



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

Volume 26, Issue 23

August 31, 2018

Vegetable Crops

Vegetable Insect Updates - *Bill Cissel, Extension Agent - Integrated Pest Management; bcissel@udel.edu and David Owens, Extension Entomologist, owensd@udel.edu*

Fields that started silking at the beginning of the major 2018 moth flight are being harvested right now. Please let us know how well your spray program worked. Your feedback is important to us to evaluate if any recommendations need to be adjusted for 2019. Moth capture has declined slightly at several locations, and Monday captures (<http://agdev.anr.udel.edu/trap/trap.php>) were slightly lower than last week's. Earworm flight may have peaked for the season.

Trap Location	BLT - CEW	Pheromone CEW
	3 nights total catch	
Dover	4	8
Harrington	3	44
Milford	63	127
Rising Sun	6	17
Wyoming	4	30
Bridgeville	6	19
Concord	8	27
Georgetown	2	19
Greenwood	10	---
Laurel	2	84
Seaford	3	12

This will be the last trap capture for 2018. Many thanks to all of our cooperators who graciously host blacklight and/or pheromone traps at their

locations. We are also grateful to Jon Baker with Trap Woods Inc., Harry Thompson with Thompson's Roadside Stand, and Donna Hamilton for sharing their trap capture data with us; their data is posted twice a week on the website. You can view season catches and graphs of previous year trapping results at the above link.

Fruit Crops

Extending Your Strawberry Season with Day Neutral Varieties - *Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu*

Plasticulture strawberry planting season is quickly approaching. Growers seeking to extend their strawberry seasons should consider planting a portion of their area to day-neutral varieties. Day-neutral strawberries start fruiting 12-14 weeks after planting and have the potential to give late fall as well as early April through July production. Currently, the three varieties that have shown the most potential for extended production on Delmarva are Seascape, San Andreas, and Albion.

Albion, in particular, has shown great flexibility for season extension. It is very flexible on when it is planted in the late summer or early fall. August plantings will yield some late fall production, particularly in high tunnels. While much less productive in the main Chandler season in the spring, it has some unique properties that make it valuable to growers. First, it will give some early production, ahead of Chandler. Second, even though production is

lower, it produces evenly over an extended period of time from April through July. In general, it will give 5-6 weeks more production than Chandler. It is a large, firm berry that, while not as sweet early in the season, has good quality in May and June.

Early August plantings of San Andreas will yield more fall production than Albion and San Andreas has comparable yields to Chandler in the spring with continued production through June. Both Albion and San Andreas have good quality and are firm berries that will stand up to regional shipping.

Seascape has been around for a long time and was the first of the larger sized day-neutral berries to show commercial potential in our area; however, Seascape has a softer berry and does not ship well so is best adapted to U-pick and local sales. Some grower in the region have had luck growing Seascape with multiple spring plantings spaced about three weeks apart from March through June giving summer and fall sales. Both Albion and San Andreas can also be planted in the spring for extended summer sales. Production in the heat of July and August will decline or stop unless there is a cool summer.

Because these day-neutral varieties keep blooming throughout the season, it is critical to maintain fertility, particularly with nitrogen, potassium, and calcium through fertigation. Albion, in particular, has high nitrogen needs to produce well. Disease management is also critical because these varieties bloom for an extended season. Gray mold fungicide sprays must be applied regularly throughout the extended seasons.

Agronomic Crops

Soybean Insect Scouting Update - David Owens, *Extension Entomologist*, owensd@udel.edu and Bill Cissel, *Extension Agent - Integrated Pest Management*; bcissel@udel.edu

The most economically important insect present in soybean fields right now is corn earworm. There are reports from south and southwest Delaware of a few fields above threshold. Pay

special attention to late planted, open canopy fields. Pyrethroids should do a good job unless a field is 4x above threshold, in which case you may want to look at an alternative or additional mode of action. Stink bugs are present in low numbers in most fields, mostly greens but also with browns and the occasional brown marmorated. As a reminder, thresholds are 5 bugs in 15 sweeps, 2.5 for seed production. Defoliator complex members include green cloverworm, bean leaf beetle, aphids, and the occasional soybean looper. Virginia has been experiencing significant looper pressure in the last couple of weeks.

