Views From The Foothills

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

Vol. 23 Issue 1
Winter 2023

M. Johnson

Culpeper Soil & Water Conservation District Presents

Conservation Programs Update Workshop

March 10, 2023 from 9am-1pm at Madison Fire Hall

Come out and hear presentations and testimonials on government conservation programs
active in providing on the ground landowner conservation programs in the Culpeper District!

This program is targeted to owners and operators of agricultural and forested land in Culpeper, Madison, Greene, Orange and Rappahannock wishing to understand what the programs have to offer!

Culpeper SWCD, NRCS, FSA, Local Foresters, Virginia Outdoors Foundation, Piedmont Environmental Council and Smithsonian Virginia Working Landscapes
Please RSVP (540)825-8591 or e-mail StevieR@culpeperswcd.org
Lunch will be provided $15 per person registration required
Limited to 70 attendees.

Agricultural Cost Share Practices

Culpeper & Rappahannock (540) 825-8591

- David Massie davidm@culpeperswcd.org ext. 1004
- Amanda McCullen amandac@culpeperswcd.org ext. 1003
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- Lily Smith lilys@culpeperswcd.org ext. 1010

Green, Madison & Orange

- Kendall Dellinger kendalld@culpeperswcd.org ext. 1009
- Spencer Yager spencery@culpeperswcd.org ext. 1012

Practice	Details
Grazing Land Management with Stream Exclusion	• Stream exclusion fencing & water development. • Includes fence, well, water troughs, pipe, stream crossings, rotational fences, etc. • Covers 85% of *estimated* cost with 35' buffer & 100% with 50' buffer. • Buffer payment rate of $80/acre/year paid upon installation of all practices. • 10 and 15 year contracts available.
Stream Exclusion with Narrow Width buffer	• Stream exclusion fencing & water development with reduced setback. • Includes fence, well, water troughs, pipe, stream crossings, rotational fence, etc. • Covers 60% of *estimated* cost with 10' buffer & 75% with 25' buffer. • 10 and 15 year contracts available.
Afforestation of Crop, Hay & Pastureland	• 75% of eligible cost for planting trees (hardwood or conifers). • $100/acre for 10 year incentive & $150/acre for 15 years.
Woodland Buffer Filter Area	• Planting trees in riparian areas. • 95% of eligible cost for planting hardwoods or conifers. • Conifers: $100/acre for 10 years OR $150/acre for 15 years. • Hardwoods: $100/acre for 10 years OR $250/acre for 15 years. • Buffer payment rate of $80/acre/year paid upon installation.
Cover Crops	• October 25th cut off for harvestable cover crop & early planting date for cover crops to be killed in the spring • November 15th, cut off planting date for kill down crops. • *Note: Dates have been extended by two weeks. Producer input led to this change!* • Rates: $20/acre to harvest, up to $90/acre to kill & $45/acre for legumes.
Nutrient Management Planning	• Up to $4/acre to have a nutrient management plan written for your farm. • A great way to save money on input costs!
Precision Nutrient Management on Cropland	• Up to $8/acre for the precision application of nitrogen & phosphorus to cropland. • Must have current nutrient management plan: provide records, maps & a bill for nitrogen/phosphorous application.
No-Till & Cropland Conversion	• Up to $70/acre to convert from conventional tillage to a no-till system for 5 years. • Up to $410/acre to convert cropland to permanent hay or pasture. • 10 or 15 year contracts available.
Sod Waterway, Grass Filter Strips & Critical Area Seeding	• Up to 75% to grade & seed gully erosion. • Up to 75% to establish grass filter strips along waterways adjacent to crop, hay-land or animal holding areas. **NEW! Buffer payment rate of $80/acre/year paid upon installation.** • Up to 75% to grade, fill & seed critically eroding areas.
Continuing Conservation Initiative	• $0.50-$1.25/linear foot of stream bank protected with fencing. • $250-$1,000 per water system, water trough or stream crossing. • A great way to receive funds to maintain existing infrastructure!
Streambank Stabilization	• Covers 75% of the cost to stabilize &/or grade eroding streambanks on ag or fore-stall land • Can also cover slope toe rip rap for protection (if required), vegetative planting, trees/shrubs • Requires engineered design which is a reimbursable expense

