

Auglaize County OSU Extension Weekly Agriculture Newsletter – August 19, 2020

Scouting and Latest Information



Corn



Two, four-bean pods

Hello!! Good afternoon! I pray you are

Every Tuesday from ~~8:30~~ 8:30 to 9:30 AM we will be hosting a virtual meeting via Zoom that can also act as a simple conference call for those of you not able to get online to view live. The meeting will be set up to discuss key, timely information for your operation and to open the floor for questions and sharing of information. You may propose topics for the next meeting at anytime during the week by e-mailing or calling me. **Next week we will have Aaron Wilson and myself speak.** Please join us every Tuesday for Auglaize County Farm Talk. The last Farm Talk will be September 1st.

Is anyone interested in strip-tilling with fertilizer and seeding cover crops in a single pass? A farmer is interested in hiring someone to do this for him. The OSU Custom Farm rate survey of 2018 said the average charge for strip-tilling with fertilizer is \$27.80. If you have any interest in getting into such a business, let me know and I can give the farmer your information.

If you are a buyer or seller of hay or straw, let me know and I can keep a list to share with others.

List of individuals searching for hay or straw: None

List of individuals selling hay or straw:

1. About 200 3' X 3', 2019 wheat straw bales for sale.
2. At least 500 small square wheat straw bales from 2019 for sale.

Call the OSU Extension office at 419-739-6580 or my cell phone at 701-541-0043 or e-mail me at stachler.1@osu.edu to get the contact information.

Joke: What do you call cattle with a sense of humor??

Agricultural Fun Fact: One bushel of wheat makes about 42 pounds of pasta or 210 servings of spaghetti!!

Rain fell 2 days somewhere in the county in the last week. Much of the county is dry again, especially the Waynesfield area, east of New Knoxville, and on Townline-Lima from St 33 to Buckland-Holden roads! Rainfall on Friday, August 14th ranged from a trace at Mercer Line and St. Rt. 197 roads and Minster-Ft. Recovery and Sommers roads to 0.87" near Bloody Bridge. Rainfall Saturday ranged from 0" at 14 locations to 0.15" near Brown and Pusheta roads. Rainfall for the week ranged from a trace near Minster-Ft. Recovery and Sommers roads to 0.87" near Bloody Bridge. Rainfall for the week averaged 0.39", 0.01" less than last week. There is at least a 51% chance of rain Sunday, otherwise it will be dry.

The average high temperature now is still 82 degrees F, one degree less than last week. Temperatures were above normal for **1** day in the past week and below normal for **3** days in the past week. The range in high for the week was 77 to 86 degrees F. The average high temperature for the week was 81.6 degrees F, which is 2.7 degrees F warmer than last week and 0.4 degrees F **cooler than** the current normal high temperature of 82 degrees F. Temperatures will above normal for the 5 of the next 7 days.

Wheat

We are only about 5 weeks from seeding wheat, so hopefully you are getting ready.

Alfalfa

The leafhopper populations are still at or slightly above threshold levels, so keep scouting. If you plan to take four cuttings, hopefully you are done with 3rd cutting as we want to be done harvesting 4th cutting by September 15th to allow enough energy to be stored for next year's growth and winter survival.

Corn



Northern corn leaf blight



Flea beetle damage

Corn development is progressing nicely! I left the corn quality the same this week as I felt little had changed. I rated the corn crop at 2% excellent, 25% good, 72% fair, and 1% poor. The range in corn development is from R1 (silking) to early R5 (dent) stage. Most of the corn is at the R4 (dough) stage. Grey leaf spot is still at very low levels as of Sunday. I found northern corn leaf blight for the first time on Sunday in two fields. One field had quite a bit based upon the photo above and the other was at very low levels. There is quite a bit of flea beetle damage now in many fields as seen above in the photo. I took yield checks out of eight fields on Sunday with the help of Larry Heitkamp. Photos and yield information is below. Most ears show lack of pollination and kernel abortion, but look how much there was at location 8. Including the yield checks from last week the range in yield was 127 to 232 bushels per acre and the average yield I have determined for the county is 171.3 bushels per acre. So there will be some 200 bushel corn in the county, but there will be some less than 127 bushels per acre as well.