As you walk into fields, you may also see flagged leaves - 1 trifoliolate that has wilted. This is a sign of possible *Dectes* infestation. Examine the wilted petiole where it would attach to the stem. If the petiole core is red and hollowed out, *Dectes* is present. Fields where you see a lot of this activity should be prioritized for timely harvest.

Sorghum Insect Scouting Update - David Owens, *Extension Entomologist*, owensd@udel.edu

Corn earworms are present in sorghum heads. One earworm per head can reduce yields by about 5%. When scouting, flip over a few leaves to look for sugarcane aphids, *Melanaphis sacchari*. I have only seen one this season. It is yellow, smooth bodied, and with short, black cornicles or 'tailpipes'. Southern states use a threshold of 30+% of plants infested with 50 - 125 PER LEAF. I don't think we will see anything near that level this year. The other common yellow aphid in sorghum is the white sugarcane aphid, *Sipha flava*. It has long hairs on its body and no black markings. It is only a seedling pest.

Growing Degree Days (GDD) and Rainfall Through August 28th - Jarrod O. Miller, *Extension Agronomist*, jarrod@udel.edu

If spring weather caused you to plant fields spaced out from April to June, you may get a good idea of what the weather can do to a crop. Considering the varying planting dates, flooding,

drought, and high temperatures, we have about three years' worth of weather in one summer to observe the effects on growth, pollination, and kernel abortion.

Most later planted fields (mid-June) probably saw decent temperatures and rainfall for pollination, while earlier planted fields may have more tipback during the mid-July heatwave. Kernels forming under stress may also abort, which could certainly be seen with temperatures above 90 the week of August 17th and our current heat wave. Still, nighttime temperatures have often been below 72°F, so that should help.

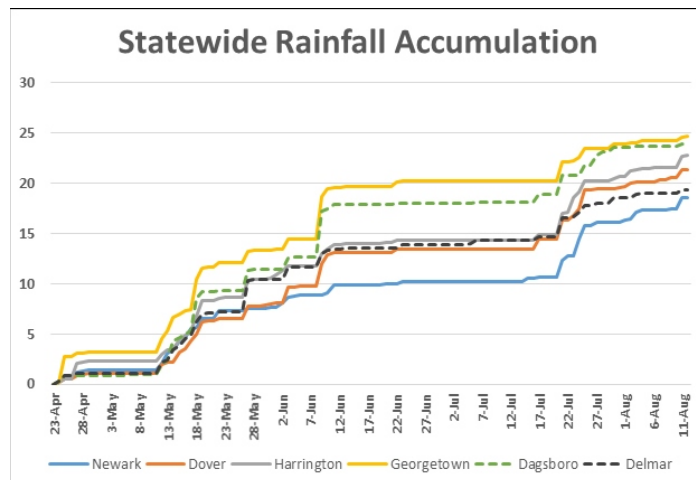
Looking at GDD, any fields planted in April (that survived) should be starting or at blacklayer. Most fields planted in May across the state should be starting or full within R5 (dent). The only way you can be sure is to walk out and check your corn.

- R1 (Silking): 1400 GDD
- R2 (Blister): 1660 GDD
- R4 (Dough): 1925 GDD
- R5 (Dent): 2190-2450
- R6 (Blacklayer): 2700

Table 1: Accumulated growing degree days based on planting dates through August 28th.

If you planted ↓	Sussex	Kent	New Castle
22-Apr	2956	2895	2794
29-Apr	2903	2848	2760
6-May	2795	2738	2662
13-May	2691	2632	2564
20-May	2580	2525	2470
27-May	2422	2366	2322
3-Jun	2270	2215	2171
10-Jun	2147	2098	2058
17-Jun	2011	1971	1929

We still cannot complain about rainfall too much. There have been a few storms popping up across the state, enough that dryland should have received a little moisture. Since mid-August, we have received less than an inch in most parts of the state, and the heat this week will probably stress corn and beans.



