

# Conservation Matters



Montgomery Soil  
Conservation  
District  
18410 Muncaster Rd  
Derwood, MD 20855  
301-590-2855

January 2017

## Fall Conservation Tour

### Calendar

Offices  
closed for  
President's Day  
Feb 20

Horse Pasture  
Workshop Feb 23

Envirothon  
Training  
March 22

Envirothon  
Competition  
April 27



Tour participants included left to right, MSCD Supervisors, Robert Stabler and Pam Saul, Montgomery County Council Member, Sidney Katz, MSCD Chairman, Robert Butz, Chris Gillis, Aide to County Council Member Leventhal, Delegate Shane Robinson, Maryland Senator Craig Zucker, MSCD District Manager, David Plummer and Maryland State Delegate Charles Barkley.



Legislators, MSCD Board Members and Staff gather at Waredaca Brewery, the first on-farm brewery in the County.



Fred Lechliden discusses cover crops and grain prices with elected officials at Sunny Ridge Farm.



John Fendrick of Rock Hill Orchard and Woodbourne Creamery explains the use of conservation practices at his operation, one of the first farms named to Maryland's Ice Cream Trail.



## 2017 Envirothon Training at Ag History Park

Each year, Montgomery County High School students who would like to learn more about their natural environment are invited to take part in the Envirothon training.

This year the training is slated for March 22, 2017. The County Envirothon Competition will be held April 27th, 2017. Both events will be held at the Agricultural History Farm Park., 18410 Muncaster Road, Derwood, MD.

The Envirothon program is an effective educational tool, that is a great way to supplement environmental education both inside and outside the classroom. It is a competitive program, administered through local soil conservation districts.

The competition is geared toward encouraging environmental education for high school students throughout North America.

The initial training offers students the opportunity to gain firsthand knowledge from natural resource professionals while working closely with biologists, soil scientists, and foresters.

The majority of training is conducted outdoors in natural settings allowing for practical hands-on experiences.

The program helps to develop the students' critical thinking, problem solving, communication, team-building and decision making skills using real and



current local environmental issues.

Students are trained and tested in five natural resource fields: soils, forestry, wildlife, aquatics, and a current environmental issue that changes annually.

This year the focus will be on Agricultural Soil and Water Conservation Stewardship. Students will learn soil and water conservation best management practices, their purpose and implementation, how these practices relate to the management of wildlife, forestry and aquatic systems, and the methods agricultural producers use to maintain a balance between their quality of life and the quality of the environment.

The Envirothon team receives support from the Maryland Department of Natural Resources, University of Maryland Extension, and the Montgomery County Department of Environmental Protection.

For more information call J. Harne at 301-590-2855.  
[James.Harne@md.nacdn.net](mailto:James.Harne@md.nacdn.net)

### 2017 North American *Envirothon* in our backyard!

The annual National Final competition is scheduled to be held at:

**Mount St. Mary's University  
Emmitsburg, MD**

**July 23 - 29, 2017**



<https://www.envirothon.org>

### HORSE PASTURE WORKSHOP



It's the time of year to start  
thinking about  
seeding pastures.

7-9pm

Thursday

February 23, 2017

Agricultural History Farm Park

More information or to RSVP

[Shelly.Ingram@montgomerycountymd.gov](mailto:Shelly.Ingram@montgomerycountymd.gov)

301-590-2853

## “4Rs” Important Aspects of Nutrient Stewardship

Recent years have seen an increased emphasis on managing nutrients on farmland, often through the use of regulations.

The proliferation of regulations has come at the national and state level, primarily driven by environmental interests. For those directly involved in agriculture, it can be difficult to see real value in any regulations perpetrated by those often far removed from agriculture.

The world is dependent on agriculture to meet the demand for food, feed, and fiber; a demand estimated to increase by 50 percent by the year 2050.

Improvements in the science of agriculture are vital to the success of meeting this need. Increased yields depend upon placing a greater emphasis on providing all of the necessary nutrients to plants.

As a result of the need for increased nutrient demand and the regulatory pressure, the fertilizer industry, agriculture universities, progressive farmers, and others have become proactive in nutrient management. They are supporting an easy to understand slogan for Nutrient Management and Stewardship:

**The 4Rs**  
the **RIGHT** fertilizer source,  
at the **RIGHT** rate,  
at the **RIGHT** time,  
at the **RIGHT** place.

