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

Calendar

June 10th – Annual Procrastinators Pesticide & Urban Nutrient Management Conference (Ag History Farm Park

June 22nd – Maryland State Envirothon -University of Maryland Clarksville Research Farm, 4240 Folly Quarter Road, Ellicott City

June 28th -Kick the Hay Habit Pasture Walk- Equine Rotational Grazing Demonstration Site 4241 Folly Quarter Road, Ellicott City, MD 21042 6-8 pm

July Ist – July 18th – FY23 Cover Crop Program Sign Up July 4th – Holiday: Office Closed

August 12th – 20th – Montgomery County Agricultural Fair

August 28-31 – Maryland Association of Soil Conservation Districts – Summer Meeting

September 5th – Labor Day Holiday – Office Closed

September 19^h – Montgomery Soil Conservation District Cooperator's Dinner at Windridge Winery



Montgomery Conservation Connection



June 2022

Maryland's Watershed Implementation Plan Shifts into High Gear!

With 2025 quickly approaching, the District, in partnership with the Maryland Department of Agriculture and our local farmers, are ramping up efforts to meet our County's Watershed Implementation Plan Goals. It goes without saying that the global pandemic, the cost of construction materials, fertilizers and fuels are creating challenges with conservation practice installation. These practices have important value in telling agriculture's success story as well as being able to receive "credit" in the Chesapeake Bay Water Quality Model. While farmers continue to implement certain agricultural best management practices on their



own, the challenge for the District is that until we visit your farm, we aren't always aware of the good things you are doing on your land to protect these resources. As a result, we are not able to capture this work in the State BMP reporting system and give you the "credit" for the good conservation work you are doing.

How Can You Help?

Certain conservation practices that you have implemented can be easily accounted for. These practices are more commonly referred to as Resource Improvements or RI's. They include practices such as having a dumpster to collect and store animal manures, fencing around streams and other water bodies, converting prior cropped farmland to pasture or establishing critical area plantings. To illustrate the importance of RI's, a dumpster that is used to manage animal waste receives the same "credit" for reducing nutrients delivered to the Bay as an engineered animal waste storage structure designed by the District. This RI alone gives our farmers a highly efficient credit in the Bay Model, so if you have a dumpster being used to manage your animal waste, it's a great opportunity to get credit for this conservation practice. Additionally, livestock exclusion fencing being utilized as part of a Nutrient Management plan is also eligible to be reported as an RI if it happened to be implemented outside of traditional cost-share programs. These RI's, once documented, enable the District to ensure these practices are receiving the "credit" in the Bay Model, further demonstrating the major role agriculture is playing in the Chesapeake Bay restoration effort.

What is the Process for Getting Credit for the Practices being Implemented?

It is very easy for you to report these BMPs and to help tell agriculture's story. You can contact the District and let us know that you believe you have implemented some of these practices on your farm. The District can come out to see the good things you are doing and document what you have done. It's as simple as that. You don't have to have a conservation plan developed for your farm to get credit for the practices you have implemented, unless of course you would like to have a conservation plan. The District would be more than happy to help you with this too. With 2025 rapidly approaching, we need to explore all available avenues to ensure our farmers are getting the credit for the conservation that they are putting on the ground. By documenting the RI's you have implemented on your farm, you can play the pivotal role of making sure agriculture is receiving its due credit towards cleaning up the Chesapeake Bay . Please help us, help you and contact the District at 301-590-2855 and let us know you would like us to come out to get your conservation practice documented.

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MDA Considers a Cover Crop Plus Pilot Program for 2022

Leveraging on the success of MDA robust traditional cover crop program, MDA is considering a new approach to Cover Crops, known as Cover Crop Plus. The emphasis placed on this proposed program focuses on longer growing seasons where a farmer agrees to plant multi-species cover over a 3-year agreement period. For this pilot, there will be a 500-acre maximum per operator. While the program specifics are still coming together, MDA indicates that producers would be locked in at a higher per acre rate with the ability to add incentives, including but not limited to, utilizing conservation crop rotations, conservation tillage, integrating livestock and having a current Soil Conservation and Water Quality Plan. Administration for the Cover Crop Program would continue through MDA's Conservation Grants



Example of a Multi-Species Cover Crop

Division. While a date for program sign up is still pending a formal announcement from MDA, the traditional cover crop program sign up for this year will begin on July 1^{*} and run through July 18^{*}. If you are interested in learning more about these Cover Crop Programs please contact the District Office at 301-590-2855.



Sad Goodbyes



Charlotte Brewster, District Conservationist with District Manager John Zawitoski

In the time between our last newsletter, we had to say goodbye and best of luck to Charlotte Brewster, NRCS District Conservationist for both the Howard and Montgomery SCD offices. Charlotte received a promotional opportunity to work at the National level coordinating NRCS' Technical Service Provider (TSP) Network.

We will miss Charlotte very much and her leadership in directing the technical workload for the District. Charlotte was with us for 4 years and during her tenure she helped to better organize and direct the District's technical workload.

