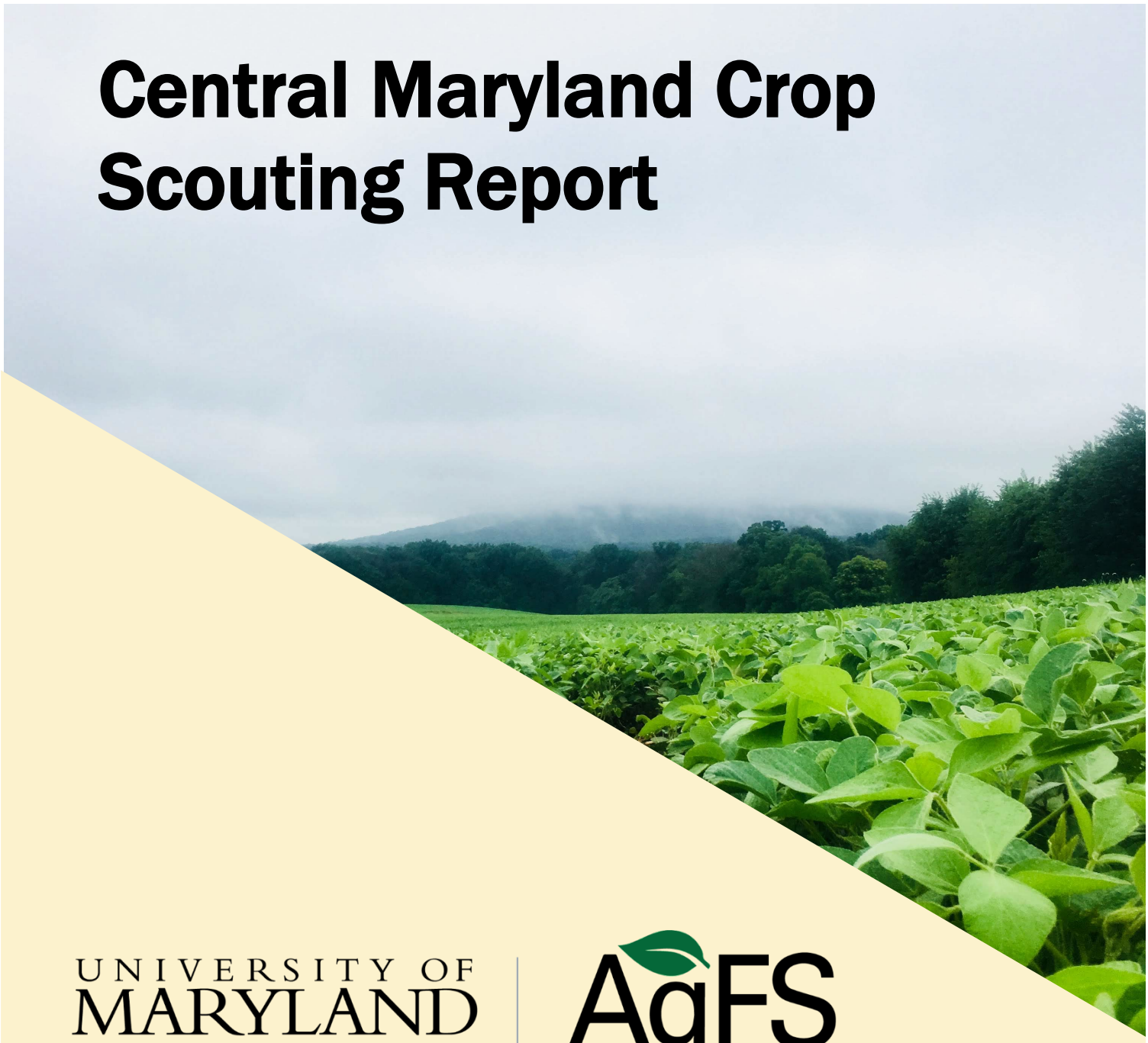
Central Maryland Crop Scouting Report



UNIVERSITY OF MARYLAND EXTENSION | AgFS Agriculture & Food Systems

2023 Fourth Edition
Week Ending 5/21/2023

Introduction

Happy Monday! Welcome to the fourth installment of the Central Maryland Crop Scouting Report from the University of Maryland Extension. Agriculture Agents in Frederick, Howard, and Montgomery Counties are offering free agronomic crop scouting for growers in Central Maryland. These reports will be available to the grower, providing a field-scale report of the observations and recommendations to address any potential concerns observed. These reports are compiled and summarized to provide a general overview of observed trends for all readers of the report.