Improving Pasture Quality through the Use of Legumes

By David Massie, Culpeper SWCD Conservation Specialist III

Do you want to add 75-200 lbs. of nitrogen per acre per year to your pastures? With rising fertilizer and other input costs, this spring might be a great time to get legumes back into our pastures and fields. Legumes will enhance the amount of nitrogen in your soil and will benefit the growth of grasses. To have a successful renovation of these fields, follow these steps:

- Take soil samples to see if soil fertility needs to be adjusted. Lime and fertilizer should be applied according to soil test results. Remember, lime takes a while to fully take effect so plan at least six months ahead. Split applications may make better economic sense in the long term.
- Curb sod growth, decrease residue and control broadleaf weeds. High density, intensive grazing in the fall and winter will remove as much vegetation as possible. This will ensure good seed-to-soil contact for your legume seedwhich is essential to germination and emergence. Broadleaf weeds are best controlled the season prior to planting; however herbicides may be a possible option.
- Make sure that you seed within the proper seeding date and to use high quality seed that is adapted for local climate. Frost seeding or drilling legumes is best done in late winter or early spring. If frost seeding is the chosen method, it might be a good time to drag pastures to break up and distribute manure, achieving better seed -soil contact. Use either certified or propriety seed to ensure high germination rates, genetics, and low noxious weed content. A great mix for pastures is 4-5 lbs. of red clover, 1-2 lbs. of ladino or white clover, and 10-15 lbs. of lespedeza per acre.
- Use correct seeding rate and inoculate seeds. Take time to calibrate your seeder or drill so that you don't waste seed by over applying or risk the chance of a weak stand due to under applying. Make sure that the seed you buy is either already inoculated or that you inoculate the seed with the proper strain of nitrogen fixing bacteria prior to seeding.
- Control seed depth and seed distribution pattern. Make sure that small seeds are not placed deeper than ½ inch. Always check the seed depth when using a drill because failed stands will result from drilling seed too deep. Also, check the spreading pattern of spinner type spreaders. Since seeds are much lighter than fertilizer, seeds aren't thrown as far. This can result in "clover strips" throughout the pasture rather than uniform stands.
- Control post-seeding competition. Without controlling post-seeding competition, you run the risk of failed stands. Competing vegetation needs to be clipped or grazed to a height just above the developing seedlings. It is better to do this sooner than later to ensure vegetation does not get ahead and choke out the seedlings.

If you follow these steps, you will be on your way to improved pasture plant diversification, adding nitrogen to the soil, and saving money on fertilizer costs.

Credit: Getty Images/iStockphoto

8th Annual Culpeper SWCD Tree Sale

Five of one species for $5 (except American chestnut)

PICK UP FOR ALL PLANTS IS 3/17/2023 and 3/18/2023

American chestnut hybrid (*Castanea dentata x mollisima x crenata*) Full Sun to Partial Sun

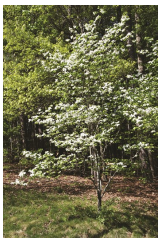
Seedlings from open-pollinated nuts collected from select (blight tolerant with American chestnut form and appearance) trees in the Lesesne State Forest chestnut breeding area. Exact pedigree cannot be guaranteed because they are open-pollinated (male parent unknown), but these likely contain more than 50% American chestnut DNA with the remainder a mix of Chinese and/or Japanese chestnut origin. Should have improved blight resistance and are more likely to survive than wild-type American chestnut, but still are likely to become infected and may not survive to maturity.

Norway Spruce (*Picea abies*) Full sun

Norway spruce can grow 80 to 100 feet tall and spread 25 to 40 feet. It is best used as a specimen in a lawn area or as a wind break or screen, planted on 20-foot-centers. Also used for Christmas tree production. Rockefeller Center in New York City erects a Norway spruce each Christmas next to the skating rink and decorates it for the holiday season. Norway spruce tolerates most soils if moist and transplants easily if balled and burlapped or potted. Trees subjected to drought are much happier if they receive periodic irrigation although they tolerate drought well.

