



Summer 2017

Maryland



# Nutrient Management News

MARYLAND DEPARTMENT OF AGRICULTURE NUTRIENT MANAGEMENT PROGRAM



## MESSAGE FROM SECRETARY BARTENFELDER

Earlier this spring, Governor Larry Hogan signed legislation establishing a new Maryland Healthy Soils Program. The bill supports research, education, and technical and financial assistance programs aimed at improving soil health on Maryland farms. Farmers can receive incentives to improve their soils by signing up to plant cover crops on their fields this fall. Studies show that in addition to protecting water quality, cover crops do a great job of improving soil health by controlling erosion, increasing organic matter, improving air and water movement, reducing compaction and capturing and managing soil moisture.

The 2017-2018 Cover Crop Program Sign-up runs June 21 through July 17 at soil conservation districts

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## COVER CROP SIGN-UP UNDERWAY

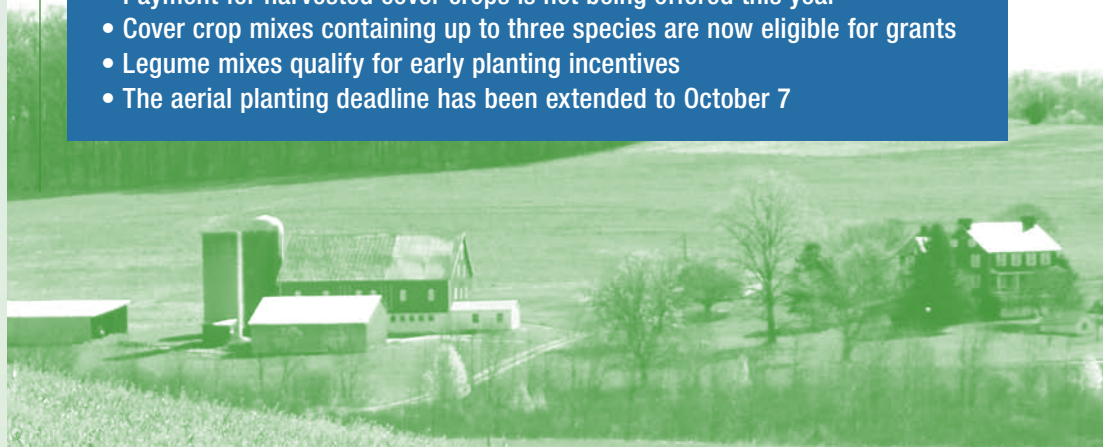
Sign-up for the Maryland Department of Agriculture's 2017-2018 Cover Crop Program runs June 21 through July 17 at soil conservation district offices statewide. Cover crops get top marks for protecting waterways from nutrient runoff, controlling erosion, suppressing weeds, and improving soil health. They may even help farm fields recover more quickly from drought and extreme rainfall events. Maryland's nutrient management regulations require farmers to plant cover crops to help protect water quality when organic nutrient sources are applied to fields in the fall.

There are several important changes to this year's cover crop program. As a cost-saving measure, farmers who choose to harvest their cover crops will no longer receive payment. Farmers may enroll all eligible acres and decide later which acres will be harvested. There also are several exciting new program changes for farmers—legume mixes now qualify for early planting incentives, cover crop mixes containing up to three species (small grains, legumes, forage radish) are now eligible for grants, and the aerial planting deadline has been extended to October 7.

The Cover Crop Program is administered by the Maryland Agricultural Water Quality Cost-Share (MACS) Program and funded by the Chesapeake Bay Restoration Fund and the Chesapeake and Atlantic Coastal Bays Trust Fund. Applicants must be in good standing with MACS and in compliance with the Nutrient Management Program. For more information, stop in your soil conservation district during the sign-up window or visit [mda.maryland.gov](http://mda.maryland.gov) and click on "Hot Topics."

