previously called the Soil Conservation Service) most fundamental goal then and now is to help landowners conserve their soil. Soil lost to wind or water erosion is lost forever or for at least a very long time. While various conservation practices such as adding organic matter to gardens and using no-till cropping systems can accelerate soil rebuilding, soil lost down river not only is effectively gone from the land, but also has a negative impact on another system - water.

Any activity you consider implementing on your land should protect the soil. It's your foundation. For a more detailed introduction to soil science, watch the video "Soil Stories" from the Natural Resources Conservation Service: http://www.youtube.com/watch?v=Ego6LI-IjbY.

Adam Downing is the Northern District Forestry & Natural Resources Agent; adowning@vt.edu; 540/948-6881.

TF cont. from page 4

- Additional clarity about how to manage for the protection of threatened and endangered species as required by law.

The 2015-2020 Standards of Sustainability are available on the Virginia Tree Farm program website, listed below.

What steps should landowners take as a result of the Standards update?

If you are a Tree Farmer, this is an excellent time to review your management plan and ensure that it meets the updated Standards. If you are not currently a Tree Farmer, I encourage you to look over and familiarize yourself with the Standards and consider taking the next steps to become certified including creating or updating your management plan. In either case, you may wish to consult your forester during this process or use one of the many online resources available through ATFS such as My Land Plan. As the weather warms up, it's also a good idea to spend time in your woods checking for any changes that may impact your management. Both of these tasks are wonderful opportunities to engage all of those involved or interested in the management of your property, in particular the next generations of forest owners. Establishing connections to the land and its management helps to ensure that informed decisions are made about its future.

What's going on in Virginia, specifically?

The Virginia Tree Farm Committee has been busy working to grow and improve the quality of the Program. We are wrapping up a year-long project to improve the quality of our Tree Farmer database by reaching out to all Virginia Tree Farmers with a request to provide updated contact and Tree Farm information, in addition to providing materials to help ensure their Tree Farms meet the Standards of Sustainability. Our corps of volunteer certified Tree Farm Inspectors continue to work to ensure that Virginia Tree Farms meet the standards, and information is kept up-to-date through required and optional inspections. In addition, our inspectors certified 84 new Tree Farms last year totaling nearly 27,000 acres of sustainably managed forestland. In May, our Committee will undergo a Strategic Planning process to develop and ensure we are able to meet goals that benefit Virginia Tree Farmers and address challenges of financial sustainability, volunteer capacity, and future program growth. As a Committee we are looking forward to the future of the Program and opportunities ahead of us.

Interested in becoming a Tree Farmer?

Visit www.treefarmsystem.org/virginia and complete the Prospective Tree Farmer questionnaire. **Want more information?** For more information about the Virginia Tree Farm Program, contact Shannon McCabe at: vatreefarm@vaforestry.org or visit: www.treefarmsystem.org/virginia.

VIRGINIA FOREST LANDOWNER UPDATE
2015
Virginia Cooperative Extension
Department of Forest Resources & Environmental Conservation (0324)
Virginia Tech
Blacksburg, Virginia 24061
RETURN SERVICE REQUESTED

NON-PROFIT ORG.
U.S. POSTAGE
PAID
BLACKSBURG, VA
24060
PERMIT # 28

Did You Know....

- Virginia's 4 p.m. burning law is in effect February 15 – April 30; learn more: http://www.dof.virginia.gov/laws/4pm-law.htm.
- the Food and Agriculture Organization has declared 2015 as the International Year of Soils? (Hence our Forest Foundation Series). Soils are way more than just dirt! To learn more about soils, visit http://www.fao.org/soils-2015/en/ and http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm.
- that Virginia is not only for lovers – it's also for frogs! The Department of Game & Inland Fisheries has declared 2015 as Virginia's Year of the Frog. Twenty-seven species of frogs and toads make their home in the commonwealth. Learn more about them here: http://www.dgif.virginia.gov/wildlife/virginia-is-for-frogs/.
- the Virginia Forest Landowner Update has a Twitter feed? Follow us: @VFLEP
- we also have a monthly Facebook 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. Like us at: 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.frec.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

