

# What can Extension do for you?

**Sarah Sharpe, Agriculture and Natural Resources Extension Agent, Greene County**

## History of Extension

- Officially began in 1914 with the Smith Lever Act and Land-Grant Universities
  - Partnership of federal government, state government, and higher education to work cooperatively towards the solution of social and economic problems
- VCE is the educational outreach program of VA's two land-grant universities: Virginia Tech and Virginia State University
- Offices in 108 counties/cities
- 11 research stations
- 4-H, ANR, FCS, Community Viability, Forestry
- Offers science/research based information and solutions

# Local Agents

- Culpeper: Carl Stafford ([ccstaffo@vt.edu](mailto:ccstaffo@vt.edu)) *Animal Science*
- Greene: Sarah Sharpe ([seweaver@vt.edu](mailto:seweaver@vt.edu)) *Commercial Horticulture and Local Foods*
- Madison: *currently open*
- Orange: Luke Bello, [bellol@vt.edu](mailto:bellol@vt.edu) *General Ag*
- Rappahannock: Kenner Love ([klove@vt.edu](mailto:klove@vt.edu)) *Crop and Soils*
- District Forestry Agent: Adam Downing ([adowning@vt.edu](mailto:adowning@vt.edu))

# Educational Publications

<https://www.pubs.ext.vt.edu/index.html>



# Educational Publications

## Agriculture



Agriculture programs help sustain the profitability of agricultural production and enhance and protect the quality of our land and water resources. Virginia Cooperative Extension strives to improve the well-being of Virginians and increase producers' profitability through programs that help put research-based knowledge to work in people's lives.

- Agriculture topics
- About
- Diagnostic and Laboratory Services
- Publications
- Certifications & Trainings
- News
- Other resources

- » [Agritourism](#)
- » [Beef Cattle](#)
- » [Commercial Horticulture](#)
  - » [Greenhouse, Nursery and Landscape](#)
  - » [Greenhouse Vegetable Production](#)
- » [Hops](#)
- » [Irrigation Pathogens and Water Quality](#)
- » [On-farm Food Safety](#)
- » [Small Fruit](#)
- » [Spotted Lanternfly in Virginia](#)
- » [Tree Fruit](#)
- » [Boxwood Blight Task Force in Virginia](#)
- » [Wine Grapes](#)
- » [Community, Local, and Regional Food Systems](#)
- » [Corn](#)
- » [Dairy Cattle](#)
- » [Sheep](#)
- » [Silvopasture](#)
- » [Small Grains](#)

### Featured Publications

- » [Tractor Safety, Lawn Care Training Guide, Safe Use of Tractor](#)

### Related Topics

- » [4-H / Youth](#)
- » [Biosolids](#)
- » [Composting and Compost Use](#)
- » [Natural Resources](#)
- » [Turf and Garden Tips Podcast](#)
- » [Volunteer with Virginia Cooperative Extension](#)
- » [Virginia State University](#)

### Events

- » [Agricultural Business, Finance & Marketing calendar](#)
- » [Agricultural Systems calendar](#)
- » [Animal Agriculture calendar](#)
- » [Crops & Soils calendar](#)
- » [Specialty Agriculture calendar](#)

### Contact

For questions regarding agriculture tips, advice, and research, please [contact your county's unit office](#) or browse through the [Agriculture topics](#) for specific contact information.

# Educational Publications

## Soil Health and Cover Crops



Soil is a foundational resource to farming, conservation and health in the 21st century. Soil health, also referred to as soil quality, is defined as the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans. Key concepts of soil health and ecological soil management include protecting soil habitat; managing more by disturbing less; keeping soil covered; diversifying food and carbon sources for soil microorganisms; diversifying plant and animal communities; and growing living roots throughout the year. This topic page will focus on how to build soil health for improved soil function and better crops.