Stop 1: near Dowty and C.R. 66A roads; 33 plants per 1/1000th of an acre (33,000 plants/A) X 16.4 rows X 29.2 kernels up ear /85 = 185.9 bushels/A



Stop 2: near St. Rt. 29 and Southland roads; 29.7 plants per 1/1000th of an acre (27,667 plants/A) X 16.1 rows X 34.1 kernels up ear /85 = 191.8 bushels/A



Stop 3: near I-75 and Southland roads; 28.3 plants per 1/1000th of an acre (28,333 plants/A) X 15.3 rows X 34.1 kernels up ear /85 = 173.7 bushels/A



Stop 4: near St. Rt. 65 and Southland roads; 30.7 plants per 1/1000th of an acre (30,667 plants/A) X 15.8 rows X 27.6 kernels up ear /85 = 157.5 bushels/A



Stop 5: near Valley and Blank Pike roads; 28.3 plants per 1/1000th of an acre (28,333 plants/A) X 16.2 rows X 27.4 kernels up ear /85 = 147.8 bushels/A



Stop 6: near Buckland-Holden and Townline-Lima roads; 24 plants per 1/1000th of an acre (24,000 plants/A)
X 15 rows X 34.2 kernels up ear /85 = 144.8 bushels/A



Stop 7: near Buckland-Holden and Short Line roads; 33.3 plants per $1/1000^{\text{th}}$ of an acre (33,333 plants/A) X 18 rows X 32.9 kernels up ear /85 = 232 bushels/A



Stop 8: near Horn and Townline-Kossuth roads; 27 plants per 1/1000th of an acre (27,000 plants/A) X 16.9 rows X 29.9 kernels up ear /85 = 160.5 bushels/A

Soybean



Most developed soybean (R6)

Early R5 soybean

The soybean crop is looking good to excellent. Moisture stress was visible again on Sunday!. I decreased the crop quality a bit this week. The current condition of soybean in the county is 20% excellent, 66% good, 12% fair, 2% poor, and 0% very poor. Last week's crop quality was 29% excellent, 52% good, 16% fair, 3% poor, and 0% very poor. The range in soybean stage is from R1 (begin flower) stage to R6 (Full seed – full-sized seed in pod on one of 4 upper nodes of plant) stage, but most are at R5 (beginning seed - at least one pod having a seed 1/8th inch long at one of 4 upper nodes of plant). It is still very difficult to find frog-eye leaf spot in fields! The most frequent disease is still downy mildew. I have found some fields with a fair amount of Septoria. Most fields have at least 5% defoliation with some up to 10% defoliation from grasshopper and Japanese beetles, but this is not enough defoliation to warrant insecticide use. I see no spider mites at this time. Start watching for stink bugs! I found one in a field!

Weeds

Please manage weeds on the outside perimeter of fields so you do not pull them into the field during harvest. See my article below about this. It is too late to spray any herbicides in soybean now, except for double crop soybean.

Insects/Other

I have no insect counts as I'm no longer trapping for insects. Insects are still active, but very few populations warrant an insecticide application.

With the cancellation of dicamba products applied to dicamba soybean, I did not update the label information below. Not sure of label changes for Tavium (<http://www.syngenta-us.com/herbicides/tavium-tank-mixes>) this week. With the end of Engenia, FeXapan, and XtendiMAX, I deleted the tank-mix information, but since Tavium is still legal, I kept that. There are 47 herbicides, 101 DRA's, 316 adjuvants, 96 nutritionals, 16, insecticides, 7 fungicides, 8 other products, and 41 nozzles approved for use with Tavium.

Enlist One and Enlist Duo for Enlist soybeans and corn also have approved tank-mix partners and nozzles like the dicamba products. **There were no changes to the labels this week that I had time to find out!** The

list of approved tank-mixtures for both of these products has been updated. Please follow these labels online at <https://www.enlist.com/en/herbicides.html>. There are 48 nozzles, 153 herbicides (10 new ones), 20 glyphosate formulations (1 new one), 10 glufosinate formulations (1 new one), 11 Dry AMS products, 85 insecticides, 30 fungicides, 21 plant growth regulators, 645 other products, and 315 fertilizers / nutrients labeled with Enlist One. There are 23 nozzles, 89 herbicides (15 new ones), 51 insecticides (3 new ones), 17 fungicides, 22 plant growth regulators, 8 Dry AMS products, 512 Other products, and 168 fertilizers / nutrients labeled with Enlist Duo.