Red maple (*Acer rubrum)* Full sun to shade tolerant

Red maple reaches a mature size of up to 90 feet in height and 2½ feet in diameter. It grows on a variety of sites, from dry ridges to swamps. The light cream-colored wood is used for furniture, turnery, woodenware and paper pulp. Red maple can be tapped for syrup-making. The fruit and buds are a primary food source for gray squirrels in late winter and early spring. Birds and mice eat the seeds, and deer browse the young sprouts. Red maple is a popular shade and ornamental tree, with brilliant fall color.



White Dogwood (*Cornus florida*) Full sun to shade tolerant

White dogwood is a small tree with a short trunk that branches low, producing a slightly rounded to flat-topped crown. This species will reach heights of 20 to 30 feet with a mature diameter of one to two feet, making it a attractive ornamental tree. Growth is best on well-drained, clay, loamy, sandy soils. Very small, inconspicuous flowers that are surrounded by four large white bracts appear in mid-spring. The red to brown wood is hard, strong and very close-grained. Although the fruits are poisonous if eaten by humans, more than 35 species of birds and many large and small mammals are known to eat them. Deer and rabbits browse the foliage and twigs. The white dogwood, otherwise known as flowering dogwood, is the state tree and state flower of Virginia.

Eastern redbud (*Cercis canadensis*) Full sun to shade tolerant

Eastern redbud reaches a mature size of 15 to 30 feet in height and 6 to 10 inches in diameter. It grows on moist, well-drained woodlands. The wood is heavy, hard, not strong and rich, dark brown in color. Some birds and mammals eat the seeds. Redbud is planted as an ornamental tree suitable for small landscapes.

Red mulberry (*Morus rubra*) Full sun to shade tolerant

Red mulberry reaches a mature size of 30 to 60 feet in height and 1 to 2 feet in diameter. Its habitat includes floodplains and low, moist slopes. The dark brown wood is light and soft, not strong, but quite durable. It was traditionally used for fencing, barrels, interior finish and agricultural tools. Produces fruit resembling a blackberry that is red when immature and turning deep purple when ripe in mid-summer. The fruit is sweet, juicy and edible and is a favorite food for squirrels, opossums, raccoons, turkeys and many songbirds.

Just clip the order part and send it to our office with a check. Ordering early is important because we usually sell out before the pick up date.

PICK UP FOR ALL PLANTS
March 17 & 18, 2023

RETURNING: POLLINATOR MEADOW SEED MIX FOR SMALL AREAS OF YOUR YARD!

This meadow seed mix includes an already pre-mixed cover crop and will cover a 1,000 square foot area. **Limit one order per customer.** The meadow mix does best in sunny areas that receive 6 hours or more of sunlight. See article on page 5: culp-swcd-nletter-09.21.pdf (culpeperswcd.org)
The mix is designed for both riparian and upland sites. Detailed instructions will accompany the seed mix at pick up. Anyone willing to plant more than the 1,000 square foot plot should consider contacting a qualified contractor.

RETURNING THIS YEAR: Live stakes to address streambank erosion and other uses
Silky dogwood (*Cornaceae cornus amomum*) and Streamco Willow (*Salix purpurea*)
These shrub cuttings come in bundles and root readily when planted in moist soils.

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.
https://extension.psu.edu/live-staking-for-stream-restoration
Red osier picture from Virginia Tech Dendrology
Streamco willow picture from Sullivan County Conservation District

Species	Price	Quantity	Species	Price	Quantity
White dogwood (5 seedlings)	$5		Red maple (5 seedlings)	$5	
American Chestnut (5 seedlings) **MAX 1 pack per customer**	$30		Norway spruce (5 seedlings)	$5	
Eastern redbud (5 seedlings) **MAX 2 packs per customer**	$5		Red mulberry (5 seedlings)	$5	
Silky dogwood (25 live stakes)	$25		Streamco willow (25 live stakes)	$25	
Meadow mix **MAX 1 per customer**	$30				
TOTAL COST: (check or cash only)					

Name	
Address	
Phone	
E-mail	

Checks payable to CSWCD. Pick up dates are Friday March 17 and Saturday March 18, 2023 at Culpeper office. Plants not picked up by 12pm on Saturday March 18, 2023 may be forfeited without a refund. We do our best to insure quality control. However, no refunds on trees that do not grow. Questions? Contact Stephanie DeNicola at stephanied@culpeperswcd.org or 540-825-8591 Mail order form & payment to ATTN Tree Sale, CSWCD, 351 Lakeside Drive, Culpeper, VA 22701 Species descriptions & pictures from Virginia Tech Dendrology https://dendro.cnre.vt.edu/dendrology/factsheets.cfm & VDOF