- What's New
- Topic Programs
- Academic Programs
- About Soil Health
- Video & Webinars
- Resources
- Website Links
- Blogs
- Slides
- Soil, Conservation, and Place Video Series

Bringing the Past Forward – Mike Phillips of Valley View Farms – A Soil, Conservation, and Place supplement

<https://youtu.be/HyW858Hb12k>

[Soil, Conservation, and Place Video Series](#)

Introduction to Soil, Conservation, and Place video series (1/5)

<https://youtu.be/KaXW-Qrea0I>

Soil, Conservation, and Place -- Renard Turner of Vanguard Ranch, Ltd. (2/5)

<https://youtu.be/gRjgEInR-gl>

Soil, Conservation, and Place -- Amy Hicks of Amy's Garden (3/5)

<https://youtu.be/VkZNaNozcq0>

Soil, Conservation, and Place -- Mike Phillips of Valley View Farms (4/5)

### Featured Publications

- » [Building Soils for Better Health](#)
- » [Managing Cover Crops Profitably](#)
- » [Cover Crop Economics Opportunities to Improve Your Bottom Line in Row Crops](#)

### Related Topics

- » [Irrigation Pathogens and Water Quality](#)
- » [Soil Information](#)
- » [Turf and Garden Tips Podcast](#)

### Events

- » [Crops & Soils calendar](#)

### Contacts

**Eric Bendfeldt**  
[ebendfeldt@vt.edu](mailto:ebendfeldt@vt.edu)

**Greg Evanylo**  
[gevanylo@vt.edu](mailto:gevanylo@vt.edu)

**John Galbraith**  
[jgalbraith@vt.edu](mailto:jgalbraith@vt.edu)

**Wade Thomason**  
[wthomason@vt.edu](mailto:wthomason@vt.edu)

### Follow Soil Health



### Follow VCE



» [Social Media Directory](#)

Need help? Find your city or county's local office.

Publications and Resources

Events and Calendars



### Partners

- » Virginia Tech College of Agriculture and Life Sciences
- » Virginia State University College of Agriculture
- » Virginia Agricultural Experiment Station

## Educational Publications

[Home](#) · [Jobs](#) · [Volunteering](#) · [Internships](#) · [Giving](#) · [Local Offices](#) · [News](#) · [About](#)


**Virginia Cooperative Extension**  
 Virginia Tech • Virginia State University

**What do you need?**  
 Use the search below to search the site or find your local unit office.

[Agriculture](#) · [Community & Leadership](#) · [Family](#) · **[Food & Health](#)** · [Lawn & Garden](#) · [Natural Resources](#) · [4-H / Youth](#)

### Community, Local, and Regional Food Systems



Virginia's food system directly impacts the survival and viability of farms and farmland, the economic development of rural and urban communities, the care, restoration, and resilience of ecological resources such as local waterways, and critical health issues. Demand for local and regionally identified foods continues to grow in Virginia and across the United States. It has also created a myriad of economic and social opportunities for agricultural producers, entrepreneurs, and communities.

**2017-18 Shenandoah Valley Local Food Directory: Buy Fresh, Buy Local**



**Take Note!**

**2018 VIRGINIA FARM TO TABLE CONFERENCE**  
 Nourishing Farming, Community, and Hope  
**December 5-6, 2018**  
 Blue Ridge Community College  
 Plecker Workforce Development Center  
 Weyers Cave, Virginia  
**Perspectives on the theme**  
**"Nourishing Farming, Community, and Hope"**

**Featured Publications**

- » [Virginia Farm to School Resource Guide: Helping Connect Virginia Foods to Virginia Schools](#)
- » [Virginia Farm to Table: Healthy Farms and Healthy Food for the Common Wealth and Common Good](#)
- » [Everyone at the Table: A community food equity assessment for Harrisonburg, VA](#)

**Follow VCE**







» [Social Media Directory](#)

**Need help? Find your city or county's local office.**


**Publications and Resources**

**Events and Calendars**



## Virginia Beginning Farmer and Rancher Coalition

[QUICKLINKS](#) | [HOME](#) | [ABOUT](#) | [RESOURCES](#) | [WHOLE FARM PLANNING](#) | [TASTE OF FARMING](#) | [WEBINARS](#) | [EVENTS](#) | [CONNECT](#)



Looking for more information? We have compiled a list of resources specially intended for beginning farmers. These resources include Whole Farm Planning modules and publications developed by the VBFRC, as well as online resources developed by other organizations. The information will be helpful and useful to beginning farmers and the service providers who work with them.

