



Spring  
2025  
Volume 2,  
Issue 1

# In the Know with Virginia Nutrient Management

## Back to Basics: Plan Writing Webinars

Starting this Spring DCR will be launching a series of webinars addressing the basic of plan writing. The webinars will explore the foundations of plan writing piece by piece. Each webinar will be about half an hour in length focusing on topics such as different parts of planning from collecting information needed at a farm visit to exploring the crop needs of not just row crops but grasses and specialty crops to what the final product can look like for the farmer, and other topics.

While this series is primarily for new or infrequent planners all are welcome to participate. The webinars will be hosted through Microsoft Teams. All sessions will be recorded and posted on the DCR webpage as a plan writing resource. Planners who attend the sessions live will receive 0.5 CEUs.

The first session in the “Back to Basics Plan Writing” series will be on **Thursday, May 22, 2025 at 10:30 a.m.** We will focus on what information should be collected from the initial farm visit(s).

All the webinars in the “Back to Basics” series will be free, but registration is **required**. If you are interested in joining the discussion please register [here](#).



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## CEUs

Have heard about a field day you think would be educational regarding nutrient management? A webinar related to nutrient management that sounds appealing? Please let us know. We try to stay abreast of field days, conferences, and outreach events, but undoubtedly miss many. If there is an event you think might be eligible for continuing education credit, please contact Steph Dawley. CEU events can be hosted by a variety of partnering agencies and do not have to be in VA. CEUs have been approved in NC, MD,

## Introducing Virginia Tech Extension Staff

VA Cooperative Extension and nutrient management planners have a working relationship to circulate current research to the farming community. Two positions that are crucial in that connection have recently been filled.

[Dr. Olga Walsh](#) works as the Associate Professor in Smalls Grains Research and Extension in Blacksburg, VA. Dr. Walsh's contact information is: (208) 590-6939 or [oswalsh@vt.edu](mailto:oswalsh@vt.edu). A synopsis of her current projects can be found on page 3 of this newsletter.

[Dr. Carrie Ortel](#) works as the Assistant Professor & Extension Soybean Specialist based at the Tidewater AREC in Suffolk VA. Dr. Ortel's contact information is: (757) 354-7852 or [carrieo@vt.edu](mailto:carrieo@vt.edu). A listing of her most recent publication can be found below.

Ortel, C., Lindsey, L.E., Casteel, S., Kandel, H., Nafziger, E., Ross, J., Matcham, E., Moseley, D., Preza Fontes, G. & Conley, S.P. (2025). Low soybean plant population: Is replanting necessary? Crop, Forage, & Turfgrass Management. <http://dx.doi.org/10.1002/cft2.70032>

Ortel, C.C. Roberts, T.L., Popp, M., Ross, W.J., Slaton, N.A., & Parvej, M.R. (2024). Economic considerations of in-season potassium applications to soybean using payoff matrices. Agronomy Journal. <https://doi.org/10.1002/agj2.21726>

Ortel, C.C., Roberts, T.L., & Rupe, J.C. (2024). A review of the interaction between potassium nutrition and plant disease control. Agrosystems, Geosciences, & Environment. <https://doi.org/10.1002/agg2.20489>

## Nutrient Management Online Plan Writing Training Videos

The online nutrient management plan writing platform continues to grow and improve. For those new to the platform, those who don't use it frequently or those looking for tips and tricks, we have started a video training library on the website. There are currently seven videos uploaded with more to come. You can find the videos at <https://www.dcr.virginia.gov/soil-and-water/nmplnr> under the Nutrient Management Plan Writing App tab.

## Grain Crops Program Update

### Virginia Tech Grain Crops Research & Extension Program: Advancing Grower Prosperity

As Virginia's crop growers prepare for another productive season, it's essential to stay informed about the latest advancements in crop management and research. The Virginia Tech Grain Crops program led by Dr. Olga Walsh is at the forefront of these innovations, providing support and knowledge to VA agricultural community.

Dr. Olga Walsh, Associate Professor, Research & Extension Specialist, and Caleb Bishop, Program Manager, Grain Crops Program, School of Plant and Environmental Sciences at Virginia Tech, coordinate the corn and small grains variety trials across Virginia. Their efforts are essential in enhancing the productivity, resiliency, and sustainability of grain crops. With a focus on yield and quality of corn, small grains, and other potential crops for grain and silage, the team is committed to increasing the economic value of food and agriculture production systems. One of the program's key initiatives is the integration of cutting-edge technologies to improve crop management practices. For instance, the use of drones for nutrient management and disease assessment is revolutionizing how farmers monitor and manage their fields. By collecting aerial imagery and Normalized Differential Vegetative Index (NDVI) data, drones can provide precise recommendations for nitrogen application, ensuring optimal growth and yield.

