

Central Maryland Crop Scouting Report

UNIVERSITY OF
MARYLAND
EXTENSION



2023 Sixth Edition
Week Ending 6/1/2023

Introduction

Happy Monday! Welcome to the sixth 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. neglenn@umd.edu, (301) 375-0260

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

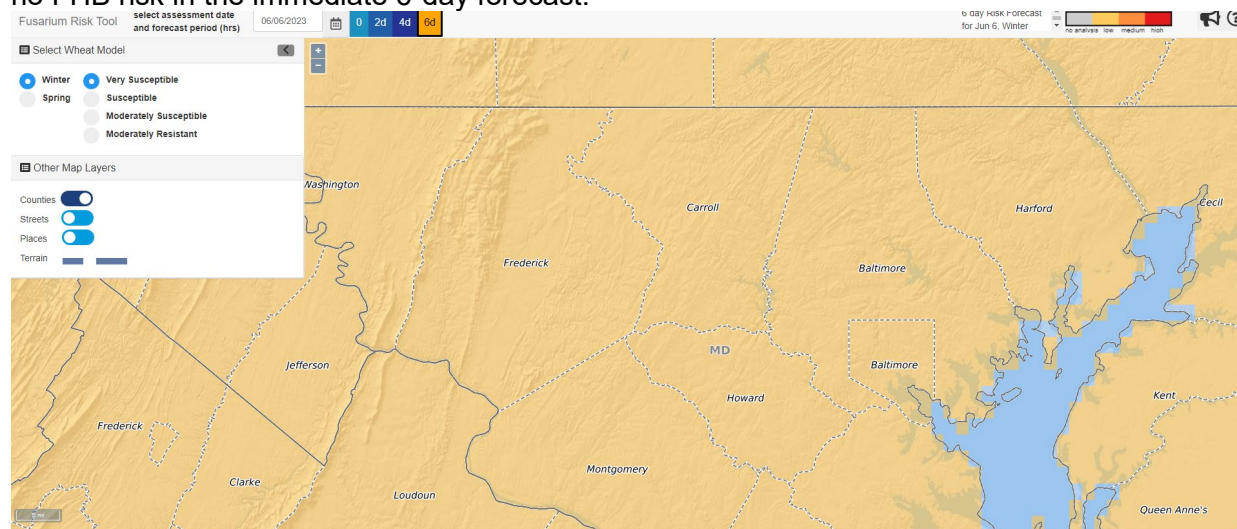
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Frederick County

Wheat:

All scouted fields had finished flowering at the time of the scouting trip. Much of the scouted fields were in the milk-development stage and moving into the dough development stage shortly. In this, we are now outside the window of T3 fungicide application timing.

No FHB pressure has been observed in Frederick County. Given our uncharacteristically dry and cool spring, the risk of FHB is low to non-existent. The image below was captured from the FHB Risk Assessment Tool (<https://www.wheatcab.psu.edu/>) for Central Maryland counties assuming a very susceptible wheat variety. In this, it is rather clear to see that there is currently no FHB risk in the immediate 6-day forecast.



I will reiterate the observed trend of Barley Yellow Dwarf: The images below were taken at the 2023 Small Grain Field Day plots.



Interestingly, the observed pressure was far greater than scouted fields in Frederick. The agronomy team at the Wye-REC indicated that they had observed significant aphid pressure early in the season, thus illustrating the cause of the disease prevalence. Similarly, one could observe the degree to which genetics played in determining BYDV susceptibility: plots directly next to each other varied in severity with some varieties expressing extreme infections while others showed slight discoloration at the tip of the flag-leaf.

With this in mind, it may be best to start thinking about variety selection for next year's wheat crop, paying careful attention to BYDV susceptibility ratings as the large aphid population observed this year may confer a large population moving into next year under the right circumstances. Similarly, planting date, seed-treatment, and early season insect management strategies may be

worthwhile.

Alfalfa:

Second cutting is underway for many growers. Regrowth after first cutting was 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:**

Put simply, we're dry. Scouted fields were at V4-V5. Scouted fields varied in terms of residual soil moisture with some fields having decent moisture at 4" and others with relatively low moisture at depths to 10". Many dug corn plants showed a healthy and vigorous vertical root system.



This is the time to think about side dress applications. We always recommend taking a PSNT soil test to accurately determine the level of residual nitrate to dial-in that side-dress rate.

Scouted fields had generally low weed pressure as weeds appear to be suffering from the drought as well. Most predominant pressure came from Canada thistle, pokeweed, hemp dogbane and young johnsongrass.

Deer damage was observed in three fields at the margins.

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.

One field showed signs of black cutworm damage. The extent of the damage was limited and was not worthy of control, however it serves as a reminder to us to stay mindful of unlikely pests as well.

