



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

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Vegetable Crops

Spring Cover Crops for Vegetable Rotations

- Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu

One principle of managing soil for improved health is to always have a crop growing on the soil. This will maintain or add organic matter, provide benefits from the action of growing roots, and recycle nutrients.

Where fall cover crops were not planted due to late harvest, spring cover crops can be planted in early April to provide soil health benefits where vegetables and field crops are not scheduled until late May or the month of June.

The most common cover crop options for late March or early April planting include spring oats, mustards and annual ryegrass. Plant oats at 90-120 lbs per acre, mustards at 10-20 lbs per acre, and annual ryegrass at 20-30 lbs per acre.

Field peas are another option; however, we are somewhat south of the best zone for spring planting. One type of field pea is the winter pea which is often fall planted in our area but can be spring planted. It has smaller seed so the seeding rate is 30-60 lbs per acre. Canadian or spring field peas are larger seeded and used as a spring cover crop planted alone at 120-140 lb/A.

Mixtures can also be used. Field peas are well adapted to mixing with spring oats or with annual ryegrass. Reduce seeding rates of each component when using in mixtures.

Recommended seeding rates are 70 lbs of oats per acre and 40 lbs/A of Austrian winter peas or 80 lbs/A of Canadian or spring field peas.

Many mustard family crops have biofumigation potential. When allowed to grow to early flower stage and then incorporated into the soil, they release compounds that act as natural fumigants, reducing soil borne disease organisms. Some biofumigant mustard varieties and blends include 'Pacific Gold', 'Idagold', 'Caliente', 'Trifecta', and 'Kodiak'. Other mustard family crops serve as non-hosts, trap crops, or deterrents for pests. In research at the University of Delaware biofumigation using early spring planted biofumigant crops such as 'Image' radish, 'Dwarf Essex' rapeseed, or 'Nemat' arugula showed potential for managing root knot nematode populations. When used as a biofumigant, mustard family cover crops should be grown to achieve maximum biomass by adding 60-100 lbs of nitrogen per acre. Nitrogen is also required to produce high biomass with spring oats and annual ryegrass at similar rates. When planting mixtures with peas, nitrogen rates should be reduced.

An often-forgotten spring seeded legume crop that can also be used is red clover. Red clover can be frost seeded into small grains, seeded alone, or mixed with spring oats or annual ryegrass. Seeding rates for pure stands would be 10-16 lbs/A, for mixtures 6-10 lbs/A.



G Johnson

Spring planted radishes and mustards as cover crops.

Fruit Crops

Establishing Blueberries - Plan Now for a 2020 Planting -Gordon Johnson, *Extension Vegetable & Fruit Specialist*; gcjohn@udel.edu and Emmalea Ernest, *Associate Scientist - Vegetable Crops*; emmalea@udel.edu

There has been an increase in interest in growing blueberries in Delaware and we have had several new plantings in Delaware in recent years.

Blueberries are very specific in the type of soil conditions in which they will grow. The ideal blueberry soil will be sandy but with high levels of organic matter, it will have a pH between 4.5 and 5.0, it will be well drained in the surface soil but will ample subsurface water. These are the conditions of southern New Jersey where blueberries are native and where there are large commercial plantings. We only have a small area of Delaware with those characteristics; the "black soils" were marshes were drained in southern Sussex County. In all other areas of Delaware, it is necessary to recreate those conditions.

There are five keys to success with blueberries:

1) Increase soil organic matter before planting

2) Drop soil pH to between 4.5 and 5.0 and bring phosphorus and potassium up to optimum or high levels prior to planting

3) Put organic material in the planting hole during planting

4) Mulch the plants well after planting

5) Install a drip irrigation system

The following are some more details on each of these keys.

A common mistake is to plant blueberries before the soil has been modified. Normal agricultural soils will have a pH around 6.0 and organic matter below 2%. Blueberries will not grow well in these conditions. Begin modifying the soil at least one year in advance of planting.

To increase organic matter, plant cover crops and consider amending the soil with additional organic sources such as pine bark fines. Do not use composts that have high pH.