**COVID-19 RESOURCES**

VBFRC Publications

Whole Farm Planning Curriculum

Farm Safety, Health, and Wellness

Land Access Resources

Online Resources

Virginia Women in Agriculture

Youtube Videos

*COVID-19 Resources*

*VBFRC Publications*

*Farm Safety, Health, and Wellness Resources*

*Beginning Farmer State, Regional, and National Resources*

*Land Access Resources*

*Virginia Women in Agriculture*

**Signature Coalition Programs**

- » [Virginia State University Small Farm Outreach Program](#)
- » [The Northern Piedmont Beginning Farmer Program](#)
- » [Certified Farm Seeker Program](#)



# Taste of Farming Videos

<https://www.vabeginningfarmer.alce.vt.edu/TasteofFarming.html>

## Videos Currently Published:

- Introduction to Business Planning
- Things to Consider for your New Farm adVenture
- Key Agencies and Resources to Assist your Farming Venture
- Basic Soils
- Vegetable Production and Food Safety Requirements
- Integrated Pest Management Basics
- Getting Started in the Greenhouse
- Horse Management 101
- Pumpkins
- Forestry
- Grazing Math
- Beef Management 101
- Agroforestry and Forest Farming
- Small Fruit
- Strawberries
- Agritourism
- Hydroponic Production
- Starting a Small Dairy
- Seafood Safety
- Direct Marketing Meat
- Sheep and Goat Production
- Christmas Tree Production
- Vineyard Establishment
- Floriculture
- Information for New Pesticide Applicators
- How to Interpret a Soils Test

## Schedule



### Introduction to Business Planning

Hear from Sarah Sharpe, Green County's Agriculture and Natural Resources Extension Agent, about writing a business plan. Sarah will share why a business plan is important and will cover the basics of the process and what needs to be included. Click for more information.



### Things to Consider for Your New Farm (Ad)Venture

Hear from Tom Stanley, Rockbridge County's Extension Agent specializing in Farm Business Management, on key considerations for planning and starting a farming enterprise.



### Key Agencies and Resources to Assist Your Farming Venture

Hear from Theresa Pittman, Accomack County's Agriculture and Natural Resources Extension Agent, who will give you an overview of key agencies that can assist you in your farming venture. Click for more information.

# Soil Samples

## CROP CODES (Select one and insert number on front of form)

### Field Crops

Corn:	
Grain, No Till	1
Grain, Conventional	2
Silage, No Till	3
Silage, Conventional	4
Irrigated	20
Sorghum:	
Grain	5
Silage	22
Canola	21
Wheat	6
Barley	7
Barley Silage-Corn Silage Rotation	23
Oats	8
Rye, Grain or Silage only	9
Double-Crop Rotations:	
Small Grain - Grain Sorghum	12
Small Grain - Soybean	11
Soybeans	10
Peanuts	13
Corn-Peanut Rotation	19
Cotton	14
Tobacco:	
Flue-Cured	15
Dark-Fired	16
Sun-Cured	17
Barley	18

### Forage Crops - Establishment

Alfalfa, Alfalfa-Grass	30
Tall Fescue/Orchardgrass without or with Clover (Red/Ladino)	31
Bermudagrass	34
Sorghum-Sudan, Millet, Sudan	35
Small Grains with Winter Annual	36
Legumes for Hay or Grazing	36
Wildlife/Erosion Control Mixture	32