We want to wish Charlotte the best of luck and prosperity as she begins the next chapter of her career!

Welcome Aboard

After serving a temporary detail as the Howard and Montgomery District Conservationist, Samuel "Sam" Engler was selected to

replace Charlotte Brewster as the District Conservationist in both offices. We are very happy to have Sam on board to help guide the technical assistance the District provides to our cooperators. Sam comes to us from the Baltimore Soil Conservation District Office where he was an accomplished Soil Conservationist. Sam grew up in Carroll County and attended Century High School, before graduating and heading to the University of Maryland, College Park, where he studied Environmental Science and Geographical Information Systems. While a student at UMD he began interning with Natural Resources Conservation Service (NRCS). He worked as an intern in Howard, Montgomery, Worcester, and Somerset counties, as well as the Plant Materials Center in Beltsville. Following his graduation in 2016, Sam accepted a job as a Soil Conservationist with NRCS in Baltimore County and Baltimore City, where he worked until coming back to Montgomery County by accepting the position as the District Conservationist. Outside of work Sam enjoys hiking, traveling, and playing with his dog. He is looking forward to starting in his new role helping the members of the agricultural community in Montgomery County and getting conservation on the ground.



Samuel Engler, District Conservationist

Local Farmers Recognized for National Award



Pictured, William F. Willard "Billy" Montgomery County Farmer

We are pleased to report that on March 9th, the National Wheat Foundation announced the winners of their National Wheat Contest for 2021 whereby William F. Willard Farms from Montgomery County was recognized for their extraordinary Dryland Winter yields for 2021. Scot Poffenberger, farm manager for William F. Willard Farms, together with farm partners Billy Willard Jr. and Joe Sayer, grow corn, soybeans, wheat, and sorghum. The farm operation consists of 2,500 acres split among dozens of fields, some as small as a few acres. The winning field consisted of a planting of soft red winter wheat that went in at 2 million seeds per acre during perfect planting conditions in the fall. The planting also consisted of broadcast nitrogen, phosphorus, and potassium, which included a new micronutrient product.

The field received split-nutrient sidedressing passes at green-up, Feekes 6 and Feekes 10, with his total nutrient load landing around 145 pounds of nitrogen, 150 pounds of potassium and 30 pounds of phosphorus. That last pass included insecticide and fungicide, which resulted in the winning yield of 141.41 bushels per acre!

Scot Poffenberger gives a lot of the credit this year to Mother Nature, where timely rains and a dry harvest period really made the difference. Always the innovators, these farmers love experimenting with new products to try on the farm. Scot has been quoted saying, "If you give me something to try, I'll always throw it on a few acres." This is quite the accomplishment when you consider the National Wheat Foundation chooses the top four yield winners from across the entire country.

2021 Montgomery Soil Conservation District Annual Report

Coronavirus Enters its 2nd year, Yet the Need for Conservation Assistance Endures

While the impacts of COVID-19 continued to ravage all segments of our society. The need for conservation technical assistance expanded significantly. Perhaps with more people working from home or finding time to think about their conservation needs on their lands, The District saw a tremendous jump in requests for assistance, further increasing the need for additional professional technical assistance staff to meet these requests. Despite these challenges, the District endeavored to rise above these COVID-19 impacts to find ways to provide services across the County to our cooperators. This annual report outlines the numerous activities and assistance provided by our committed District staff.

Conservation Cost-Share Assistance for Landowners

Leveraging private investments in conservation between farmers and government sponsored cost-share funding is an important component of the District. This service provides additional opportunities for landowners to implement practices that will improve water quality and the stewardship of their lands. These financial incentives represent an important link in the efforts to clean up our local streams and ultimately the Chesapeake Bay. The District can offer to landowners a combination of state, federal and local cost-share assistance programs whereby we assist farmers with the protection of their soil, water, and other natural resources.

Utilizing funding from the USDA Natural Resource Conservation Service's Federal conservation programs. the Maryland Department of Agriculture's Maryland Agricultural Cost Share Program and the District's Conservation Cost-Share program, we were able to assist Montgomery County farmers in securing over \$1,009,107 in conservation funding in 2021.

One example of how we assist with leveraging funds for conservation projects can best be illustrated through the Maryland Department of Agriculture's Cover Crop Program. Cover Crops are one of the most important practices for cleaning up the Chesapeake Bay. Montgomery County farmers continue to embrace this valuable conservation program through their participation. For 2021, Montgomery County farmers enrolled 18,937 acres of traditional cover crop resulting of which about 18,496 acres were certified for cost share payments of more than \$573,076.00.

The District's Commodity Cover Crop Program Supported by Local Farmers

FY20-21 Commodity Cover Crop Program Year

During the 2020-2021 Cover Crop Program sign up, a total of 18,543.20 acres were enrolled. Of this total, farmers assigned 8,150 acres as Commodity Cover Crops and were included for cost share assistance through the MSCD local Commodity Cover Crop program. One of the greatest variables for establishing cover crops under this program is the weather. Planting conditions can become unfavorable during times of extended drought, or excessive rainfall. For the 2020-2021 program year, COVID-19 created challenges with in-person interactions with farmers and we had to adjust our program to provide services in a remote setting. A late summer and early fall drought also contributed to delays in establishing cover crops.