The Right fertilizer source includes the use of the right formulation of fertilizer.

The Right rates are balanced with crop needs and soil test results.

The Right time includes the use of nitrogen inhibitors and stabilizers for the slow release of nitrogen fertilizers.

The Right place includes the banding of fertilizers at planting and the use of precision technology.

The environmental benefits from the use of the 4Rs is a greater percentage of applied nutrients are used by the crop, reducing field losses from leaching and runoff.

Through the use of the 4Rs, it is believed we can meet the goals for increasing crop production and increasing farm profits, as well as enhancing environmental protection, and promoting sustainability.

The use of additional Best Management Practices also

increases the effectiveness of the use of the 4Rs.

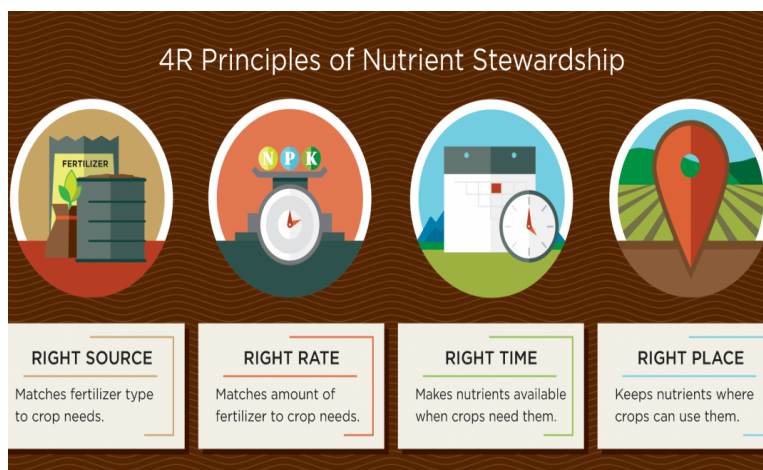
No till planting disturbs less soil, reducing nutrient runoff potential.

Cover crops curtail erosion and also take up nutrients that may otherwise escape the field over winter.

Crop rotation with nitrogen-producing crops and nitrogen-using crops help balance this nutrient in the soil.

Waste storage structures allow manure nutrients to be applied at more optimum times for plant uptake.

Terraces and diversions also reduce erosion and the effects of excessive runoff.



Farmers benefit because the 4Rs are a way of “optimizing” the effectiveness of crop nutrients because the supply in the soil is more closely matched to crop requirements. This is especially relevant with the growing cost of fertilizer; the best use of fertilizer should also mean an increase in profit.

Farmers tend to pay more attention to crop growth in general, when closely watching nutrients and therefore more quickly become aware of other issues. This attention to detail can often lead to higher yields and better overall management.





## OnPasture.com Offers Answers to Grazing Questions

Wish there was a website solely devoted to finding out the latest about pasture and grazing?

**Now there is** <http://onpasture.com>

This site not only provides a great compilation of articles but also allows you to ask experts in the field direct questions.

We asked about forages for horses with insulin resistance and/or those that would allow for longer grazing times.

Here's an abridged version of the answer we received from Genevieve Slocum, King's AgriSeeds,:

You will want to seek out feed of a lower quality. This means more mature forages lower in sugar, and grass and legume species that are naturally lower in carbohydrates.

Horses need good nutrition, but highly digestible fiber and energy are less critical components of the diet than they are for high-producing animals. However, nutrient requirements of horses will still vary depending on their discipline or current state of training/competing.

There are a variety of feeding strategies and grass species that you can focus on for managing horses with insulin resistance. Selecting the right forage crops are an important part, but just one piece of the management needed. Pasture grass is one of the highest sources of sugar in the diet, but carbohydrate content varies depending on the soil type, the climate, hours of sunlight, species, season, and time of day. Horses with insulin resistance should have carefully restricted access to pasture.