Prepare Now for Small Grain Planting Season

- Phillip Sylvester, Extension Agent - Agriculture, Kent County, phillip@udel.edu; Jarrod O. Miller, Extension Agronomist, jarrod@udel.edu; Cory Whaley, Extension Agent - Agriculture, Sussex County, whaley@udel.edu; Amy Shober, Extension Specialist - Nutrient Management and Environmental Quality, ashober@udel.edu; Mark VanGessel, Extension Weed Science Specialist, mjv@udel.edu; Bill Cissel, Extension IPM Agent, bcissel@udel.edu; and Alyssa Collins, Extension Plant Pathologist (Penn State), collins@psu.edu

Winter wheat and barley planting season will be here soon. Now is a good time to review yield, test weight, and disease resistance data from land-grant university variety trials. This data will help you select varieties adapted to our region. Seed may be in short supply this year, so be sure to inquire about availability as soon as possible. Here are some suggestions to help you get the most out of your small grains as we head into the fall.

Determine if small grains are profitable for your own operation. The idea that a small grain crop pays for itself and double crop soybean crop seed is antiquated. Small grains have become an intensive crop to grow in our region, mainly due to an increase in Fusarium head blight (FHB), which is also known as head scab. We suggest that you complete a [crop budget](#) using your own realistic yields, input prices, and expected grain prices. According to USDA-NASS, average wheat and barley yields in Delaware hover around 65-70 and 80-85 bushels per acre, respectively.

Remember, the crop budgets are only as good as the information you enter.

Select varieties with disease tolerance or resistance, particularly for FHB. Although complete resistance for FHB does not yet exist in commercial wheat varieties, researchers have shown that planting a moderately resistant variety, in combination with a well-timed fungicide application at flowering, will significantly lower mycotoxin (i.e. DON) levels compared to a susceptible variety. Now is the time to take the first step toward FHB management by planting a moderately resistant variety.

Read [this article](#) about managing Fusarium head blight in 2019. Pay special attention to the part about not relying on fungicides alone for FHB management.

Review land-grant university data from local misted nurseries to determine if your wheat variety has some resistance against FHB. Researchers screen many commercial varieties for resistance levels by creating an extremely favorable environment for FHB in the misted nursery over the entire time a variety is flowering. We are fortunate to have a couple misted nurseries in the region, including one in [Maryland](#) and another in [Virginia](#). Select a high yield variety, with good test weight based on land-grant university performance data from [Delaware](#), [Maryland](#), and [Virginia](#).

Look for varieties that also have good resistance against powdery mildew, leaf blotch complex (i.e. tan spot, stagonospora, and septoria), and glume blotch. Although there has been a lot of focus surrounding FHB, don't forget that these common foliar diseases can also be managed by planting resistant varieties. Avoid varieties that are completely susceptible to our common foliar diseases. This may prevent you from having to make a difficult fungicide timing decision as you approach flowering.

Clean any seed you saved legally from the previous harvest before planting. [University of Maryland](#) provides information about which varieties of seed can be saved legally. Be wary of seed that came from fields that were infected with glume blotch, smut, or scab. It may be useful to take a sample, clean it, and then send

to a lab for germ testing. (Delaware Department of Agriculture can do this testing for a nominal fee.) Avoid using low germ seed. Commercial purchased seed is required to have a tag with germination rates, along with information about purity and weed seed. It would not hurt to ask for a copy prior to planting seed.

Perform a germination test on any seed you have saved. The [University of Maine](#) has an easy method for estimating germination using paper towels to simulate soil. Be sure to use at least 20-25 seeds in your germination test to get an accurate test.

Consider planting small grains following soybeans, rather than corn. Fusarium head blight is caused by a fungal pathogen that also causes disease in corn. The fungus overwinters on corn residue, so planting small grains after full season soybeans may reduce field level pressure from FHB. Furthermore, there may be an opportunity to skip the tillage passes because there is less residue to deal with.

