Ag Notes
Harford County Newsletter

UNIVERSITY OF MARYLAND EXTENSION

June 2023

University of Maryland Extension

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M—F 8:00 a.m.—4:30 p.m.

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INSIDE THIS ISSUE:

Hello, Harford County!

June is National Dairy Month! Hit Maryland's Ice Cream Trail to celebrate!

I hope everyone had a great Memorial Day weekend. It has certainly been excellent weather for making hay, although I don't think any of us would mind a nice rainstorm which we could seriously use. While most of the northern counties of MD and Southern PA have gotten some moisture, Harford County has been stuck in an unfortunate dry stretch of weather. The last time we picked up more than 0.5" of rain was over 30 days ago and we are currently running about 8-10" short on precipitation for the year. Couple that with an abnormally dry winter, our soil moisture is getting depleted. Fortunately we have also been stuck with unusually cool temperatures, which I think has held off the major drought conditions; at least for now.

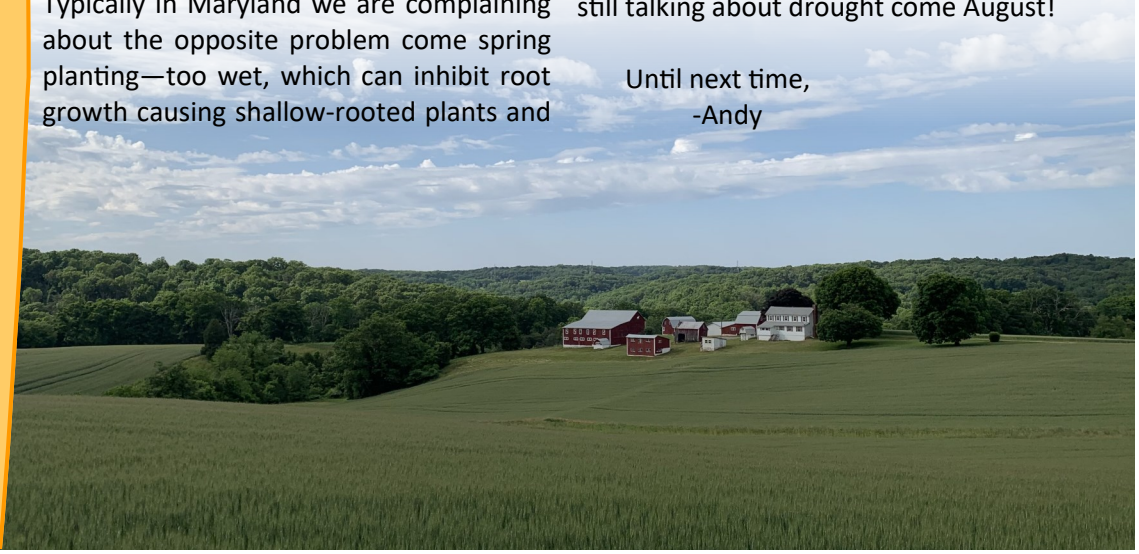
You may be wondering what early drought conditions means for crops, and the answer is it depends on how long conditions remain droughty.

For our vegetable crops, many of which are transplanted, this means that you have to crank up the irrigation to keep those soils moist while the delicate transplants develop roots. However for rainfed field crops, such as corn and soybeans, early season droughts can actually be beneficial, assuming it is not so severe that plants die and rain eventually arrives. Typically in Maryland we are complaining about the opposite problem come spring planting—too wet, which can inhibit root growth causing shallow-rooted plants and can also cause root-rotting diseases leading to total plant death. However, a little bit of moisture stress during early vegetative growth, say V2-V8 in corn, can actually benefit the crop later in the season because the plants will be much deeper rooted (assuming there's no hard pan) and can access moisture when they most need it, during tassel and grain fill. Research indicates that drought stress before V13 stage has very little, if not any, affect on yield. However, from V13 to silking, drought stress will significantly affect corn grain yield.

Fortunately most of the young crops are still hanging on ok, and have yet to exhibit the tell-tale leaf curling. As long as we can avoid that condition and get some much-needed timely rains, we still have potential for big yields. If droughty conditions persist into late vegetative and reproductive stages, then we should expect reduced yields.

For soybeans, as long as the plants are not showing signs of wilting they should still have decent yield potential. Even if soybeans do start showing signs of drought stress in early vegetative growth, they can still rebound with near full yield potential as long as moisture returns around R1. The most critical time for soybeans to have adequate moisture is R4 and R5; I sure hope we are not still talking about drought come August!

