

Small Farm Nutrient Management Team

Tad Williams

Dairy and Small Farms
Nutrient Management Specialist
Cell: 540-290-3602
taw1776@vt.edu

Williams provides technical assistance in developing nutrient management practices with a focus on dairies and beef operations without permits. The goal is to improve use of manure to protect water quality in Virginia.

Tammy Holler

Horticulture and Small Ruminant
Nutrient Management Specialist
Cell: 804-229-2730
tammyh3@vt.edu

Holler provides professional nutrient management guidance and assistance to small agronomic and livestock operations to improve water quality. The focus is on providing strategic ways of reducing nutrients entering ground and surface waters.



This project has been funded wholly or in part by the United States Environmental Protection Agency (EPA) and the Virginia Department of Environmental Quality (DEQ) under a Section 319 grant agreement #2016-DCR-TMDL 319H15-0 to the Virginia Department of Conservation and Recreation (DCR).



Nutrient management on small farms



The Small Farms Nutrient Management Program was developed by Virginia Tech under a cooperative agreement with the Virginia Department of Conservation and Recreation to better serve the Virginia small-farming community. Virginia Tech's Small Farms Nutrient Management Program team is dedicated to working with individuals to educate, improve water quality, develop nutrient management plans and provide technical support.

Purpose

The purpose of the program is to help individuals develop strategies to best manage nutrients being applied to each crop grown.



What is a small farm?

A small farm is considered any agriculture activity occurring on more than 10,000 square feet and fewer than 400 acres or dairy operations with fewer than 200 animal units. Small farms may include dairy, beef, sheep, goat, horticulture and cut-flowers operations.

What is a nutrient management plan?

Nutrient management plans are guides for applying organic or inorganic fertilizers to maximize yield while preventing the movement of nutrients into ground and surface waters. These plans are written to fit your farm and to meet your soil and yield goals.

Soil testing

Soil testing establishes a baseline for soil nutrients. Soil sample analyses are essential for accurate nutrient recommendations by crop and soil type and should be updated at least once every three years. As part of the program, there is no cost associated with soil testing.

What does a soil test show?

- Excessive or deficient nutrients in the soil
- Macronutrients (nitrogen, phosphorus and potassium)
- Soil pH
- Micronutrients (calcium, magnesium, zinc, copper, iron and boron)

Benefits of a soil test

- Excessive nutrient application and associated costs can be avoided.
- Helps ensure that applied nutrients are available to the plants being grown.
- Measures changes in soil nutrients over time.



Services provided

(All services are free to the cooperator)

- Soil sampling
- Manure sampling
- Pre-sidedress nitrate test
- Equipment calibration
- Manure and fertilizer recommendations
- Lime recommendations
- Nutrient management plans
- Water quality agreement programs

Soil and manure sampling

Representative samples should be taken once every three years to ascertain nutrient content.

Manure and fertilizer recommendations

Recommendations are written for your farm based on soil tests, manure analysis and producer yield records.

Equipment calibration

Nutrient management specialists will help calibrate manure and fertilizer spreaders.

Pre-sidedress soil nitrate test (PSNT)

A PSNT is used to determine soil nitrate levels at a specific point in time. The best fields for this test are those with horticultural crops or fields to which manure or poultry litter have been applied in the last three years.

Water quality agreement program

This horticultural and gardening water quality agreement program is designed to encourage and reward those who use the best soil nutrient management practices available to reduce nutrient losses to ground and surface waters. Producers meeting all requirements will receive yearly certification and the "Green and Clean" seal.

Cost-share

Contact your local Soil and Water Conservation District about funding for best management practices.