Other information about the Enlist products include the following:

1. Enlist Duo rate is 4.75 pts/A which only has 1.0 lbs ae/A of glyphosate which is really not enough. You would think you could just add more glyphosate, but you CAN NOT add more glyphosate with Enlist Duo.
2. Enlist One can be mixed with ANY rate of glyphosate, glufosinate and 192 other herbicides.
3. Never use Enlist One alone on Enlist crops and always apply Enlist One at 2 pts/A
4. You CAN NOT add glufosinate with Enlist Duo!
5. When adding a postemergence grass soybean herbicide like quizalofop, clethodim, sethoxydim, or fluazifop to Enlist One add 33% higher rate of these products to reduce the antagonism with grasses OR apply the postemergence grass herbicides 7 days after the Enlist One.

Upcoming Meetings

1. **Auglaize County Farm Talk.** On Tuesdays from 8:30 to 9:30 AM we will have a virtual meeting. The link to get onto the meeting is as follows:
<https://osu.zoom.us/j/264219671?pwd=K0VDSTZF0VldGJWeUZaeVA3QUVrQT09> A password may be needed. If so it is Farmtalk (first letter in caps, then lower case for rest with no spaces). If you just want to call in the phone number and meeting code are as follows: 646-876-9923 264219671# with password of 07099073. The last Farm Talk will be September 1st.
2. Farmers interested in learning some strategies for successful drying and storage of grain, specifically corn and soybeans, are invited to join a **Zoom Webinar on Monday August 24, 2020 at 8:00 PM.** **Dr. Kenneth Hellevang**, Ph.D., PE, Extension Engineer and Professor from North Dakota State University will be the featured speaker. He is one of the leading experts on grain drying, handling and storage. To join the webinar,

go to <https://osu.zoom.us/j/7911606448?pwd=L1pQQ0VoODROZG56Q015enNBQkVVUT09> and enter the
Password: STORAGE

- 3. All OSU Extension face to face meetings have been cancelled or postponed, although we are allowed to apply for exemptions now to host meetings.**
- 4. The Farm Science Review has been cancelled for 2020 due to COVID-19, however it will proceed virtually, but the process has not been determined yet!**

Answer to joke: Laughing stock!!

Perimeter Weed Management



Weed density in a field is usually the greatest along the perimeter of the field. Weeds are more prevalent along the outside perimeter today than historically. The biggest reason for more weeds along the outside of the field perimeter is that glyphosate (Roundup) is killing the grassy edges of the field. The resulting bare area is an opportunity for weeds to take over.

Reasons for more weeds being on the inside field perimeter include weeds on the outside perimeter of the field being pulled into the interior field perimeter during harvest, wind currents from vehicles, birds sitting on power or phone lines, water entering the field from the road ditch, equipment entering a field and greater sunlight.

One major concern with weeds along the outside perimeter of the field is that when the field is sprayed the weeds in the perimeter do not receive a full rate of the herbicide(s). Therefore, surviving plants are being selected for resistance to the herbicide(s) applied. Then during harvest these surviving plants on

the outside perimeter get moved into the field and if truly resistant will become an issue within the field.

The best way to remove these weeds on the outside perimeter is to mow the perimeter of the field a few times during the season. Another option to controlling weeds is to use herbicides, but if plants are not completely killed then resistant plants will be selected. Another issue with using herbicide is the possibility of injuring the crop along the edge of the field. At this time of the season, we will not stop the greatest amount of weed seeds from being produced because many of these weeds are already producing viable seeds. However, mowing now will at least keep the majority of the seeds on the outside perimeter of the field rather than pulling them into the field with the grain head during harvest!

The most important weeds to control with mowing on the outside perimeter are waterhemp, Palmer amaranth, giant and common ragweed and marehail (horseweed). Of these waterhemp is of the greatest concern. We really need to treat waterhemp like Palmer amaranth because more herbicides will be required to manage waterhemp than currently being used. Waterhemp is more prevalent throughout the county this year compared to last year.

As I drive around the county not many field perimeters have been mowed to remove weeds!! For those fields with weeds on the perimeter, please take time prior to harvest to mow the outside perimeter of fields to reduce weed seeds from entering the field. Mowing now can save significant money if you can keep waterhemp from getting into your field. If you need help determining if waterhemp is in a field or on the field perimeter call 419-739-6580 or e-mail me at stachler.1@osu.edu.

