Views From The Foothills A Publication of the Culpeper Soil & Water Conservation District Serving Culpeper, Greene, Madison, Orange & Rappahannock Counties Winter 2017 Www.culpeperswcd.org

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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

Meadows for EveryoneBy Richard Jacobs, Conservation Specialist III

Converting regularly mowed lawn areas to a meadow might be the best do -it-yourself practice that can improve wildlife habitat and protect water quality. Lawn conversions are popular west of the Mississippi where an emphasis on more sustainable landscapes that use less water is the norm. With dwindling butterfly and bee populations and lack of migratory bird nesting habitat, there is a growing desire to install meadows in Virginia. A meadow is a type of Conservation Landscaping that uses low-input native plants to protect water quality. Tree and shrub planting either as a riparian buffer or on vulnerable slopes is also a type of Conservation Landscaping.

What makes a meadow? Meadows will have a mix of warmseason grasses and forbs (i.e. wildflowers). A diverse mix is desired since each site is unique and some species may not grow as abundant as others. Diversity also ensures that something will be growing and blooming throughout the year and over the many stages of the meadow. Meadows do have a life cycle in Virginia. Without periodic mowing or prescribed burns, a meadow will transition into a forest. Forests are the dominate land cover of Virginia, but grassland meadows can occur where there is disturbance such as fire, grazing and wind damage.



Photo: First Year Meadow with annual cosmos in bloom

Woods and Wildlife Conference: Bring Out the Best in Your Property

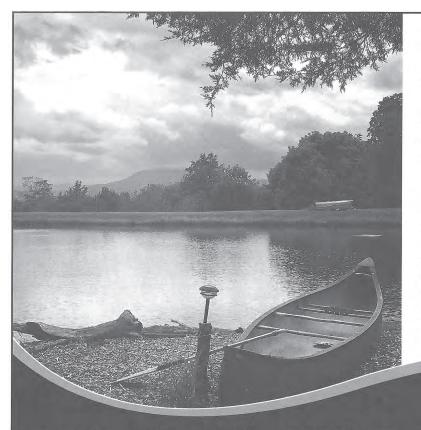
Owners of woodlands large and small can learn how to maximize their property's potential at the 13th annual Woods and Wildlife Conference. This educational event will be held February 25 from 8:30 AM to 4:30 PM, at Germanna Community College's Daniel Technology Center in Culpeper.

"This conference addresses the latest issues and trends in forest and wildlife management," said event founder Adam Downing of Virginia Cooperative Extension. Ellen Powell of Virginia Department of Forestry noted, "Participants can tailor their own program by attending sessions that target large property management, small woodlot projects, or topics of general interest to any landowner."

Collaborators from a multitude of public, private, and industrial entities plan the conference, which is designed to appeal to a broad array of landowners. This year's event features expert speakers on diverse topics relating to Virginia's snakes, pollinators, habitat, selling timber, woodland care, and other forestry and wildlife topics. The conference cost is \$45 per person or \$80 per couple, which includes lunch and materials.

Registration and program details at http://forestupdate.frec.vt.edu/ and click on Landowner Programs. The deadline to register is February 14. For more information, contact Katie Jenkins at 540-948-6881 or kjenk@vt.edu.

Persons with disabilities who desire any assistive devices, services or other accommodations to participate in this activity may also contact Katie during the hours of 8:00 a.m. to 5:00 p.m. to discuss accommodations, no later than February 1. *TDD number is (800) 828-1120.



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2nd Annual Tree Seedling & Rain Barrel Sale

Pick up late March/early April 2017 from the CSWCD office in Culpeper Visit our website for more information: www.culpeperswcd.org

Trees benefit our environment by controlling erosion, reducing toxins, converting carbon dioxide to oxygen, and enhancing wildlife habitat. Proceeds will be used for educational programs.

Returning Species

Flowering Dogwood and Eastern White Pine

New Species

Indigobush, White oak, Sugar maple and American Plum

Please note: The nursery does not have Eastern redbuds this year.

Rain Barrels - Collect and store rain water runoff from your rooftop via rain gutters. The rain barrels are made of recycled plastic bottles. The kit includes: the barrel, lid, spigot, plug, connector hose, a drill bit to cut the downspout hole the right size, and detailed instructions. Great way to water your landscape and garden and save money.