Until next time,
-Andy



Ag Business

Assistance for Organic Transition and RCPP

Genevieve Lister, Partnership Coordinator/State Public Affairs Officer
USDA-NRCS, Maryland

NRCS recently announced two funding opportunities for producers and partners that we'd like to ensure you are aware of:

Organic Transition Initiative

The first is a new Organic Transition Initiative to help producers with a new organic management standard under the Environmental Quality Incentives Program (EQIP). The standard allows flexibility for producers transitioning to organic production to get the assistance and education they need such as attending workshops or requesting help from experts or mentors. It supports conservation practices required for organic certification and may provide foregone income reimbursement for dips in production during the transition period.

Higher payment rates and other options are available for underserved producers including socially disadvantaged, beginning, veteran, and limited resource farmers and ranchers. Maryland farmers, forest landowners, and other producers beginning or in the process of transitioning to organic certification should apply at their local USDA Service Center by **June 19** to be considered for funding this year.

NRCS is also looking to enter into agreements to hire six organic technical experts and one organic research position across the nation. A Notice of Funding Opportunity, closing on **June 11**, outlines requirements for proposals from regional organizations and partners.

Regional Conservation Partnership Program

Second, the application period is now open for the Regional Conservation Partnership Program (RCPP).

RCPP leverages a voluntary approach to conservation through public-private partnerships. Up to $500 million is available this year nationwide, and applications are being accepted now through August 18. National funding priorities are projects that support climate-smart agriculture as well as urban agriculture and underserved farmers and ranchers. This is also a great opportunity to leverage resources to advance partner priorities in the Chesapeake Bay.

NRCS will host a webinar for potential applicants. To receive calendar invites for these webinars please contact RCPP@usda.gov.

- Wednesday, June 7th from 2-3:30 ET, Click here to join.

For those of you familiar with RCPP, you may be happy to know that NRCS has embarked on a concerted effort to streamline and simplify RCPP and improve the experience for partners, producers and employees. Action teams are currently working to improve the following areas:

- Simplifying and Reducing the Number of Agreements
- Reducing Lengthy RCPP Easement Transactions
- Improving the RCPP Portal
- Consistent Guidance and Training for Employees and Partners
- Simplifying the Technical Assistance Structure
- Improving the Conservation Desktop
- Simplifying the Partner Reimbursement Process

Turf

Turfgrass Field Day

The University of Maryland Turfgrass Program invites you to attend the annual Field Day on Tuesday, July 18th, 2022 (12:30-7:00 PM) at the Paint Branch Turfgrass Facility (395 Greenmead Drive, College Park, MD 20740).

Schedule

Sign In: 12:30-1:00 PM

Research Plot Demonstrations: 1:00-5:00 PM

- Turfgrass Pathology Trials with a focus on dollar spot, brown patch, gray leaf spot (Dr. Fereshteh Shahoveisi), and nematodes (Dr. Benjamin Waldo and Dr. Fereshteh Shahoveisi)
- Variety Trials (Dr. Tom Turner and Mr. Geoffrey Rinehart)
- Organic Lawn Care Trials (Dr. Mark Carroll and MS. Kelly Nichols)
- Effect of Mowing Height on Weed Encroachment (Dr. Tom Turner and Mr. Dave Funk)

Cornhole Tournament, Dinner: 5:00 – 7:00 PM

Email ExecDir@MDTurfCouncil.com to register.

Viruses in High Tunnel Tomatoes

Jerry Brust, Vegetable IPM Specialist
University of Maryland Extension

In the last week or so high tunnel tomato plants have been reported that look a bit squirrely. I thought it was possibly herbicide or virus or nutrient problems. After eliminating the first and third possibilities we had the plants tested for a battery of viruses; there were three viruses found. The most unusual one was the Pepino mosaic virus, which belongs to the Potexviruses. This virus is very easily transmitted mechanically and has a low seed transmission rate. Seed transmission occurs at rates of less than one in a thousand when seed is not properly cleaned. The virus is external, contaminating the seed coat and not the embryo or endosperm. Symptoms vary greatly with fruit marbling being the most typical and economically devastating symptom. You can also have fruit discoloration, open fruit, leaf blistering or bubbling, leaf chlorosis and yellow angular leaf spots. The severity of the Pepino mosaic virus symptoms is dependent on environmental conditions. As the infected plants mature the foliar symptoms usually disappear, but not the fruit problems. Prevention of infection is through stringent hygiene measures as the virus is spread primarily by mechanical methods. The Pepino mosaic virus is a newer one but is appearing more often in tomato production areas.