Some type of tillage may be helpful if you are going to plant small grains after corn. Practices which bury corn residue can result in lower field level pressure from FHB. If you use vertical tillage implements, consider making multiple passes to facilitate the breakdown of corn residue into smaller pieces. Make the first pass right after harvest, following up with additional passes prior to planting. Do not forget to include the cost of tillage in your crop budget. Another reason to for tillage is uniform crop emergence. When late tillers push up as a result of uneven residue, they flower later than the main stems. This will make timing your scab control fungicide application very challenging.

Consider using a seed treatment fungicide. These treatments do a good job against pathogens that can be carried over on or in seed like the bunts and smuts, glume blotch and scab. Treatments are also effective at reducing stand and yield loss from seed rots and early season diseases like those caused by Fusarium, Pythium and Rhizoctonia. This can be especially important if planting is delayed and the seed bed is cool and wet. Fungicidal treatments will not provide control of bacterial diseases or viruses. Seed treatment will also not protect your wheat and barley from the head scab that

occurs in the spring, it only provides protection for the damping off that may occur at germination as the result of planting some scabby seed.

Read this factsheet about [Barley Yellow Dwarf in Small Grains](#). Four common species of [aphids](#) can infest small grains in Delaware and all species are capable of vectoring [Barley Yellow Dwarf \(BYD\)](#) virus. However, the economic impact from BYD is still unclear in Delaware. Furthermore, only the green bug aphid is known to cause direct damage to small grains in the fall. If BYD or green bug aphids have been a problem in the past in your fields, and you suffered economic losses, consider implementing management options outlined in the factsheet.

Take a soil test prior to planting small grains and make a fertilizer application, if needed. Fall is a great time for soil sampling. The [University of Delaware](#) recommends application of small amount of nitrogen at planting. You can save some money by combining nitrogen, phosphorus, and potassium into one mix (provided all these nutrients are needed). Be sure to follow your nutrient management plan. The target pH for small grains is 6.0; do NOT apply lime if your soil pH is higher than 6.0. Manganese deficiencies in barley and wheat are common in some parts of the state, and can be induced when the pH reaches 6.3 or above. If your soil test is already above 6.0, consider adding manganese to your mix, or making a foliar Mn application in the spring.

Be sure to control weeds prior to or at planting. Conventional tillage with chisel plowing will eliminate weeds present at planting, but if planting no-till or relying on vertical tillage, then use a non-selective herbicide (paraquat or glyphosate) to control emerged weeds. Vertical tillage is not an effective method of killing weeds. Zidua or Anthem (same active ingredients) can be applied once the wheat has begun to spike through the soil; applications prior to this time can result in significant crop injury. Zidua or Anthem are not labeled for barley. Consider a fall herbicide application for fields with heavy weed pressure, or fields with Italian ryegrass, or planted early in the fall; refer to the [Mid Atlantic Weed Management Guide](#) for options. Fall herbicide options may not eliminate the need for a spring

application, but applications in the fall are more consistent and provide more herbicide options. Furthermore, with the mild winters we have had, winter annual weeds are larger and more robust at time of spring applications and often the small grain crop interferes with getting good herbicide coverage.

Plant small grains during the *optimal* window to give the plants plenty of time to germinate and produce fall tillers, which are important for achieving maximum yield. The optimal time to plant barley is in the first half of October; the optimal time to plant wheat is within the two-week period following the Hessian fly-free date (New Castle: Oct. 3, Kent: Oct. 8, and Sussex: Oct. 10). Yes, we have all heard the stories of planting wheat in December and the ex post facto claims of “yielded just fine”. Sure, you can plant that late, just like you can plant corn in June and soybeans in August. However, they will not, on average, produce the highest yields. Be warned-planting *prior* to these dates can cause too much growth, and can serve as an attractive host to unwanted insect pests, such as aphids and Hessian fly, and foliar disease.