Grass Filter Strips — Now Paying Buffer ("rent") Payments

Grass filter strips are areas of planted vegetation along cropland drainage channels, animal holding areas, small streams and most other water bodies that are designed to anchor soil particles , intercept and filter out sediments, nutrients and pesticides and other potential pollutants. They are intentionally planted areas and provide land cover and protect what can often be fairly unproductive areas of cropfields that don't produce much product anyway due to wet, water logged soils or other conditions. There are new higher cost share rates for the filter strips and now as of July 1, the strips are also eligible for the buffer ("rent") payment per acre of land taken out of production and to help with any maintenance costs.

As an example, a 35-foot-wide strip pays 85% cost share for a 10-year contract and receives $80 per acre per year for the 10 years, all paid upfront. For a 35-foot-wide strip for 15 years it is 90% cost share with the same rent. A 50-foot-wide strip pays 95% cost share for a 10-year contract and 100% cost share for a 15-year contract. Both also receive the same buffer payments per acre. So, for example for a 50-foot-wide strip, 871 feet long (about 1 acre) some quick math; for a 10-year contract an applicant would receive 95 percent of eligible installation costs plus $80 x 10 years ($800). For a 15 year contract, 100 percent of eligible installation costs plus $80 x 15 years ($1,200). Now that's per acre of strip installed. So maybe look at the land and ask yourself if you have such acres along "water" that aren't really producing much.

So, what are those "eligible" installation costs mentioned above? Seedbed preparation, seed, planting, soil testing, fertilizer for establishment only, land leveling if necessary, lime. Possibly other.

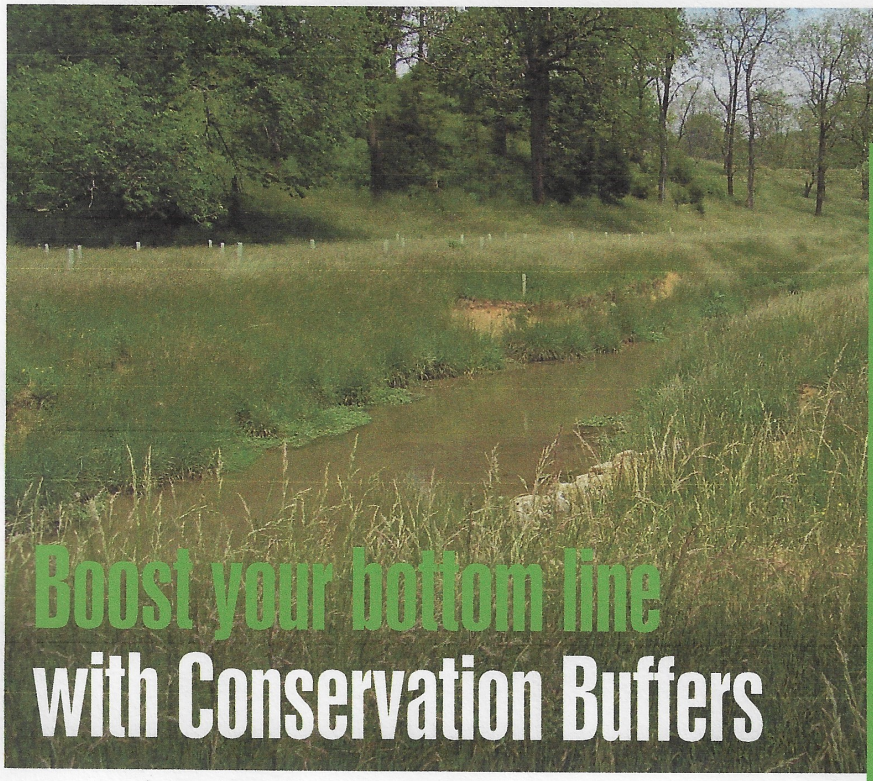
We encourage all ag producers and owners of cropland to evaluate the possibilities to add grass filter strips in the appropriate areas. The filter strips can and really do help improve local water quality and also count for progress with the Bay goals.