### Maryland's Cover Crop Program: What's New for 2017-2018

- Farmers receive up to \$75/acre to plant traditional cover crops this fall
- Payment for harvested cover crops is not being offered this year
- Cover crop mixes containing up to three species are now eligible for grants
- Legume mixes qualify for early planting incentives
- The aerial planting deadline has been extended to October 7



Here's a quick checklist of what Maryland farmers need to know and do as they transition to the Phosphorus Management Tool (PMT):

- ✔ Fields with the greatest risk for phosphorus (P) runoff into nearby waterways as indicated by a P Fertility Index Value (FIV) of 500 or greater may not receive additional phosphorus applications. This ban has been in effect since 2015.
- ✔ All new/updated nutrient management plans must be developed using both the Phosphorus Site Index and the new PMT for farm fields with an average P FIV of 150 or greater. This allows farmers to compare the results and recommendations for each tool and better plan for potential management changes.
- ✔ All farm fields with an average P FIV of 150 or greater should be assigned to a tier group. The tier groups determine when the farm transitions to the PMT. Farmers should check their nutrient management plans to make certain this critical step has been taken.
- ✔ Beginning in 2018, high risk (Tier C) farms with an average P that is greater than 450 FIV begin to transition to the PMT.
- ✔ Beginning in 2019, medium risk (Tier B) farms with average P of 300-450 FIV begin to transition to the PMT.
- ✔ Beginning in 2020, low risk (Tier A) farms with average P of 150-299 FIV begin to transition to the PMT.
- ✔ In all tier groups, management will vary during the PMT phase-in, however, soils with high phosphorus levels will be restricted in their application of phosphorus.
- ✔ Farmers should consult their nutrient management plans for further guidance.



## MANURE INJECTION EQUIPMENT RENTAL A HIT

Earlier this spring, dairy farmers in Frederick and Washington counties took advantage of a unique rental equipment program that allowed them to inject manure directly into the soil using a brand new Veenhuis Euroject manure injector and storage tank that was purchased in 2016 by the Catocin and Frederick Soil Conservation Districts. The state of the art equipment injects liquid manure below the soil surface to reduce the risk of nutrient runoff to nearby streams and waterways. Manure incorporation or injection is required by Maryland's nutrient management regulations for farms that are not using no-till farming practices.

"Farmers used the equipment to inject manure into more than 2,000 acres of crop fields since mid-April," said Denny Remsberg, who manages the two districts.

"The response by farmers has been excellent and the turnaround time for the equipment rental is fast. I know of a farmer who injected manure one day and planted his corn crop the next. As an extra benefit, neighbors appreciate the equipment because it really cuts down on odors."

"We are very excited about this equipment," said Dwight Dotterer, who oversees the Nutrient Management Program. "There is very little soil disturbance and that's a real plus for water quality."

The districts bought the manure injector and storage tank from Veenhuis Machines, a farming equipment manufacturer based in the Netherlands using a grant secured by Sustainable Chesapeake in 2016. Other project partners include the Maryland Department of Natural Resources, University of Maryland Extension, Atlantic Tractor, MidAtlantic Farm Credit, and Allegheny Ag, which operates the equipment and provides the injection service at little to no cost to farmers.

Farmers who want to arrange a custom application between now and December 15 should contact Denny Remsberg at 301-695-2803. Washington County farmers should contact Jeff Semler, University of Maryland Extension, at 301-791-1304.

# MOST MARYLAND FARMS NOT SUBJECT TO PMT

Approximately 80 percent of Maryland’s soils statewide are low in phosphorus and will not be subject to new restrictions requiring the use of the Phosphorus Management Tool, according to the latest data released by the Nutrient Management Program.

As of April 2017, the department had received soil test data for approximately 86 percent of regulated acreage. Areas with the highest soil phosphorus Fertility Index Value (FIV) levels include the Lower Eastern Shore (70 percent), the Mid-Eastern Shore (25 percent) and Southern Maryland (24 percent). Less than 10 percent of the farmland located in the Upper Eastern Shore, Western Maryland, and Central Maryland had high phosphorus FIV levels according to the soil data.

Statewide, roughly 1.62 percent of the farmland tested has been banned from receiving additional phosphorus applications.

“According to the soil data received so far, the majority of Maryland farmers will simply follow their nutrient management plans when applying phosphorus to their fields,” said Maryland Agriculture Secretary Joseph Bartenfelder.

“We realize, however, that some parts of the state are affected more than others. We will be working closely with those farmers to redistribute manure resources appropriately, based on the soil data results,” he said.