Of the 8,150 acres enrolled in the fall, 3,461 acres were certified by producers for payment in June for the 2020-21 program. This resulted in a total payout of \$51,480 of program funds for FY21. Based upon the estimated 6 to 8.5 lbs. of nitrogen reduced per acre, the 3,461.9 acres of certified commodity cover crops in our program resulted in a total reduction between 20,771.4 lbs. to 29,426.2 lbs. of nitrogen for the FY21 program year.



FY21-22 Commodity Cover Crop Program

The District continues to implement programmatic changes to the Commodity Cover Crop program that were adjusted from the 2019-20 program year. These changes allow for fertilization of the small grain crop in the fall. The enhanced program requires a fall soil nitrate test that must be completed prior to fall fertilization. This will help the farmer decide if fertilizing the crop is needed and appropriate. It will also help to prevent fertilizing a crop that cannot utilize the additional nutrients. Additionally, a vigorously growing cover crop will take up excess nutrients in the soil and store it in the plant over the winter months and prevent leaching into the water table or loss via soil erosion. Acreage certified under the 2021-22 program will be eligible for nutrient reduction credit under the WIP as an enhanced nutrient management practice. The payment for the 2021-22 program will remain at \$15.00 per acre. We estimate that of the 14,233.20 acres planted to cover crops, about 3,500 acres will be assigned to the Commodity Cover Crop Program.

The MSCD believes the expansion of the Conservation Incentive Program will continue to result in a reportable nutrient reducing component that can be tracked, captured, and reported. If all 3,500 acres are certified for payment under the local Commodity Cover Crop program, we estimate that nitrogen reductions would be between 21,000 lbs. to 29,750 lbs. of nitrogen for the FY22 program year. The Commodity Cover Crop program in combination with the SCWQP and Nutrient Management Plan requirements represent powerful tools that will make significant progress in helping the AG sector meet the WIP nitrogen goal. The total maximum payout for the Commodity Cover Crop program is estimated to be \$52,500 for FY22.

Virtual Legislative Visits Help District Extend Outreach to Local and State Elected Officials

Although Montgomery County is the most populated County in the State of Maryland, it boasts a robust and diverse Agricultural Industry that employs over 10,000 people and contributes over \$287 Million to the economy. Our thriving agricultural sector is due primarily to our award-winning Agricultural Reserve, a 93,000-acre agricultural zone created in 1980 by the Montgomery County Council to preserve farmland and rural space in the northwestern part of the County. The Agricultural Reserve comprises a third of the County's land mass and is ranked 3rd in the Nation for total easement acres protected. While we are blessed to have such a wonderful agricultural resource, there are many challenges that face our farmers. One is the unintended consequence created by new laws and regulations that can cause negative impacts to farmers that threaten agricultural viability and sustainability. The MSCD has embraced new approaches to conduct outreach intended to provide new opportunities to educate both local and State elected officials on the conservation efforts by our agricultural community.

Normally the Montgomery Soil Conservation Board of Supervisors will descend on Annapolis each February for 2 days during the legislative session to meet with State Delegates and Senators to discuss proposed legislation as well as State funding priorities for the benefit soil conservation, water quality and a better environment. As with most activities that required face to face interactions, COVID-19 required the District to find alternative means to meet with Legislators. For 2021, the Montgomery District scheduled individual virtual meetings with members of the Montgomery County Delegation to discuss legislation important to the District and Maryland Agriculture.

These legislative visits in Annapolis provided the District opportunities to discuss State funding priorities for the benefit of soil conservation, water quality and a better overall environment for County residents. Over the course of 2 weeks in February, Supervisors met virtually with 3 State Senators and 16 Delegates briefing them on the accomplishments of the District and how they assist farmers in addressing resource concerns on their land. Supervisors also discussed important legislation and the required funding needed to help agriculture meet the Chesapeake Bay restoration goals. The value of these virtual meetings with legislators cannot be understated. We are making progress in educating our legislative delegation on what agriculture has and continues to accomplish in a voluntary compliance environment, as well as what assistance will be needed to keep our conservation momentum moving forward.



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The District Partners with Montgomery County Farm Bureau with Farmside Chat Series



August 5th, Farmside Chat on Deer Management

This past summer, the Montgomery Soil Conservation District, Montgomery County Office of Agriculture, U of MD extension, partnered with the Montgomery County Farm Bureau to deliver a series of Farmside chats, covering a variety of subjects important to Montgomery County Farmers to discuss with legislators. The Farmside Chat series was intended to be held in a very informal setting where a small group of farmers could have direct discussions with legislators on a variety of agriculture issues/topics as well as providing an opportunity to follow up on legislative issues following the 2021 legislative session.