Virginia Cooperative Extension
Virginia Tech • Virginia State University
www.ext.vt.edu

This publication is supported by matching grant funds from the Virginia Forest Stewardship Program administered by the Virginia Department of Forestry in cooperation with the USDA Forest Service.
VT/000800/15-9595/3200

Volume 29, Number 2 http://forestupdate.frec.vt.edu Spring 2015

VIRGINIA FOREST LANDOWNER UPDATE

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

VIRGINIA FOREST LANDOWNER EDUCATION PROGRAM

Jennifer L. Gagnon, Editor

Address all correspondence to: Virginia Forest Landowner Update
228 Cheatham Hall (0324)
Blacksburg, VA 24061
ph: 540/231-6391; fax: 540/231-3330
e-mail: forester@vt.edu
http://forestupdate.frec.vt.edu

Virginia Forest Landowner Update is published four times per year (January, April, July, and October) by the Virginia Forest Landowner Education Program. Circulation 4,000.

Subscriptions are free of charge to citizens of the Commonwealth of Virginia and non-resident Virginia forest landowners. Subscriptions to other non-Virginia residents at the discretion of the publisher. Printing and distribution cost is approx. $1/subscription per year.

INSIDE

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

The Forest Foundation (Part 2)

By: Adam Downing, Virginia Cooperative Extension

In Part 1 of The Forest Foundation, which appeared in the Winter 2015 edition of the Virginia Forest Landowner Update, I wrote about soil properties such as texture and pH. In addition to these two properties, soil science also explores and quantifies parameters such as depth and drainage.

Soil depth refers to the amount of soil available for downward root growth. In most soils, there is a layer under the top soil, which obstructs root growth. This barrier may consist of materials such as rocks or compacted clay, or may be water-saturated.

Drainage refers to how well water penetrates through the soil. Sandy soils are well-drained to excessively well-drained, meaning water moves through them quickly. Soils that consist of heavy clay are typically poorly drained, meaning water has a difficult time moving through them. Most plants grow best on deep, well-drained soils.

However, some plants, such as longleaf pine, grow well on excessively well-drained soils, while others, such as cattails and cypress, tolerate poorly drained soils. Northern red oaks grow best on deep soils, while chestnut oaks tolerate shallow soils.

Soils dictate the manner in which plants compete. In dry shallow soils, plants compete for moisture and nutrients. On mountain ridge tops in Virginia, soils are often dry and shallow. In these areas, plants that are adapted to shallow soils (like the aforementioned chestnut oak), have a competitive advantage. Where moisture is plentiful but drainage is poor, such as a swamp, trees and shrubs tolerant of poorly drained soils (such as the aforementioned cypress) are the best competitors.

In deep, well-drained soils, such as floodplains, where there is little competition for water, trees compete for light. Light is, in general, the most limiting resource in eastern forests. On sites like this, tall species such as tulip-poplars, sycamores, or walnuts may out-compete other species. Shorter stature species can also grow well on these soils, but only without competition from taller trees.

Indicator species act as a measure of soil fertility. Species such as black cohosh indicate a site with high fertility. Phot by: Adam Downing, Virginia Cooperative Extension.

So what does all this mean to you and your natural area? "Right Tree, Right Place" is a mantra often heard from natural resource professionals. We can expand this to any plant, from grasses and sedges to maples and magnolias. Every species will perform best, i.e. compete best, on certain sites. So how do you know what the right tree (plant) is for your site? There are two approaches and we recommend both.

The first, and more enjoyable approach, is to take a stroll around your land. Look down. Take note of what species are already growing there. Species that are naturally occurring in an area tend to be well-adapted to the site and will likely also perform well when planted. Certain species, such as ginseng (*Panax quinquefolium*), black cohosh (*Cimicifuga racemosa*), and blue cohosh (*Caulophyllum thalictroides*) are well-known indicators of sites with high soil fertility (i.e., deep, moist, and nutrient-rich). If you find these indicator species on your property you most likely have a productive site in that location.

