

If you would prefer to conduct a burn on your property yourself, it is recommended that you become a Certified Prescribed Burn Manager, at a minimum. In Virginia, the Department of Forestry has developed requirements to become a Certified Prescribed Burn Manager, which, for those new to burning, includes the successful completion of a three-day course and exam. The course is open to landowners, consultants, and anyone who would like to know more about burning. It includes sessions on the legal aspects of prescribed burning, fire behavior, tactics, smoke management, environmental effects, plan preparation, safety, and more. Certified Prescribed Burn Managers have an additional level of liability protection over those who are not certified if they adhere to the regulations within the Virginia Certified Prescribed Burning Manager Program Act.

You can gain additional experience by assisting a neighbor with a burn, or by virtually watching a landowner conduct a burn as part of a free online course offered by North Carolina State University. The course, called e-FIRE, can be accessed here: <http://www.go.ncsu.edu/efire>. It allows participants to "see" how burns are conducted, and provides numerous videos and other resources to watch and read at your own pace. You can also exchange information, techniques, and experiences with other practitioners through your state's Prescribed Fire Council. You can learn more about the Virginia Prescribed Fire Council and how to become a member by visiting their website: <http://www.dof.virginia.gov/fire/vpfc.htm>.



*A well-planned prescribed burn can help you achieve woodland management goals such as creating wildlife habitat, reducing fuel loads, and decreasing competing vegetation. Photos by: Jennifer Gagnon, Virginia Tech.*

Many landowners are concerned about the liability of conducting a prescribed burn. However, Virginia is considered a "negligence" state, which means that any landowner or his/her agent who conducts a prescribed burn in compliance with the law will not be held liable if smoke from the fire causes damage or injury, unless the damage results from negligence or improper conduct. There is no comparable liability protection for damages or injury resulting from an escaped fire in Virginia. Several insurance companies provide protection for prescribed burning, some even on a "per burn" basis for those landowners who may only burn once or twice each year.

Although prescribed burning is one of the most cost-effective tools available to manage your land, costs associated with a prescribed burn may still be a concern. Fortunately, there are several options available through various financial assistance programs such as those with the Natural Resources Conservation Service (NRCS) Environmental Quality Incentives Program (EQIP) and Conservation Stewardship Program to help offset the costs of conducting a burn. Payments for a prescribed burn through EQIP vary depending on the type of burn and whether you are considered to be historically underserved. Visit your local NRCS field office to learn more. To learn more about how good fires can protect your forest, please visit [www.goodfires.org](http://www.goodfires.org).

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| EVENT CONTACTS |  |              |   |
|----------------|--|--------------|---|
| Contact        | Name/Affiliation                                 | Phone        | e-mail/website  |
| DCR            | Virginia Department of Conservation & Recreation | 804/786-1712 | <a href="http://www.dcr.virginia.gov">www.dcr.virginia.gov</a>  |
| AC             | Alycia Crall                                     | 434/872-4580 | <a href="http://www.virginiamasternaturalist.org">www.virginiamasternaturalist.org</a>  |
| JG             | Jennifer Gagnon                                  | 540/231-6391 | <a href="mailto:jgagnon@vt.edu">jgagnon@vt.edu</a>  |
| CATS           | Charlottesville Area Tree Stewards               | NA           | <a href="http://charlottesvilleareatreestewards.org/documents/">http://charlottesvilleareatreestewards.org/documents/</a>                 |
| NC             | Neil Clark                                       | 757/653-2572 | <a href="mailto:neclark@vt.edu">neclark@vt.edu</a>  |
| JF             | Jason Fisher                                     | 434/476-2147 | <a href="mailto:jasonf@vt.edu">jasonf@vt.edu</a>  |
| BW             | Bill Worrell                                     | 276/889-8056 | <a href="mailto:bworrell@vt.edu">bworrell@vt.edu</a>  |
| AD             | Adam Downing                                     | 540/948-6881 | <a href="mailto:adowning@vt.edu">adowning@vt.edu</a>  |
| SAV            | State Arboretum of Virginia                      | 540/837-1758 | <a href="http://www.blandy.virginia.edu/our-foundation/online_payments">http://www.blandy.virginia.edu/our-foundation/online_payments</a> |
| TB             | Tiffany Brown                                    | 540/231-0790 | <a href="mailto:tiffany.brown@vt.edu">tiffany.brown@vt.edu</a>  |