We viewed this as an opportunity to get legislators on the farm and have an opportunity to meet farmers that they've never interacted with before and to hear of the challenges facing Montgomery County Agriculture. While all legislators could not attend every Farmside chat, legislators could choose which chats were of interest to them and schedule time on their calendars to attend. Outlined below is the sched-

ule for our Farmside chat series that were conducted this past summer: June 8: Food Resiliency: July 1: Livestock Processing & Grain Farming; August 5: Deer Damage; September 8: Forest Banking; October 6: Ag Reserve Solar

Ag. Conservation Programs - Conservation Planning and Technical Assistance Outreach

District Conservation Planners are responsible for developing Soil Conservation and Water Quality Plans (SCWQ Plans), and recommending best management practices, and implementing strategies for promoting soil conservation and improving water quality in Montgomery County. Our Equine Conservation Planner's annual workplan included emphasis on providing Conservation Planning and other technical assistance to the equine industry to help the County toward achieving its annual Phase III Watershed Implementation Goal.

During the reporting period, the District Equine Conservation Planner and Resource Conservation Planner completed 42 SCWQ Plans covering over 3,020 acres of agricultural land during this rating period. Their planning efforts led to the implementation of over 250 Best Management Practices, both structural and agronomic that address agricultural resource concerns on rural lands. While the Equine Conservationist is focused on developing a solid working relationship with the equestrian community, the Resource Conservation Specialist works directly with our traditional agricultural producers. This is demonstrated by the technical assistance provided to both traditional and equine operations through implementation and installation of recommended SCWQ Plan Best Management Practices.

Support and Technical Assistance for Local Agricultural Products

The locally grown food production and organic farming movement continues to grow in our area. Consequently, so did the need of the District for conservation technical assistance. During 2021, the District provided technical assistance with 4 high tunnel installations as well as providing conservation planning to these in urban and suburban farms, including associated best management practices and nutrient management planning coordination with Extension.

Providing cost-share programs and technical assistance to all these areas of agriculture will continue to be critical components of our conservation efforts throughout Montgomery County.



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Best Management Practice (BMP) Implementation

Following is a list of the some of the practices completed by MSCD Cooperators in 2021.

Code	Practice	Extent /U	Extent /Units	
309	Agrichemical Handling Facility	I	NO	
367	Roofs and Covers	3,200	FT	
386	Field Border	5.19	AC	
412	Grassed Waterway	5.75	AC	
468	Lined Waterway Outlet	88	FT	
484	Mulching	5.65	AC	
516	Livestock Pipeline	2,537	FT	
558	Roof Runoff Structure	I	NO	
561	Heavy Use Area Protection	2,022	SQ FT	
590	Nutrient Management	6.8	AC	
606	Subsurface Drain	700	FT	
614	Watering Facility	12	NO	
620	Underground Outlet	2,600	FT	
642	Water Well	I	NO	
342A	Critical Area Planting—HEL	2.9	AC	
560	Farm Access Road	916	FT	
	Cover Crops	18,496	AC	
	Sediment & Erosion Control/SWM—Ag Structures	4	Plans	
	Sediment & Erosion Control—Fill Activities	3	Plans	
	Small Pond/Retro Fit Approvals	4	Plans	

Conservation Education

With a population that exceeds I million people, there is an increased demand for conservation education to serve this growing community. The Montgomery Soil Conservation District (MSCD) Board and staff have made educating this growing population a top priority by promoting the future of agriculture and the conservation of farmland within the county. There are numerous programs and initiatives we promote to implement these objectives. These programs include:

Award Winning "Close Encounters with Agriculture" Returns to an In Person Program

Many young people today are unaware of the benefits agriculture provides and how they can become good stewards of the land. Close Encounters with Agriculture (CEWA) creates a special opportunity for students to enjoy a hands-on learning experiences that can create tangible impacts concerning their future. Students often take the lessons learned home and discuss what they have learned with their families. This results in an extension of benefits beyond the student's participation in the program. In 2020, the program had to be shifted to a total virtual setting due to COVID19; however by the fall of 2021, we were able to return a more modified in person program. This past year, we were able to hold the program for I week, presented jointly by University of Maryland Extension and MSCD, provides approximately 1,500 Fourth Grade students, teachers and parents from across the county with a comprehensive agricultural learning experience. The program includes not only Extension and MSCD staff but also receives volunteer assistance from the County Farm Bureau, local farmers, and members of the Master Gardeners program, who present courses relating to nutrition, production agriculture, conservation and the environment. Each group has a full day of fun activities that provide a great opportunity to learn about things not usually covered in their regular curriculum and reconnects them with their agricultural heritage.

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2022 MSCD Annual Report (continued)

The State of Maryland Crowns Montgomery County as State Envirothon Champion.

One of the District's most prolific environmental educational programs directed at County High School students, is the Envirothon Program. As with many of our educational outreach programs, we had to coordinate our local Envirothon program in a virtual setting.