The pH of the soil will need to be modified. This is done by adding elemental sulfur at recommended rates according to soil type and the amount of pH drop required. Again, the target is between 4.5 and 5.0. Blueberries are among a group of unique plants that are acid loving in contrast to most other crops, which require a higher pH. Sulfur additions to lower pH must be done the year before planting. This is because bacteria in the soil need to react with the sulfur to form an acid that lowers the pH. This only occurs when soil temperatures are warm and it takes several months for the full reaction to take place. You cannot apply sulfur in the year of planting and expect the soil pH to be in the acceptable range for good first year growth. Sulfur rates will depend upon soil types and starting pH.

During the year when you are modifying soil, add phosphorus and potassium to bring soil levels to optimum for those two nutrients prior to blueberry planting. Use Potassium Sulfate as the potassium source.

After the soil has been properly modified, you can plant the blueberries. This is normally done in the spring. Fall plantings are possible but there are higher risks of plant loss in harsh

winters. When laying out plantings and deciding on between row spacing, think about how you will apply mulch and pesticides and whether you will be using netting to exclude birds. Rows will need to be wider if large equipment is used for mulching or spraying, but wide row spacing will increase costs if netting is needed to prevent bird damage.

Another key to planting blueberries is to add organic matter to the planting hole. The most common practice for smaller plantings is to use one gallon of moistened peat moss in each hole. Other organic materials can be substituted but they should be low in pH and should be at least partially decomposed. Most commercial composts are not acceptable because the pH is too high for blueberries. Also, composts made with manures as a component may have too high of salt levels and can injure the blueberry roots.

After planting, blueberries should be mulched heavily. Blueberry roots are shallow and need to be protected from high soil temperatures. In addition, the mulch will conserve soil moisture and provide additional organic matter as it slowly decomposes. Blueberries are also very sensitive to weed competition and mulch helps to prevent weed growth. The best mulch materials are high in lignin and acidic in nature. Pine bark is ideal but is often not readily available. Aged wood chips or ground yard waste that has been aged makes good mulch. Sawdust must be partially decomposed before use to avoid nitrogen deficiencies. Avoid mulches that increase soil pH.

Drip irrigation is recommended for blueberries and is best placed under the mulch. Because blueberries are shallow rooted, frequent irrigations during our hot summers will be needed to get the plants established and growing well. Two drip lines per bed, one on either side of the plants, optimizes rooting area, especially in sandy soils. Overhead irrigation can also work if designed properly.

Do not put fertilizers in the plant hole and avoid adding any fertilizer until plants are established. In the first year, blueberries will need about 20 pounds of nitrogen and nitrogen should be in the form of ammonium sulfate or urea. Do not use N sources that contain nitrate. Do not use

fertilizers containing chloride (such as KCl - potash).

Place plant orders the year prior to planting. Plants may come as bare root plants, large liners, or potted plants. Large liners and pots have less risk of planting losses. Choose northern high bush varieties recommended for our region. Current recommendations can be found in the Mid-Atlantic Berry Guide. The University of Delaware has conducted trials with additional varieties (many southern highbush types). Contact Emmalea Ernest (emmalea@udel.edu) for results and additional recommendations.

Blueberries cannot tolerate standing water at any time and site selection is important. Choose well drained sites and consider raising beds or ridges to improve drainage where needed.

Agronomic Crops

Agronomic Crop Insect Scouting - David Owens, *Extension Entomologist*, owensd@udel.edu

Corn

As planting time nears for corn, it's important to know what your wireworm and white grub pressure is. This time of year, the easiest method is the compact soil sampling method. The compact soil sample consists of digging a hole 8 inches L x 8 inches W x 6 inches deep. Others (WSU.edu wireworm scouting fact sheet) recommend a shovel full, roughly 6 inches diameter and 10 inches deep with a treatment threshold of 1 wireworm every 5 shovel fulls.

This factsheet on white grubs explains the sampling strategy and has treatment threshold guidelines:

https://www.pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/2802/2802-7027/ENTO-296.pdf.

Small Grains

We have seen some signs that a few cereal leaf beetle may be present in fields, but have not yet seen adults. Aphid populations are building with the warm weather. Aphid species present are almost entirely English grain aphid. Due to crop prices, an insecticide during this period is not likely going to pay for itself.