C.O.R.N. Newsletter

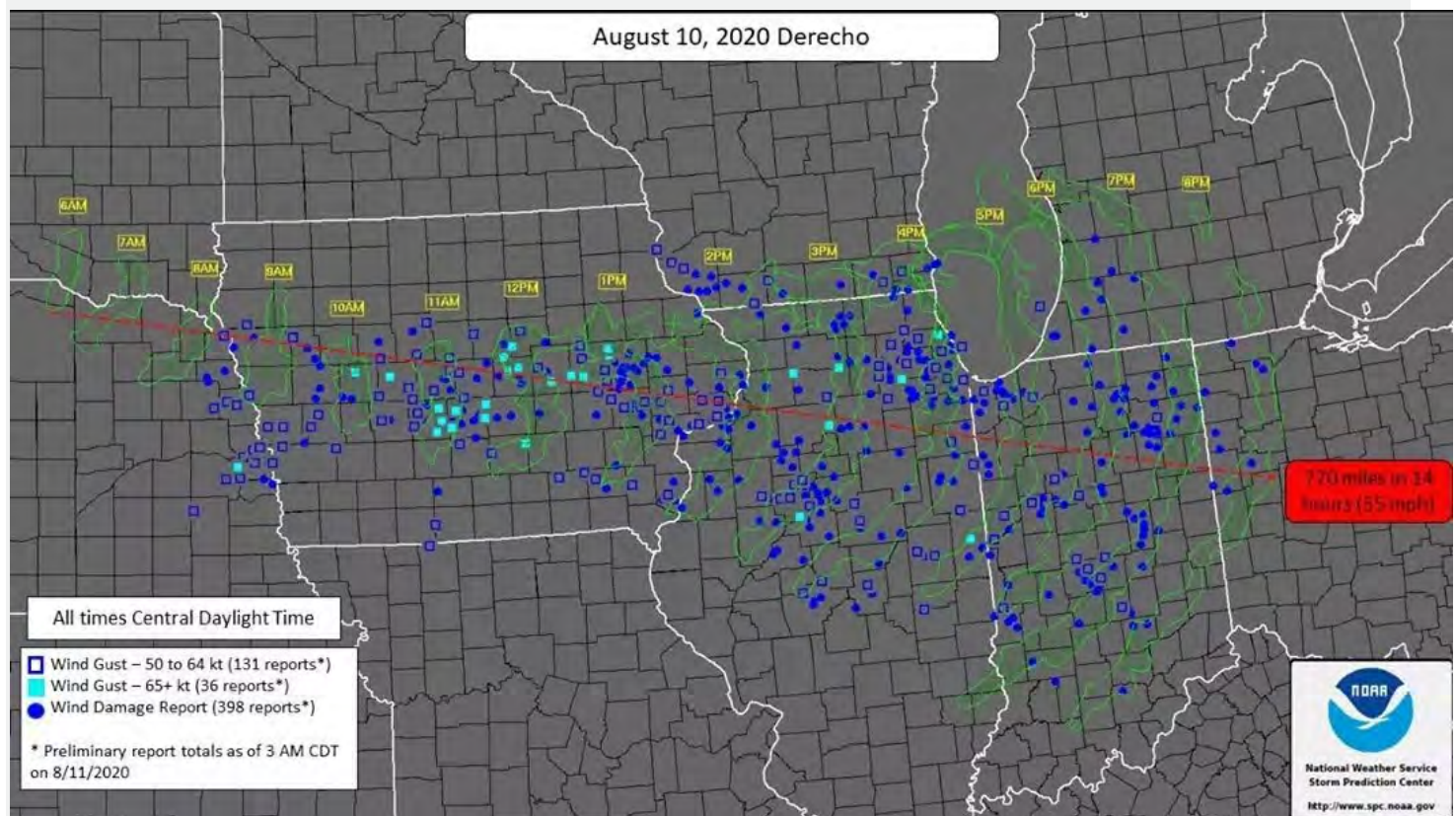
<https://agcrops.osu.edu/newsletter/corn-newsletter>