That said, species that are lower in sugars and allow for longer grazing times include timothy, brome or chardgrass, bermudagrass, and teff. Millet and crabgrass are acceptable as well, although millet can have higher sugars when nights are cooler. (Second cuttings of summer grasses like millet and crabgrass tend to be especially low in sugars because of

the hot, dry weather typical of midsummer.)

Avoid ryegrasses, meadow fescue, and cereal hay, such as wheat and oats. Alfalfa is a good source of both protein and less-digestible fiber. When fed as the primary forage, it meets or can exceed horses' calcium and protein requirements.

Cool season grasses accumulate more starches, sugars, and fructans (a carbohydrate that is digestible only in the large intestine), and are higher in total energy content. Although alfalfa hay is higher in total energy content than grass hays, most of the energy is from protein and fiber.

Grasses growing in cooler weather in general accumulate more sugars because they respire less. For this reason, warm season grasses are less apt to accumulate sugars and can help control weight and blood glucose concentrations.

Avoid grazing any pasture grasses when they're growing rapidly or going through a dynamic phase – for example, after a summer rain, or entering dormancy in late fall.

Keep horses off of weedy pastures as well, since weeds can have a greater concentration of iron than forage grasses, potentially leading to elevated insulin. Depending on species, they can also be higher in sugar.

Cut back on fertilizing pastures more than you would for high-performing animals. This takes some balance to avoid encouraging overly lush pastures high in carbohydrates. Don't neglect balanced fertility in the pasture, however – that's the best way to encourage weediness. Clipping regularly to (ideally) a 6-8 inch height is also a good way to keep weeds back.

In spring, when grass is at its most lush and rapid growth, horses will want to consume more. This also can lead to excess carbohydrate consumption. Introduce them slowly and gradually to a pasture, and carefully restrict grazing time. Muzzles can also be used to limit intake.

While on pasture, horses should have plenty of access to good quality water, since dehydration can lead to high blood sugar levels. Muddy stock ponds and other substandard water sources will lead to lower intake.

Water helps move the forage through digestion faster, which keeps insulin levels under control. Some additional management considerations: Beware of grazing after a frost, since frost can greatly increase fructans in the plants within a few hours. Plus, fructans will be highest in the base of the plant – a good reason to avoid close grazing (which requires close management for horses). And, even hay can run the risk of higher sugar content if it is cut in bright sun.

In summary, graze more mature forages, keep animals active while watching their calorie intake, limit time grazing, and be sure to provide other feeds in supplement to the grasses – especially those that supply a greater lignin content. The species you graze the horses on are important, but the maturity stage of the grass is just as critical – aim to graze the animals on more mature forages than you would high-producing dairy or beef cattle.

Note: These are suggestions only and in no way guarantee the prevention of adverse effects of equine diabetes. Also, this is meant to be a holistic approach. Choosing to follow only one piece of this advice may or may not deliver the intended result, as there are many variables involved. Work with your nutritionist to analyze each of your feed sources so that your horse's diet may be optimized for its individual needs (and of course, to avoid harm to an animal).

<https://twitter.com/OnPasture>



## NRCS Offers A Wide Variety of Programs

The Natural Resources Conservation Service (NRCS) offers several programs through its local offices that provide financial assistance for the implementation of best management practices on farms.

The Environmental Quality Incentives Program (EQIP), and Agricultural Management Assistance (AMA) are two of the most widely known programs available to producers.

NRCS also offers another program with a different financial incentive for using conservation practices.

The Conservation Stewardship Program (CSP) rewards farm operators for current environmental activities and provides them with incentives to add more conservation above and beyond the existing level on their farms. NRCS uses a computer based evaluation tool to assess the current conservation level on each land use.

Land that is eligible for the program includes cropland, hay land, pasture, and non-industrial private forest land. Program applicants must demonstrate they

will have control of the proposed land for the five (5) years of the contract.

The CSP program is based on the implementation of expanded conservation activities (called enhancements). These include but are not limited to pollinator and wildlife habitat improvements, cover crops, and wider buffers.

