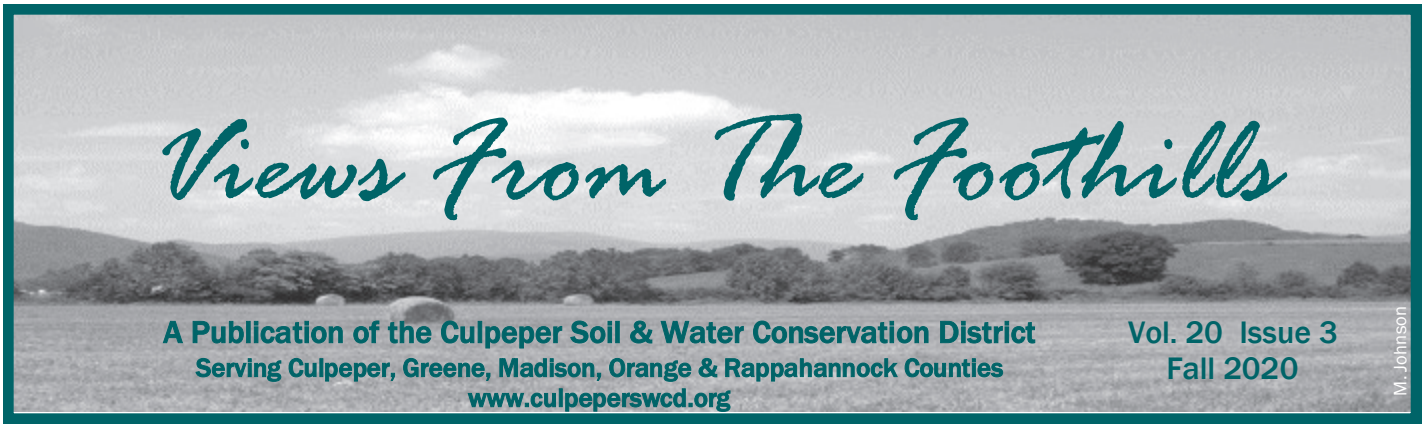
Views From The Foothills

A Publication of the Culpeper Soil & Water Conservation District
Serving Culpeper, Greene, Madison, Orange & Rappahannock Counties
www.culpeperswcd.org

Vol. 20 Issue 3
Fall 2020



Inside This Issue

Welcome!

You are receiving this newsletter because you receive land use tax benefits in our counties. Please call 540-825-8591 or email stephanied@culpeperswcd.org to remove yourself from our mailing list.

Nutrient Management Plans and House Bill 1422

The Department of Conservation and Recreation (DCR) is currently offering a Nutrient Management Plan Direct Pay Program where DCR pays the nutrient management planner directly for developing nutrient management plans on agricultural acres (hay, pasture, crops) in the Virginia portion of the Chesapeake Bay Watershed. This includes all of the Culpeper District counties. The DCR currently holds a $469,000 EPA grant to accelerate the development of plans to get more acres under plans to help meet Chesapeake Bay Watershed Implementation Plan (WIP) III goals. It is currently reported by DCR that there are 37 counties which have less than 10 percent of their agricultural acres under plans. This includes all five of the Culpeper District counties. DCR has targeted the EPA grant towards 9 counties; all 5 of Culpeper District counties included. Now is a very good time to have a nutrient management plan developed for your farm.

During the most recent regular session of the Virginia General Assembly, House Bill 1422 (Senate Bill 704) passed. This legislation, among other things, could require nutrient management plans of "… any operator of 50 or more acres of Chesapeake Bay cropland …" See the link and read the legislation: https://lis.virginia.gov/cgi-bin/legp604.exe?201+ful+CHAP1185.

In our estimation, this legislation stresses the importance of accelerating the development and implementation of plans now, since progress towards the WIP III goals will be monitored each year … and while the direct payment program is currently available. We also suggest that now is a more opportune time to have a plan developed than waiting until 2024 or 2025. We expect there will be a significant backlog in these later years. There are other options for cost sharing nutrient management planning, now and every year, through the Virginia Agricultural Best Management Practices Cost Share Program. This includes reimbursements for plan writing and various levels of implementation practices.