As mentioned in the first report, there are many details still to work out in the reporting and delivery of these reports. In this, the Central Maryland Team has decided to release these reports on Monday in an effort to supply additional forward-looking thought processes and ensure additional time to compile crop conditions.

Growers and agronomists; feel free to provide any observations or trends you have come across while scouting–we appreciate your involvement and participation.

Finally, if you would like to have an Agriculture Agent with UME come to scout your fields, please visit https://go.umd.edu/CMD-IPM-Scouting to complete the Google Form, or contact any one of the Ag Agents:

UME - Frederick: Mark Townsend, Agent Associate. mtownsen@umd.edu, (301) 600-3578

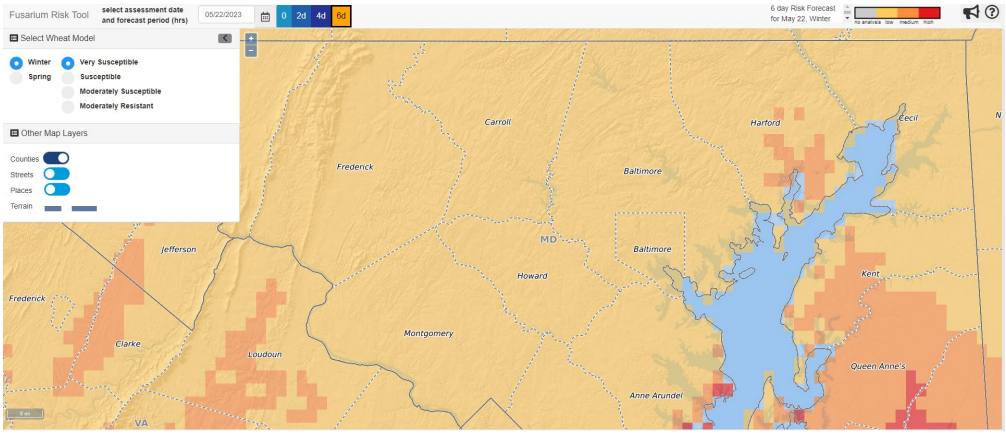
UME - Howard: Nathan Glenn, Agent Associate. nglenn@umd.edu, (301) 375-0260

UME - Montgomery: Kelly Nichols, Agent: kellyn@umd.edu, (301) 590-2807

Frederick County

Wheat:
All scouted fields were flowering at the time of the trip. This indicates that we are at the last point at which we can spray a T3 fungicide to control diseases like Fusarium Head Blight (FHB) with reliable efficacy. As a reminder, no fungicide products containing a strobilurin (QoI FRAC code 11) should be applied at this time (since flag-leaf). These products have been shown to elevate DON (Deoxynivalenol, aka Vomitoxin) levels in field infected with FHB.

However, in all scouting trips, no FHB pressure has been observed in Frederick County. Given our uncharacteristically dry and cool spring, the risk of FHB is rather low. The image below was captured from the FHB Risk Assessment Tool (https://www.wheatscab.psu.edu/) for Central Maryland counties assuming a very susceptible wheat variety. In this, it is rather clear to see that there is currently minimal FHB risk in the immediate 6-day forecast. At this point, a fungicide application would not be advised given the currently low pressure and limited timeframe for application.



More scouted fields were observed to have cereal leaf beetle pressure, with some at IPM threshold levels. As mentioned in the last report, though an earlier insecticide application (assuming IPM threshold population) may have been more effective at controlling the CLB population and subsequent damage, research cited in this University of Delaware Fact Sheet on Cereal Leaf Beetles (https://www.udel.edu/academics/colleges/canr/cooperative-extension/fact-sheets/cereal-leaf-beetle/) notes that significant damage may still occur between flowering and soft-dough stage.

There are many products labeled for CLB control in small grain crops, always read and follow label instructions.

Yet another scouted field in Frederick County, this time in the Unionville area, showed signs of Barley Yellow Dwarf Virus (BYDV) infection. The virus is transmitted through the saliva of certain aphid species and can result in significant yield loss. Though few aphids were directly

observed in the BYDV affected fields, a significant population of green bug aphids (one of the BYDV associated species) were observed in adjacent fields. Higher than normal aphid populations and therefore the presence of this disease is known to increase with warmer winters.

The two above to the right illustrate the common symptomology of the disease; generally shorter plants and a characteristic discoloration of the flag-leaf.

There is no direct treatment for BYDV, rather one may only treat for aphid populations. However, these treatments are advised for aphid infested fields of small grain at early crop developmental stages, not at heading. Thankfully, spring infections of BYDV are found to affect yield less-so than fall infections.