Fill out form and fax to: 540-645-6624 or clip order form and mail to: CSWCD, 351 Lakeside Drive, Culpeper, VA 22701, or email: stephanied@culpeperswcd.org or call (540) 825-8591.

	ick up at Culpeper SWCD only in early April Pre-Orders must be paid in full CHECKS OR EXACT CASH ONLY
	ANY TREES NOT PICKED UP MAY BE FORFEITED WITHOUT REFUNDS
NAME:	
MAIL:	
DDRESS	S:
CITY/ZIP	PHONE:

ITEM	# IN PACK	\$ PACK	# PACK	TOTAL	ITEM	SIZE	# IN PACK	\$ PACK	# PACK	TOTAL
White Dogwood	5	\$5			Sugar maple		5	\$5		
Indigobush	5	\$5			Tree tube	3'	1	\$4		
White oak	5	\$5			Tree tube	4'	1	\$5		
White Pine	5	\$5			Rain barrel	50 gal	1	\$70		
American plum	5	\$5								

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Total Amount Included:

Continued from page 1

Establishing a meadow requires reducing competition from lawn grass, particularly fescue and other invasive plants. Sunny areas are better suited for the sun-loving natives. Shady areas require a specific plant mix and require a higher degree of control for woody vegetation such as trees and shrubs. Native plants do well in poor soil, as long as there is not excessive erosion or foot traffic.

First step is the preparation of the seedbed or planting bed. Preparation usually includes at least two herbicide treatments. The first treatment is usually in the fall followed by seeding of an annual cool season cover and a second treatment in the spring two weeks prior to seeding/planting; or two treatments in the spring separated by 4 weeks. Other chemical free methods could be used for small meadows, such as smothering with cardboard or landscape fabric; solarization heat treatment; or sod removal. Each of these methods takes more time and effort. Dead vegetation forming a thatch should be removed with a rake so the seed has good soil contact.

Seeding or planting is done after the last frost between April and June. Seed can be broadcasted or drilled. Broadcast the seeds with a carrier material like topsoil, potting soil, or peat at a 20:1 carrier to seed ratio. Use about 30 seeds per square foot for seed drills and 40 seeds per square foot for broadcasting. Seed mixes can be custom blended or premade. There are several good seed and plant vendors in the Piedmont Environmental Council's Go Native Go Local publication and website: https://www.pecva.org/our-mission/wildlife-habitat/go-native-go-local

Expect to see annual wildflowers and some grasses the first growing season. Year two will see more perennials. And year three you should see a dominance of attractive native grasses and possibility slow growing biennials such as milkweed. The meadow will be 3 to 5 feet tall depending on the mix. You may start to see woody vegetation encroach by this time and maintenance mowing, spot herbicide treatment or prescribed burns may be necessary. Mowing and prescribed burns will restart the whole cycle again. Always be on the lookout for invasive plants such as autumn olive, multi-flora rose, siltgrass, and ailanthus, these should be treated immediately.

If you cannot convert the lawn to a meadow, there are three other options to consider: mowing high (6 inches plus); testing soil fertility and develop a nutrient management plan; and amending the soil with compost. All of these will decrease lawn inputs, improve the soil microbes and provide marginally better habitat.

The District can provide additional technical assistance and for residential sites, there is funding available with the Virginia Conservation Assistance Program or VCAP under the Conservation Landscaping practice. Under VCAP, eligible installations can receive a payment of \$250 per 1,000 square feet of meadow or \$9 per tree planted. See the website for more details: www.vaswed.org/vcap.

Interested in Converting Turf to Native Plants and Trees? The Virginia Conservation Assistance Program may pay for some of the costs of the trees on page 3. Call 540-825-8591 to learn more!

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Increasing Farm Income by Maximizing Forage Uptake through Rotational Grazing

By David Massie, Conservation Specialist III

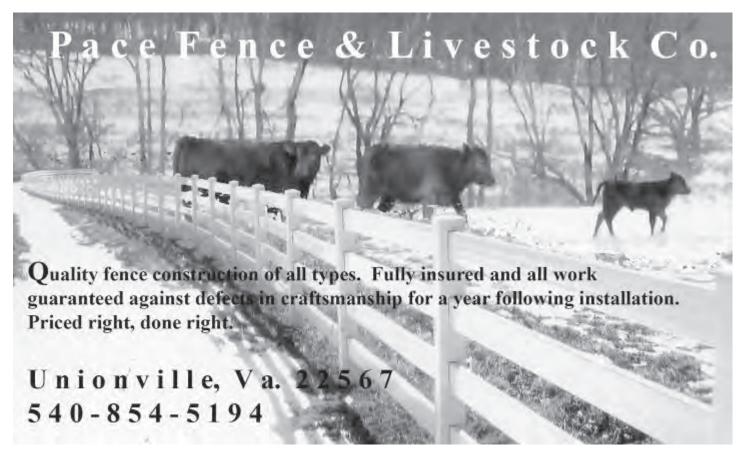
The classic disagreement has been tossed around for years between conservationists and farmers: natural resources conservation versus production, soil and water quality in a tug-of-war with the bottom line. Traditionally, the answer has been payments of some sort from the government to producers to make up for the lost profits that are thought to be the result of conservation.