Derecho Devastates the Midwest While Ohio's Dry-Weather Pattern Continues

Midwest Derecho

On Monday August 10, 2020, a powerful weather system known as a derecho (pronounced “deh-REY-cho”) impacted nine states from South Dakota to Ohio (Figure 1). The National Weather service defines a derecho

as a long-lived windstorm that produces widespread damage like a tornado but in one direction along a straight path or "straight-line wind damage." Last week's derecho was exceptionally damaging to agricultural interests, particularly in Iowa. Numerous reports of winds stronger than 70 mph were noted with an unofficial gust to 106 mph at Le Grand. According to the Iowa Soybean Association, the latest USDA reports suggests 14 million impacted crop acres with \$6 billion in liability losses. Only minor damage was reported in northwest Ohio as the derecho weakened below severe limits Monday evening, but it brought a decent round of rainfall to the area. The last major derecho to occur in Ohio was on June 29, 2012 which brought 22 fatalities from Illinois to the Mid-Atlantic and \$2.9 billion in losses.



8-10-20 Derecho Map

Figure 1: Preliminary storm reports associated with the August 10, 2020 derecho.

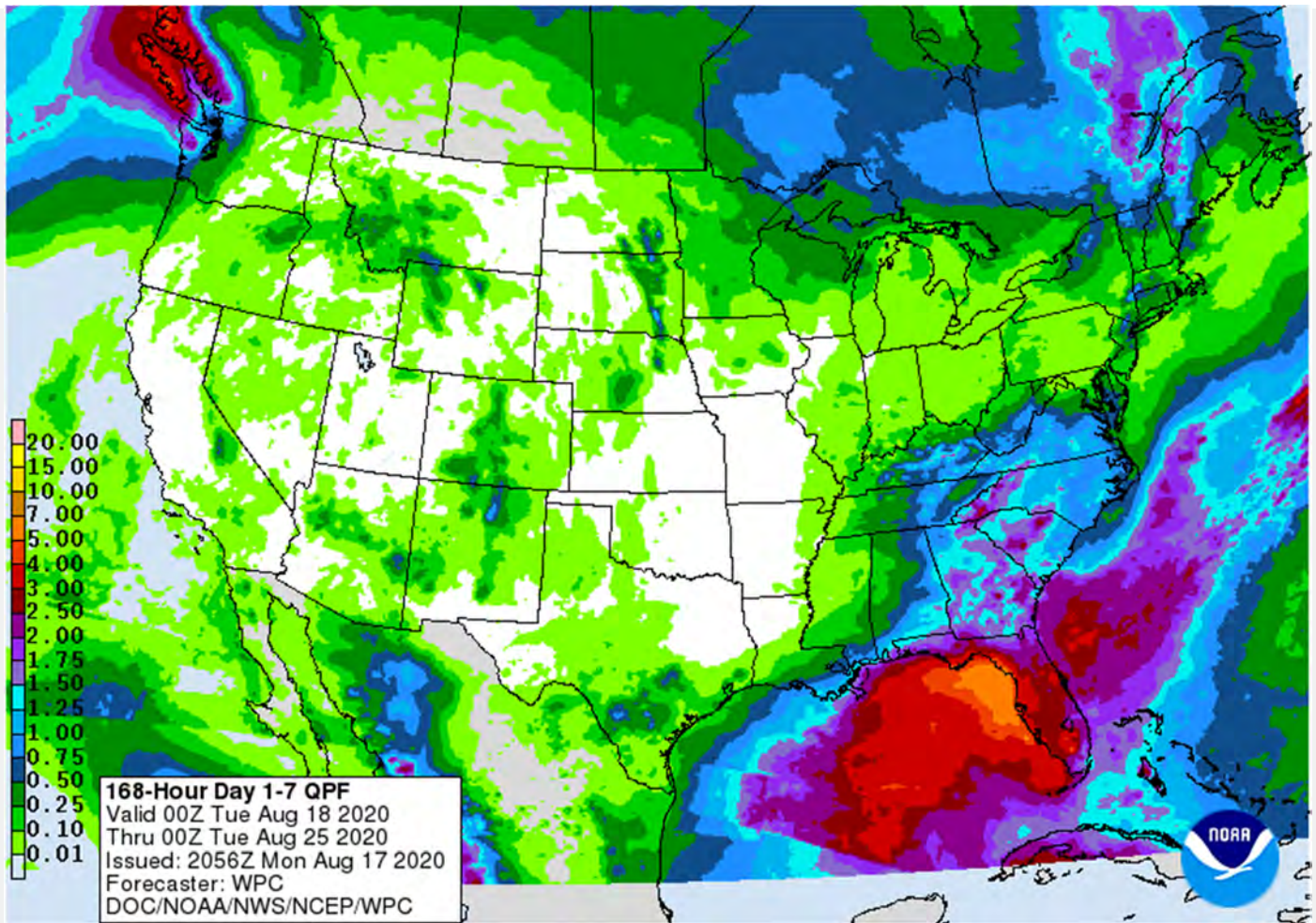
Weather Summary

Although the last couple of weeks have featured multiple rounds of showers and storms across Ohio, much of the state has seen below average precipitation. Rainfall amounts of 2-3" have been scattered across counties in northwest, southwest, and south-central Ohio, with some locations picking up even greater totals