During your stroll, be sure to look up as well. Typically, trees grow taller on fertile sites than on less fertile sites. For example, the height of a 100-year-old tulip-poplar may range from 80 to 125 feet, depending on the quality of the site. You can easily observe this on ridge tops which have fertile NE facing slopes on one side and usually less fertile SW facing slopes on the other. If both slopes have a

Foundation 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	April, May & June	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
SA	April 13	Boyce	**Birding & Habitat Conservation** Join NSV Audubon and Potomac Conservancy for a presentation on Shenandoah Valley riverside habitat preservation at 7 p.m. Weather permitting, a 6 p.m. bird walk will precede the public program.	7:00 p.m.	Free
SM	April 15-16	Charlottesville	**Virginia Forestry Summit: Wood Connections & Relationships** Join professional foresters, loggers, wood products manufacturers, and woodland owners at this annual meeting. Educational programs will be available for everyone.	Varies	Varies*
JF	April 24 May 8 May 15	Alberta Bedford Halifax	**Spring Venture Outdoors** Interested in learning about current forestry issues that pertain to the health and management of your land? If so, join Virginia Cooperative Extension and partners for this event.	9 - 3:30	Free*
DP	May 13	Wakefield	**6th Annual CPS Vegetation Management Workshop** Learn about methods for getting invasive species under control. CFE, SHARP Logger, and pesticide recertification credits will be available	All day	$35*
EP	July 11-12	Abingdon	**Southwest Virginia Landowner Weekend Retreat** Spend the weekend with fellow forest owners and natural resource professionals. A combination of classroom talks, field tours, and hands-on experiences will teach new landowners about important aspects of forest management.	8:00 a.m. Saturday until 1:00 p.m. Sunday	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

Contact	Name/Affiliation	Phone	e-mail/website
DCR	Virginia Department of Conservation & Recreation	804/786-1712	www.dcr.virginia.gov
AC	Alycia Crall	434/872-4580	www.virginiamasternaturalist.org
SA	Shenandoah Audubon	shenandoahaudubon@yahoo.com/www.audubon-nsvas.org	
SM	Shannon McCabe	804/278-8733	smccabe@vaforestry.org
JF	Jason Fisher	434/476-2147	jasonf@vt.edu
DP	Doug Pond	804/241-8118	doug.pond@cpsagu.com
EP	Ellen Powell	434/220-9083	ellen.powell@dof.virginia.gov

MAM cont. from page 3

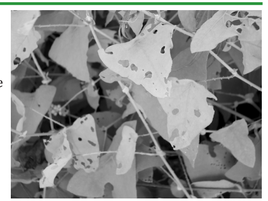
Conclusion

MAM is an aggressive weed that can be an economic problem in orchards, nurseries, and forest production settings. It can also cause environmental damage by creating monocultures and crowding out native plants. Early detection and the use of appropriate control measures can be effective in limiting the impact of this invasive plant.

For additional information check the following websites:

- http://www.na.fs.fed.us/spfo/pubs/pest_al/mm/pa_mam.pdf
- http://www.invasivespeciesinfo.gov/plants/mileminute.shtml
- http://www.invasive.org/browse/subinfo.cfm?sub=3065

Tina MacIntyre is an Agricultural Inspector, VDACS Office of Plant Industry Services; Tina.macintyre@vdacs.virginia.gov; 804/564-9696.



Mile a minute weevils are a biological control option for this pesky vine. Photo by: Beth McClelland, VDACS.

You Ain't From Around Here! Exotic Invasive of the Quarter: Mile a Minute Vine (*Persicaria perfoliata*)

By: Tina MacIntyre, Virginia Department of Agriculture and Consumer Services

Introduction/Damage

MAM vine can quickly take over a site, crowding out native species. Photo by: Tina MacIntyre, VDACS.