### Forage Crops - Maintenance

Hay:	
Alfalfa or Alfalfa with Grass	37
Tall Grass with Clover	38
Tall Fescue/Orchardgrass	44
Bermudagrass	47
Pasture:	
Fescue/Orchardgrass - Clover	40
Native or Unimproved	42
Bermudagrass	46
Stockpiled Tall Fescue	45
Switchgrass	48

### Commercial Vegetable Crops

Asparagus - Nonhybrid Strains	50
Asparagus - New Hybrid	51
Bean, Lima	52
Beans, Snap	53
Broccoli, Cauliflower	54
Cabbage	55
Brussels Sprouts, Collards	56
Cucumbers	57
Muskmelons	58
Onions, Bulbs	59
Onion, Scallions	60
Peas	61
Peppers	62
Potatoes, White	63
Potatoes, Sweet	64
Pumpkins	65
Spinach	66
Squash	67
Sweet Corn - Fresh Market	69
Sweet Corn - Processing	70
Tomatoes - Fresh Market, Bare Ground	71
Tomatoes - Fresh Market, Polyethylene Mulched	76
Tomatoes - Process, Multiple Harvests	72
Tomatoes - Process, Single Harvest	73
Watermelons	74

### Hops

Hops 75

### Commercial Turf Production

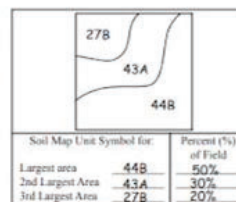
Sod Production:	
Kentucky Bluegrass, Fescue	90
Bermuda, Zoysia	91

### Fruit Crops

Grapes	94
Apples	95
Peaches	96
Strawberries	97
Blackberries	98
Blackberries, Raspberries	99

### Commercial Forest Tree

Hardwood:	
Establishment	105
Maintenance	106
Nursery, Black Walnut	107
Pine:	
Establishment	109
Maintenance	110
Nursery	111
Christmas Trees:	
Frazer Fir, Norway Spruce, Hemlock	113
White Pine, Virginia Pine, Scotch Pine	114
Blue Spruce, Red Cedar	115
Nursery	116

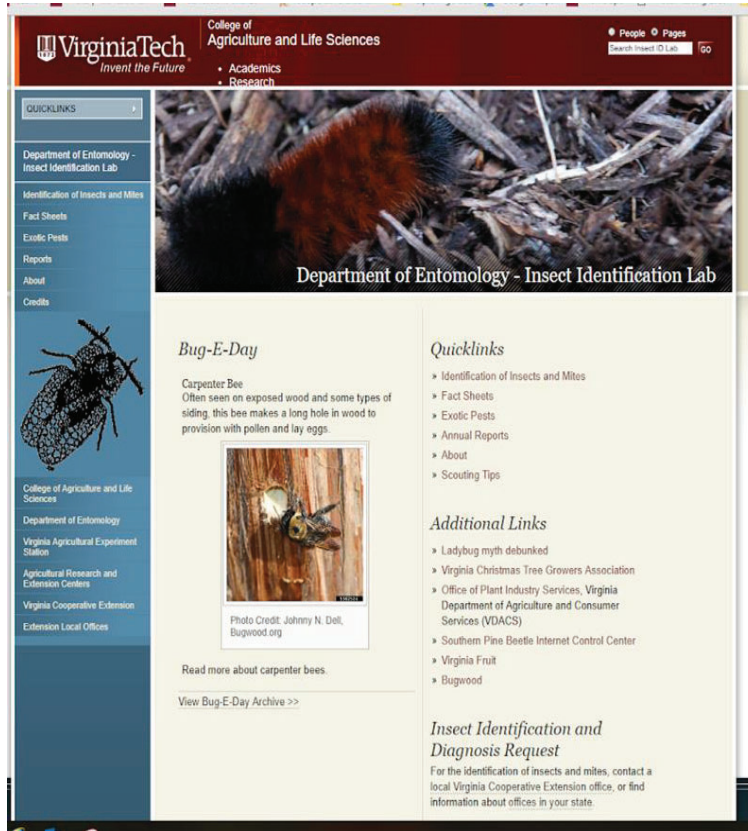


Example: Obtaining soil information


## Providing Soils Information

Fertilizer recommendations are based on potential crop yield. Since yields vary from soil to soil, information on your soils will enable the Soil Testing Lab to make a customized recommendation for your field. Soil information may