Plant 30-35 *live* seeds per square foot (1.3-1.5 million *live* seeds per acre). To convert to seeds per foot of row, multiple seeds per square foot × (row width/12). For example, 35 seeds per square foot × (0.625 for 7.5 in rows) = 22 seeds per foot of row. We do not recommend using pounds (bushels) per acre because seed size can vary greatly between varieties. Ask for the seed size prior to purchasing seed so you can purchase the correct quantity. Seeds should be planted at a depth of 1-1.5 inches. Steps for drill calibration can be found in section 4 of this guide from the [University of Kentucky](#).

Walk your fields after planting. After emergence, take stand counts and monitor the crop for insects, diseases, and weeds.

Options for Harvest-Aid Treatments for Field Corn - Mark VanGessel, *Extension Weed Specialist*; mjv@udel.edu

There have been several questions regarding options for harvest-aid treatment. A harvest-aid may be a consideration to dry down vegetation

prior to harvesting and to reduce foreign matter in the harvested grain. There are a number of things to consider including: what weeds need to be treated; how will harvest-aid be applied; stage of the crop, and size of the weeds.

Be realistic on expectations of these products; while they are herbicides they were developed to control much smaller weeds than the size treated as harvest aids. Most of the products listed below will not kill plants; they are likely to burn off leaves, but not impact lower stems or vines. These products will not affect weed seed production. Reducing leaf material and foreign matter entering the combine should be the goal, not killing the weeds present.

A few more considerations:

- With the hot temperatures, the risk of drift will increase with these products
- Spray coverage is important for the contact herbicides (Defol and Gramoxone), so be sure to apply in 20 gpa or higher
- If morningglory is present, can a combine run through the patches without pulling down the corn?
- This time of year will favor translocation, so glyphosate is likely to cause more damage to desirable plants
- Read the product label carefully for all instructions and restrictions

Products labeled:

Defol (sodium chlorate) is labeled for applications 14 days prior to harvest. Defol will dry down plants but it does not have herbicide activity. Dry down is slow; expect at least 14 days for dry down. Control of morningglory can be erratic.

Glyphosate is labeled but must be used with care do to potential injury to desirable vegetation. Apply glyphosate at 35% moisture or less and black layer has formed. Allow 7 days between application and harvest. Refer to the glyphosate label for rates.

Gramoxone Inteon is labeled for broadcast treatments. Application rates are 1.2 to 2 pts/A plus a non-ionic surfactant, and must be applied at least 7 days prior to harvest. Be sure to read the label for all precautions.

Aim is labeled for applications up to 3 days before harvest. Aim will only effect a few weed species and will not dry down grasses.

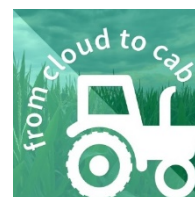
2,4-D amine is labeled but due to volatility and off-target movement, use of 2,4-D is not recommended. Applications with air temperatures above 85 degrees increases the likelihood of off-target movement. Application timing is after the hard dough or dent stage.

General

New Podcast on Delmarva Ag Topics

From Cloud to Cab is a podcast series for farmers on the Delmarva Peninsula and in the Mid-Atlantic Region, offering timely conversations with scientists, policymakers, agribusinesses, conservationists and other farmers. The goal is to offer news, updates and different perspectives in a fresh and accessible format, especially when our listeners don't have the time to sit down and read an article! From Cloud to Cab is hosted by Josh Bollinger with the University of Maryland Harry R. Hughes Center for Agro-Ecology of Queenstown, Md., and Jen Nelson with Resource Smart LLC of Greenwood, Del.

If you check it out you will hear some familiar voices from University of Delaware Cooperative Extension. Here's a link to all the podcast episodes: <https://soundcloud.com/from-cloud-to-cab>. You can also subscribe on iTunes or Google Play. If you have questions about From Cloud to Cab or about how to access the podcasts, please contact Jen Nelson at jen.nelson@resourcesmartllc.com.