The other two viruses found were more common: Tobacco mosaic virus and tomato mosaic virus. Tobacco mosaic virus (TMV) is one of the most highly persistent tomato diseases because it can remain viable without a host for many years and it is able to withstand high temperatures. Both viruses are spread primarily by mechanical methods. Workers and their equipment can become contaminated when they touch infected plants. Symptoms are rather general and appear as yellow-green mottling on leaves with flowers and leaflets being curled, distorted, and smaller than normal in size. Generally, the fruit from TMV infected plants do not show mosaic symptoms but may be reduced in size and number and may develop an internal browning that most often appears in fruits of the first cluster. Severe strains of TMV and tomato mosaic virus can cause the lower leaves to turn downward at the petiole and become rough and crinkled. Some tomato varieties when infected with TMV or tomato mosaic virus can develop dead areas on leaves, stems and roots. As with the Pepino mosaic virus the best control for these two viruses is strict hygiene and not using contaminated seed.

New Pumpkin Budgets

Nate Bruce, Farm Business Management Specialist
University of Delaware

Enterprise budgets for producing pumpkins using either plastic and drip irrigation or no-till have been created for the 2023 growing year. Returns for pumpkins are given in either pounds per acre or pumpkins per acre if selling directly to consumers. You can use these budgets to estimate your production costs and returns. The budgets are in Excel. The first tab contains research estimated costs and returns. The second tab allows you to enter your own costs and returns. Access the Pumpkin Budget Excel file here or contact the Extension office for hard copies.

OTC Antibiotics Now Require a Prescription

Nicole Cook and Kassandra Turnball
University of Maryland, Agriculture Law Education Initiative

Reposted from the Ag Risk Management Blog (abridged). This article is not substitute for legal advise.

In an effort to address the growing concerns of antibiotic resistance in livestock and in humans, the U.S. Food and Drug Administration (FDA) issued guidance #263 in 2021 regarding the use of over-the-counter (OTC) medically-important antibiotics in livestock production. Per the guidance, nationwide, effective June 11, 2023, livestock producers will be required to obtain a prescription from a veterinarian to purchase certain OTC medically-important antibiotics for animals. This article aims to shed light on the upcoming changes and their implications for livestock producers.

Under the new guidance, all medically-important antibiotics used in livestock production will be subject to veterinary oversight. Producers will no longer be able to purchase certain affected drugs over the counter without a prescription from a veterinarian. As of June 11, 2023, labels on those medications will read "Caution: Federal law restricts this drug to use by or on the order of a licensed veterinarian."

The list of impacted drugs includes: Gentamicin, Oxytetracycline, Lincomycin, Cephapirin, Cephapirin benzathine, Penicillin G procaine, Penicillin G benzathine, Sulfadimethoxine, Sulfamethazine, and Tylosin.

You might know the affected medications by some of their more common brand names, like LA-200, Noromycin 300 LA, Vetramyicn, Duramycin, Terramycin, SulfMed 40%, Draxxin, Penicillin Injectable, Dura-Pen, Tylan 50 or 200, ToDAY, and ToMORROW.

Non-medically important antimicrobials like coccidiostats, ionophores, bacitracins, carbadox, flavomycins, and tiamulin, are not affected by the restrictions.

While these changes may seem daunting, it's important not to panic. Instead, if you haven't already, focus on establishing a "Veterinary-Client-Patient Relationship" or "VCPR." In Maryland, a VCPR must be established in-person and it only applies to one veterinarian.

A VCPR is a formal relationship between a producer and a veterinarian. This relationship ensures that the veterinarian assumes responsibility for making clinical judgments about animal health, possesses sufficient knowledge of the animals because the vet has recently seen and is personally acquainted with the keeping and care of the animal, and provides necessary follow-up care.

Once you've established a VCPR, a VCPR form will be filed with your veterinarian's office, allowing you to purchase affected antibiotics through them or with a prescription from them.

Remember, as of June 11, 2023, you'll no longer be able to just run to your local farm supply store to get a bottle of LA-200. While the medicines will still be available when you need them, you will just have to buy them through your vet's office, or with a prescription from your vet.