**VIRGINIA FOREST LANDOWNER UPDATE**



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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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**Putting Fire to Work in Your Woodlands**  
 By: Jennifer Evans, North Carolina State University

Lightning-caused wildfire is natural. It is part of the ecosystem. And it is inevitable. Careless use of fire and other human-caused factors can also cause wildfires any time of the year. As I was once taught about our woods, "It is not if they will burn, but when they will burn." Therefore, we need to prepare our woodlands for the inevitable. In the Summer VFLEP newsletter you read about how a Fire Safety Plan can help reduce the potential for wildfire damage on your land. But, did you know that some fires are in fact good and could actually mitigate the catastrophic damage that a wildfire could cause?

Prescribed burning, also known as controlled burning, is the deliberate use of fire by experienced practitioners under specified and controlled conditions to achieve a specific land management goal. It is a safe way to apply a natural process, ensure ecosystem health, and reduce wildfire risk.

Most wildfires that burn into areas where prescribed burning has recently occurred cause less damage and are easier to control. This is because the flammable plants and other fuels have already been reduced by previous fire. By safely reducing excessive amounts of duff, brush, and shrubs, prescribed burning is the most practical and cost-efficient way to reduce dangerous accumulations of combustible fuels under southern pine stands. It is one of the most effective tools that we have in preventing the dangers and spread of wildfires.

In addition to wildfire hazard reduction, prescribed fire can be used to reach other land management objectives, such as controlling hardwoods and other competing vegetation in pine stands. Shade-tolerant hardwoods of low value and poor quality often encroach upon the land that is best suited for growing pine. Unwanted species may crowd out or suppress pine seedlings. However, through the carefully planned use of prescribed fire, the understory can be managed to limit competition.

Since prescribed fire recycles nutrients back into the soil, encourages the new growth of native vegetation, and maintains many plant species that depend on periodic fire, it is also often used to improve forage and habitat for both game and non-game wildlife species. Other management objectives for which prescribed burning can assist include site preparation (some species, such as longleaf pine, actually need bare mineral soil cleared by fire in order to grow and germinate), enhancing appearance and access, and controlling insects and disease. The use of prescribed fire at the appropriate scale and frequency in your woodlands can ultimately help to increase the long-term value of your land, regardless of your management objectives.



*Sam Lindblom, The Nature Conservancy, explains to landowners the importance of understanding fuel levels and types before a prescribed burn. Photo by: Jennifer Gagnon, Virginia Tech.*

Now that you know the benefits of prescribed burning, you may be wondering about the next step to start the process of bringing prescribed fire into your woodlands. In some states, forestry agencies can help to install firebreaks, write a burn plan, conduct the burn, stand by on a burn that you are managing, or provide general assistance. However, if your burn must be conducted within a specific period of time, it is advised to check with them first because there may be a wait list. Oftentimes, private contractors are also available for hire to complete these same activities. In Virginia, the Department of Forestry does not explicitly offer prescribed fire services; however, although you are responsible for your own due diligence in obtaining references before hiring, a list of available private contractors can be found at this periodically-updated website: <http://www.dgif.virginia.gov/quail/prescribed-burn-contractors.asp>.

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

**Useful Resources**

If you haven't already, check out our new publication, *Welcome to the Woods! A Guide for New Virginia Woodland Owners*, now available on-line and in print. This full-color guide covers the top ten things new Virginia woodland owners should know. Complete with resources, agency contacts, and a glossary, this guide can help those new to woodland ownership (or management) get started. Download it here: <https://pubs.ext.vt.edu/ANR/ANR-136/ANR-136.html>.

Follow the Virginia Forest Landowner Update on Twitter @VFLEP. 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](http://www.facebook.com/VFLEP).