Alfalfa:
Regrowth after first cutting has so far been promising for scouted alfalfa fields. No alfalfa weevil or leaf-hopper pressure was observed in scouted fields. Some spittle bug pressure was noted in one field though this is not typically a significant pest for this area or alfalfa. The population will be reevaluated over time, though the observed pressure fell well below IPM threshold levels.
Continue scouting for weevil, and leaf hopper. Additionally, be on the look-out for foliar diseases as we continue into the growing season. Growers: it may prove useful to ensure adequate potassium and sulfur fertility before second cutting.

Corn:
With great weather recently, nearly all of the corn has been planted in Frederick County. Early planted corn is approaching V3. Scouted fields had minimal weed pressure as recent burndown herbicide applications have had enough heat and warm temperatures to administer effective control.

Deer damage was observed in two fields. All scouted fields had some degree of slug damage though none of the damage affected germination and emergence. In this, the damage is typical and is not considered especially concerning as we move into the season where the affected crop will shortly outgrow its damage.

No seedling diseases nor soil-borne insect pests were observed in scouting trips.

Soybeans:
Like corn, the soybean crop is getting in the ground at a rapid pace. Similarly, some slug damage has been observed in scouted fields and did not affect emergence. The damage was relatively minimal and would not likely affect yield at current levels.

Similarly, no insect nor disease concerns were observed in scouting trips.

–Mark Townsend, Agent Associate.