While the changes may require adjustments, they offer several advantages for livestock producers:

- Improved Antibiotic Selection: Working closely with a veterinarian can lead to the discovery of more effective antibiotic options for specific conditions. Veterinarians may also provide preventive measures, reducing the need for antibiotics altogether.
- Tailored Management Plans: Establishing a relationship with a veterinarian enables a better understanding of your farm's unique requirements. This collaboration allows for the development of customized management, prevention, and treatment plans specific to your livestock operation.
- Preserving Antibiotic Effectiveness: The guidance aims to combat antibiotic resistance. By implementing greater control over antibiotic usage, we can ensure their continued efficacy and limit the development of resistance in both animals and humans.

Although these changes require adjustments from livestock producers, establishing a VCPR and working closely with your veterinarian will ensure optimal animal health and welfare. By prioritizing this collaboration, we can safeguard the long-term efficacy of antibiotics and promote sustainable livestock production practices.

National Equine Survey

The American Horse Council (AHC) is kicking off what could be one of the biggest studies in its more than 50 years with the 2023 National Economic Impact Study.

Thanks to a grant from Rural Maryland Council, partners in the Maryland Horse Industry are able to purchase a break out study of Maryland.

We need you to take the survey so we know what is going on in Maryland!

An economic impact study examines the effect of an event or industry has on the economy and usually measures changes in business revenue, business profits, personal wages, and/or jobs. As a large, economically diverse industry, the United States horse industry contributes significantly to the American economy.

The purpose of the census is to demonstrate the value of the equine industry in the national and state economies by analyzing the direct, indirect, and induced economic impacts of horse ownership, recreation, and equine-related services.

Data collected will inform public and private investments in equine-related businesses, equine health care, education, land use decisions, tax policy, tourism, employment incentives, etc.

New this year are sponsored incentives for individuals and groups who participate in the survey, including a John Deere Z545R ZTrak Mower valued at $7,500, one year of Nutrena feed for one horse (a $2,000 value); one year of Purina feed for one horse (a $500 value/ horse); gift certificates from Trafalgar Square Books (total value $180); enrollment in Texas A&M AgriLife Equine Reproductive Management Online Course valued at $300/enrollment; plus more.

"The Economic Impact Study is the most effective tool in our advocacy quiver," says Julie Broadway, president of the AHC. "When the industry needs to take aim at an issue, this data is invaluable in helping us paint the picture of the contributions the industry makes and the breath & depth of its composition."

More information and the 2023 Economic Impact Study can be found on the AHC website: https://horsecouncil.org/economic-impact-study/.

If you have questions, contact American Horse Council President Julie Broadway at jbroadway@horsecouncil.org.

The survey ends September 29. Click the links below to take the survey.

Horse Owner Survey **Horse Industry Supplier Survey**

Video Recordings: Insurance and Attorneys

Paul Goeringer, Agriculture Law Legal Specialist
University of Maryland, Agriculture Law Education Initiative

I recently finished a webinar series on the same topics as the recent workshops on *Owning Rural Land In Maryland: Answering Basic Questions Landowners Have*. Based on feedback from the workshops, we included two additional topics in the webinar series. The webinars included Q&As with an insurance agent and two attorneys who often work with agricultural operations. **Videos from those sessions are now available online**.

The insurance session featured Tim Bishton from the Crow Insurance Agency in Middleton, Delaware. In the session, Tim covered insurance coverage basics and explained the importance of insurance for many agricultural operations.

The session featured two attorneys featured Stephanie Brophy, partner with Dulany Leahy Curtis & Brophy LLP, and Brooke Schumm, a principal with Levin & Gavin. Stephanie is the current chair of the Maryland State Bar Association Agriculture Law Section, and Brooke is the current treasurer. In this webinar, both discussed their practices and strategies for agricultural operators regarding when to engage with an attorney.

We covered several other topics with this webinar series, but those sessions were not recorded. If you want to learn more about trespasser liability, fencing law, livestock liability, agricultural leasing laws, right-to-farm law, and estate planning, you can check out our online course here. This course, the workshops, and the webinar series were funded by the Northeast Extension Risk Education Center and USDA-NIFA. This is material is based upon work supported by USDA/NIFA under Award Number 2021-70027-34693.

Cultivating Conservation Webinar

June 20
7-8:30 PM
Online via Zoom

Federal programs can be complex to navigate, especially for beginning farmers or individuals who have not established a relationship with the sponsoring agency. "Cultivating Conservation for Maryland and Delaware's Small and Historically Underserved Farmers" will target historically underserved groups to increase their knowledge of conservation practices and programs. The course will cover an overview of conservation practices, available conservation programs provided by the Natural Resource Conservation Service (NRCS) and other agencies, an understanding of application processes, eligibility, and contractual agreements, and how conservation projects can fit into an overall farm plan.