Anyone interested can contact the District for a list of nutrient management planners who are enrolled in the Direct Pay Program and can visit https://www.dcr.virginia.gov/soil-andwater/document/nmdir.pdf and find more information on the program.

The District carries nonwoven geotextile (filter fabric) for sale that meets most state and federally funded project requirements, as well as many on-farm needs. Geotextile is sold by the foot, which comes in 12.5' widths. Please call the Culpeper Office at 540-825-8591 for pricing and more information!

Using a soil test to inform your lawn management can yield results as seen above

Save Money with Soil Testing to Improve Your Lawn

Caring for the environment also means caring for your lawn. By using proper mowing and maintenance practices, you can enjoy a healthy, beautiful lawn while protecting local streams, rivers and lakes.

Our homes contain impervious surfaces (rooftop, patio, and driveway) that can't absorb and filter rainfall. The underlying soil characteristics of the lawn can affect how the lawn absorbs and filters the impervious runoff. Soil compaction, low pH (e.g. acid soils) and low nutrients can impact how you grow vegetation in your lawn. Improperly applied or excess fertilizer and other chemicals are not retained in the landscape, and can contribute to harmful algal blooms and other water quality problems.

What is lawn care? It's not just seeding, watering and mowing. We must amend the soil not only to feed the grass but to improve soil structure. Managing clippings and leaves are all part of lawn care too. Returning these byproducts improve the soil and vegetation. How we care for our lawn determines the degree of the environmental benefits and impacts we achieve.

Healthy lawns can help prevent erosion, reduce runoff, and filter rainwater. A healthy lawn has uniform and mature vegetation that inhibits erosion and retains nutrients. A healthy lawn can capture over an inch of rain; traps dust and dirt; convert carbon dioxide to oxygen; and reduces the heat island effect with air temperatures up to 30 degrees cooler than pavement. A sparse lawn with bare soil needs improvement either by amending the soil or selecting different landscape plants.

The soil should be tested every three years. A composite soil sample of the whole yard is collected. A soil test includes information on the amount of nutrients, organic matter and pH level. The proper balance is essential to a healthy lawn. Additional assessments of patchy bare spots could be done to verify foot traffic, recent disturbance, disease or standing water.

The Culpeper Soil and Water Conservation District is working with your local Extension agent to make sure homeowners like yourself have the knowledge and resources to do your part. The District is offering a voucher to cover the cost of the soil test. For these vouchers please contact the District at 540-825-8591 or stephanieD@culpeperswcd.org.

For more information on lawn care see the Virginia Extension Publication list: https://www.pubs.ext.vt.edu/tags.resource.html?tag=pubs_ext_vt_edu:lawns .

A Guide for New Virginia Woodland Owners: Part 2: Welcome to Your Woods (see http://www.culpeperswcd.org/wp-content/uploads/2020/08/culp-swcd-nletter-summer-2020.pdf for Part 1)

By Adam Downing, Virginia Cooperative Extension Forestry Agent

It is our intention to make new forestland owners aware of this publication. To read the publication visit our website, http://www.culpeperswcd.org/wp-content/uploads/2020/11/welcome-to-the-woods.pdf.

As a new landowner, what do you need to know to have healthy productive woodlands that provide all of the previously outlined benefits? What follows are the top 10 items the Virginia Forest Landowner Education Program and its natural resource partners think would be most helpful for you. There is a glossary of terms and information for obtaining all of the resources mentioned in the text is provided in Appendix A of the publication.

1. How Do Your Woods Work?

Composition

In terms of composition, the woods of Virginia are very diverse. Hardwood and hardwood-softwood mix forest types make more than 79 percent of the Commonwealth's woods. Hardwood is an informal term that usually refers to broad-leaf tree species like oaks, yellow-poplar and maples. Most hardwoods drop their leaves in autumn as the weather becomes colder and moisture and sunlight are less available. Their growth and development pause until favorable conditions return in late winter and early spring.