Here is an additional concept to consider for eroding streambanks along cropfields. Consider implementing a streambank stabilization project at 75% cost share along with a water quality filter strip. Ask us about this. We believe there are some good opportunities for this.

For more information, contact the Culpeper District at 540-825-8591.

Stream Bank Restoration Funding Increased

The Culpeper Soil and Water Conservation District currently has significant funding available for restoring and stabilizing eroding stream banks through its funding for the Virginia Agricultural Best Management Practices Cost Share Program (VACS). Commonly known as "the cost share program", VACS provides up to 75 percent reimbursement and up to 25 percent tax credit for engineer designed practices that are approved by the District Board prior to commencing any construction. Eligible properties include cropland, pastureland, hay land and forestland. Eligible expenses for reimbursement include stream bank grading and shaping costs, slope toe stabilization with riprap costs (if required), vegetative plantings that are temporary, permanent, and shrubs and/or trees and any engineering costs to design and verify the installation. The District has recently engaged several engineering firms to provide timely designs and permitting assistance to interested landowners. The funds cannot be utilized for in-channel design or construction although tax credits may be available if the project includes such. Neither the cost share program or tax credit program support stream straightening projects. Any lands under consideration for funding must meet basic program requirements and have been approved as eligible for the practice; must be at least 5 contiguous acres, have verifiable gross receipts in excess of $1,000 from the production or sale of agricultural, horticultural or forest products per year for each of the past 3 years and must be in the Culpeper District (Culpeper, Greene, Madison, Orange & Rappahannock counties). Non-industrial private forest lands may be eligible and are exempt from the $1,000 requirement. Maximum cost share available per project is $300,000 provided no other cost share is received by the applicant the same year. Maximum tax credit available is $25,000. A District Board approved application and cost estimate are required. In addition, DEQ has 0 (yep, that's zero) interest loans available that could be very helpful with upfront costs (see page 13). For more information on this opportunity, contact the Culpeper Soil and Water Conservation District at 540-825-8591.



Boost your bottom line with Conservation Buffers

The benefit to your farm:

Your local Soil and Water Conservation District can help you qualify for funds that decrease the cost of installing conservation buffers on your farm, which can boost your bottom line by:

- Removing poorly drained land from cultivation.
- Reducing soil loss from wind and water erosion.
- Squaring off oddly shaped fields that are hard to work efficiently.
- Providing a long-term soil rental income.
- Establishing timber for future harvest.
- Leading to better herd health and weight gain when used with stream exclusion practices.

Money comes from the Virginia Agricultural Best Management Practices Cost-Share Program, which is carried out by conservation districts and administered by the Virginia Department of Conservation and Recreation.

How it works:

Installing a forest or grass buffer between bodies of water and adjoining agricultural operations improves water quality by filtering — even treating — pollutants and by reducing soil erosion and sediment delivery. Buffers are particularly cost- effective when they are matched to your farm's site-specific needs. Some places to consider locating a buffer for both conservation and production benefits include:

- Seasonal wetlands and the borders of intermittent waterways.
- Eroding creek, stream and river banks.
- Streamside pastures, in combination with stream exclusion practices.

DCR
Virginia Department of Conservation & Recreation

The payoff:

In State Program Year 2023, the Virginia Cost-Share reimbursement rate is:

Up to 95% plus:

- **Up to $150/acre for conifer buffers.**
- **Up to $250/acre for hardwood.**
  These buffers are defined as trees, shrubs, herbaceous plantings and groundcover planted from the edge of a stream bank to a width of at least 35 feet but not more than 100 feet.

100% for a maximum of:

- **$80/acre/year for grass filter strips (for the life of the practice).**
  These buffers are defined as permanent vegetative cover planted on cropland within 100 feet of a live or intermittent waterway and designed to filter sheet flow.

Other financial incentives from state and federal partners have increased in recent years. These include soil rental, buffer rentals through the Conservation Reserve Enhancement Program (CREP) and more. Farmers and landowners can experience net economic gains over the life of a buffer practice when they take advantage of all applicable programs.