In addition to technological advancements, the program emphasizes collaboration with Virginia Cooperative Extension Agents, Agricultural Research Extension Centers, and stakeholder groups such as the Virginia Grain Producers Association. This collaborative approach ensures that research findings are effectively translated into practical solutions for farmers across the state.

Graduate students are also making significant contributions to the program. Aarati Khulal (MS student) is evaluating the effects of nitrogen, potassium, and phosphorus fertilizers on corn yields. Sheetal Kumari (PhD student) is developing methodologies for estimating soil nutrient content and soil moisture using remote sensing. Ivy Flory (MS student) is investigating natural amendments to improve wheat and corn yields. Caleb Bishop, in addition to his role as a Program Manager, is an MS student focusing on identifying appropriate seeding rates for Virginia corn. Jitender Rathore (PhD



#### Grain Crops Extension Program

**Olga S. Walsh**

Associate Professor  
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student) is designing a zone-specific on-farm digital support system for crop yield potential prediction and nutrient management.

Current and future projects will focus on updating fertilizer recommendations for grain crops, supported by local commodity groups such as the Virginia Small Grains Board and the Virginia Corn Board. These updates aim to provide more precise and effective guidelines for nutrient management, enhancing both yield and sustainability. The Grain Crops team is collaborating with the Virginia Grain Producers Association on the development of an interactive, searchable database. The highly interactive free-source tool that will be available online in the next couple of weeks. The tool will allow growers to search, select, and sort corn, wheat, barley, and other crops varieties by specific parameters, rank the performance of varieties in particular areas, and access digitized historical variety trials data. This online system will offer numerical and visual outputs, making it an invaluable resource for researchers, agronomists, breeders, extension educators, and grain producers.

Dr. Walsh's program is also dedicated to addressing the challenges posed by climate change and evolving disease and pest pressures. Variety testing assists in developing resilient crop varieties and sustainable management practices. The Grain Crops Program's commitment to sustainability is reflected in the program's ongoing research and extension efforts, which strive to provide farmers with the tools and knowledge they need to thrive in an ever-changing landscape.

As we look ahead to the upcoming growing season, Virginia's crop growers can take confidence in the support and expertise provided by the Virginia Tech Grain Crops Research & Extension Program. Under Dr. Olga Walsh's leadership, the program continues to drive innovation and excellence in crop management, ensuring a prosperous future for our agricultural community.



## DCR's Resource Management Plan Program

Are you interested in offering next-level services for your clients?

**You can do that by offering Resource Management Plan planning services.**

A Virginia Resource Management Plan (RMP) is a comprehensive conservation plan that includes agricultural best management practices proven to ensure the farm is meeting a conservation farming standard. A farmer's decision to have an RMP written, or to implement the plan, is completely voluntary. The plans are written by certified RMP developers and are specific to the farm operation. The RMP will address onsite erosion issues, including measures to protect perennial streams, and include recommendations for nutrient management. The RMP provides a list of agricultural BMPs for the farmer to implement.

### **What do you get?**

Using the Direct Payment Initiative, RMP developers can be paid directly by DCR for both RMP development services and for certification services. Payment rates are currently \$13/acre for development and \$4/acre for certification.

### **What does the farmer get?**

- Eligibility for enhanced tax credit
- Potentially higher priority for VACS funding
- Eligibility for RMP-2 payments for certified RMPs
- RMPs are written by certified RMP plan developers and provided at no cost to your farm.
- RMPs that have been certified as fully implemented are considered environmentally compliant. Should newer, more stringent state regulations related to the Chesapeake Bay or local stream TMDLs be adopted, the certified RMP farm operation is considered compliant with nutrient, sediment and water quality standards. The certificate is valid for nine years provided the farmer continues to implement the RMP.

### **What do you need to do?**

Currently-certified NM planners can apply to become a certified RMP developer. You must also either be a certified conservation planner or have experience and education in conservation and agriculture. The RMP developer application can be found here at <http://www.dcr.virginia.gov/form/DCR199-228.docx>

For more information, visit <http://www.dcr.virginia.gov/soil-and-water/rmp/> or contact DCR's Barbara McGarry, [barbara.mcgarry@dcr.virginia.gov](mailto:barbara.mcgarry@dcr.virginia.gov), 804-371-0297.

## Soil Sampling for Plans: A Short Refresher

A few tips on collecting quality soil samples for plan writing.

1. One sample should represent just one management unit.
2. Separate fields into uniform areas should be around 20 acres (per VA NM Regulations).
3. Take separate samples from areas that differ significantly. Avoid old fence rows, ditches, dead furrows and other spots that are not representative of the whole field.
4. A sampling tube or auger (trowel or spade can be used). A clean plastic container or a Laboratory's soil sample container.
5. A minimum of 2 to 5 cores (subsamples) per acre should be collected within a uniform area.
6. Sampling patterns.
  - A. Random: is a composite sample by 15 to 20 cores are taken at random locations.