The 2021 Maryland Envirothon was held virtually the week of April 26th. While the global pandemic forced the cancellation of our Montgomery County Envirothon for this year, the State Envirothon Program leadership developed an alternative approach to ensure the program could proceed. The Maryland State Envirothon Leadership decided to conduct the competition in a total virtual setting allowing Counties not being able to hold local sponsored competitions, an opportunity to compete at the State level. This allowed multiple teams from each County to participate. This meant that each county in the State was permitted to submit as many teams as wanted to participate. Montgomery County sent 2 teams from Richard Montgomery High School. Each participating high school team was made up of 5

members whereby they competed by completing one test per day from the four environmental testing disciplines. These testing categories were aquatics, forestry, soils, and wildlife. Normally about 20 teams compete in the State Envirothon competition. A total of 50 teams from Counties across the State participated this year. It is important to note, as the number of teams increased this year, so did the level of competition!

We are delighted to report, that a team of students from Richard Montgomery High School received Ist Place honors. "Team A" members, Lynna Deng, Connor Palansky, Josh Goozman, Katie Yang and Sienna Burns are all high school Juniors and impressively finished with the top score in each of the four test areas including a perfect score on the soil's exam. This was a remarkable achievement especially in a year where the learning and test taking had to be done virtually. Being the top team in the State, our team from



Richard Montgomery High School participated in the National Envirothon competition which was also held virtually by the host State of Nebraska in July. Teams from across America, Canada and Southeast Asia participated in this competition. We are pleased to report that our team from Richard Montgomery finished in 9th place Richard Montgomery High School State Envirothon Champions in the national competition. It is also worth noting, that our second team, "Team B" from Richard Montgomery High School finished 5th overall in the State Competition.

Montgomery County last took the State title in 2003 and 2004 with teams from Montgomery Blair High School. The top Montgomery County Envirothon team has regularly finished in the top 5 at the State level for the past several years. We hope to return to a normal program in 2022. Teams will form in the winter and will begin to study for the County Envirothon which will be held in March of 2022 at the Agricultural History Farm Park.

Agricultural Tours, Pasture Walks and Educational Outreach

Montgomery County Middle Schooler's Experience Montgomery County AG

This past summer, the Montgomery Soil Conservation District, in partnership with the Montgomery Office of Agriculture and University of Maryland Extension coordinated an Agricultural Experience Summer Camp Program for Montgomery County Middle School Students. Through this two-day summer camp experience, students explored various aspect of Agriculture in Montgomery County, ranging from protection of the environment, food production and livestock management. This in person field trip emersed middle school students in Montgomery County Agriculture.

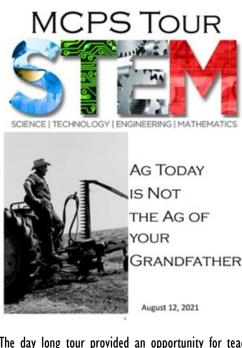
Students visited Bella Vita Farm where they learned about growing food in a controlled environment and horticulture and local food production at Butler's Orchard. On the second day, students visited Pleasant Valley Farm where they learned about how farmers use conservation tillage methods to help protect the soil, how integrated pest management is an important tool to reduce pesticide use, the



Middle Schoolers Interact with Young Dairy Calf at Woodbourne

differences between sweet corn and field corn grown primarily for animal feed and raising beef steers. In the afternoon the students visited Rock Hill Orchard where they learned about dairy farming and got to see firsthand, the robotic milking parlor in action. Students also got the opportunity to interact with young dairy cows as part of their emersion experience. This summer camp experience was so well received by teachers and students, they have already begun discussions on expanding this program next summer.

Montgomery County STEM Teachers Tour Montgomery County Farms



Also, this past summer, the Montgomery Soil Conservation District, the Montgomery Office of Agriculture (OAG) and University of Maryland Extension-Montgomery County participated in a Chesapeake Bay Foundation (CBF) sponsored mini course for Montgomery County STEM teachers. The Mini Course was entitled **"Connecting Montgomery County to the Chesapeake Bay through Environmental Chemistry"**. This day long agricultural tour was part of a five-day continuing education event sponsored by the CBF.

The Agricultural component of the mini course was entitled "Ag Today is not the Ag of Your Grandfather". Teachers toured four Montgomery County farms and interacted with farmers and State and County agricultural resource professionals where they discussed the role farmers play in the Chesapeake Bay restoration effort. Teachers were treated to the rich diversity of Montgomery County Agriculture as they toured Ruppert Nurseries and learned about horticulture production, Sunny Ridge Farm where they learned about no-till agriculture, nutrient management, cover crops and agri-chemical handling facilities. They also toured Waredaca Brewery to better understand how on farm breweries that utilize locally sourced agricultural products are emerging and growing in popularity. Finally, they visited Laytonsville Landscaping to discuss how turf farming has evolved over time and how they do their part in conserving our soil resources.