Wheat Disease Updates - Alyssa Koehler,
Extension Field Crops Pathologist;
akoehler@udel.edu

Other than a few patches of minor powdery mildew, the cool temperatures and multiple frost events throughout March have kept disease levels low. However, as temperatures warm up over the next few weeks, continue to scout your fields to monitor for disease. Nitrogen applications provide a good opportunity to scout for foliar diseases like powdery mildew and leaf blotch diseases. While you can make a fungicide application at 2nd nitrogen application or flag leaf, remember that fungicides applied at this timing will not provide control of Fusarium Head Blight (FHB) and deoxynivalenol (DON) levels. The main priority of early season fungicide application is to protect the flag leaf. In most years, foliar diseases do not approach the flag leaf until the flowering stage, so a well-timed fungicide to manage FHB is typically effective for common foliar diseases. If you are not seeing a lot of early season disease pressure in your field, waiting to apply fungicide at flowering should protect the flag leaf and tissues contributing to wheat yield. In next week's issue, we will discuss FHB cultural and chemical management options including optimal timing for FHB fungicide application.

Get Ready to Make Spring N Applications to Small Grains - Jarrod O. Miller, *Extension Agronomist,* jarrod@udel.edu and Amy Shober, *Extension Nutrient Management and Environmental Quality Specialist;* ashober@udel.edu

Wheat at our research plots is at Feekes 4/5 and getting closer to jointing with the warmer weather approaching. Feekes 5 (Zadocks 30) is the recommended stage for an application of N to small grains, as this is right before the period of maximum N uptake by the crop. The application at Feekes 5 will help with seed head formation. If nodes are observed above ground when scouting, the wheat has passed Feekes 5 and N applications should be made as soon as possible.

Researchers at Virginia Tech have shown that tissue N content at Feekes 5 is a good indicator of how much additional N is needed to meet the nutritional needs of the crop. A quick tissue test will tell you how much N to apply at this time (Table 1), regardless of whether this is your first or second spring application to small grains.

Table 1. Nitrogen rate recommendations for single or split spring applications to small grains based on tissue N content. Based on research conducted by Virginia Tech scientists.

Tissue N Content (%)	Recommended Spring N Rate at Feekes 5 (lb/acre)	
	Wheat	Barley
2.0	120	100
2.25	110	100
2.5	100	100
2.75	90	80
3.0	80	50
3.25	70	30
3.5	60	0
4.0	40	0
4.5	20	0
5.0	0	0

There are some additional considerations before you apply N to small grains. The University of Delaware recommends total N applications of 80-120 lbs/acre for wheat and 60-90 lbs/acre for barley. The higher end of the UD range is for sandy soils or fields receiving a single spring N application. If you do not base your Feekes 5 application of N on a tissue test, then you should adjust the N rate by subtracting the rate of N applied during the previous fall to promote fall tillering or at green up in early spring to help with tillering.

Do NOT apply N at rates exceeding 120 lb/ac for wheat and 100 lb/ac for barley, as excessive N can result in lodging and yield loss, as well as N leaching. Also, avoid making N applications once the small grain crop is at or past Feekes 7 (Zadocks 32), as crop response to N at that point is minimal.

Check your small grain fields now and make final N applications soon to maximize the potential of your small grain crop.

Using Drones for the 2019 Scouting Season

- Jarrod O. Miller, Extension Agronomist,
jarrod@udel.edu

Drones can be an excellent tool to assist with scouting this season. University of Delaware Extension has information on drone and camera types, which can be found at the following link: <http://extension.udel.edu/factsheets/types-of-drones-for-field-crop-production/>

We have also written recommendations when purchasing a drone for crop scouting and most scouts could start with a simple drone (\$800-\$1200) as they learn this season. There is no reason to buy drones that cost \$10,000 or more, as the return on investment has not been determined yet. Our recommendations can be found at this link: <http://extension.udel.edu/factsheets/selecting-a-drone-for-crop-scouting/>

Although there is a lot of discussion on the regulations attached to drones, a license can be obtained by passing the exam, and much of Delaware airspace is class G. For agriculture, our bigger issue will be avoiding crop dusters during the season. Information on regulations and studying for the exam can be found at the bottom of this page: <http://jarrodmiller.weebly.com/drones-and-precision-ag.html>

PDF copies of the publications can be found here:

https://www.researchgate.net/publication/331745275_Selecting_a_Drone_for_Crop_Scouting

https://www.researchgate.net/publication/329797484_Types_of_Drones_for_Field_Crop_Producti
[on](#)

Last Year's Drowned Out Corn, This Year's Weed Problems - Mark VanGessel, Extension Weed Specialist; mjv@udel.edu

A number of fields last summer had poor stands of corn due to the wet soils. As a result, the weed control in those areas was very poor and the number of weed seeds in the soil is probably very high.