No seedling diseases were observed in scouting trips.

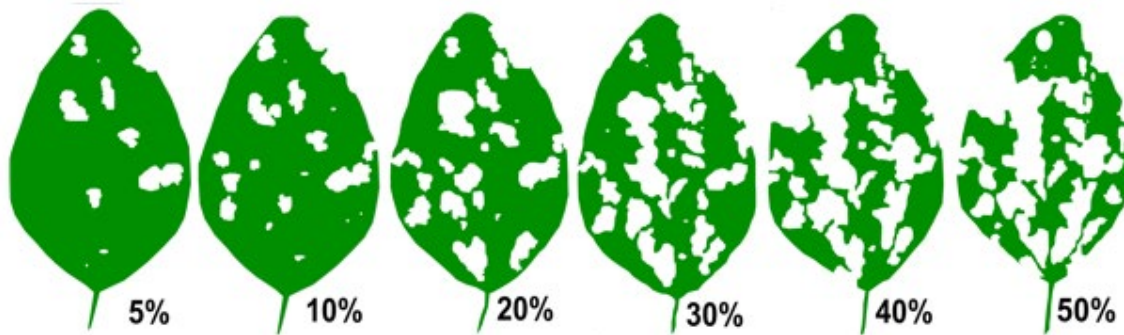
Soybeans:

Scouted beans appeared in good condition. Like everything, the soybean crop could use a rain. Though the old adage, "the only drought resistant corn is a soybean" rings true again as no drought stress symptoms were observed in scouted soybean fields. Early planted soybeans are approaching V3 while later beans remain in the VC – V2 stages. Slug damage was observed in all scouted fields, though the affected soybeans appeared to be growing out of the damage as newer trifoliates appeared healthy and without damage.

With dry weather looking to linger longer, please begin to scout for dry weather pests like spider mites and soybean aphids. Though these pests are generally reserved for later in the season, we may find ourselves slightly ahead of normal in regards to these pests given our recent weather pattern. IPM guidelines suggest an action threshold at 250 aphids per plant,

however given recent crop prices and generally lower application costs, this value may be more economically advantages at a slightly lower level.

To access foliar feeding damage from other insect pests, please refer to the image below indicating the relative defoliation.



–Mark Townsend, Agriculture Agent Associate.

Montgomery County

Depending on where you are in the county, you either got a few drops or close to an inch of rain yesterday. Wheat overall looks good. Some barley yellow dwarf virus is present, but not in large areas across the field. Corn is at V2-V5. Slugs are present in fields with heavy residue; however, the newest leaves have less damage. Soybeans are at VE-V1. Summer annual weed (e.g. crabgrass, foxtail, and pigweed) emergence and growth had been slowed with the cooler nighttime temperatures, but they are becoming more visible and up to a few inches tall now.

--Kelly Nichols, Agriculture Agent.

Howard County:

Corn:

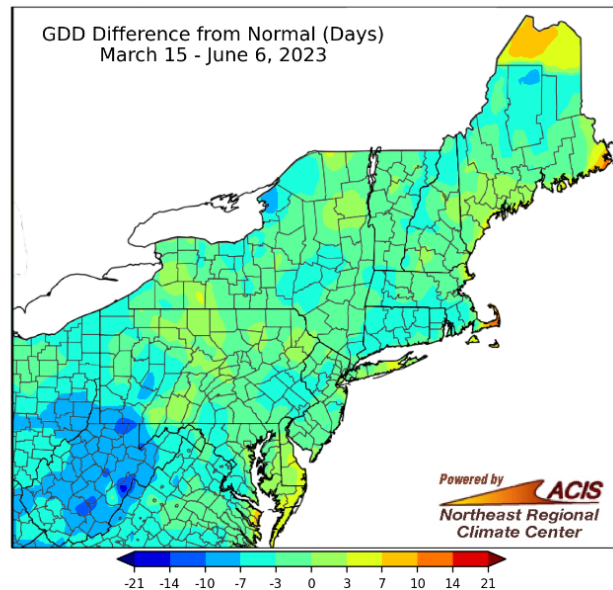
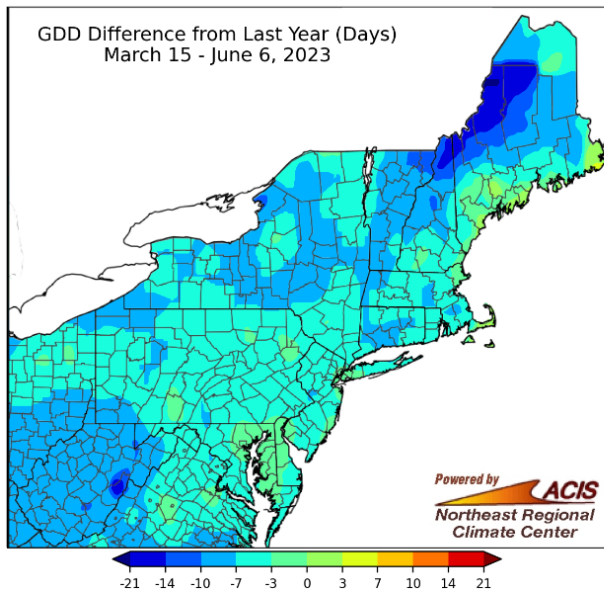
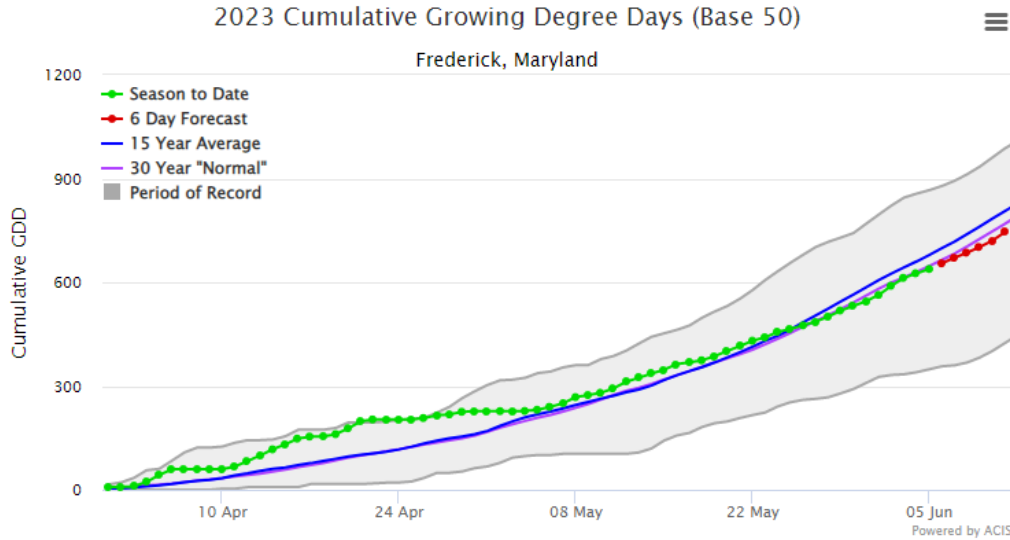
Corn in Howard County is currently anywhere from V2 stage to V5. Recently scouted corn at V4 stage showed some cutworm damage where plants were completely cut off at the base. It is advisable to continue to monitor cutworm damage in order to make decisions based on economic thresholds. Some defoliation due to slug damage was also observed, but at this point it does not look to be a major problem. There was not a lot of nutrition related disease observed other than a small amount of zinc deficiency--this could be an issue related to the drought in which we find ourselves. Weeds that were present included pokeweed, canada thistle, hemp dogbane and milkweed. It is advisable to wait and spray a few hours after our next rain so that the herbicide is given a chance to be effective. Topsoil and subsoil moisture content is significantly low.

Soybeans:

Soybeans in Howard County have emerged despite drought conditions and compacted soils. Stands seem to be between VC and V1 stage. Very little pest and disease problems have been observed as of yet. Deer damage is something that should be monitored in order to update your financial plan for each field and make informed management decisions as pest and disease problems come about in the future.