The day long tour provided an opportunity for teachers to learn about how farmers are helping to clean up the Chesapeake Bay through the implementation of Soil Conservation and Water Quality Plans, Nutrient Management Planning and other Agricultural Best Management Practices that reduce nutrients and sediments entering our waterways. Teachers also learned that agriculture and wastewater treatment facilities have been responsible for most of the nutrient reductions to he Bay. Since 1985, agriculture has reduced nutrient loads to the bay by an average of 10.5 million lbs. of nitrogen per year. By 2025, an additional 8.4 million lbs. of nitrogen must be reduced by all sectors. Teachers learned what this means for farmers. They are responsible for 43% of the nutrient loads and are being asked to achieve 51% of the

2021 MSCD Annual Report (continued)

reduction, or 4.3 million lbs. of nitrogen per year. The key takeaway is that farmers are doing their fair share and more to help clean up the Chesapeake Bay! Through these discussions, teachers learned that while agricultural best management practices help to address soil and water resource concerns, most do not result in an increase to the farmers bottom-line. This means, farmers are voluntarily installing practices at their own expense, and it is one reason there are publicly funded cost share programs designed to reduce the farmers cost of practice implementation.



STEM Teachers were able to see a new Ag Chemical Handing Facility Under Construction at Laytonsville Landscaping

2021 MSCD Cooperator's Dinner, An Evening of Reflection and Conservation Excellence

The Montgomery Soil Conservation District Cooperators dinner is a very important event for the District. The purpose of our annual dinner is to take a break from our day-to-day activities, to

gather and celebrate soil and water conservation here in Montgomery County. It allows us to take the time to promote and educate others about the importance of being good stewards of the land, keep the community up to date on the changing environmental landscape as well as to recognize the cooperators in the county and others who have made a commitment to conservation. Through these efforts, it provides the opportunity to share our conservation experiences and exchange information with attendees in a very informal setting.

Even more importantly, the dinner provides a pathway to extend our sincerest "thank you" to everyone that helps to helping make the conservation of our natural resources in the County a priority. It goes without saying just how impactful the global pandemic has been. All signs in June indicated that COVID-19



Getting Ready for a Great Meal at our Cooperator's Dinner

was in decline, and it would be safe to hold our event. As we approached September, variants of COVID-19 made a resurgence and we wanted to make sure guest attending our event could do so in a safer environment. Holding the event at an outdoor venue, providing masks for guest to wear, having individual hand sanitizers available and maintaining social distancing were all put in place for the safety of our guests attending.



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Special Recognitions

On September 15th, we were blessed with such a pleasant evening where 100 guests attended and enjoyed the peaceful surroundings, a wagon tour of Butler's Orchard, a pumpkin cannon demonstration, conservation award recognitions and a delicious meal.

Last year, marked our 75th anniversary and unfortunately COVID-19 robbed us of the opportunity to celebrate the passing of this important milestone. During the dinner, there was a presentation by John Zawitoski, District Manager commemorating the 75th Anniversary of the Montgomery Soil Conservation District. John reached back into the District archives and highlighted some items of interest that perhaps have been long forgotten that have occurred over the past 75 years as well as highlighted the District's accomplishments over the past year. The evening event culminated with the presentation of several recognitions to individuals that were conservation leaders this year within Montgomery County. Paul Meyer and James Harne received their Years of Service Awards to Montgomery County. Within the last year, we had three exceptional supervisors who stepped down after serving distinguished terms on the Board.



Bobby Stabler —34 Years of Service MSCD District Supervisor

Pam Saul, County Executive Appointment - For 15 years of Service,

Wade Butler, Farm Bureau Appointment — For 25 years of Service, Robert Stabler, U of MD Extension Appointment — For 34 years of Service.

The District also recognized Ben Allnut as the recipient of the MSCD Contribution to Agriculture Award. This is not an award the District



Delaney Gladhill Pictured with John Zawitoski, District Manager presenting 2021 Cooperator of the Year Sign

presents annually, but rather when we truly have a cooperator worthy of this recognition of distinction. This is a well-deserved recognition for Ben as he has demonstrated a long history of conservation work and agricultural educational outreach on his farm and throughout the County. Last but certainly not least, the District, The Maryland Department of Agriculture and Natural Resources Conservation Service joined to honor Delaney Gladhill as the Farm District's **2021 Cooperator of the Year**. Over a 20-year period, Delaney has been an active participant in Federal, State and Local conservation grant programs, he often will pursue conservation measures regardless of whether cost share assistance is available, even on rented ground. He has been and continues to be an early adopter of conservation measures as well as promotes soil and water conservation through outreach efforts among his peers. This clearly shows his sustained interest in the conservation and conservation education. Please join with us as we honor Delaney Gladhill with the 2021 Cooperator of the Year Award.

The nights event's culminated with the cutting of our 75th Anniversary cake making the night's events a huge success. We certainly hope that all that attended enjoyed the evenings events and we hope to see everyone again for next year's Cooperators Dinner!