Softwood dominated forests represent approximately 20 percent of Virginia's woodlands. Softwood usually refers to species that have their seeds in cones and have needle-like or scale-like leaves. Examples of softwood or coniferous trees include pines, firs, spruces, cedars and cypresses. Most of these retain foliage throughout the year. Planted pine accounts for almost 63 percent of softwood acreage in Virginia. The most commonly planted pine species include loblolly and white, although there is a resurgence in planting both shortleaf and longleaf. Other pine species found in Virginia woodlands include pitch, Table Mountain and Virginia.

The Virginia Department of Forestry publishes the annual "State of the Forest Report" that provides additional details about Virginia's forests.

The trees, shrubs and other plants that compose Virginia's woods vary dramatically depending on location. In fact, someone travelling across the southern portion of Virginia will encounter five separate geologic landforms that greatly impact species composition.

The five geologic landforms in Virginia include the Cumberland Plateau, Ridge and Valley, Blue Ridge, Piedmont and Coastal Plain. The characteristics of these landforms affect local climates, moisture and soil types and offer a diversity of growing conditions. Each typically supports a plant community with similar growth requirements. Therefore a maple-beech-birch (northern hardwoods) association, which provides the most vibrant autumn colors, occurs in the cooler and higher elevations of western Highland County in the Ridge and Valley region but is rare on the more humid Coastal Plain. A loblolly-shortleaf pine association is common in low-lying areas of the Coastal Plain but absent in the Cumberland Plateau. The most common woodland type in Virginia is the oak-hickory forest association. It contains many species of oak trees, including white oak, northern red oak, black oak and chestnut oak, along with a variety of hickory species like shagbark and pignut. You'll likely find a plethora of other trees, shrubs and herbs growing in this forest type including tulip-poplar, red maple, dogwood, eastern redbud, blueberry, mountain laurel, Solomon's seal and may apple.

Ecology

All plants need basic resources to live: light, water, nutrients and growing space. The plants in your woods are constantly competing with each other for these resources. Those that lose this competition will die off. Most forest plants would probably grow quite well on moist, well-drained, fertile soils with adequate sunlight and growing space, similar to plants in a well-tended garden or a greenhouse. On these ideal, productive sites, however, competition is fierce and species that are best at growing fast out-compete slower-growing species. Any given site can support only a limited amount of vegetation.

Many plants in our woods have developed adaptations to help them better tolerate the incessant competition for resources. For example, red maple, the most common tree in Virginia, can develop and grow in low levels of light under the shade of a forest canopy. Longleaf pine can tolerate dry, sandy soils. Bald cypress can tolerate flooded and wet soils. Under these conditions, these species are strong competitors.

Continued on page 13

Partner Spotlight: The Virginia Forage and Grasslands Council

By Jim Tate, VFGC President

The Virginia Forage and Grasslands Council (VFGC) is a volunteer group of industry producers (farmers), supporting business professionals and government and non-governmental organization representatives dedicated to promoting, improving and education about the forage industry and its related livestock enterprises. The Council promotes mass educational events each year across Virginia to promote effective and informed forage management.
The VFGC conducts many outreach and education events each year.

Winter Forage Conferences: the premier event held on four consecutive days at four venues around the state featuring nationally and internationally known professionals to educate on new and important forage topics. The conference will occur virtually January 18-22. See www.vaforages.org for more information.

Grazing schools: The Council is now holding three different types of grazing schools. These are small group schools with limited attendance, intended to give producers tools and information to improve their grazing management and are held with classroom instruction and hands on, in the field application. There is first the long standing, basic grazing school to get producers starting in improved grazing management. The Council has been holding these schools long enough that there is now a demand from former participants for advanced grazing schools and the Council usually holds one or more of these every year. A relatively new addition is grazing schools for industry professionals. These are schools for industry workers who may work with forage and livestock producers as a part of their larger job responsibilities.

Fencing schools: There are normally one or two fencing schools per year. These schools are normally taught by fencing professionals as well as VFGC professionals and feature the how to's and why's of building quality fences that will also meet government program specifications.