(e.g., 3.98” near Archbold in Fulton County). As of Thursday August 13, 2020, the [U.S. Drought Monitor](#) indicates ~71% of the state is currently experiencing abnormally dry to moderate drought conditions, with the driest areas located across Madison, Pickaway, Richland, Wayne, Stark, Belmont, and Jefferson Counties. Soil moisture remains depleted along with low flows on streams in these areas. If you are seeing drought impacts in your area, consider submitting a report to the [Drought Impact Reporter](#). For more information on recent climate conditions and impacts, check out the latest [Hydro-Climate Assessment](#) from the [State Climate Office of Ohio](#).

Forecast

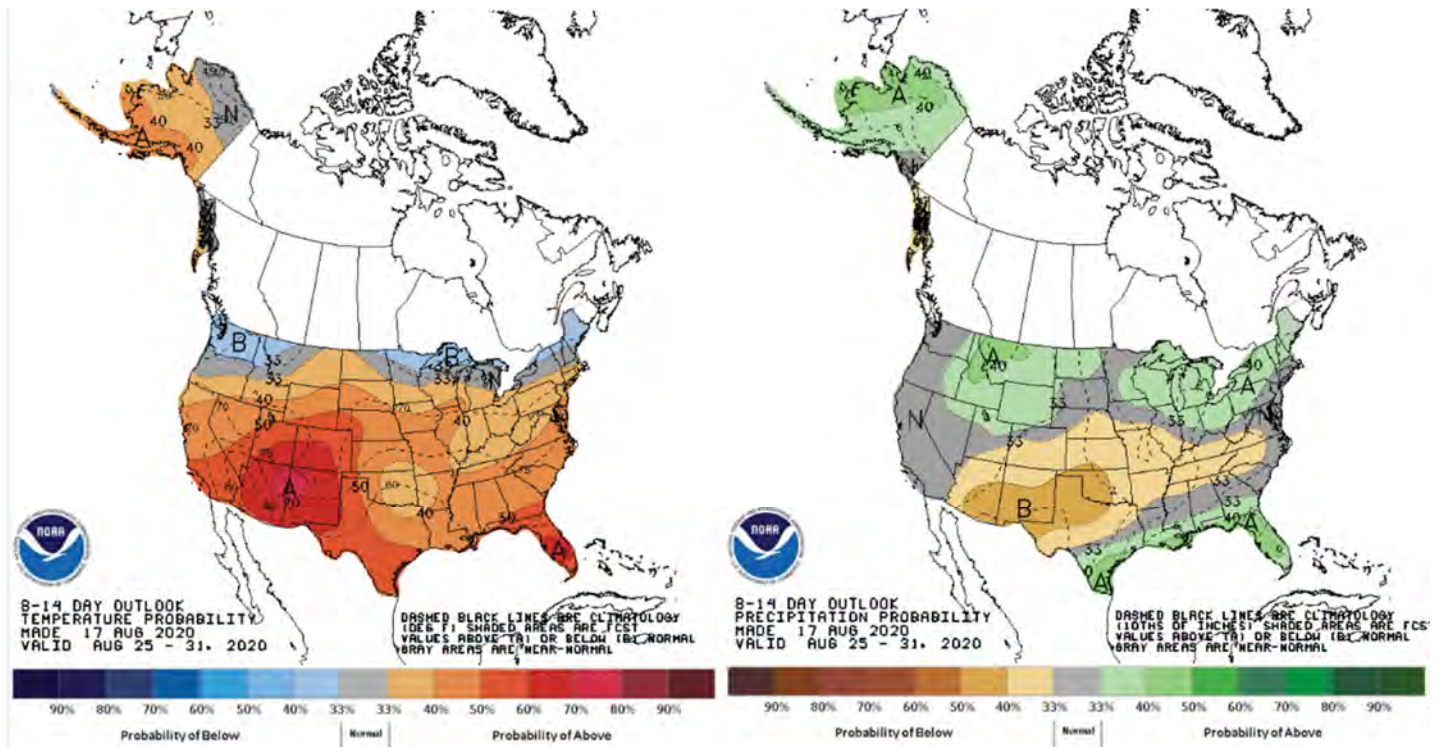
While a slight chance for an isolated storm continues through Tuesday, drier and cooler air will be in control for much of the week ahead. Highs will generally range from the mid-70s to the low-80s (north to south) on Tuesday and Wednesday, slowly warming back into the 80s statewide by the weekend. Overnight lows this week will dip into the low to mid 50s for many as well. A few storms may develop as we end the weekend into early next week. Overall, precipitation will be on the light side (Figure 2), with less than 0.10” expected (locally heavier rainfall possible).