Next steps:

Conservation begins with your Soil and Water Conservation District. They can help you apply for multiple cost-share funding programs for buffer best management practices. They can also find other conservation funding programs for which you qualify.

Culpeper SWCD
540-825-8591
www.culpeperswcd.org

VIRGINIA'S SWCD SOIL & WATER CONSERVATION DISTRICTS

2022 Conservation Awards

The District's Annual Conservation Awards Dinner was held on November 17, 2022 in Culpeper to honor residents who have demonstrated leadership in the stewardship of local soil and water resources.

The **Clean Water Farm Awards** are awarded to one farm in each county of the Soil and Water Conservation District that is exemplary in its protection of the state's soil and water quality, with particular emphasis on nutrient management. The recipients of the Bay Friendly Farm Awards were:

- Culpeper County, John Paul & Mollie Visosky, *Locust Dale Cattle Company* (#1)
- Greene County, Brian Farinholt & Caitlin Morse, *Far-Mor Family Farm (#5)*
- Madison County, Jacob & Jennifer Gilley, *Heaven's Hollow Farm* (#2)
- Orange County, Monte Ginery, *Somerset Plantation (#4)*
- Rappahannock County, Meredith Bolton & Daniel Brecht, *Brecht's Farm (#8)*

The **Conservationist of the Year Award** is given to an individual or individuals who demonstrate outstanding leadership, hard work and investment in conservation practices that protect the quality of soil and water in the Culpeper District and exhibit strong advocacy to others for conservation. This year's award was presented to **The Engh family** of **Lakota Ranch** for exemplary conservation practices in **Culpeper** County and for support to District outreach efforts. (#3)

The 2022 **Forestry Award** was given to **Carolyn Smith** of **Madison** County**. (#7)**

The 2022 **Educator of the Year** was presented to **Sarah Moore,** of **Rappahannock** County. (#6)

The 2022 **Wildlife Habitat Award** was given to **Blue Ridge School** of **Greene** County. (#9)

Culpeper SWCD employee Henny Calloway was recognized with the Chairman's Award for exemplary service.

Culpeper SWCD Directors were also recognized for years of service on the District Board: Robert Bradford (25 years); Lynn Graves (15 years); Tom O'Halloran (15 years); and Robert Runkle (25 years).

#1

#2

#3

Left: #4

Right #5

Left: #6

Right #7

Left: #8

Right #9

Woods and Wildlife Conference

The 19th Annual Woods and Wildlife Conference returns to the Daniel Technology Center in Culpeper on Saturday February 25, 2023! This all-day conference is for owners of large or small tracts of land and is a one stop/ first stop for individuals, families and managers to learn about woods, wildlife and other natural resources. It provides multiple links to information, sources of assistance and a broader community of landowners and professionals and will explore a myriad of forest issues relevant to woodland owners.

Contact Adam Downing at adowning@vt.edu or 540-948-6881 for more info!

Small Farm Outreach

The Small Farm Outreach Program (SFOP), a part of Cooperative Extension at Virginia State University, educates and empowers small, limited-resource, socially disadvantaged and veteran farmers and ranchers to own, operate and sustain farms and ranches independently with agricultural training programs that improve farm management skills and quality of life. For more information, visit https://www.ext.vsu.edu/small-farm-outreach-program.

Not just meddling in the middle! Have a Plan.

By Ed Furlow, VDOF Area Forester

What is there to do in your woodlot when a timber harvest is not feasible or you plan to cut timber someday, but not anytime soon? Well, forest health can always be improved. Forests look static, but they are constantly changing, mostly at a slow, almost imperceptible rate, but sometimes sudden disturbances change the forest drastically.

Ever noticed the tiered vertical tree structure in a forest? Seedlings, saplings, and small trees are found in the understory, the tallest trees are considered the overstory (or canopy), and somewhere in between these two structure classes is the midstory. Midstory trees can be as old as the overstory trees- they just lost the race to the overstory and are now stuck in the middle- or a young midstory could be composed of tree species adapted to grow with less sunlight. If a disturbance alters the forest, such as the Derecho storm or the Emerald ash borer invasion of the last decade, whatever is in the midstory, whether native or invasive trees, gets a chance to grow into the overstory.