2021 MSCD Annual Report (continued)

Social Media Outreach: Website, Facebook, Twitter and Newsletters

Most of us use some form of social media every day - whether it is for personal communication, self-promotion, or marketing, we use it religiously. Humans are creatures of habit but are also opinionated and impatient. Those two traits alone are the reasons why social networks thrive. People want the news fast and they want to talk about it now. During FY21, the District continues to make the investment in utilizing social media to help promote the District and to use the platforms to "get information out" to inform the public in short concise information blasts. The District also completed the redesign of the District website, with the objective to have our information in a format that was more accessible, reader friendly and aesthetically pleasing. The District greatly expanded our social media presence on Facebook and Twitter, which resulted in an increase of information and technical assistance requests from County landowners. In a normal month, we publish between 20 and 30 "articles" primed for social media publication. As a result, we have a steady stream of informational posts that are not only timely but also interesting to our browsers. The District has seen first-hand how this engagement increased interactions with our target audience. Our quarterly newsletter continues to be an excellent medium used to educate our clientele. Each newsletter is carefully crafted to include articles designed to reach our audience in an informative and entertaining format. The District receives positive feedback about the content and the enjoyment subscribers receive by reading it. We currently have over 1,000 mailed subscribers. We also provide our internet guests electronic versions that are available free of charge through the District website.

Workshops, Fairs and Expos: As with most in person events, many workshops, fairs and expos fell victim to COVID-19 restrictions. In August of 2021, the MSCD and staff were able to resume participation in both the Montgomery County and State Fair. This participation enabled the District to interact face to face with thousands of constituents attending these fair events. The MSCD, University of Maryland Extension and the Montgomery County Office of Agriculture once again joined together to create an interactive and education booth for the Montgomery County Fair.

Measures of Success

The best measure of our success comes from the Cooperators that have requested our assistance. District Supervisors and staff endeavor to provide quality conservation technical assistance to our Cooperators. Our best conservation salesman are the cooperators that have good experiences in working with the District. They help promote our assistance through their peer to peer network and is measured by the number of Cooperators that continue to request our assistance.

Another measure of positive gains achieved by the District, can be best quantified through the awards and other recognitions we have received this past year. During 2021, the District received several awards from the Maryland Association of Soil Conservation Districts (MASCD) and other District Partners. In July of 2021, the Maryland Association of Soil Conservation District's (MASCD) recognized the Montgomery Soil Conservation District for several of the Association's top awards. The District was awarded the *Conservation Education District of the Year*, an honor we have received for a 4th year in a row. Through programs like the Close Encounters with Agriculture, the State Envirothon and other educational outreach presentations to both public and private schools, environmental and S.T.E.M programs, the District is making a tremendous difference in educating the next generation of policy leaders, environmental professionals, business leaders and farmers. These programs highlight the shared responsibilities every individual has in protecting and enhancing the stewardship of the land. This past year, the District has reached in excess of 5,000 students and adults and was a key component of the District's environmental educational outreach efforts.

The District was also recognized as 2nd place finisher of the MidAtlantic Farm Credit Outstanding District of the Year, the first place award was given to the District in 2020. This Award is presented to the District that exhibits comprehensive soil and water conservation programs, demonstrates leadership in promoting and achieving conservation throughout their District, and annual fulfillment of the District's mission. We are very appreciative of MASCD recognizing the Montgomery District for this Award. Being recognized by your peers as among the top District's in the State is indeed quite the honor!

Local Schools Battle It Out at County Envirothon

Just before going to press, the Montgomery Soil Conservation District hosted it's first in-person Envirothon Competition for local high schoolers since the start of the pandemic. Each participating high school team was made up of 5 members whereby they competed against other high school teams in four environmental testing disciplines and one special 5th issue testing topic. Students were tested in aquatics, forestry, soils, and wildlife as well as this year's 5th issue concerning Waste Management. Despite overcast skies and threat of rain, teams from Montgomery Blair and Richard Montgomery battled each other for the top spot in this year's competition. Going into the final round, only two points separated the top two teams. The fifth issue testing category ultimately decided this year's winner from Richard Montgomery High School. The winning team "Tree Troupe" ironically, finished in 1st place in last year's State Competition. This means our winning team will have the opportunity to defend their title in this year's State Competition that will be held in June. We are very proud of all the teams that competed in this year's competition and wish "Tree Troupe" the best of luck as they represent Montgomery County at this year's State Envirothon Competition.



2022 Ed Byrd Foundation Montgomery County Envirothon Champions



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Battling Buttercups

Spring is an exciting time of year with the arrival of butterflies and the hum of honey bees, bluebird skies, low humidity, and a beautiful assortment of flowers, from azaleas to dogwoods, wisteria, and redbud.

Unfortunately, there is another spring flower, which most owners of horse farms would rather not see, particularly when it turns that beautiful, lush pasture into a carpet of inedible yellow weeds which can be harmful to grazing animals. That flower is the creeping buttercup, or more specifically, *Ranunculus repens*.

Like many invasive plants in the United States, it was originally introduced as an ornamental but rapidly spread and became naturalized. Today it is present in every state except North Dakota, Nebraska, New Mexico, Louisiana, Florida, Georgia, and Hawaii. If moving your equine operation to one of these states is not in your immediate plans, learning the best ways to control buttercup is the next best thing.



Picture Description: The left side of the field was treated with broadleaf herbicide early last May. The right side of the field received no herbicide treatment.