Field days: The Council normally holds at least one field day every year. These are fairly big events designed to showcase forages and forage management in different regions of the state. The Council tries to rotate these events to farms around the state with a good forage program and the room to handle a large crowd. Specialists are usually brought in from surrounding states and cooperating agencies to hold concurrent rotating sessions to demonstrate the Best Practices being showcased. They are always a beneficial and educational day.

Pasture Walks: These are medium sized events usually held in the late afternoon or early evening and normally have a crowd of fifty to seventy five attendees. Again, the purpose is to demonstrate new strategies or processes or species or managements that are helping producers meet their production goals. There are normally several of these events every year in various regions of the state.

Scholarships: The Council raises money and administers two memorial scholarships for students pursuing degrees in forage agronomy or related fields.

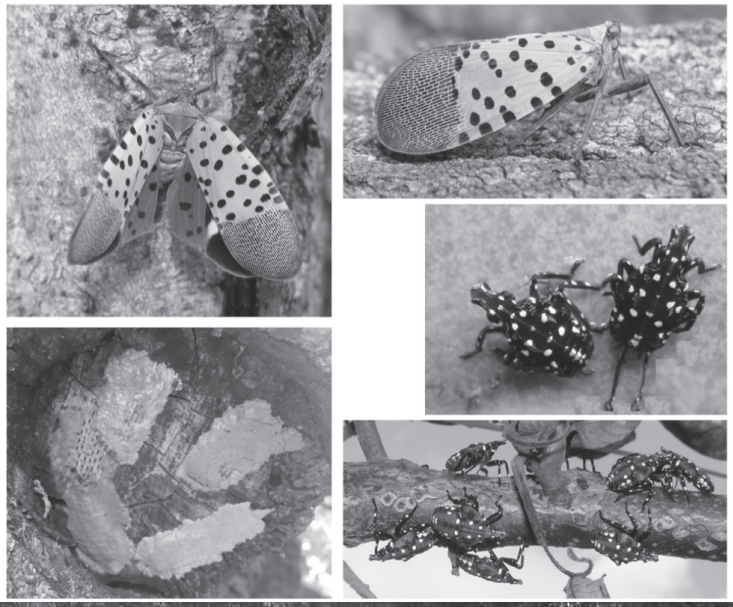
The VFGC is also a member organization of the American Forage and Grassland Council and many of our members serve on that Council's Board of Directors. Among our members are several former and the current President of the American Forage and Grassland Council. We encourage anyone with an interest in forage or livestock to become a member of VFGC and join us at any of our events. Membership is not required but any organization is only as strong as its active members. All VGFC events are open to the public and are normally advertised through Virginia Cooperative Extension, the 47 Virginia Soil and Water Districts and the USDA Natural Resources Conservation Service, member e-mails, the VFGC website as well as through member businesses and agencies. For more information visit https://vaforages,org/.

Spotted Lanternfly Look out!

Please be on the look out for the egg masses of the Spotted Lantern Fly (SLF). The first egg mass was found in Virginia January 10, 2018 near Winchester. In less than a year, it's spread now includes Virginia's Clark County and Berkley County, WV. It was also confirmed for the first time in Cecil County, MD last year. This is the most effective time of year to do something positive about this situation.

1. If an Egg Mass is found in a new area, report it
2. If an Egg Mass is found in a known area, destroy it (because each egg mass is 30-50 new adults by the Fall)

Go to this site for more information and join the squash and Smash SLF Army! https://ext.vt.edu/agriculture/commercial-horticulture/spotted-lanternfly.html



Our Annual Tree Sale is Accepting Orders!

This year's species are: American elderberry, black cherry, hazelnut, flowering dogwood, river birch and Norway Spruce. See our website, www.culpeperswcd.org for an order form or email Stephanie DeNicola at stephanied@culpeperswcd.org.

Annual Report Available!

Culpeper Soil and Water Conservation District's Annual Report is available on our website! This 38 page publications details cost share allocated, education programs and much more! Visit our website, www.culpeperswcd.org and click on the Publications tab. Questions can be sent to Stephanie DeNicola at stephanied@culpeperswcd.org.