The program also encourages

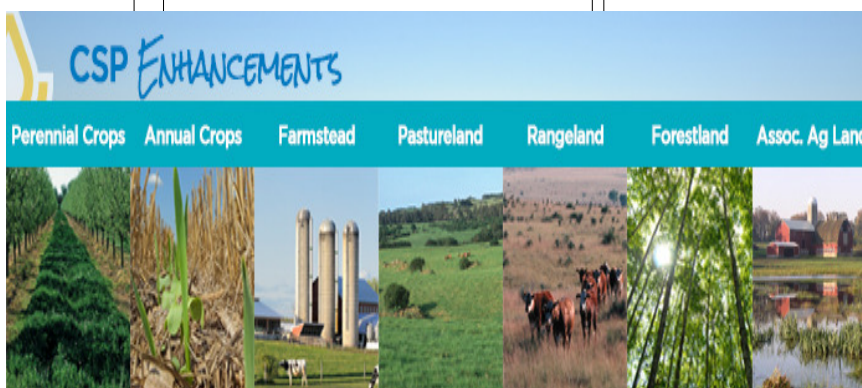
sister agency to the NRCS within the USDA and is located with the conservation office at the Agricultural History Farm Park, 18410 Muncaster Road, Derwood.

For FY 2017, the goal is to enroll up to 12,000 acres in the program in the state of Maryland. Applications are ranked and the higher ranking applications are chosen until all acres are recorded.

This year's acreage goal is higher than many of previous years in Maryland, so chances for acceptance into the program may be higher.

Sign up for this program is continuous and funding usually becomes available early in the calendar year.

For more information, you may contact the local NRCS office at 301-590-2855. Speak with Brandy Gibbons or Melbaliz Santiago.



technology and new management techniques such as precision agriculture applications, carbon storage practices, and soil health improvements. There is a new minimum payment of \$1,500 per year per contract, intended to encourage smaller farm operators to participate.

As with all NRCS programs, if applying as an entity, a Data Universal Numbering System (DUNS) number and System for Award Management (SAM) number are required to be eligible. Instructions on how to obtain these numbers are available from the Montgomery Soil Conservation District office.

Another eligibility requirement is that the applicant must have up to date records with the Farm Service Agency (FSA). FSA is a

CONSERVATION  
STEWARDSHIP  
PROGRAM (CSP)



Your stewardship goals. *Our Assistance.*

**Don't Get Scammed Because  
You Want to Get Into SAM  
There is no cost to  
register with SAM**

The real SAM website is:  
<https://www.sam.gov/>

Always look for the ".gov" after  
"SAM" in the URL address.

Private, for-profit businesses will  
not have the ".gov" suffix.



# Cover Crop Program Sees Continued Success

Winter Cover crops play a vital role in most crop rotations on Maryland farms.

For years, farmers throughout Maryland have been using winter cover crops as one way to improve soil health, reduce soil erosion, suppress weeds, and reduce the amount of nitrogen and phosphorus that end up in the Chesapeake Bay.

Cover crops, planted in the fall, usually consist of cereal grains like wheat, rye, spring oats and barley. Once established, cover crops play a key role in restoring the overall health of the Bay. In the spring, certain cover crops can be harvested for grain, straw, and animal feed and therefore provide an additional benefit to the farm.

The fall of 2016 was quite dry and therefore provided a broad window for harvesting corn and soybeans as well as establishing cover crops. The down side of

this is that many of the later cover crop plantings didn't get the moisture needed to germinate quickly. December was fairly mild with some wet weather which may have allowed some of those late seedlings to play catch up.

Montgomery County farmers reported more than 20,000 acres of cover crops this fall. This is a



new high for our county. Last year's total acres were just over 17,600. Getting that many acres planted is no small feat and our farmers should be commended for their hard work.

Moving forward in 2017, don't forget that suppression of cover crops may not begin until March 1st. No nutrients may be applied to any cover crops prior to March 1st. Traditional cover crop acres must be suppressed and reported to the Soil Conservation District by June 2nd. Commodity cover crops must be reported by June 2nd as well.

Options for end of winter suppression include green chopping (on farm use only), plowing under, or killing by an herbicide. If a cover crop field is not suppressed by June 2nd, it must be reported as a commodity cover crop or dropped from the program.

Spring spot checks for Cover Crop Program participants will occur between February 1st and March 1st, 2017. Spot checks to verify spring kill down may also be requested, with farms to be randomly selected by the Maryland Department of Agriculture.