Fall Control of Perennial Weeds - Mark VanGessel, *Extension Weed Specialist*; mjv@udel.edu

Fall is often the best time and the most convenient time to treat most perennial weeds because it is the time that plants are best able to translocate the herbicide to the roots where it will do the most good. When considering fall weed control the emphasis should be on what the patch of weeds will look like next spring or summer not the amount of dead stems this fall. Also, it is important to consider that a fall application will not eradicate a stand of perennial weeds; the fall application will reduce the stand size or the plant vigor, but applications in consecutive years are likely needed. Fall application of glyphosate is the most flexible treatment for most perennial weeds such as bermudagrass, Canada thistle, common milkweed, common pokeweed, yellow nutsege, horsenettle and johnsongrass. Rates of 1 to 1.25 lb acid per acre are consistently the most economical (or about 1.5X the normal use rate for annual weeds). Dicamba (Banvel) at 2 to 4 pints is also labeled for artichoke, bindweeds, dock, hemp dogbane, horsenettle, milkweeds, pokeweed or Canada thistle. Planting small grains must be delayed after dicamba application 20 days per pint of dicamba applied. Fall herbicide applications should be made to actively growing plants. It is best to spray prior to mowing the corn stalks and allowing plants to recover after harvest. Allow 10 to 14 days after treatment before disturbing the treated plants. If fall applications are delayed, remember weed species differ in their sensitivity to frost; some are easily killed by frost (i.e. horsenettle) others can withstand relatively heavy frosts. Check the weeds prior to application to be sure they are actively growing.

Take the Integrated Weed Management Quiz - Mark VanGessel, *Extension Weed Specialist*; mjv@udel.edu

As troublesome herbicide resistant weeds continue to develop and spread across the United States, effective weed management strategies require the use of multiple effective techniques rather than relying on a singular

method of weed control. Integrated weed management (IWM) is the practice of utilizing multiple weed management tactics to achieve weed suppression superior to what a single tactic could provide.

This brief, 20-question quiz is anonymous and will provide insight to the understanding and adoption of IWM practices across the United States.

Click here to take the survey:
<https://www.surveymonkey.com/r/SD9RT6R>

This IWM quiz was written by weed scientists from 14 universities and the USDA with funding from the USDA Agricultural Research Service. Find more information on integrated weed management at www.integratedweedmanagement.org.

Guess the Pest! Week #22 Answer: Helicoverpa zea, Corn Earworm - Bill Cissel, *Extension Agent - Integrated Pest Management*; bcissel@udel.edu

Congratulations to Amanda Heilman for correctly identifying the insect as an adult corn earworm and for being selected to be entered into the end of season raffle for \$100 not once but five times. Everyone else who guessed correctly will also have their name entered into the raffle. Click on the Guess the Pest logo to participate in this week's Guess the Pest challenge!

Guess the Pest Week #22 Answer: *Helicoverpa zea*, commonly known as corn earworm



The moth in the photograph is an adult *Helicoverpa zea*, commonly referred to as a corn earworm. The adult moth is a nectar feeder and not considered a pest. However, corn earworm larvae are considered by some to be the most economically important crop pest in North America. They are highly polyphagous meaning they feed on many different species of plants. Corn, especially sweet corn, is a preferred host plant. However, they also attack soybean, sorghum, snap bean, tomato, and cotton to name a few. Larvae prefer to feed on reproductive plant structures including blossoms, buds, and fruits. It is because of this large host range, and the fact that *Helicoverpa zea* larvae are so destructive that they are known by several other common names including tomato fruitworm, cotton bollworm, and podworm.



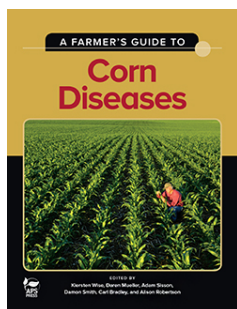
[What is this disease?](#)



Guess the Pest! Week #23 - *Bill Cissel*,
Extension Agent - Integrated Pest Management;
bcissel@udel.edu

Test your pest management knowledge by clicking on the GUESS THE PEST logo and submitting your best guess. For the 2018 season, we will have an "end of season" raffle for a \$100.00 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 week, one lucky participant will also win A Farmer's Guide To Corn Diseases (\$29.95 value).



You can't win if you don't play!