To start, it is important to understand a bit about the life cycle of creeping buttercup. Despite being perennial, individual buttercup plants have a remarkably short lifespan, rarely living longer than three years (Sarukhan, J., & Harper, J.L. 1973). Though it produces an abundance of flowers, creeping buttercup rarely spreads by seed, instead relying on tough stolons, root-like structures growing near the soil, to spread and produce clones of the parent plant, called ramets.

Studies have shown that on disturbed and grazed sites, the stolons of creeping buttercup produce ramets more rapidly and at closer intervals. (Waite, S. 1994). This goes far to explain why the plant seems to have a penchant for invading horse pastures. So, when and how should buttercup be controlled?

Since the stolons grow close to the ground, mowing is only marginally effective and may encourage stolon growth. A more effective approach is to maintain a dense stand of grass, but don't be fooled by lush spring growth. The ability of your pasture to suppress buttercup depends on how dense the pasture is in *late summer*, since that is the time when most of the new ramets are being established.

Many have found that the best control for buttercups rests with timed application of broadleaf herbicides. This can be done in spring and will likely kill most older plants. It is also effective to apply the broadleaf herbicide in late summer or early fall, when the ramets are the most vulnerable. A conservation plan can assist you in improving your pasture growth and provide you with more information about herbicide applications on pastures. To learn more about conservation planning, contact the Soil Conservation District at 301-590-2855. For specific herbicide recommendations, contact the county extension office at 301-590-2807.

Sarukhan, J., & Harper, J. L. (1973). Studies on Plant Demography: Ranunculus Repens L, R. Bulbosus L. and R. Acris L: I. Population Flux and Survivorship. *Journal of Ecology, 61*(3), 675–716. Waite, S. Field evidence of plastic growth responses to habitat heterogeneity in the clonal herb *Ranunculus repens*. *Ecol. Res.* 9, 311–316 (1994)

District Completes Horse Manure Nutrient Content Study

The Montgomery Soil Conservation District (MSCD) would like to warmly thank the dozens of equine operations across the county that participated in the horse manure nutrient content study. Starting with the last issue of this newsletter and continuing through February, MSCD reached out to a broad swath of the Montgomery County Equine community, including licensed stables, breeding facilities, educational institutions, and private stables. District and University Staff collected the samples on March 18, 2022, and results were mailed to individual participants on May 2, 2022. While a full report is forthcoming, some key pieces of information have already been drawn from a deeper analysis of the data.

- 1. Analysis found that the content of key components Nitrogen (N), Phosphate (P2O5) and Potash (K2O) was roughly 30% lower than University of Maryland book values.
- 2. Compost contained 30% more Nitrogen and Potash and significantly higher amounts of micronutrients than non-composted material collected from the same farms.



- 3. The pH of all samples was consistently alkaline, averaging 8.64. This was not significantly affected by bedding type.
- 4. C:N ratio for manure without bedding was 25:1, considered ideal for microbial activity. C:N ratio for manure with sawdust was also in the acceptable range, at 28:1, while manure with shavings was on average 32:1, outside the suitable range for composting.
- 5. The nutrient content of Nitrogen (N), Phosphate (P205) and Potash (K20) was consistent, whereas the micronutrient content was highly variable and not significantly affected by the feeding of supplements.

The study confirmed much of the existing information about horse manure and bedding, and further emphasizes the value of composted horse manure as a soil amendment. Since the average horse produces about 10 tons of manure and bedding each year, how many nutrients are you paying a manure hauler to take off your property each year?

If you are interested in composting horse manure and bedding, the MSCD can assist you with locating and designing an appropriately sized composting facility and <u>exploring</u> cost-share to assist you with its construction. MSCD also has an equipment rental program where you can sign up to rent a manure spreader at a reduced cost. For more information on assistance for composting facilities or the equipment rental program, contact the District at 301-590-2855.

Equipment Rental Program

The Montgomery Soil Conservation District has 4 pieces of farm equipment available for rent by Montgomery County farmers for a nominal fee. The program requires the equipment to be used in Montgomery County only, and the renter must be trained and provide insurance listing Montgomery Soil Conservation District as the Certificate holder. Equipment type and rates are listed below.

No-Till Drill	\$25/day		
Manure Spreader	\$15/day		
Walk-Behind Tractor (BCS)	\$15/day		
BCS Attachments	\$10/day (rotary Plow, roller/crimper)		
Plastic Mulch Lifter	\$20/day		
Please call Karen Walker at 301-590-2855 for additional information.			

MARYLAND

Equine Pasture Walks

Equine Rotational Grazing Demonstration Site 4241 Folly Quarter Road Ellicott City, MD 21042

6:00 - 8:00 pm

May 25- Getting Started with Rotational Grazing

June 28 - Kicking the Hay Habit

Registration required: https://go.umd.edu/horsepasturewalks

Equal Opportunity Program



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30855 Derwood, MD 18410 Muncaster Road

DISTRICT CONSERVATION MONTGOMERY SOIL

http:// www.montgomeryscd.org

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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.