In recent years, conservationists have come up with evidence-based information to aid in selling conservation to landowners, pointing out things like improved herd health and increased weight gain as a result of fencing cattle out of streams. In addition, the conservation-minded can demonstrate improved water quality in the treated streams.

Virginia's Department of Conservation and Recreation (DCR) developed and published a document titled "Streamside Livestock Exclusion: A tool for increasing farm income and improving water quality" by R. Zeckoski, B. Benham & C. Lunsford (September 2007). This provides scientific proof that when it comes to livestock exclusion, conservation and increased profits are not mutually exclusive.

Alternative water sources such as frost-free troughs fed by wells are a key to these increased profits and as the document states, studies show an increase of roughly an extra pound per day for steers as well as heifers due to having clean drinking water. One Augusta County farmer has seen a 5-10% increase in weight gain since fencing out a stream and providing alternative water. Cattle have often been seen walking through a stream crossing to get water from a frost-free trough.

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2016 Conservation Awards

The District's Annual Conservation Awards Dinner was held on November 10, 2016 in Culpeper to honor residents who have demonstrated leadership in the stewardship of local soil and water resources.

The **Bay Friendly Farm Awards** are given 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, Beauregard Farms
- Greene County, Octonia Highlands Farm, Alton Keel
- Madison County, James Aylor
- Orange County, Jordan Farm LLC
- Rappahannock County, Bean Hollow at Over Jordan Farm, Mike Sands

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 **Ashland Farm of Madison** for exemplary conservation practices in **Madison** County.

The 2016 Educator of the Year was presented to Theresa Sicheri of Culpeper County.

The 2016 Forestry Award was given to Mark & Jill Meyer of Greene County.

The 2016 Wildlife Habitat Award was given to Laurel Hill Farm of Rappahannock County.













Pond Management Planning

It is likely that most of us think less about pond management strategies during the winter than we do during the growing season when problems or nuisances become more apparent and are pretty much "in our face" as the saying goes. Many of the calls we receive at the District for technical assistance for ponds occur mid to late summer and are related to excessive, unwanted vegetation either floating on the water surface or submerged underwater. Sometimes its algae; sometimes it's not. In fact often it's not! Don't assume anything; get an official weed species identification from us or someone even more qualified, often at no cost. Many of these aquatic weeds can be very aggressive, particularly if the landscape that drains to the pond delivers a lot of nutrients and sediment into the pond; from whatever source. This accelerates the growth of the plants. There are many strategies to help control the plants, some more effective than others and this can be dependent on which plants you have in your pond. Some are more easily controlled, even eradicated, than others. Chemical control, biological control, landscape management changes to reduce nutrient inputs, cultural controls in the pond such as deepening shoreline areas to create less desirable habitat for the invasive type plants, introduction of native shoreline plants to basically take over the available habitat, and more. A good plan of attach is your best option and having a plan in place before the "in your face" stage is a good choice. We at the District encourage you to consider your options during the short day winter months when you have some extra time to consider how to preempt the situation. As always, an ounce of planning is worth a pound of cure. We are available for site visits and technical advice on managing your pond. We call to your attention a valuable resource published by Virginia Tech as a good solid place to start. Here is the link to that resource: https://pubs.ext.vt.edu/420/420-251/420-251.html. It is one of many such resources available.





Developing strategies to help your land work for you!

Environmental Land-Use Planning Environmental Resource Inventory Stream / Wetland Banking and Restoration Environmental Permitting Conservation Easement Support Lakes, Ponds, and Dams Forestry Services

Call Brian Hawley, PWS for more details. 540.785.5544





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This booklet also illustrates the reduction of disease rates once cattle are removed from the streams and the muddy, dirty, unsanitary conditions that one commonly finds when cattle have free access to surface water. It identifies foot rot, environmental mastitis, jaundice, fever, red nose, bovine virus diarrhea and tuberculosis as problems that a stream exclusion project can lessen dramatically. Also, not having access to steep, muddy banks reduces injuries as well as calving losses.