**CONTACT OUR SPONSORS AND STATE NATURAL RESOURCE MANAGEMENT AGENCIES:**

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

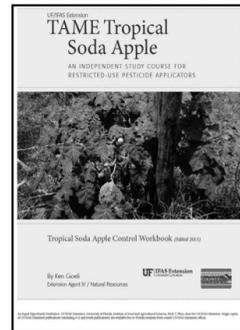
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| EVENTS CALENDAR  |                    |                           | For the most complete listing of natural resource education events, visit the on-line events calendar at <a href="http://forestupdate.frec.vt.edu">http://forestupdate.frec.vt.edu</a>  |                                      |   |
|--|--------------------|---------------------------|---|--------------------------------------|---|
| Contact  | Date               | Location                  | Event   | Time                                 | Fee   |
| DCR  | Oct., Nov., & Dec. | Virginia's State Parks    | <b>A variety of events and activities</b><br>For a complete list, visit: <a href="http://www.dcr.virginia.gov/parks">www.dcr.virginia.gov/parks</a> .   | Varies                               | Varies  |
| AC   | Year-round         | State-wide                | <b>Virginia Master Naturalist Volunteer basic training</b><br><a href="http://www.virginiamasternaturalist.org/chapters.html">www.virginiamasternaturalist.org/chapters.html</a>  | Varies                               | Varies  |
| JG   | Oct. 3-4           | Cumberland                | <b>Central Virginia Landowner Weekend Retreat</b><br>Classroom talks, field tours, and hands-on experiences will help you keep your woods healthy and productive.   | Sat:<br>All day<br>Sun: 7:15 - 12:30 | \$40*/person,<br>\$80*/couple<br>\$75**/person,<br>\$150**/couple |
| CATS   | Oct. 6 - Dec. 12   | Charlottesville           | <b>Charlottesville Area Tree Steward Training Class</b><br>The Charlottesville Area Tree Stewards is a group of volunteers whose mission is to support rural and urban forests.   | Varies                               | \$95  |
| NC   | Oct. 8             | Franklin City/Southampton | <b>39<sup>th</sup> Annual Fall Forestry &amp; Wildlife Field Tour</b><br>On this tour, we'll explore how forestry shaped Franklin City and the role it plays today. You will learn about keeping ash trees EAB- free, intensive pine management, and harvesting. We will also visit an active sawmill.                        | 8:30 - 4:30                          | \$45*/person  |
| JF   | Oct. 16            | Nelson County             | <b>39<sup>th</sup> Annual Fall Forestry &amp; Wildlife Field Tour</b><br>Did you know there is plenty of active forestry in Nelson County? On this tour you'll learn about creating habitat for pollinators, silvopasture, and hardwood management & processing.  | 8:30 - 5                             | \$35*/person;<br>\$60*/couple                                     |
| BW   | Oct. 23            | Smyth/Wythe               | <b>39<sup>th</sup> Annual Fall Forestry &amp; Wildlife Field Tour</b><br>This tour of beautiful southwest Virginia will highlight diverse aspects of forestry. We'll learn about silvopasture, log grading, hardwood regeneration, the American chestnut, the importance of mussels, and visit a hardwood finishing facility. | 8:30 - 5                             | \$35*/person;<br>\$60*/couple                                     |
| AD   | Oct. 24            | Madison                   | <b>Natural Hardwood Charcoal Making Demonstration</b><br>An open-house demonstration occurring at the first-ever Fall Harvest Festival. Cooking with real charcoal and taste-testing samples with local meat! <a href="http://www.frec.vt.edu/charcoal/">http://www.frec.vt.edu/charcoal/</a>                                 | 8 - 12                               | Free  |
| AD   | Oct. 25            | Montpelier Station        | <b>Working Woods Walk</b><br>Explore beyond the mansion and lawn to the woods of Montpelier through a state-of-the-art trail showcasing various forest & habitat tending methods.   | 2 - 4                                | \$10  |
| SAV  | Oct. 29            | Winchester                | <b>The Role of Deer in Structuring Forest Communities</b><br>Deer are a key engineer in eastern deciduous forests. This talk will explore impacts of this large herbivore on forests and the need to manage deer.   | 7 - 8:30 p.m.                        | \$12  |
| SAV  | Nov. 4             | Boyce                     | <b>Identification of Fall Trees</b><br>Learn to identify trees using available characters, from bark and branching to fruits and leaves.  | 2 - 4 p.m.                           | \$12  |
| TB   | Nov. 13            | Front Royal               | <b>Forest Botanicals: Working Together to Build a New Supply Chain</b><br>Attendees of these meetings will learn about the opportunities and challenges facing forest-based growers (and buyers) of native medicinal plants.  | 9 - 3                                | \$15*   |
| TB   | Nov. 14            | Abingdon                  | <b>Forest Botanicals: Working Together to Build a New Supply Chain</b><br>See above.  | 9 - 3                                | \$15*   |
| SAV  | Nov. 18            | Boyce                     | <b>Forest Defoliators</b><br>Learn about native and nonnative defoliating moth species, ecological and socioeconomic impacts, and management options.   | 3-4:30 p.m.                          | \$12  |
| 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 <a href="http://forestupdate.frec.vt.edu">http://forestupdate.frec.vt.edu</a> . We have several scheduled this fall! |                    |                           |   |                                      |   |
| *meals included ; **meals, Friday and Saturday night lodging included  |                    |                           |   |                                      |   |