The Nutrient Management Program is charged with obtaining soil test data results for 100 percent of the farmland in Maryland. To date, soil data has been collected for nearly 1.1 million acres statewide and the department’s nutrient management specialists are busy contacting farmers whose soil data results have not been reported. As the 2018 deadline nears for high risk farms to begin transitioning to the Phosphorus Management Tool, farmers with unreported soil data may very well find themselves out of compliance.



## INTRODUCING GURPAL TOOR

Gurpal Toor, (pronounced Gur-pawl Tour) is the new Nutrient Management and Water Quality Extension Specialist at the University of Maryland’s Department of Environmental Science and Technology.

Toor first became interested in agriculture as a child during visits to his grandfather’s wheat and rice farm in the Punjab state of India. He received both his bachelor’s degree (1993) and master’s degree (1996) from Punjab Agricultural University and earned his PhD in Environmental Soil Science from Lincoln University in New Zealand (2002), where he worked to reduce phosphorus leaching from dairy pastures.

For the last 10 years, Toor has served as Associate Professor and Extension Specialist at the University of Florida where his work focused on reducing nitrogen and phosphorus transport to water bodies. Previously, he worked as a research scientist in the Biological and Agricultural Engineering Department of the University of Arkansas. He also worked in the Plant and Soil Science Department at the University of Delaware where he identified phosphorus compounds in animal diets and manure.

Throughout his career, Toor and his colleagues have shown that efforts to reformulate dairy and poultry diets are not only good at reducing phosphorus in manure, but also reduce phosphorus loss when manures are land-applied. With his extensive background in agriculture and soil science, Toor will be a tremendous asset to Maryland farmers and consultants. He can be reached at [gstor@umd.edu](mailto:gstor@umd.edu).

**Maryland Soil Test Results (as of April 24, 2017)**

Region	Total Acres Submitted	Percentage of County Acres Reported	Soil P FIV 0-149 Percent of Acres	Soil P FIV 150-499 Percent of Acres	Soil P FIV > 500 Percent of Acres
Western Maryland	280,342	79.10%	92.02%	7.86%	0.12%
Central Maryland	120,150	79.11%	93.53%	6.21%	0.26%
Southern Maryland	82,439	85.24%	75.48%	24.22%	0.30%
Upper Eastern Shore	263,904	96.80%	90.22%	9.56%	0.23%
Mid-Eastern Shore	209,394	84.94%	75.08%	24.64%	0.28%
Lower Eastern Shore	140,728	90.34%	30.01%	58.85%	11.14%
<b>MD State Total</b>	<b>1,096,957</b>	<b>85.84%</b>	<b>79.32%</b>	<b>19.06%</b>	<b>1.62%</b>



# TO INCORPORATE, OR NOT TO INCORPORATE

In the wake of recent updates to Maryland's nutrient management regulations, there has been some confusion among farmers about whether they are required to incorporate manure into their fields. Here is the long and short of it: *Manure, biosolids, and other organic nutrient sources are required to be incorporated or injected into the soil within 48 hours of application unless the following conditions are met:*

1. The farmer is using a no-till farming system.
2. The livestock manure is deposited directly by animals.
3. The land is in permanent pasture.
4. The land is being used for hay production.
5. Fields are defined as highly erodible land by USDA-Natural Resources Conservation Service Field Office Technical Standards and determination protocols. (This exemption requires supporting documentation.)
6. Spray irrigation is being used to apply nutrients to a growing crop.
7. Small grains have been planted for harvest on the land either as grain or silage. This is considered a standing crop, and therefore exempt from incorporation during spring green up.

## URBAN UPDATE

### Renewal Forms Mailed

Renewal forms for Professional Fertilizer Applicators (PFA), trained employees, and Fertilizer Business License holders were mailed in early June. PFA renewal forms were mailed to home addresses, while business license and trained employee renewal forms were mailed to business addresses. Please call or email the Urban Nutrient Management Program if you have not received your renewal form or have questions about renewals.