# Insect ID



## Disease ID



# Virginia Cooperative Extension

Virginia Tech • Virginia State University

**Plant Disease Diagnostic Form**  
Publication 450-097  
Revised 2016

Submit specimens and this form to: Plant Clinic, 106 Price Hall, 170 Drillfield Dr., Virginia Tech, Blacksburg, Virginia 24061-0331

Date Collected \_\_\_\_\_ Lab I.D. No. \_\_\_\_\_

**SEE [www.ppsw.vt.edu/extension/plant-disease-clinic/index.html](http://www.ppsw.vt.edu/extension/plant-disease-clinic/index.html) FOR INSTRUCTIONS ON HOW TO COLLECT SPECIMENS AND COMPLETE THE NUMBERED SECTIONS OF THIS FORM.**

- Plant \_\_\_\_\_ Cultivar/Variety \_\_\_\_\_
- Extension Agent \_\_\_\_\_ County \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_  
 Grower \_\_\_\_\_ Grower email \_\_\_\_\_  
 Address \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_
- Briefly describe the symptoms and ask the specific question you want answered:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- Do you want a control recommendation for:  
☐ Home lawn/garden    ☐ Commercial production    ☐ Lawn/landscape maintenance    ☐ other

Plant Part Affected	General Appearance	Disease Distribution	Location
<input type="checkbox"/> roots	<input type="checkbox"/> wilted	<input type="checkbox"/> general	<input type="checkbox"/> field/farm
<input type="checkbox"/> crown	<input type="checkbox"/> yellowed	<input type="checkbox"/> scattered plants	<input type="checkbox"/> garden
<input type="checkbox"/> stem or branch	<input type="checkbox"/> stunted	<input type="checkbox"/> in spots or groups	<input type="checkbox"/> sod farm
<input type="checkbox"/> leaves	<input type="checkbox"/> stained/streaked	<input type="checkbox"/> certain cultivar	<input type="checkbox"/> Christmas tree farm
<input type="checkbox"/> flower	<input type="checkbox"/> leaf spot/bright	<input type="checkbox"/> in low areas	<input type="checkbox"/> nursery
<input type="checkbox"/> fruit	<input type="checkbox"/> leaf mottle	<input type="checkbox"/> upland areas	<input type="checkbox"/> greenhouse
<input type="checkbox"/> seeds	<input type="checkbox"/> other _____	<input type="checkbox"/> other _____	<input type="checkbox"/> athletic field
			<input type="checkbox"/> forest
			<input type="checkbox"/> other plant

- Size of total planting: Acres \_\_\_\_\_ or square feet \_\_\_\_\_ or number of plants \_\_\_\_\_  
 Percent of crop affected \_\_\_\_\_ or number of plants affected \_\_\_\_\_  
 Last year's crop 20 \_\_\_\_\_ Crop planned for next year 20 \_\_\_\_\_  
 Symptoms first noticed, date \_\_\_\_\_ Occurrence in previous years: ☐ No    ☐ Yes    ☐ Unknown
- Past weather conditions: ☐ normal    ☐ rainy    ☐ dry    ☐ hot    ☐ cold    ☐ other \_\_\_\_\_  
 Have plants been irrigated? ☐ yes    ☐ no    how much? \_\_\_\_\_
- SOIL:
 