Events contacts on pg. 5

## You Ain't From Around Here! Exotic Invasive of the Quarter: Tropical soda apple (*Solanum viarum*) By: Jennifer Gagnon, Virginia Tech

Continuing my mission to expose invasive species that have not been found in Virginia, but are lurking outside our borders, I return (virtually) to my old stomping ground, Florida, to talk about tropical soda apple. I begin all my research on the invasive species I write about at [www.invasive.org](http://www.invasive.org). This website has many images and links to more information. You can only imagine my delight when I found that my *alma mater* has an independent study course on tropical soda apple. The course was designed to provide pesticide applicators (something that I am not) with continuing education credits. Since I love interactive learning, I went ahead and completed the course just so I could write this article. If you too are also a lover of interactive learning, you can find the course (and others) here: <http://pesticide.ifas.ufl.edu/TropicalSodaApple/index.shtml>.



*The TAME Tropical Soda Apple Independent Study Course Manual. It even includes a super-fun word search! UF-IFAS Extension.*

What did I learn?

Tropical soda apple is an annoying spiny shrub that goes by the acronym TSA and originally hails from Argentina and Brazil. Ranchers in South Florida first identified TSA in 1988. This species seems to be restricted to semi-disturbed sites, such as pastures, ditch banks, citrus groves, sugarcane fields, and wet areas on rangelands; it doesn't do well in areas with long periods of standing water. But even with those limitations, Florida's infestation increased from 25,000 to 500,000 acres between 1990 and 1996.

In addition to the typical problems most invasive species cause, such as shading out and out-competing native species, TSA takes over pastures quickly and replaces forage for grazing animals. TSA leaves are unpalatable to livestock, resulting in decreased stocking rates. It is on the federal noxious weed list.

A single plant can produce 40-50,000 seeds each year. These are dispersed by birds, cattle, deer, feral hogs and raccoons, all of which eat TSA fruits. Seeds are also dispersed by contaminated hay, sod and machinery. Seed germination rates depend on light, temperature, and age. The older seeds get, the lower the germination rate. But, under ideal conditions, germination rates are over 75%. Interestingly, greenhouse studies show seeds buried as deep as 3.25" will germinate; seeds under 6" of soils may even be able to germinate. Compare this to vegetable seeds that we plant typically no deeper than 1 - 1.5". In addition to seeds, TSA develops an extensive root system, which sends out shoots to create new plants.

TSA has not been reported in Virginia. According to the Early Detection & Distribution Mapping System, it has been reported in south-central North Carolina and throughout Tennessee, including counties just south of Washington County, Virginia. The USDA PLANTS Database maps also shows TSA being reported in Pennsylvania. There's no reason to believe TSA isn't planning a move to the Old Dominion. We need to be on the lookout.

### How to Identify TSA

**Form:** Bushy, prickly, herbaceous perennial; 3-6' tall.

**Stems:** Covered in broad-based straight or downward pointing prickles, white to yellowish color.

**Leaves:** Alternate, simple, oval-triangular, divided into broad pointy lobes; 4-7" long, 2-6" wide; surface dense with fine soft hairs resulting in a velvety sheen.