Announcements

Sussex Master Gardeners Summer & Fall Workshops

The Master Gardeners are planning an interesting array of workshops for the summer and fall. The classes are free, unless otherwise specified, and held at the Elbert N. and Ann V. Carvel Research and Education Center, 16483 County Seat Highway, Georgetown, DE 19947.

Pre-register for workshops by contacting Tammy Schirmer at (302) 856-2585, ext. 544 or by email at tammys@udel.edu. You can also register online at <http://extension.udel.edu/lawngarden/mg/sussex-county/workshops/>.

Thursday, September 13, 1:00 p.m. Master Gardener Sandi Dew will teach us how to make **Draped Hypertufa**. New to hypertufa or looking for new hypertufa project? This is a new, messy and fun adventure making draped hypertufa flowerpots. **Limit 14 participants. Fee \$15.00.** (please register, but receiving payment reserves your spot) Wear old clothes, bring an old bath towel and latex gloves.

Tuesday, September 25, 1:00 p.m. Master Gardener Judy Pfister will lead a program on common **Native**

Plant Seed Harvesting. Workshop will also include propagation including when to harvest, how to dry and store them. We will also discuss testing seeds for viability before planting. Weather permitting, we will go into the demo garden to identify seed heads of fall bloomers and select some seeds for harvesting back in the classroom. Please bring a pair of tweezers and a magnifying glass if you have them.

Tuesday, October 2, 6:30 p.m. Master Gardener Terry Plummer will present a workshop on **Landscaping with Native Plants.** Make your garden life easier with less watering and less fuss. Plant native trees, shrubs, and perennials for a delightful landscape. Terry will introduce you to a wide variety of native plant materials, that will draw insects and the birds that love to eat them to your garden.

Tuesday, October 16, 1:00 p.m., Woodland Trail Master Gardeners will lead the group along a trail through the woods. The trail invites attendees to enjoy the woods and learn interesting things about trees, soil, and the residents of the woods. The trail is about a 40-minute walk. Wear closed-toe shoes and long-sleeved shirts or jackets.

Tuesday, October 23, 1:00 p.m., Woodland Trail Master Gardeners will lead the group along a trail through the woods. The trail invites school-aged children to enjoy the woods and learn interesting things about trees, soil, and the residents of the woods. The trail is about a 40-minute walk. Children must wear closed-toe shoes and long-sleeved shirts or jackets.

Tuesday, October 30, 6:30 p.m. Master Garden Joe Parish will discuss **Bats**, an organic choice for insect control. Bats are not just a cute Halloween creature but should become a part of your garden planning. Why not invite some in today.

Master Gardeners are working volunteers and are supported by Delaware Cooperative Extension through the University of Delaware and Delaware State University Extension offices. Delaware Cooperative Extension's policy that no person shall be subjected to discrimination on the grounds of race, creed, color, sex, age, religion, national origin, sexual orientation, veteran or handicap status. If you have special needs that need to be accommodated, please contact the office two weeks prior to the event.

Growing Farmers Workshops

Coverdale Farm Preserve
543 Way Road, Greenville, DE 19807

Coverdale Farm Preserve is a 377-acre farm and nature preserve located in Greenville, DE. We are pleased to offer a series of free hands-on workshops for farmers of all levels of experience and scale of operation.

Registration is required. To Register please contact Melinda Hardie: melinda@delnature.org

Fall 2018 Series

Troubleshooting in Specialty Crop Production

Wednesday, September 19, 10:00am – 12:00pm

Rain date: Friday, September 21, 10:00am – 12:00pm

Keep your plants thriving and productive. Learn to identify common pests including insects, plant diseases, nutrient deficiencies. Discover preventative strategies, steps, and solutions to compromising conditions in order to maximize yields.

Techniques for Successful Lettuce Production

Wednesday, October 10, 10:00am – 12:00pm

Rain Date: Friday, October 12, 10:00am – 12:00pm

Lettuce is a fast growing and profitable 4-season crop. Explore our production fields to learn the methods we have refined over the years, the varieties that do best in both cool and hot seasons, as well as harvesting, cleaning, and storage tips.