Mile a minute vine (MAM; *Persicaria perfoliata*, formerly *Polygonum perfoliatum*) invades a variety of habitats including disturbed areas, openings in forests, orchards, nurseries, streamside herbaceous wetlands, upland meadows, forest edges, and roadsides. It can grow 20 feet in a season, so you can see how it got its name. The MAM vine will create monocultures, crowding out native plants, and can easily overwhelm small trees, seedlings, shrubs, and small structures.

MAM vine is native to eastern Asia. It was introduced into the United States in 1890 in Oregon, in the 1930's in York County, Pennsylvania, and in the 1940's in Prince Georges County, Maryland. It can now be found in 14 states from New York southward to North Carolina and westward to Ohio. The population that was introduced in Oregon seems to be eliminated.

Life Cycle/Identification

MAM is a prickly, branching, annual vine. It emerges from seeds in early spring, producing white flowers in early June or July and fruit from August to frost. Frost kills the vines but seeds can remain viable for up to six years. Seeds can be dispersed by birds, animals, and people. One MAM vine growing in good conditions and full sun can produce over 2,000 seeds. MAM weed can be identified by the following characteristics.

- Leaves are triangular, 1.5-3 inches long, and are alternately attached to the stem.
- The main veins, petioles, and stems have sharp, hook-like barbs.
- At growth nodes, there is a saucer-shaped collar (ocres) that encircles the stem.
- The berry-like fruit are shiny and blue and are borne in clusters.

Management

Due to its prolific seed production and the long viability of the seed, it is very difficult to eradicate this aggressive weed once it gets established. Here are some management tactics that can help reduce its impact. To be successful, managers may have to use several of these methods.

MAM vine features distinct triangular-shaped leaves, and blue berry-like fruit. Photo by: Leslie J. Mehrhoff, University of Connecticut.

Mechanical Controls - If small populations of MAM vine are found they can be hand-pulled. (Remember, MAM is prickly, so you might want to wear gloves). Once pulled, the plant dies and does not regenerate from the roots. Mowing low or string trimming will also help keep MAM in check. The plants should be mowed or hand-pulled before seed is produced.

Cultural Controls - MAM vine does not grow well in shade. If possible, plant or protect existing plants that provide shade or out-compete MAM in open or disturbed areas.

Chemical Controls – There are pre-emergent and post-emergent herbicides available to control MAM vine. Post-emergent herbicides should be applied before seed set. Commonly used herbicides for MAM include pendimethain, imazapic, sulfometuron, glyphosate, atrazine, hexazinone, imazethapyr, imazapyr and triclopyr. Always read and follow the label. Due to the long viability of the seed, several applications over several years may be necessary.

Biological Control – The mile a minute weevil, *Rhinoncomimus latipes*, is a host-specific pest of MAM. The weevil, which is native to China, is being mass-reared by the New Jersey Department of Agriculture and released in several states in the Mid-Atlantic and Northeast to help control MAM weed. The adults feed on the foliage and the larvae are stem borers. Approximately 25,000 weevils were released at 26 sites in Virginia from 2009 to 2014. The New Jersey Department of Agriculture will sometimes have extra weevils which can be purchased by the general public. For more information, go to http://www.nj.gov/agriculture/divisions/pi/prog/biological.html. Permits may be needed in order to buy the weevils. In order to obtain a permit for the release of *R. latipes*, go to the USDA permits information webpage at: http://www.aphis.usda.gov/wps/portal/footer/topicsofinterest/applyingforpermit.

After three years, this weevil is very good at migrating away from the original release site. You may want to check MAM infestations to see if the weevil has moved to your location.