Live Stakes

Using Live Cuttings to Propagate Shrubby Plants to Stabilize Stream Banks and Wet Areas

NOTE: Commencing this fall as part of the Culpeper District's Annual Tree Seedling Sale we will be offering live stakes for sale. Orders will be taken during the fall and winter for early Spring 2021 delivery. We include this article as an introduction to live staking.

Whether you have an eroding stream bank or want to restore a riparian area, consider planting with live stakes. Live staking is the practice of using unrooted cuttings to propagate shrubs and some trees for establishing vegetation in difficult riparian areas such as stream banks and floodplains. Using cuttings from dormant multi-stem shrubs and trees which have the capacity to grow roots once they are tapped or hammered into the ground.

There are specific species that are particularly well suited for this; these include the silky, gray or red osier dogwoods, willows, buttonbush, arrowwood viburnums, elderberries and sycamores. These plants root easily from cuttings. The cuttings should be between 1/2 inch and 1.5 inches in diameter and between 18 and 24 inches long.

Cuttings are taken in the dormant season, usually 2 to 3 weeks before planting in the spring (February and March). Use your thumb to gauge the diameter of the cuttings and start at the base of the branch and then cut into shorter lengths. Keep cuttings cool, moist and covered until planting.

Planting live stakes involves making sure the cutting has a sharp point to help with pushing or tapping into the ground. There needs to be at least one active bud above ground and the stakes need to be planted with the bud facing up. A push rod can be used to aid planting by making a pilot hole for cutting. The live stake needs to be as deep as possible, leaving the active bud near the surface. The bottom of the planted stake should be in the soil that remains constantly wet or nearly so. Space the cuttings about 1 to 2 feet apart, depending on the desired density.

Not all of the live stakes will survive. After 2 to 5 years you can always take more cuttings from the living to replant the bare areas. Good luck planting!

Other Resources:
Fetter, Jennifer & Koch, Kristen. Live Stakes for Stream Restoration. Penn State Extension. March 17, 2015. Accessed August 2020. https://extension.psu.edu/live-staking-for-stream-restoration

Davis, Ryan. Live Staking: A Trusty Technique for Planting Trees and Shrubs on the Cheap. Alliance for the Chesapeake Bay. Accessed August 2020. https://www.allianceforthebay.org/2019/03/live-staking-a-trusty-technique-for-planting-trees-and-shrubs-on-the-cheap/

Below left: Stream bank sloped, bench and toe planted with live stakes
Below right: 5 years of growth, live stake willows

Conservation Incentive Programs

Available in the Culpeper Soil & Water Conservation District Updated November 2020

Program	Cost Share Rate to Establish Practices	Agreement Period	Requirements	Annual Rental and Other Payments	Other Cost-Sharing	Where & When to Sign-Up
Environmental Quality Incentives Program (EQIP)	Up to 90% of estimated costs	2-10 years Must be part of conservation plan	Threat to soil, water, air, and related natural resources on land	None	VA BMP Cost Share Program	FSA or NRCS
Reforestation of Timberlands (RT)	Up to 75% of estimated costs	10 years	Water quality BMP's must be installed. Pines only. 100-acre maximum.	None	None	VA Department of Forestry
U.S. Fish & Wildlife Service Partners for Fish & Wildlife	75% to 100%	10-year-minimum	Priority areas include Upper James, Upper Roanoke, Upper Tennessee watersheds	None	VA BMP	Culpeper SWCD USFWS
Virginia BMP Program	60-100% plus incentives	5 - 15 years	Existing water quality problems	Yes for buffers	Some areas	Culpeper SWCD
Virginia BMP Loan Program	Zero interest loans – no maximum.	Up to 10 years	Must be an eligible practice	None	None	Culpeper SWCD
BMP Tax Credit Program	25% of out-of-pocket expenses	5 - 10 years	Existing water quality problem	None	BMP Program	Culpeper SWCD
Emergency Conservation Program (ECP)	50 - 64%	10 years	Damage to agricultural production due to declared agricultural emergency	None	None	FSA When announced
Conservation Reserve Program (CRP)	No more than 50%; varies by component	10 or 15 years	Vary according to practice	Varies based on soil types	None	FSA
Conservation Reserve Enhancement Program (CREP)	No more than 50%; varies by component	10 or 15 years	Vary according to practice	Varies based on soil types Various additional incentives available	SWCD	FSA
TMDL Ag BMP Program	50-85% depending on the practice	10 years	Stream exclusion projects with 10-35 foot setbacks in selected watersheds	Optional bonus payments per foot for fencing in selected watersheds	None	Culpeper SWCD
TMDL Septic Cost Share Program	50-80% depending on income	5-10 years	Inspections, pumpouts, repairs or replacements of septic systems in selected watersheds	None	None	Culpeper SWCD
VA Conservation Assistance Program (VCAP)	75% of costs	10 years	Problems with erosion, poor vegetative cover & impervious runoff. Existing Homes more than 3 years old are eligible	None	None	Culpeper SWCD
Agricultural Land Easement (ALE)	Easement purchased	Permanent easement	Open space easement; requires a partner agency to provide funds and hold easement	None	State program options	NRCS
Wetland Restoration Easement (WRE)	100% of wetland restoration costs plus cost to obtain easement	Permanent easement	Area must meet criteria for wetland restoration	None	None	NRCS

