

FARMING IN THE MID-ATLANTIC

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If it's not drought or a devastating spring frost, it has to be too much moisture. Yes that's right, we do live in the Mid-Atlantic. Here in the lovely Eastern United States, it seems like every season is one extreme or the other. Lets take a few minutes to examine what we can learn from the weather in the beautiful State of Virginia.

With all this rainfall and moisture in the soil there has never been a better or easier time to assess drainage in your fields. Are you seeing standing water in your fields in some places and not others? Now is a good time to prove to yourself the usefulness of soil maps, and look to see just how well the changes in your soil types reflect the variation of wetness in the fields. Odds are, you'll find some correlation there. This confirmation might convince you to look at soils maps for drainage if nothing else.

Assessment of drainage is critical for crops that don't tolerate "wet feet" especially when you're viewing the potential field during those dry years. Local/micro topography will have an impact on the drainage too. Obviously the low spots will collect water, in addition to being the same spots that collects frost. Then, what to do with this area? Is this something that some well-prepared raised beds can solve?

Or is this a nice spot to keep as a "naturalized area" affording biodiversity and beneficial insect habit to the farm. Information on "Farmscaping to Enhance Biological Control" can be found at <http://attra.ncat.org/attra-pub/farmscape.html>. Further insight to soil drainage can be provided by your local extension agent or soil scientist in addition to what the United States Geological Service Soil Surveys have to offer.

On to the negative side of the abundant rainfall this spring is the enhanced disease pressure. Strawberry crops may suffer from Botrytis (grey mold), many annual vegetable crops may suffer from pithium or "damping off" amongst numerous rot diseases, and perennial fruit crops such as cane berries may exhibit the height of phytophthora root rot in these wet years. Every site has unique needs, ranging from organic to conventional management, yet there are resources available to help. Virginia Tech annually develops Publication 456-017 "Pest Management Guide for Horticultural and Forest Crops" and Publication 456-420 "Commercial Vegetable Production Recommendations (a.k.a. "the green book") which offer comprehensive recommendations for optimizing management of your crops. These guides are insightful of chemical control options and effective resistance management guidelines, and the can be obtained by contacting your local extension agent. Additionally, Appropriate Technology Transfer to Rural Areas (ATTRA) has a wealth of information for sustainable farming and can be found at <http://attra.ncat.org/>.

Like I said, if it's not devastating frost.....

This season the Northern Virginia Farmers seemed to do well and had minimal frost impacts. Yet I'd like to draw attention to a previous publication offered by Charlie O'Dell during his years with Virginia Cooperative Extension. Virginia Cooperative Extension Resources, found at <http://pubs.ext.vt.edu/>, offers a wonderful diversity of information for growers. In terms of frost protection, I'd like to note the article on Crop Covers for Frost Protection, which is a sound alternative to overhead irrigation for fruit and vegetable producers.

In this article Charlie O'Dell related the level of protection afforded by various crop cover systems in a typical Virginia cold snap down to the 30's and 40's Fahrenheit following a week at approximately 80 degrees Fahrenheit.. The conclusion was that highest protection was afforded by a double covering of 1.2 or 1.25 oz. weight material, with only a slight reduction in protection offered by a single layer of 2.0 oz. material. The thicker single layer only resulted in minimal damage to the highest set blossoms touching the crop cover. For commercial growers counting on the crop, sound frost protection systems should be included in the overall management plan.

Finally, the snow this past winter was an impressive event. By my calculations, the 2.5 feet of snow that might have piled on your roof, could weigh as little as 15 pounds per square foot if it is nice and fluffy, or as much as 60 pounds per square foot if it is wet snow. This means a slant roof of 12 feet by 24 feet could be holding between 4,320 pounds and 17,280 pounds. My point is: planning for snow and wind loads is a necessity in our area. If you are considering a new construction for the farm this summer, have a look at NRAES-1 Post-Frame Building Handbook. This publication offers insight to 50-Year Snow events, and Basic Wind Speed. This guide will help in determining post size and spacing, and appropriate construction techniques. A NRAES publication list and ordering information can be made by calling 1-607-255-7654 or visit their website at www.nraes.org.

The Mid-Atlantic offers a unique circumstance. I've found that we can grow an incredible variety of crops, but each comes with its own issues in certain years. Comprehensive management using reputable resources for decisions making is a critical skill for the Mid-Atlantic farmer.