### Annual Fertilizer Application Reports

Annual Fertilizer Application Reports for calendar year 2016 were due to the department by March 1. Most firms have submitted their reports, but some reports are still outstanding. If you have not submitted your report, please do so immediately. A report is required even if it shows no activity. Count each area once regardless of how many times it was fertilized. If you need help with record-keeping, please call your regional nutrient management specialist at the number listed below.

### News and Notes

- Applicators are reminded that compost is considered a fertilizer, even when it does not have a guaranteed analysis. Applicators must have an analysis for compost that is less than two years old. The maximum application rate is 0.25 lb. P205/1000 sq. ft. and 0.5 lb. P205/1000 sq. ft./year. A soil test is required in order to apply compost. Compost may only be applied on properties where the soil test phosphorus level is either "low" or "medium." Compost may not be used if the soil test phosphorus level is in the "optimum" or "excessive" range.
- Read labels carefully to ensure that you don't exceed 0.9 lb. N/1000 sq. ft. Some applicators have obtained fertilizer that is labeled with an application rate of 1 lb. N/1000 sq. ft., which is incorrect.

### Contact Information

For questions about certification, re-certification, continuing education credits, or other concerns, please call or email the Turfgrass Nutrient Management Program directly.

#### Southern Maryland and the Eastern Shore

Judy McGowan  
410-841-5955  
judy.mcgowan@maryland.gov

#### Central and Western Maryland

Kelly Love  
410-841-5973  
kelly.love@maryland.gov

*Secretary's Message cont. from page 1*

statewide. Some farmers have expressed concern that harvested cover crops will not be eligible for payment this year. The reality is that we needed to scale back this feature of the cover crop program in order to assure adequate funding to meet increasing demand for traditional cover crops. Many positive changes were made to the cover crop program this year to support soil health, increase flexibility for aerial seeding and give farmers

more options when planting mixes. I encourage farmers to take a closer look at all the benefits that traditional cover crops have to offer.

Moving forward, all farms with high soil phosphorus levels (P FIV of 150 or greater) should have nutrient management plans that use both the Phosphorus Site Index and the new Phosphorus Management Tool (PMT) to compare the risk of P runoff and indicate management adjustments. The first phase-in date for the PMT is fast approaching in 2018.

Now is the time to work out management strategies. As always, farmers should contact their regional nutrient management specialist for assistance. With best wishes for a healthy and productive growing season.

Sincerely,



Joe Bartenfelder  
Maryland Agriculture Secretary

# TRAINING CALENDAR

## AGRICULTURAL NUTRIENT MANAGEMENT PROGRAM

### Consultant Nutrient Management Exam

Date:	August 4, 2017
Location:	Annapolis
Who Should Attend:	Individuals who want to take the exam to become certified to write nutrient management plans for farmers.

### Agricultural Nutrient Management Update Training

Save the Date:	December 6, 2017
Location:	National Wildlife Visitor Center, Laurel
Who Should Attend:	Farmers, consultants and anyone who makes nutrient management recommendations. Check website for registration information later this summer.

### Learn and Earn Continuing Education Credits On-Line

Ongoing:	Many educational programs qualify for Maryland Nutrient Management continuing education credits. Even if you can't attend a webinar session "live," you may be able to earn continuing education credits at a later date.
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### How to Register

On the web:	Visit <a href="http://mda.maryland.gov">mda.maryland.gov</a> and click on Nutrient Management in the Quick Links Bar. Follow the link to training classes. Registration forms are available in PDF format.
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## TURFGRASS NUTRIENT MANAGEMENT PROGRAM

### Professional Fertilizer Applicator Certification Training/Exam

Date:	June 26, 2017
Location:	Annapolis
Who Should Attend:	Individuals who want to take the exam to become certified to apply fertilizer to lawns that they manage. Optional training sessions will be available.

### Professional Fertilizer Applicator Continuing Education Offerings

Dates:	June 27, 2017 (Webinar) Additional offerings will be posted on the website as soon as they are finalized.
Locations:	Statewide
Who Should Attend:	Individuals who are currently certified by the department. Classes satisfy the two-hour continuing education requirement for recertification.