Working in the midstory is one way to improve forest health. Managing the midstory can positively change or maintain the current forest type for the next hundred years, improve wildlife habitat for desired animals or insects, allow new trees to grow in the understory, reduce or prevent rot and decay from developing, and more. Midstory management can be as simple as cutting down trees for firewood or leaving them standing-dead.

Where to begin? Depending on current forest conditions and owner's objectives, several management practices could be applied to a woodlot. The technical part is to determine what sort of work is needed, if any. The Virginia Department of Forestry's staff members can tell you about the condition of your forest and what may be needed to improve your forest's health. If an activity is recommended, a new VDOF cost-share program (Hardwood Habitat Initiative Program) may be able to help you pay for it. Landowner education, forest project assistance, wildland firefighting, and forest laws enforcement are VDOF Foresters daily duties. However, if you can't wait to meet with us, Consulting Foresters are also available to work with you. Their services deserve another whole article to explain, so stay tuned.

Virginia Department of Forestry contacts:

Culpeper & Orange
Peter W. Schoderbek E-mail: peter.schoderbek@dof.virginia.gov Phone: (434)282-4169
Greene & Madison:
Edward P. Furlow III E-mail: ed.furlow@dof.virginia.gov Phone: (540)395-1164
Rappahannock:
Zoe A. Bergman E-mail: zoe.bergman@dof.virginia.gov Phone: (434)906-3696
All Counties:
Kinner W. Ingram E-mail: kinner.ingram@dof.virginia.gov Phone: (540)216-6524

Applications for College Scholarships, Camp Woods and Wildlife and Youth Conservation Camp are on our website! Contact Stephanie DeNicola at stephanied@culpeperswcd.org for more information!

New Landowner Update

Last fall, Culpeper SWCD hosted a New Landowner Workshop at Graves Mountain Lodge on September 16. Nearly 100 people were in attendance. In preparation for the workshop CSWCD produced a binder for new landowners. If you would like to see the binder contents given to attendees, visit our website at: New Landowner Binder - Culpeper Soil and Water Conservation District (culpeperswcd.org).

Information is also available through the New & Beginner Farmer Initiative at https://www.ext.vsu.edu/small-farm-outreach-program.

Free Lawn Soil Tests Still Available!

Contact Stephanie DeNicola at stephanied@culpeperswcd.org for information.
Photo credit: Soil Testing Service (uri.edu)

0% Interest Loans Available

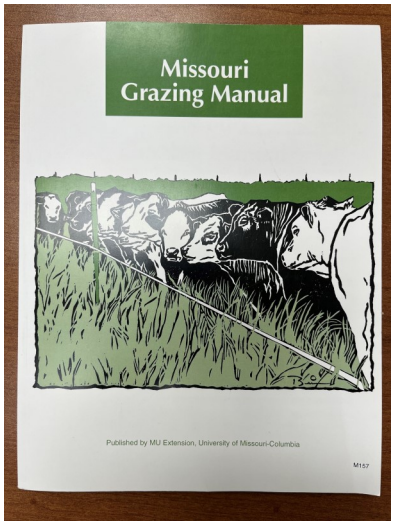
Are you interested in conservation practices but do not have the money upfront to fund the project? No worries. Department of Environmental Quality's Ag BMP Loan Program offers funds for you with no money upfront with 0% interest, no long-term requirement, and potential for principal forgiveness. Fortunate for you, projects are accepted year-round and reviewed monthly. Debt repayment begins 6 months after project completion with 1-to-10-year repayment schedules depending on loan amount and asset useful life. DEQ will prioritize applications and tentative authorization will be granted. Contact DEQ today to find out if you're eligible. See page 13.