Be sure to scout those areas separately from the rest of the field to evaluate if additional weed control is needed or if the area needs to be treated the sooner to achieve good spray coverage.

- Start clean, no weeds should be present at time of planting
- Apply residual herbicides within 1 to 2 weeks of planting
- Use full herbicide rates
- Scout to be sure the residual herbicides were activated and evaluate if postemergence herbicides are needed
- Treated emerged weeds while they are small and most susceptible (less than 4 inches tall)
- Scout again to be sure treatments were effective and determine if a follow-up treatment is needed

General

Guess the Pest! Week 1 - David Owens, Extension Entomologist, owensd@udel.edu

Guess the Pest is back for 2019! Test your pest management knowledge by clicking on the GUESS THE PEST logo and submitting your best guess. For the 2019 season, we will have an "end of season" raffle for a \$100 gift card. Each week, one lucky winner will also be selected for a prize and have their name entered not once but five times into the end of season raffle.

This year, weekly winners will win a heavy duty sweep net, a valuable tool in the field, for building insect collections, and avoiding awkward confrontations, because no one messes with someone using a sweep net.

What is this early spring insect?



Photo by Mary C. Legg, bugwood.org

To submit your guess, click the Guess the Pest logo or go to:

https://docs.google.com/forms/d/e/1FAIpQLSfU-PYLZnTRsol46hXmqgj8fvt5f8-JI0eEUHb3QJaNDLG_4kg/viewform?c=0&w=1



Welcome to Extension Plant Pathologist, Dr. Alyssa Koehler - *Alyssa Koehler, Extension Field Crops Pathologist*; akoehler@udel.edu

My name is Alyssa Koehler and I am the new UD Field Crops Extension Plant Pathologist. I look forward to meeting everyone and working with you and the Extension team at Carvel to help address plant disease issues in Delaware. I began working in plant pathology in 2009. I worked in a nematology lab for three years, spent a summer working with fungal diseases of pineapple, and worked with USDA APHIS developing pest risk models. I then went on to complete my Master's degree at North Carolina State University working on diseases of tobacco and *Rhizoctonia* species in home lawn turfgrass. As part of my M.S., I began working with a new crop called stevia. This project continued to develop and I completed my Ph.D. at NCSU researching diseases of stevia and assessing its viability as a new specialty crop in the US.

The main goal of my research is to reduce crop loss due to disease through applied field trials and laboratory investigations to better understand host biology. I joined UD in October 2018 and look forward to my first full field season here working with soilborne and foliar pathogens in small grains, corn, and soybeans. This year I will be conducting fungicide efficacy trials and will be active around the state surveying for soilborne pathogens in soybeans. My office is located at the Carvel Center in Georgetown. You can reach me at akoehler@udel.edu or (302) 856.1845, ext 571. Please feel free to contact me with any questions.

Using Degree Days to Predict Insect Life Cycles - *David Owens, Extension Entomologist*, owensd@udel.edu

Because insects generally have limited mechanisms of regulating their temperature, insect development and life history is tied to ambient temperature. This enables certain life history events to be predicted fairly accurately. The easiest way to calculate degree days is $DD = (\text{max temp} + \text{min temp})/2 - \text{Insect base temperature}$. A negative number counts as a 0. For example, seedcorn maggot's base temperature is 39, if a day's high was 50, low 30 then $DD = (50+30)/2 - 39 = 1$. This week in Georgetown, we hit peak overwintering seedcorn maggot adult activity (base 39, DD target 360, start Jan 1). Fields with recent manure incorporation may have maggot eggs in them. Other insects of interest are as follows:

Alfalfa weevil DD = 200-300, base 48°F.

San Jose scale DD = 380, base 51°F. Start sampling at DD 300. Maximum crawler activity DD 600.

Cereal leaf beetle egg lay DD = 327, base 46°F.