MAM cont. on page 2

Virginia Tree Farm Program Update

By: Shannon McCabe, Virginia Tree Farm Program

Each time you receive this newsletter, you see the diamond-shaped American Tree Farm System (ATFS) logo on the back panel. Do you recognize it? Do you know what it represents? If you are one of over 1,300 Virginia Tree Farmers, you probably recognize the logo from the large green and white sign displayed on your property. What does it mean to you? Similar questions were asked at a recent meeting of Tree Farmers and other ATFS leaders from around the country. Responses were varied but one common theme emerged: pride. Tree Farmers are proud to manage their woodlands sustainably and foresters are proud to work with landowners doing so. As Administrator for the Virginia Tree Farm Program, I am proud to work among this strong network of individuals dedicated to the sustainability of Virginia's family forests. Whether you have been a proud Virginia Tree Farmer for years or are just learning about the program and interested in joining this great network, I hope you will find this information helpful as you work to sustainably manage your land.

What are the American Tree Farm System and Virginia Tree Farm Program?

ATFS is the largest and oldest sustainable family woodland system in America and a program of the American Forest Foundation (AFF). ATFS is endorsed by the Programme for the Endorsement of Forest Certification benefiting Tree Farmers by opening doors to markets for certified wood. The Virginia Tree Farm Program is one of 44 state programs working to implement ATFS goals on the ground. Virginia's program is managed by the Virginia Tree Farm Committee, a volunteer group made up of state and private foresters and Tree Farmers.

What are the benefits of being a Tree Farmer?

Just as one landowner's objectives may be different from the next, each Tree Farmer may wish to realize different benefits of the program. Benefits of being a Tree Farmer include but are not limited to:

- Family Legacy: Participating in the Tree Farm Program gives families a sense of pride of ownership, which can be passed down generation after generation.
- Recognition: Tree Farmers are encouraged to display the familiar green and white diamond-shaped Tree Farm sign as evidence of their commitment to practicing sustainable forestry. Tree Farmers are models for other woodland owners who want to be better stewards of their land. Participation in state, regional, and national Outstanding Tree Farmer of the Year programs creates opportunities for even broader recognition of a Tree Farmer's good work.
- Community: Tree Farmers promote neighbor-to-neighbor learning and promote stewardship values to sustain America's family forests.
- Tools and Advice: Through the Virginia Tree Farm Program and ATFS, landowners have access to online seminars, field days, workshops, online tools, and forest management information. Our local network of volunteers provides on-the-ground support and professional advice to woodland owners.
- Third-Party Certification: ATFS is internationally recognized and meets strict third-party certification standards, opening markets for Tree Farm wood.
- Representation: ATFS represents the interest of woodland owners to policymakers and educates the public about the role forest owners play in providing all Americans with multiple benefits such as clean air and clean water, wildlife habitat, recreational opportunities, and ways to connect children to the natural world.

What does it take to become a Tree Farmer?

Landowners owning between 10 and 10,000 contiguous acres of forestland are eligible to become certified Tree Farmers. Properties must be managed under a written management plan that meets the 2015-2020 ATFS Standards of Sustainability, described below. Tree Farmers must be willing to participate in Standards compliance monitoring procedures should their Tree Farm be selected for inspection. Participation in Tree Farm recognition programs and landowner education and outreach opportunities is also encouraged.

What are the 2015-2020 Standards of Sustainability?

Every five years, the ATFS Standards of Sustainability are updated through a transparent review process. The 2015-2020 Standards were recently approved by The American Forest Foundation (AFF) and went into effect January 1, 2015. As explained by a recent ATFS Certification Update, these revised Standards include key elements to support landowners in achieving their conservation goals including:

- Emphasis on your objectives, as a landowner, and additional guidance in implementing management strategies and techniques to help you accomplish your goals.
- Integrated approaches to help you address forest health and resilience in your woods.
- Increased continuity with global sustainability frameworks and market opportunities, including recognition by the Programme for Endorsement of Forest Certification (PEFC).
- Expanded recognition of the work you do implementing your State Forestry Best Management Practices (BMPs) and its benefit for air, water, and soil.

TF cont. on page 5