**Flowers:** White, in small terminal clusters (at the end of the stem); 5 petals; stamens with prominent cream-colored anthers; flowers all year, but concentrated September through May.

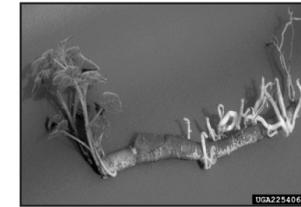
**Fruit:** Globose berry, 1-1.5" in diameter; green with dark veining, like a tiny watermelon when immature; dull medium yellow when ripe; 400 seeds per berry; 40,000 - 50,000 seeds per plant. Plants typically have both mature and immature fruits on them at the same time.

**Related species:** *Solanum capsicoides*, commonly known as cockroach berry or red soda apple, is often mistaken for TSA. However, this species is not nearly as common as TSA and has red fruits. A relative of TSA, bitter nightshade (*Solanum dulcamara*) is an exotic species that does occur in Virginia. However, this species looks nothing like TSA.



*A TSA infestation in south Florida. Photo by: J. Jeffrey Mullahey, University of Florida.*

*TSA cont. from page 3*



*Clockwise from top left: The leaves of TSA are deeply-lobed and almost as wide as they are long. The flowers are white with prominent cream-colored anthers. Immature fruits are green with prominent veining and look like small watermelons. The extensive root systems of TSA grow shoots that form new plants. Photos by: John D. Byrd, MSU, Rebekah D. Wallace, UGA, J. Jeffrey Mullahey, UF, and Charles T. Bryson, USDA Agricultural Research Service.*

Herbicides such as Remedy Ultra (active ingredient triclopyr) are also effective chemical treatments. When using triclopyr-based herbicides, mow plants to a 3-inch stubble height as soon as possible to keep them from producing fruit and seed. Repeat mowing when plants reach the flowering stage every 50-60 days through April. Fifty to 60 days after the April mowing, when plant regrowth is at the first flower stage (late May-June), apply the triclopyr-based herbicide at the rate recommended on the label. Triclopyr does not remain active in the soil, which could be a benefit if you are trying to reestablish native plants on the site; however, TSA seeds in the soil will continue to germinate and follow-up treatment will be necessary.

Regardless which herbicide is used, regular monitoring after treatment is necessary. TSA can produce fruit at almost any time during the growing season. In addition, if possible, quickly reclaim sites by planting desirable species.

**Biological:** The TSA beetle, *Gratiana boliviana*, is native to South America and is highly specific to TSA. While the TSA beetle doesn't kill the plants, it does reduce their vigor, growth rate, and fruit production, making them less competitive with native plants. This beetle is appropriate for small infestations or where TSA is present in remote areas.

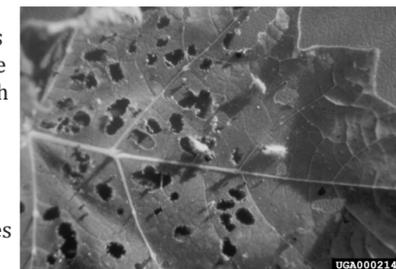
For sparse infestations, release 100-300 beetles. For dense infestations, release 300-500 beetles. The TSA beetle has many natural enemies, so monitor the sites to ensure that the beetle population persists, reproduces, and spreads throughout the TSA-infested area. To obtain TSA beetles, call the Florida Department of Agriculture and Consumer Services at (888) 397-1517.

Depending on the type of infestation, a combination of mechanical, chemical and biological controls may be most effective.

If you think you've found TSA in Virginia, please report it to the Southeast Early Detection Network. You can download the free mobile app to your smartphone or tablet from here: <https://www.eddmaps.org/southeast/>. Remember, early intervention is the easiest and least expensive way to manage invasive species outbreaks!

*Jennifer Gagnon is a Project Associate in the Department of Forest Resources and Environmental Conservation; 540/231-6391; [jgagnon@vt.edu](mailto:jgagnon@vt.edu).*

*TSA cont. on page 4*



*Larvae of the TSA beetle feed on the TSA leaves. While this damage is not fatal, it does reduce the overall vigor of the plants, making them less competitive with native species. Photo by: Julio Meda, University of Florida.*