In practice, the locations are selected by walking a zigzag pattern that covers the whole field and approximates a random sample and collecting a core at regular intervals

B. Grid: a grid is superimposed on the field. A common grid size is 2 acres or approximately 300 feet on a side. At each intersection of grid-lines, 5 to 10 soil cores are taken within a 10 foot circle and composited to make up the sample for that point. Best suited for large, regularly shaped fields.

7. Sampling depth:
  - A. Cultivated Fields: to the depth of plowing/cultivation (approx. 6 to 8" depth)
  - B. Pasture, Semi-permanent Hay, and No-Till Crop Fields: 2 to 4" depth.

For more information see [Mid-Atlantic Nutrient Management Handbook](#) Chapter 7.

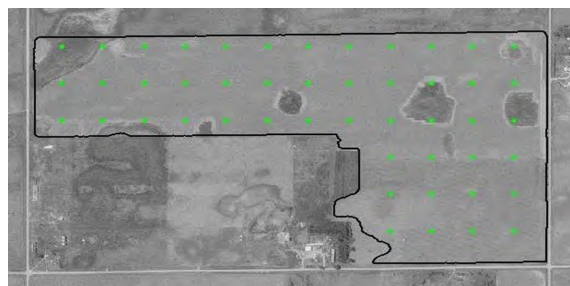


Figure 1: Grid Sampling

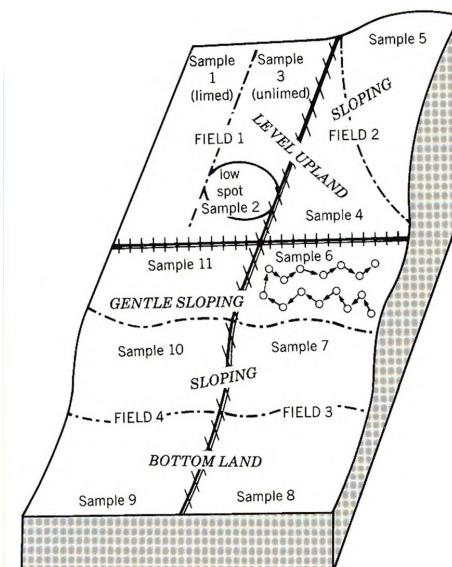


Figure 2: Field sampling areas of significant difference

### Planner Input

Is there something you would like to discuss about the DCR Nutrient Management Program? Are there topics of nutrient management plan writing that you would like more details on? Do you have information that you would like to share with other planners for future newsletters? If so, we want to hear them!



## Direct Pay Directory Reminder

A directory for planners wanting to advertise their services with DCR's Direct Pay Program is on the [website](#).

If you are not listed in the directory and wish to be included contact; [vanmplnr@dcr.virginia.gov](mailto:vanmplnr@dcr.virginia.gov) for the form to fill out with the needed information.

Please have it completed by Monday, May 19, 2025 in order to have your information be included in the next update.

## DCR Staff

### Field Staff:

Carl Kling: Abingdon Office  
Abby Pierson: Radford Office  
Alec Lipscomb: Staunton Office  
Scarlett Reel: Staunton Office  
Caroline Schrider-Sullivan: Staunton Office  
Stacy Polk: Staunton Office  
Jay Marshall: Warrenton Office  
Robert Shoemaker: Warrenton Office  
Hunter Quinones: Tappahannock Office  
Marie Schirmacher: Suffolk Office  
Rachel McAden-Farmer: Suffolk Office  
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(540) 290-3602 [alex.hessler@dcr.virginia.gov](mailto:alex.hessler@dcr.virginia.gov)  
Palmer Bunce: Poultry Litter Transport Incentive Coordinator  
(540) 416-5350 [palmer.bunce@dcr.virginia.gov](mailto:palmer.bunce@dcr.virginia.gov)

[Click Here](#) to see full map of planner areas and contact information.

### Office Staff:

Hunter Landis: Program Manager  
Stephanie Dawley: Training and Certification Coordinator  
Seth Mullins: Animal Waste Coordinator  
Nick Moody: Biosolids Coordinator  
Susan Jones: Training and Certification Technician  
Joe Tesaro: Direct Pay Specialist  
Pamela Capps: Direct Pay Technician  
Gonzalo Ortiz: Urban Specialist

[Click Here](#) for specific topics covered and contact information of office staff.

*Please make sure you have a non-work related email on file with the DCR! Your certification is attached to YOU, not your work. If you leave your current place of employment, and only have that email on file, it is difficult for us to keep in touch regarding your certification. Please contact Susan Jones at [Susan.Jones@dcr.virginia.gov](mailto:Susan.Jones@dcr.virginia.gov) to check on or update your email status.*