Season Extension of Specialty Crops

Wednesday, October 17, 10:00am – 12:00pm

Rain Date: Friday, 19, 10:00am – 12:00pm

Vegetables are the focus of this workshop with particular attention to selected varieties trialed for season extension. Learn how to maximize yields in shoulder season in both protected culture and field grown situations.

Advanced Soil Health & Cover Crops Workshop

Wednesday, September 12, 2018 9:00-3:00

St Jones Reserve Coastal Training Center
818 Kitts Hummock Rd Dover, DE 19901

Topics Include:

- Increasing soil organic matter
- Soil biology
- Impacts of herbicides on cover crops

- Benefits of species and mixes
- Farmer case studies

Featuring:

Dr. Sjoerd Duiker from Penn State
& Dr. Mark VanGessel from UD

CEU's are pending for this free workshop.

Lunch is included.

Contact Jason Challandes for more information or to register at jchallandes@desu.edu or (302) 388-2241.

Cooperative Extension Education in Agriculture, 4-H and Home Economics, Delaware State University, University of Delaware and United States Department of Agriculture cooperating, Dr. Dyremple B. Marsh, Dean and Administrator. It is the policy of Delaware Cooperative Extension that no person shall be subjected to discrimination on the grounds of race, color, sex, disability, age, or national origin.

Summer Cut Flower Tour
Wednesday, September 12, 2018
8:40 a.m.-2:30 p.m.

Sponsored by:

University of Maryland Extension

Co-sponsors:

Association of Specialty Cut Flower Growers
Maryland Cut Flowers Growers Association

LOCATIONS

Loveville Produce Auction
40454 Bishop Road, Mechanicsville, MD

Weaver's Cut Flower Farm
25964 Bishop Road, Mechanicsville, MD

Jacob Hertzler Farm
37011 New Market Road, Charlotte Hall, MD

SCHEDULE

8:40 – 9:00 Check-in/Registration

9:00 – 10:00 Loveville Produce Auction

10:00 – 11:30 Weaver's Cut Flower Farm

11:30- 12:15 Ko Klaver – Botanical Trading
Company, Bulbs for Cut Flowers

12:15 – 12:45 Lunch: Fried Chicken, Local Produce
Fixin's and Homemade Ice Cream

12:45-1:15 Travel to Jacob Hertzler's in Charlotte Hall

1:15 – 2:30 Jacob Hertzler and Family Cut Flower
Farm

Times are approximate. Farm stop times can vary.

University of Maryland Extension programs are open to all citizens without regard to race, color, gender, disability, religion, age, sexual orientation, marital or parental status, or national origin.

REGISTRATION

Cost: \$30 per person

Lunch is not guaranteed after September 10.

No refunds after September 11.

To register with a credit card go to:

<http://2018cutflowertour.eventbrite.com>

[A form for mail-in registration is available.](#)

For more information on the program or registration call (301) 596-9413 or email sklick@umd.edu

**2018 Mid-Atlantic Crop Management
School**

November 13-15, 2018

Princess Royale in Ocean City, MD

The Mid-Atlantic Crop Management School is held every November the week before Thanksgiving. This 2.5 day workshop has five classrooms supporting continuing education in Crop, Pest and Nutrient Management as well as Soil & Water. This school is organized by Cooperative Extension from the University of Delaware, University of Maryland, Virginia Tech and West Virginia University. Other support comes from Mid-Atlantic State Agricultural Departments and the Natural Resources Conservation Service.

We expect the registration site to go up by September 4th, right after Labor Day.

Please watch this webpage for when the registration site goes live:

<https://sites.udel.edu/agronomy/cropschool/>

Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of August 23 to August 29, 2018

Readings Taken from Midnight to Midnight

Rainfall:

No rainfall recorded

Air Temperature:

Highs ranged from 95°F on August 29 to 78°F on August 23.

Lows ranged from 77°F on August 29 to 56°F on August 24

Soil Temperature:

74.4°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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