Missouri Grazing Manual Available

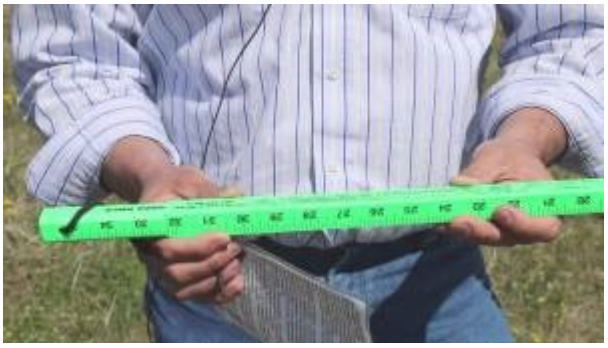
By David H. Massie, CSWCD Conservation Specialist III

The Culpeper Soil and Water Conservation District has copies of the Missouri Grazing Manual available to producers interested in expanding their grazing knowledge. This grazing manual encompasses so many different aspects of grazing management – soils, plant growth, nutrient cycling, water system and fence layout, grazer's arithmetic, and economics of grazing. This manual also brings together different groups of researchers, educators, and producers with broad experience in land management, forage, and livestock systems to provide a comprehensive guide to understanding and managing grassland ecosystems.

This manual will assist producers with furthering their knowledge of grazing management and provide more detailed, specific information they will need to enhance their grazing techniques. Jim Gerrish, a nationally recognized, well-respected grazer, is one of the key contributors and editors of this manual. His background in agronomy, as well as forage management and research, adds an unparalleled perspective which is useful for the beginning grazer as well as the seasoned grazer.



The distribution of these manuals will be on a first come, first serve basis. We also have pasture grazing sticks for sale for $5 each. Pasture grazing sticks are a great tool for helping producers "train their eyes" to the amount of forage available for their livestock. A two page instruction manual comes with the pasture grazing stick, and District Staff will be happy to assist using this valuable tools on your farm.



Courtesy of South Dakota State University Extension

Fighting Bugs with Bugs

By Cory Swift-Turner, Communications Specialist

Eastern hemlock (*Tsuga canadensis*) is a coniferous tree that favors the cool and humid climate along the Appalachian Mountains. Hemlocks can grow more than 150 feet tall and live for more than 800 years. Their short, dense needles provide excellent habitat for many kinds of wildlife, from warblers to bobcats. Unfortunately, healthy hemlocks are becoming increasingly rare.

In the early 1950s, an invasive insect called hemlock woolly adelgid (HWA) was transplanted from Japan to Virginia. Since its introduction, HWA has spread across eastern North America, killing thousands of hemlock trees. These tiny sap-suckers feed on hemlocks by using needle-like mouthparts to feed on nutrients traveling through twigs. This disruption of nutrients first causes foliage dieback in the host tree and mortality in as little as four years. Individual adelgids are very small, less than 2 mm, but they create small white, woolly coverings around them which make them easier to spot.

In an effort to preserve Virginia's hemlock trees, VDOF's forest health staff have been implementing a variety of control techniques to protect remaining hemlocks on state forests. Fortunately, several chemical solutions have been found to be effective. In addition, VDOF has collaborated with Virginia Tech to identify another way to combat HWA that may surprise you. Hint: it's another bug!

As an invasive insect, HWA is not effectively controlled by native predators in the eastern U.S. To solve this, researchers brought one of HWA's natural predators from Japan into the fight: the *Laricobius osakensis* beetle. Before they could be released in the wild, these beetles were studied in quarantine facilities by the U.S. Department of Agriculture for years to ensure they wouldn't cause their own problems.

Introducing predatory insects to fight pest insect species is called "biological control." Although these beetles are also quite small, they have a large appetite for HWA! Researchers are hopeful that releasing the beetles on hemlocks infested with HWA will be an effective method of controlling HWA in several states, including Virginia.

Last month, VDOF forest health staff released *Laricobius* beetles on several eastern hemlock trees at our Paul and First Mountain State Forests in Rockingham County. The beetles will feed on HWA adults and egg clusters, or ovisacs (the white blobs that help to identify the presence of HWA). The beetles also lay their eggs in the adelgid egg sacs. When the beetle larvae hatch, they continue the feeding frenzy by feeding on the ovisacs and eventually adult HWA.

Watch this short video to learn more about using biological control to fight the hemlock woolly adelgid: https://www.youtube.com/watch?v=1pA9CUTSzO8

Have some hemlock trees you want to protect? Contact your local forester to learn what control methods are best for your trees.

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!

RAIN BARREL SALE!

A new order of rain barrels are have arrived! Prices are $90 for one and $175 for two plus sales tax. For more information, contact Stephanie DeNicola at 540-825-8591 or send an email to: stephanied@culpeperswcd.org.

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