## Equipment Rental Available

Are you ready to start that project and just realized you need a little more than good intentions?

The District's equipment rental program may have just what you are looking for.

There is a daily rental fee and some training on each piece of equipment is required prior to use.

Check out the details on the MSCD website:

<http://www.montgomeryscd.org/>

or

Contact Karen Walker  
301-590-2855

[Karen.Walker@md.nacdnet.net](mailto:Karen.Walker@md.nacdnet.net)



**Land Pride 606NT  
No-Till Compact Drill**



**Model #1800 Plastic  
Mulch Lifter**



**Manure Spreader  
MS11 Series**



**Rototiller  
BCS model**



# MSCD Bids Farewell to District Manager



Montgomery Soil Conservation District Manager, David Plummer recently accepted the District Manager position with the Howard Soil Conservation District. He will transition to the new roll in early February.

"I have always had a great appreciation for farmers' connection to the land and their stewardship ethic," Plummer said. "Helping them achieve their conservation goals has been incredibly rewarding."

Plummer started with MSCD in February 2003 after working for the State Department of Natural Resources Forest Service for a decade.

Several of Plummer's family members farmed in Kent County, Maryland, and although he grew up a self-avowed "city boy", he feels that his roots are still in agriculture.

Plummer's uncle, Carl Plummer, was the original manager of

Chesapeake Farms, formerly known as Remington Farms outside of Chestertown, Maryland.

This 3,300-acre property is a demonstration farm for wildlife conservation and agricultural production, based in part on the practices Carl Plummer put in place in the 1950s and 60s.

"My uncle was a great farmer but he was also a conservationist, and he helped me to understand our connection to the land and natural resources," Plummer said.

While he is clearly excited about the new challenge, it is also evident that he will miss many aspects of Montgomery County.

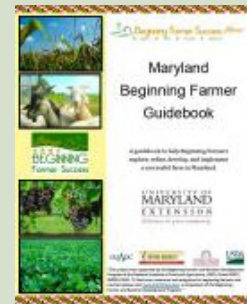
"The MSCD staff and Board of Supervisors are passionate about helping farmers get conservation practices on the ground and that makes this job very gratifying," he said. "I have enjoyed working with and for the agricultural community."



*Thank you and  
Best Wishes  
David!*



## Beginning Small Farm Workshop Series



**January 18  
thru  
March 22, 2017**

**Focusing  
on  
Commercial Food  
Production  
and  
Marketing for  
the New Farmer on  
Small Acreage**

Classes will be held  
Wednesday evenings  
from 6:00-9:00 pm

Location:  
University of Maryland  
Extension Office  
18410 Muncaster Rd.  
Derwood, Maryland

For more information contact  
Chuck Schuster at  
301-590-2807 or  
email [cfs@umd.edu](mailto:cfs@umd.edu)

**MONTGOMERY SOIL  
CONSERVATION  
DISTRICT**

18410 Muncaster Road  
Derwood, MD  
20855

**[http://  
www.montgomeryscd.org](http://www.montgomeryscd.org)**

**MSCD Board of Supervisors**

Robert Butz, Chairman  
George E. Lechliden, Vice Chairman

Pam Saul, Treasurer  
Wade F. Butler, Member  
Robert Stabler, Member  
Robert Butts, Associate Member  
Tim McGrath, Associate Member

**MSCD Staff**

David C. Plummer, District Manager  
Jim Myers, District Conservationist  
Brandy Gibbons, Soil Conservationist  
J. Harne, Resource Conservation Specialist  
Shelly Ingram, Equine Conservationist  
Paul Meyer, Engineering Technician  
Melbaliz Santiago, Soil Conservationist  
Karen Walker, Administrative Aide  
Michael Weyand, Soil Conservation Technician

**You Can Receive  
This Newsletter by EMAIL!!!**  
Enjoy a full color version  
emailed to you as soon as it is  
posted to our website.  
Register by  
phone 301-590-2855  
or  
email  
[Kaen.Walker@md.nacdnet.net](mailto:Kaen.Walker@md.nacdnet.net)

***The Montgomery Soil Conservation District (MSCD) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs and marital or familial status.***