Along with stream fencing, an additional method of grazing management that has proven to benefit both your land and animal weight is controlled or *rotational grazing*. Rotational grazing enables the producer to control where livestock graze and livestock are then able to better utilize forages. How does it work? It's fairly simple. Take a pasture that is continuously grazed and run a single wire across it. Now you have two paddocks within the same pasture that are each grazed 50% of the time. If you bisect that wire with another wire, you now have four paddocks. However, paddock design needs to be based on landscape, land productivity, water availability and the number and types of animals in the system.

What are the benefits of such a system? First and foremost, you improve the performance of the forages in your paddocks because they have more time to recuperate after being grazed and you keep them in an active stage of growth. You can produce more forage per acre per year. Livestock then eat more and what they eat is of higher nutritional value. This also leads to a stronger root system and increases the volume of water held in the roots. This is especially important during times of low rainfall or even drought. Weed control is better accomplished also. Rotational grazing also tens to promote better water infiltration and leads to less runoff from paddocks which is good for water quality. Nutrients from manure are also distributed more uniformly over the field which increases organic matter in the soil, nutrients that were once lost to the streams.

Animal weight gain is improved because livestock constantly have nutritious, palatable forages to utilize. Another benefit is improved animal behavior because they are being handled more frequently. This is beneficial when it comes time to vaccinate and wean your livestock. Also, by observing your livestock when moving them into new paddocks, you are able to identify any health issues that can be treated in the early stages.

The best part about adopting a rotational grazing system is the economical benefits involved. Profits can increase because herd health is improved, stocking rate can often be higher, the grazing season is extended and there is less dependence on hay production. These benefits, along with the agronomic and environmental improvements for your land, make rotational grazing a practical method of pasture management. If you are interested in rotational grazing systems, contact the District and we can discuss your options.

To receive a copy of the aforementioned publication contact the District. The District currently has cost share funds available to assist with the implementation of wells, troughs and fencing.



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 for pricing and more information!

Cost Share for Septic System Maintenance and Repairs Opens to Entire 5-County Area

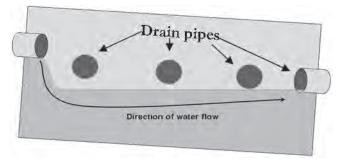
By Henny Calloway, CSWCD Conservation Specialist II

All residents of the District are now eligible for reimbursement of fifty percent of the expense of pumping, maintaining, repairing or replacing on-lot septic systems. The Culpeper Soil and Water Conservation District has just received a two year grant to expand their current septic system program to all areas of the five county conservation district; all areas Culpeper, Greene, Madison, Orange and Rappahannock Counties. This grant is focused on reducing any existing or potential impacts on local ground and surface water quality. E. Coli bacteria in some local streams has long been identified as being higher than expected by state water quality standards, although other pollutants can also be involved, particularly nutrients. An additional benefit to the property owner is the assurance that their system is up to standards and functioning properly. It is a win-win for both water quality and property value. This grant compliments several others already in existence by expanding the options to the entire District.

Program participants are eligible for several different payments depending on the actual needs of their system. Reimbursement payments are typically fifty percent although can go as high as seventy-five percent for individuals that qualify for low income status. Maximum payments to property owners under average income levels are \$150 maximum towards a pump out and inspection; \$3,500 maximum towards a repair; \$4,000 maximum towards a conventional system or \$4,500 if a pump is required to move the liquids to the drain field; and \$10,000 maximum towards an alternative engineered system. Pump outs and inspections are encouraged by everyone; such preventative maintenance extends the life of a system and prevents higher costs later on if the systems fail. If further repairs are indicated by the inspection, the owner is still eligible for the additional repair payments. Applications are required and need to be approved prior to the work being done or funding can be declined. Free assistance with initial assessments of individual system needs is available from the District. Reimbursement payments are made promptly once the work has been completed. The program is entirely voluntary and assistance from the District is free of charge.

Further information on the program is available from the District at 825-8591 or 948-7531. Funding for these projects has been secured by the Culpeper Soil and Water Conservation District from the Virginia Department of Environmental Quality, Commonwealth of Virginia.

A Common Septic System Problem



An unlevel distribution box forces all of the septic wastewater into 1 drain line. This causes the water to appear above ground because the soil is saturated.

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WINTER RAIN BARREL SALE!

Rain barrels are available! Prices are \$70 for one and \$135 for two. For more information, contact Stephanie DeNicola at 540-825-8591 or send an email to: stephanied@culpeperswcd.org.



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Views From The Foothills

Published Seasonally By Culpeper Soil & Water Conservation District

Stephanie Rose DeNicola, Editor

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