USDA Seeks Public Comments on Conservation Practice Standards

USDA's Natural Resources Conservation Service (NRCS) announced on March 11, 2019 that it is

seeking public input on its existing national conservation practice standards as part of implementing the 2018 Farm Bill. NRCS offers 150-plus conservation practices to America's farmers, ranchers and forest landowners to help them meet their business and natural resource needs on their working lands.

"With the help of NRCS, agricultural producers across the country are taking voluntary steps to improve their operations while benefiting natural resources," NRCS Chief Matthew Lohr said. "As part of our process of implementing the 2018 Farm Bill, we are asking agricultural producers, conservation partners and others to provide feedback on our practice standards in an effort to refine and enhance them."

NRCS is requesting public comments on how to improve conservation practice standards that support programs such as the Environmental Quality Incentives Program and Conservation Stewardship Program, which help producers cover part of the costs for implementing these practices. The comment period ends April 25, 2019. More information can be found in the [Federal Register](#).

These standards provide guidelines for planning, designing, installing, operating and maintaining conservation practices.

2018 Farm Bill

As part of implementing the 2018 Farm Bill, NRCS is reviewing conservation practices by:

- Evaluating opportunities to increase flexibility while ensuring natural resource benefits.
- Seeking avenues for the optimal balance between meeting site-specific conservation needs and minimizing risks of design failure and associated construction and installation costs.
- Ensuring, to the maximum extent practicable, the completeness and relevance of the standards to local agricultural, forestry and natural resource needs, including specialty crops, native and managed pollinators, bioenergy crop production, forestry and others.

Providing Comments

Comments may be submitted using any of the following methods:

- *Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.
- *Mail or hand-delivery:* Public Comments Processing, Attention: National Environmental Engineer, Natural Resources Conservation Service, United States Department of Agriculture, 1400 Independence Avenue SW, Room 6130-S, Washington, DC 20250.

NRCS will use comments as part of updating standards. For more information on how NRCS is implementing the Farm Bill, visit farmers.gov/farmbill.

Funding Available to Protect Delaware Wetlands

USDA's Natural Resources Conservation Service (NRCS) in Delaware is now accepting applications from landowners interested in protecting Delaware's wetlands through the Agricultural Conservation Easement Program (ACEP).

NRCS provides technical and financial assistance through the Wetland Reserve Easement (WRE) component of ACEP to restore, protect and enhance wetlands. Applications are accepted on a continuous basis, but the deadline to apply for fiscal year 2019 funding is **April 19, 2019**.

WRE applicants must have farm records established with USDA's Farm Service Agency and the land should have been owned for two years. Properties eligible for WRE include farmed wetlands that can be successfully and economically restored; former or degraded wetlands with a history of agricultural use; wetlands farmed under natural conditions; and "prior-converted" cropland converted on or before December 23, 1985. Conservation Reserve Program (CRP) land established with trees may also be eligible for enrollment through a waiver process.

Landowners have two options under WRE:

Permanent Easements - NRCS pays 100 percent of the easement value for the purchase of the easement. Additionally, NRCS pays up to 100 percent of the restoration costs.

30-Year Easements - NRCS pays the landowner 50 to 75 percent of the easement value for the purchase of the easement and 50 to 75 percent of the restoration costs.

“Conserving wetlands has tremendous benefits in Delaware including improvements to water quality as well as safeguarding wildlife habitat,” said Kasey Taylor, Delaware State Conservationist. “I encourage our farmers to engage with their local conservationists to learn more as conserving wetlands may be closer to you and more beneficial than expected.”

Applications are available at your local [USDA Service Center](#) and online at www.nrcs.usda.gov/GetStarted. Learn more about ACEP and other Farm Bill programs at www.de.nrcs.usda.gov/.

Funding Available to Help Delaware Farmers Improve Water Quality in Select Watersheds

Funding is available for Delaware farmers in the Choptank, Nanticoke, and Pocomoke watersheds to conserve and protect their land as part of the Delmarva Whole System Conservation Partnership - Field to Stream project. This effort focuses on effective nutrient management practices that will improve water quality and enhance wildlife habitat. Farmers interested in applying are encouraged to contact their local USDA Service Center by April 19, 2019.