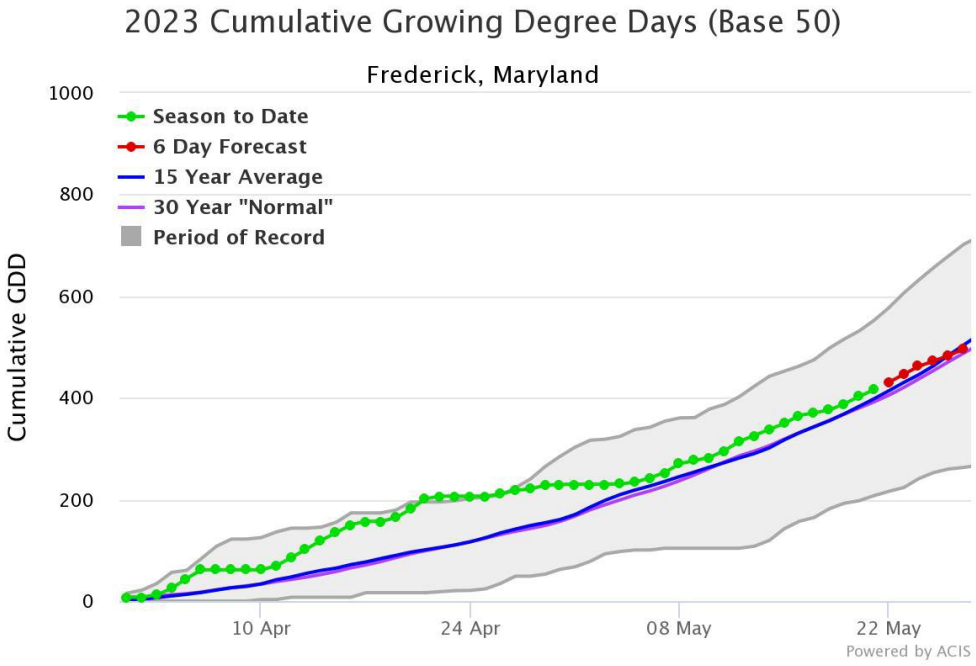
Montgomery County

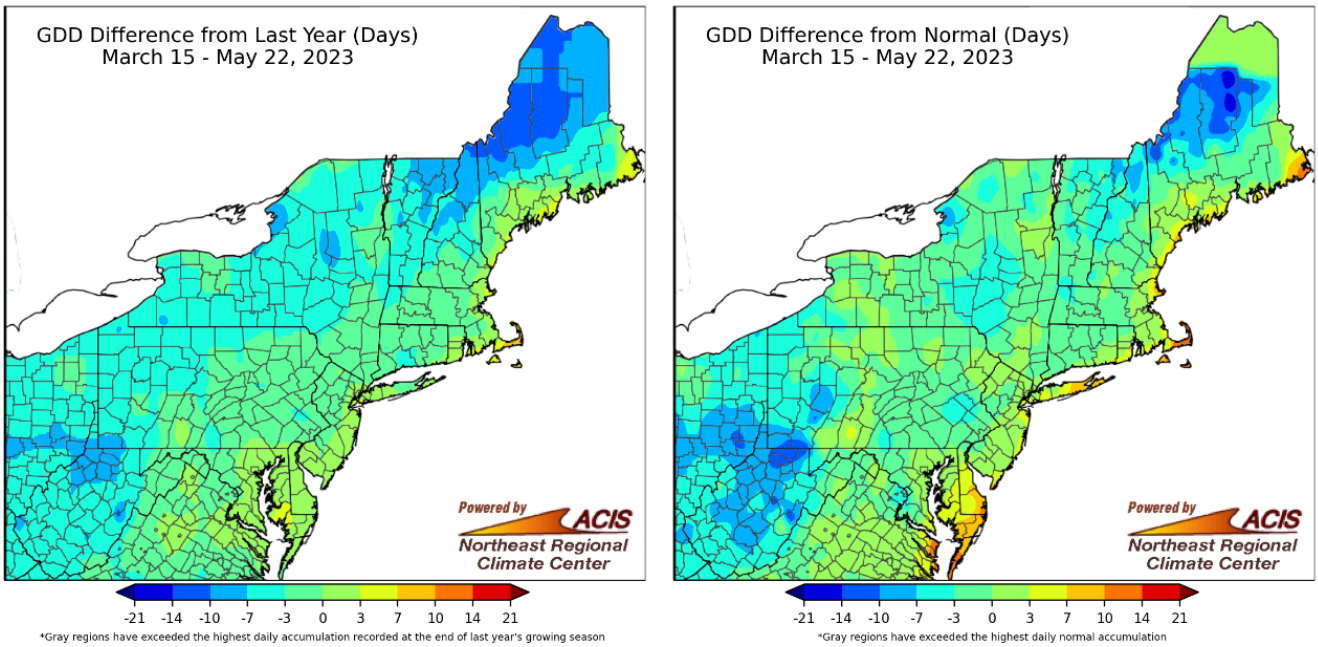
Wheat is finishing flowering. Corn is V3-4 in the western portion of the county. Summer annual weed germination and growth has been slowed by the cooler temperatures. However, soil temperatures are beginning to finally climb. Soils are also starting to dry out, so all are hoping for a bit more rain.

--Kelly Nichols, Agriculture Agent.

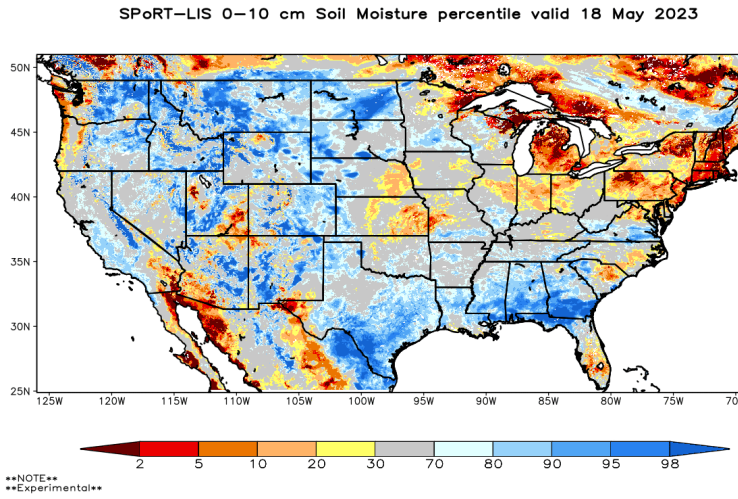
Weather

Since last week, we accumulated another 78 GDD. This brings the seasonal total (Jan 1st to May 21st) to 460 GDD. The chart here from the Climate Smart Farming GDD Calculator (http://climatesmartfarming.org/tools/csf-growing-degree-day-calculator/) set to Frederick, MD illustrates how we are nearing the 15-year average in terms of GDD accumulation. As noted in a previous report, this represents a dramatic slow-down in terms of rate of GDD accumulation from the month of April.





This cool down is similarly observed in the year over year difference in GDD accumulation as illustrated in the above graphic from the Northeast Regional Climate Center. Central Maryland is back within a weeks difference of last year, having been as far as 10-days ahead of last year by late-April. Some regions of the state are now slightly behind last year by about 3 days. However, forecasts predict a warmer drier week that will likely confer an increase in GDDs.



NASA SPoRT – LIS data suggests soil moisture is back again on the dry side. This model is as good as May 18th which does not consider the rains this region received over the last weekend. No less, gravel roads are a little dusty and newly planted crops could sure use a rain!