Continued on page 13

In eastern forests in the US, the most-needed resource is light. In general, the more light your trees get, the faster they can photosynthesize (make food) and grow. As trees grow, they need to generate more food resources to maintain and support this new and existing tissue. Therefore, they need to expand their crown to capture more sunlight.

In your woods, the trees in the upper canopy that shade the ground have won the long-standing competition for light. However, woodlands are dynamic, and this canopy dominance may not last for long. Although you may not see it on a regular basis. Change is always happening in your woods.

Succession is one of the most important changes in our woodlands. Succession is the replacement of one plant community by another over time. This concept explains why your woods look one way today and why they will look different in the future, even if you don't do anything. Succession in eastern US forests is mainly influenced by the vegetation's ability to grow under various levels of light.

At one time, your Virginia woodland was likely a farm field. Once farming ceased, the natural succession process began. Initially, fast growing plants that take advantage of full sunlight (pioneer species) invaded the field. In the first few years, these fast-growing species would have included short-lived grasses and small, flowering plants, but perennial plants and woody shrubs soon replaced them. Fast-growing, shade-intolerant trees also took advantage of the light. These trees eventually shaded out the early shrubs and plants as the canopy closed and significantly reduced light to the ground.

Growing along with these shade-intolerant trees, however, were trees that can tolerate partial and significant shade. These species tend to use their food resources more efficiently to survive with less light, but they grow more slowly. (Shade tolerance is not always constant in a species. Many trees like oaks, maples and eastern white pine become more intolerant of shade as they age.) Eventually, the short-lived, shade-intolerant trees died and created gaps or openings in the canopy that allowed these intermediate and shade-tolerant tree species to flourish with additional sunlight. These trees tend to live longer and — once in the canopy — can persist. Shade-tolerant species can regenerate and grow under their own shade, so they can continually replace the canopy. When this occurs, succession has reached its climax and the forest is considered mature. No further succession is possible without disturbance. Stability, of sorts, takes hold, as long as the environment doesn't change.

But of course, the environment does change. Fires, storms, droughts, insect infestations, diseases or human activities can disturb woodland structure. These events have always been a part of our landscape, periodically creating canopy gaps. In these gaps, new plants grow and existing plants expand. Our plant and wildlife communities have come to depend on gaps, which are critical for maintaining diversity. Even a climax woodland is not a static woodland. Small changes are occurring every day, whether it is a branch falling off a tree or a seed germinating. Larger changes, like several trees falling over in an ice storm, occur less frequently but still play a major role in succession.

How does wildlife fit in?

When you purchased or inherited your woodlands, you also inherited a host of wild critters. Wildlife viewing is an increasingly popular activity and hopefully you'll have many opportunities to appreciate your land's inhabitants.

The type of wildlife you should expect to see in your woods depends on the food, water, cover and space your land provides. During early forest succession, the grass/flowering plant stage will attract wildlife that feeds on tender plants and seeds (like insects, meadow voles or eastern cottontail rabbits.) As perennial plants and woody shrubs become established, they attract additional species like bobwhite quail and woodcock. Early successional woods also attract animals like American kestrel, red-tailed hawks and foxes that hunt their prey in open fields but need cover in trees.