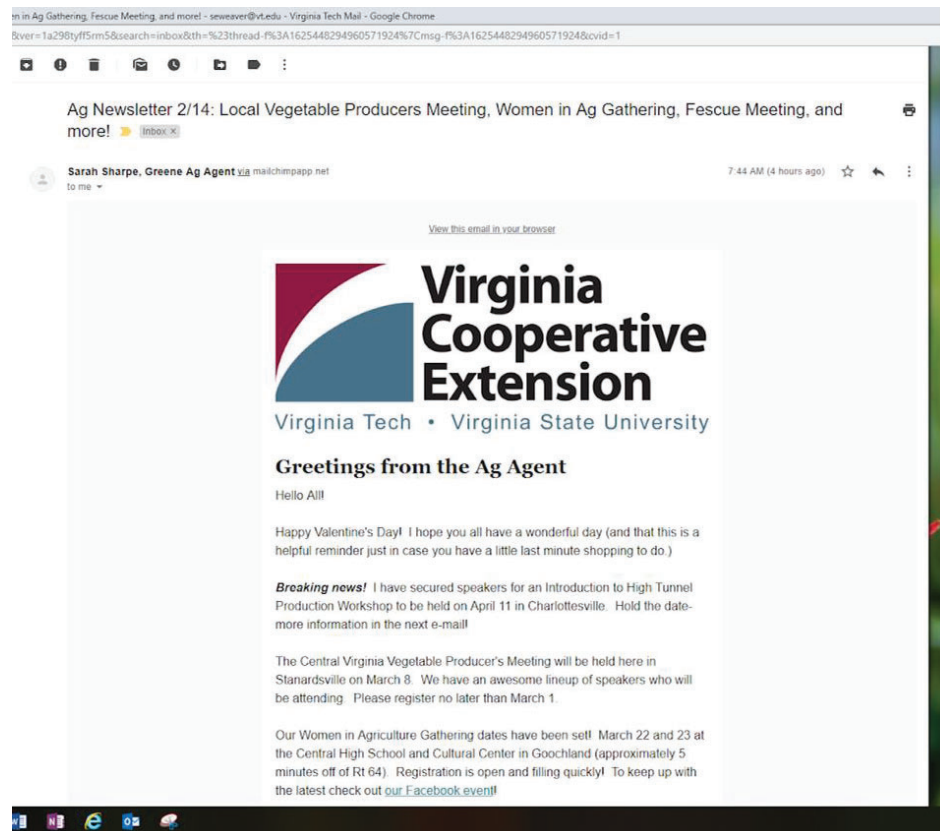
Type	Terrain	Drainage	Soil-less	Mulch
<input type="checkbox"/> sandy	<input type="checkbox"/> sloped	<input type="checkbox"/> good	<input type="checkbox"/> pinebark	<input type="checkbox"/> bark chips
<input type="checkbox"/> clay	<input type="checkbox"/> level	<input type="checkbox"/> moderate	<input type="checkbox"/> peat moss	<input type="checkbox"/> plastic
<input type="checkbox"/> loam	<input type="checkbox"/> low	<input type="checkbox"/> poor	<input type="checkbox"/> other _____	<input type="checkbox"/> vine _____
<input type="checkbox"/> no till	<input type="checkbox"/> conventional till	<input type="checkbox"/> minimal till		

[www.ext.vt.edu](http://www.ext.vt.edu)  
Produced by Communications and Marketing, College of Agriculture and Life Sciences, Virginia Tech, 2016

# Educational Programs

- Direct Meat Marketing 101
- Women in Agriculture Gathering
- Beef Cattle Educational Meetings
- Writing an Agriculture Business Plan
- Farmers Market Vendor Training
- Whole Farm Planning
- Farm Leases
- Central VA Vegetable Growers Meeting
- High Tunnel Production
- Eastern Virginia Pumpkin Growers Meeting
- Enhancing the Safety of Locally Grown Produce
- Baleage
- Farm Taxes
- Well Water Testing

# Newsletter



# Questions?

**Sarah Sharpe**  
**[seweaver@vt.edu](mailto:seweaver@vt.edu)**