More than \$58,000 is available to help farmers implement advanced nutrient management practices including variable rate nutrient application, autosteer, grid or zone soil sampling, nitrogen inhibitors, and tools that predict in-season nitrogen needs. These targeted practices will ensure the right amount, right source, right placement, and right timing of commercial fertilizers, manure, soil amendments, and organic by-products are properly land applied. These practices not only

protect soil and water quality but also air quality and enhance native habitats.

The Delmarva Whole System Conservation Partnership - Field to Stream project is a Regional Conservation Partnership Program (RCP) project led by The Nature Conservancy (TNC) and the Delaware Maryland Agribusiness Association (DMAA). Now in its fourth year, the project is working to increase the implementation of advanced nutrient management practices to reduce excess nutrients to the Chesapeake Bay. The project also uses science-based targeting of these practices to increase their effectiveness.

RCP is administered by the USDA Natural Resources Conservation Service (NRCS) and promotes coordination between the agency and its partners to deliver conservation assistance to producers and landowners. The Delmarva Whole System Conservation Partnership covers both Delaware and Maryland and brings additional resources to Delaware.

Interested producers must submit an application on or before April 19, 2019. Contact your local USDA Service Center for more information. In Sussex County, call 302-856-3990, ext. 3; in Kent County, call 302-741-2600, ext. 3; and in New Castle County, call 302-832-3100, ext. 3. Additional information on NRCS programs and services is available at www.de.nrcs.usda.gov.

Announcements

Farm Manager and Farming Assistant Positions with the Delaware Food Bank

Farm Manager

The Food Bank of Delaware is looking to fill the position of Farm Manager in our Newark Facility. The Farm Manager will supervise all steps of crop production and retail sales (farm stand, CSA and wholesale sales) at the Food Bank of Delaware's Newark Farm. The Farm Manager is also responsible for all components of the agricultural workforce development activities of Delaware Food Works, this includes but is not limited to development of curriculum, classroom and field instruction, recruitment of students, internships, job placement and tracking, scheduling guest lecturers and field trips.

Part Time Farming Assistant

The Food Bank of Delaware is looking to fill the position of Part Time Farming Assistant in our Newark Facility. The Farming Assistant will work with the Farm Manager in all steps of crop production at the Food Bank of Delaware's Newark Farm including maintaining outdoors vegetable gardens, indoors high tower gardens, farm plot. In addition the Farming Assistant will also assist the Farm Manager with all components of the agricultural workforce development activities of Delaware Food Works; this includes but is not limited to recruitment of students, classroom and field instruction, internships and field trips.

Additional details about both positions and application information are available online at:

<https://www.fbd.org/job-opportunities/>

Rotem Controller Workshop

Thursday, April 18, 2019 10:00 a.m.-4:00 p.m.
The Frankford Fire Company Hall
7 Main Street, Frankford, DE 19945

Rotem's Controllers set new standards in the poultry industry. These controllers enable poultry farmers to raise their flocks under the best conditions possible while reducing operating expenses and increasing efficiency. This Workshop will provide information to help you decide to use, whether you are a new grower or an existing grower. Put on by the University of Maryland Extension, along with the University of Delaware Cooperative Extension and Delmarva Poultry Industry, Inc., this Workshop will cover both standard and precision mode controllers.

This is a **free** workshop. Lunch will be provided.

To register go to Eventbrite (Free):

<https://www.eventbrite.com/e/rotem-controller-workshop-additional-location-added-tickets-58647031851>.

Any questions, please contact **Jenny Rhodes**, jrhodes@umd.edu, (410) 310-0103, **Jon Moyle** jmoyle@umd.edu, (410) 742-1178, or **Georgie Cartanza**, cartanza@udel.edu, (302) 632-3173

Sponsored by: Rotem, University of Delaware Cooperative Extension, Delmarva Poultry Industry, Inc., University of Maryland Extension

Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of March 28 to April 3, 2019

Readings Taken from Midnight to Midnight

Rainfall:

0.08 inch: March 31

Air Temperature:

Highs ranged from 76°F on March 30 to 48°F on April 1.

Lows ranged from 50°F on March 30 to 26°F on March 28

Soil Temperature:

50.6°F average

Additional Delaware weather data is available at http://www.deos.udel.edu/monthly_retrieval.html and <http://www.rec.udel.edu/TopLevel/Weather.htm>

Weekly Crop Update is compiled and edited by Emmalea Ernest, Associate Scientist - Vegetable Crops

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