The University of Maryland Extension and Agriculture Law Education Initiative team, in cooperation with the University of Delaware Extension, Maryland and Delaware NRCS, and Soil Conservation District field offices, will deliver education and outreach through classroom and hands-on experiences and tours of conservation offices.

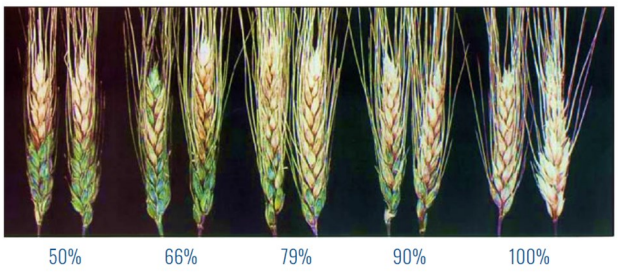
The program will provide online classroom instruction. It is free and open to anyone interested in adopting conservation practices on their farm. For more information about the program: https://go.umd.edu/bfsconservation.

This project is funded through the NRCS Conservation Innovation Grant. The program is open to all. If you need special accommodations, please contact the coordinator.

Scouting for Fusarium Head Blight

Andrew Kness, Senior Agriculture Agent, University of Maryland Extension
Alyssa Koehler, Field Crops Pathologist, University of Delaware

Conditions for Fusarium head blight (FHB) have been generally low this year because of our dry, mild conditions; however, it's still good practice to scout fields to identify potential problems prior to harvest. Once wheat has flowered, symptoms of FHB are usually visible in 18-24 days, but cool weather can slow symptom development. Heads with FHB will have bleached florets and may have pink growth on spikelets. Glume blotch may also be present, but typically has more of a grey appearance. You can follow these steps to assess the severity of FHB present in your field.



Adapted from the Visual Scale to Estimate Severity of Fusarium Head Blight in Wheat by NDSU Extension Service.

To access the full document, scan the QR code

1. For every 10 acres , randomly select one spot to survey.
2. Keeping your line of sight above the wheat heads, walk 40-50 yards and randomly pick 10-20 heads to look at on the plant or detach and place into a bag. (Looking down may bias the heads you select).
3. Once you have randomly collected the heads, rate the percent of each head with symptoms of FHB (bleaching or pink growth on spikelets). You can use the scale pictured to the right to help calibrate your eye.
4. After you have recorded values for each head, determine the average percent FHB severity by dividing the sum of disease severities by the total number of heads collected. (Ex. You rate 10 heads with severity values: 0%, 10%, 30%, 0%, 0%, 20%, 10%, 0%, 0%, 0%. These add up to 70. 70/10 heads = 7% overall FHB severity). Higher levels of FHB are typically associated with elevated levels of DON and possible issues with yield and test weight. **It is possible to have delayed or lower levels of symptoms and still have DON.**
5. Repeat this assessment as needed to get an overall rating for the field. Fields with greater than 10% FHB severity are at higher risk for yield losses or elevated DON. Fields with elevated DON should be harvested as early as possible and you may want to consider increasing combine fan speeds and shutter openings to reduce the amount of scabby kernels harvested.

Check for Allium Leaf Minor

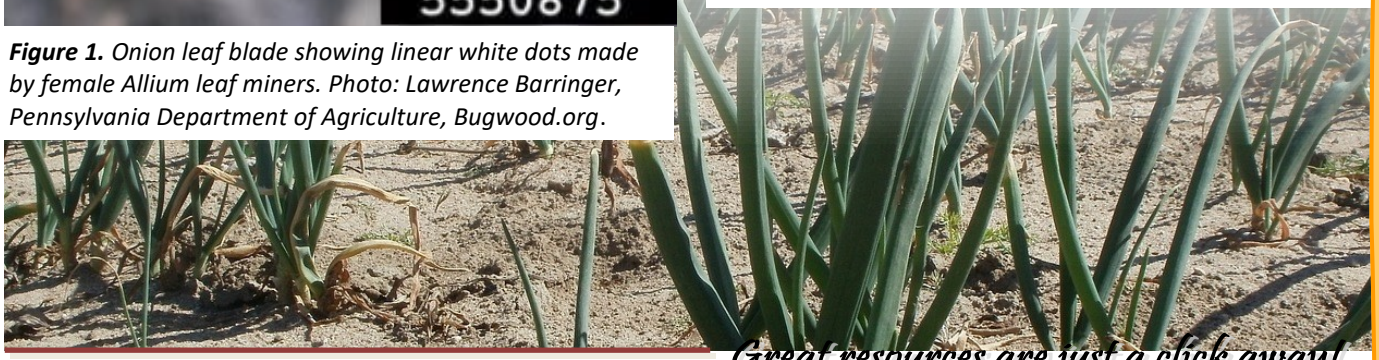
Jerry Brust, Vegetable IPM Specialist
University of Maryland Extension