### How to Register

On the web:	Visit <a href="http://mda.maryland.gov/fertilizer">mda.maryland.gov/fertilizer</a>
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## SCHWANINGER TO RETIRE

**D**an Schwaninger, the long-time nutrient management specialist serving farmers in Caroline and Dorchester counties, will retire June 30 following a lengthy career in agriculture and state government. A fifth generation farmer, Dan joined the Nutrient Management Program in 2000. At the time, the program was transitioning from a voluntary conservation effort to a full-fledged regulatory program. Armed with an extensive background in agriculture and soil science, Dan provided a steady hand, deep compassion, and unflagging humor to help farmers through the sometimes bumpy transition.

"I spent a lot of time encouraging consultants to do a better job of writing nutrient management plans for farmers," said Schwaninger.

"As for the farmers, I think they know that I always had their best interests at heart. My region has consistently reported upwards of 90 percent compliance. That's something to be proud of."

During his retirement, Dan plans to spend time with his wife, Betty, while pursuing his two favorite pastimes—hunting deer and elk. The Nutrient Management Program thanks Dan for his years of hard work and dedication and wishes him the best as he embarks on this exciting new chapter of his life.



**Maryland Department of Agriculture**  
**Office of Resource Conservation**  
**Nutrient Management Program**  
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 Annapolis, MD 21401  
[mda.maryland.gov](http://mda.maryland.gov)



Larry Hogan, *Governor*  
 Boyd K. Rutherford, *Lt. Governor*  
 Joseph Bartenfelder, *Secretary*  
 James P. Eichhorst, *Deputy Secretary*

Western Maryland

**Maryland Department of Agriculture  
 Nutrient Management Offices**

**Alleghany, Garrett and Washington counties**  
 12407 Naves Cross Road, NE  
 Cumberland, MD 21502  
 Contact: Keith Potter, 301-777-1747, ext. 116 or  
[keith.potter@maryland.gov](mailto:keith.potter@maryland.gov)

**Carroll and Frederick counties**  
 92 Thomas Johnson Drive, Suite 110  
 Frederick, MD 21702  
 Contact: Moana Himes, 301-695-2803, ext. 8604  
 or [moana.himes@maryland.gov](mailto:moana.himes@maryland.gov)

Central and Southern Maryland

**Anne Arundel, Howard and Montgomery counties**  
 92 Thomas Johnson Drive, Suite 110  
 Frederick, MD 21702  
 Contact: Jessica James, 301-695-2803, ext. 8605  
 or [jessica.james@maryland.gov](mailto:jessica.james@maryland.gov)

**Baltimore, Cecil and Harford counties**  
 2205 Commerce Road, Suite C  
 Forest Hill, MD 21050  
 Contact: Darren Alles, 410-838-6181, ext. 118 or  
[darren.alles@maryland.gov](mailto:darren.alles@maryland.gov)

**Calvert, Charles, Prince Georges and St. Mary's counties**  
 26737 Radio Station Way, Suite B  
 Leonardtown, MD 20650  
 Contact: Weylin Anderson, 301-475-8402, ext.122  
 or [weylin.anderson@maryland.gov](mailto:weylin.anderson@maryland.gov)

Eastern Shore

**Caroline, Dorchester, Kent, Queen Anne's and Talbot counties**  
 28577 Mary's Court, Suite 4  
 Easton, MD 21601  
 Contact: Howard Callahan, 410-822-8126 or  
[howard.callahan@maryland.gov](mailto:howard.callahan@maryland.gov)

**Somerset, Wicomico and Worcester counties**  
 27722 Nanticoke Road, Unit 2  
 Salisbury, MD 21801  
 Contact: Steven Dorsey, 410-677-0802, ext. 4 or  
[steve.dorsey@maryland.gov](mailto:steve.dorsey@maryland.gov)

## Nutrient Management Notes

### ▶ NEW PHONE NUMBERS COMING

Several regional offices will be assigned new phone numbers in upcoming months. The department will mail postcards to farmers with the new phone numbers as soon as they are assigned.

### ▶ HAVE YOU MOVED?

Please help us keep your contact information up-to-date. Call your regional nutrient management office with address, email or telephone changes as soon as possible.

### ▶ SUBSCRIBE TO MARYLAND NUTRIENT MANAGEMENT NEWS ON-LINE

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