Mature woodlands may provide acorns, hickory nuts and wild cherries, with a more diverse vertical structure — from small flowering plants on the forest floor, to shrubs, to the crown of the tallest tree. Mature woodlands should have standing dead trees with nesting cavities that can support a whole host of birds and mammals. Some species require large tracts of mature woods to breed successfully and maintain viable populations. These include barred owls, scarlet tanagers and wood thrush, which seek over deep in the woods in order to protect their eggs and young from predators found along woodland edges.

Continued on page 14

Continued from page 13

The habitat needs of many species also vary at different times of the year or at different stages in their lives. Eastern wild turkeys, for example, rely on both early successional fields and mature woods, while their young feed almost exclusively on insects, which are abundant in open fields.

The woods within your property lines will not completely account for the wildlife you see there because wildlife often depends on the resources of a broad area. Ten acres of woods surrounded by agricultural land or subdivisions will attract different animals than 10 acres that are part of a larger, contiguous woodland. Think about how your woods fit into the surrounding landscape. Does your land provide a unique need for wildlife? If not, could it? Ideas for integrating wildlife into your woodland management are available from Virginia Department of Wildlife Resources and the Virginia Cooperative Extension.

Please see the next issue for more from this publication.

Coming in January 2021: applications for College Scholarships and Summer Camps!

RAIN BARREL SALE!

Rain barrels are available! Prices are $75 for one and $140 for two. For more information, contact Stephanie DeNicola at 540-825-8591 or send an email to: stephanied@culpeperswcd.org.

HELP US CONSERVE PAPER! WOULD YOU LIKE TO RECEIVE THIS NEWSLETTER VIA E-MAIL? SEND AN E-MAIL TO STEPHANIED@CULPEPERSWCD.ORG.

Printed on recycled paper.

Views From The Foothills

Published Seasonally By
Culpeper Soil & Water Conservation District

Stephanie Rose DeNicola, Editor

Culpeper Office
351 Lakeside Drive
Culpeper, Virginia 22701
540-825-8591
540-645-6624 (F)

Orange Office
325-B Madison Road
Orange, Virginia 22960
540-308-6301

Board of Directors

Culpeper County
Thomas O'Halloran, Treasurer
Dennis Verhoff
Bob Williamson, Associate Director

Madison County
Lynn Graves, Chair
Stephen Hill
L. Brad Jarvis, Associate Director

Greene County
Philip C. Morris, Vice-Chair
Robert Runkle
Steve Morris, At-Large
Sarah Weaver Sharpe, Ext. Agent, At-Large

Orange County
Robert Bradford
J. Robert Brame III
Warren Lee, Associate Director

Rappahannock County
Mike Biniek
Mike Sands

District Staff

Greg Wichelns, District Manager
JoAnn Neal, Administrative Secretary
Richard Jacobs III, Conservation Specialist III
W. Spencer Yager, Conservation Specialist II
David Massie, Conservation Specialist III
Henny Calloway, Conservation Specialist II
Stephanie Rose DeNicola, Information/Education Coordinator
James Henshaw, District Representative
Amanda McCullen, Conservation Specialist II
Kendall Anderson Dellinger, Conservation Specialist

Natural Resources Conservation Service

Rex Rexrode, District Conservationist
Ashleigh Cason, Soil Conservationist
Courtney Pooton, Soil Conservationist
Corey Bray, Soil Conservation Technician
John Jeffries, ACES

CULPEPER SOIL AND WATER CONSERVATION DISTRICT

351 Lakeside Drive
Culpeper, VA 22701
540/825-8591

PRSRT STD
U.S. POSTAGE
PAID
RICHMOND, VA
PERMIT NO 388

If you would like your name removed from our mailing list, please just give us a call at 540/825-8591 or send an e-mail to stephanied@culpeperswcd.org.

The sponsors of this newsletter help support the conservation efforts of the Culpeper SWCD. If you are interested in placing information about your business or organization in this space, please call (540) 825-8591.