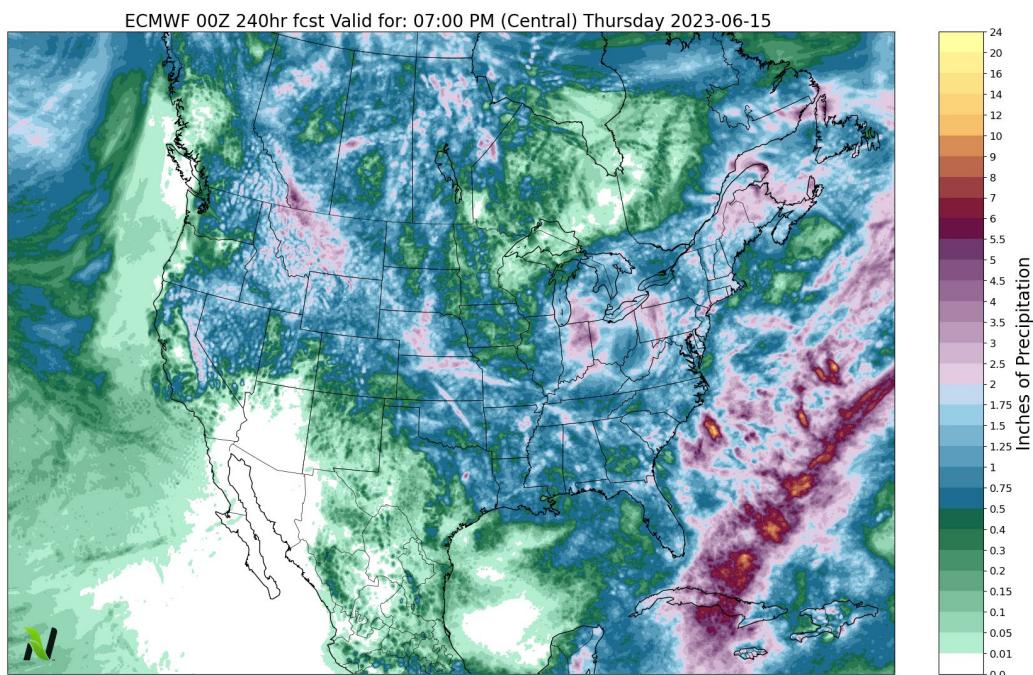
Weather

Since last week, we accumulated another 107 GDD. This brings the seasonal total (Jan 1st to May 21st) to 670 GDD. The chart here from the [Climate Smart Farming GDD Calculator](http://climatesmartfarming.org/tools/csf-growing-degree-day-calculator/) (<http://climatesmartfarming.org/tools/csf-growing-degree-day-calculator/>) set to Frederick, MD illustrates that we are below the 15-year average and at the 30-year average in terms of GDD accumulation.

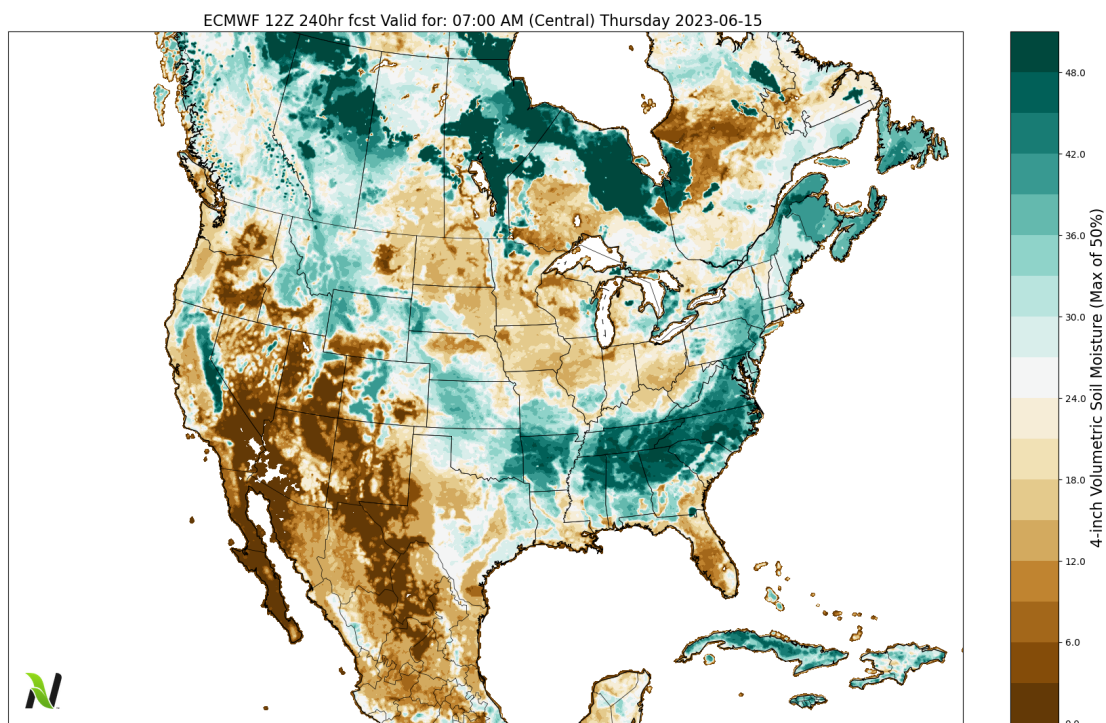


As noted in a previous report, this represents a dramatic slow-down in terms of rate of GDD accumulation from the month of April.

Though last week's weather was nothing short of spectacular, we have fallen below average GDD Accumulation. However, given the warm forecast for this week, it is likely that we may return to average to slightly above average with warm temperatures on the way for early June.



The above image illustrates projected precipitation accumulation for the United States over the next 10 days. Projected soil moisture maps for the same time period suggest a similar trend in that the model is calling for 1-1.75" of rain and a subsequent 35-40% (by volume) soil moisture content over the next ten days.



These maps indicate there is a likelihood that our region will receive some much-needed rainfall. It is worth noting, however, that these are still long-term projections that have limited accuracy.

All this to say, keep doing the rain dance!