If you grow leeks or onions or other *Allium* species, you should already be checking for the tell-tale marks left by Allium leaf miner. Allium leaf miner, *Phytomyza gymnostoma*, tell-tale marks consist of many linear small white dots (made by the female's ovipositor) that appear in the middle towards the end of leaf blades (Fig. 1) of their preferred hosts of leeks, onions, garlic and other Allium species. Spring crops are usually not as hard hit as fall crops especially when looking at leeks, but this pest has been steadily increasing its geographical range each year as well as its damage potential. If you had some infestation last year you will especially want to be looking for the signs of this pest.

Figure 1. *Onion leaf blade showing linear white dots made by female Allium leaf miners. Photo: Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org.*

To go over recommendations for this pest: New transplants or seedings of onions, leeks or garlic should be watched closely for the tell-tale signs of the fly's damage. When eggs hatch the larvae at first mine leaves (Fig. 2) and then move down to the bulbs and leaf sheathes where they feed and eventually pupate. Pupae will undergo a summer aestivation (type of hibernation because temperatures are too warm for them to be active) and only emerge again in late September. You can cover any just– transplanted Allium planting with a row cover (but don't wait too long after transplanting) to keep the flies off or if needed treat with insecticides. Research out of Cornell University has found using just two applications of spinosad (Entrust, which is OMRI-labelled) two weeks after oviposition marks are first found and then another application 2 weeks after this will give adequate control of the pest. But the oviposition marks must be watched for carefully and discovered very soon after first being made. If new oviposition marks are being seen each week a weekly application of insecticide may be necessary. A penetrant adjuvant also is recommended to be used when treating for the larvae.

Figure 2. *Allium leaf miner larva mining in onion. Photo: G. Brust, University of Maryland.*



Great resources are just a click away!

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Back-issues can be found at: https://extension.umd.edu/locations/harford-county/agriculture-and-nutrient-management

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Dates to remember

14 Jun. Women in Ag Webinar: Creating a Farm Lease Agreement. 12 noon. Free. Register online.

10-15 Jul. Mason Dixon Fair.

22-29 Jul. Harford County Farm Fair.

10 Aug. Horticultural Twilight Tour. 5-8 PM. Western MD Research & Education Center, Keedysville. Free. Register online or call (410) 368-2760.

UNIVERSITY OF MARYLAND EXTENSION AgFS

AGRONOMY NEWS

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Inside this issue:

Up and Down: Maryland Weather at its Finest

Mark Townsend, Agriculture Agent Associate | mtownsen@umd.edu
University of Maryland Extension, Frederick County

It feels that most years we find ourselves finding something abnormal about the weather. This year is no exception and in some ways is even more different from our "abnormal-normal."

Put lightly, the 2022-2023 winter was mild. There were only a handful of instances where we fell significantly below freezing and stayed there for more than a night or two. In fact, the average temperature from January to March of 2023 of 43.4 degrees Fahrenheit, was the second warmest on record in the 128 -year NOAA Statewide Time Series dataset, just falling behind 2012 at 43.5 degrees Fahrenheit.

With this comes a significant accumulation of Growing Degree Days (GDD), a heuristic tool measuring the accumulation of heat through time which can be used to predict the development of crops and insects during the growing season. For review, GDDs are calculated by taking a simple average of the high and low daily temperatures subtracted from some base level. The base level is determined for each crop representing the lowest temperature the plant may still develop. For wheat and other small grains, the base temperature is often 32 or 40°F, while warm season crops like corn and soybeans have a GDD base temperature of 50°F.

Figure 1 is a cumulative line chart illustrating the accumulation of growing degree days since the start of the year in Frederick, MD. These data were obtained from the Cornell Climate Smart Farming (CSF) Growing Degree Day

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June 2023