Precipitation Forecast Map

Figure 2: Forecast precipitation for the next 7 days. Valid from 8 pm Monday August 17, 2020 through 8 pm Monday, August 24, 2020. Figure from the Weather Prediction Center.

The latest [NOAA/NWS/Climate Prediction Center](#) outlook for the 8-14 day period (August 25 – 31) and the [16-Day Rainfall Outlook from NOAA/NWS/Ohio River Forecast Center](#) show slightly elevated probabilities for *above average temperatures* and *above average precipitation* (Figure 3). Normal highs during the period are in the low to mid-80s, lows in the low to mid-60s, with 0.85-1.05” of rainfall per week. From a drought perspective, this is likely to maintain current conditions.



Outlook Map

Figure 3: Climate Prediction Center 8-14 Day Outlook valid for August 25-31, 2020 for (left) temperatures and (right) for precipitation. Colors represent the probability of below, normal, or above normal conditions.

Author(s):

Aaron Wilson

How to Identify Late Season Soybean Diseases in 2020



Sclerotinia stem rot – The nights have been cool this growing season, even when the days were very warm. The fog this morning in Wayne County reminded me that this is the time of the year to begin to scout for this stem disease. Sclerotinia is caused by a fungus that survives from season to season and over several years from sclerotia. The infections actually occurred during flowering when the canopy was closed, and cool nights can really enhance and favor this disease. For this disease, disease levels can reach 20% incidence before there is a measurable yield loss. Sclerotinia will occur as single plants or small patch of dying plants, that wilt and turn an deeper olive green color. Look at the stem and white fluffy growth will appear on the stem, this is the sign of the fungus.



Early symptoms of
Sclerotinia stem rot
Also called white mold



Sclerotinia Stem Rot

Sudden Death Syndrome – reports that this disease is also beginning to develop in some areas of the state where soybeans are reaching R6. Symptoms include irregular yellow spots, which turn brown or necrotic between the veins. Interestingly the veins are surrounded by green. The center of the stem or pith is bright white in this disease. This is a fungal pathogen and infections most likely occurred shortly after planting and this fungus causes extensive root rots. Figure has both susceptible and resistant cultivar. There is a look alike symptom caused by triazole fungicides when applied under hot conditions. To separate these

two, if a triazole had been sprayed, look at the roots. The roots will be very healthy where SDS, the roots and the center of the tap root are discolored.

Diaporthe stem canker (northern and southern) have both been problems in recent years. On susceptible cultivars the plants will die early in patches. For Northern, there is a canker at the third node which girdles the plant. For Southern, there can be several reddish cankers on the stem and the internal pith tissue is a reddish brown.



Diaporthe southern stem canker

Diaporthe Stem Canker

Phytophthora stem canker – numerous reports this year due to localized flooding events and in places that have not reported it very frequently. *Phytophthora* stem canker will occur 1 to 2 weeks after a heavy rain and in fields with poor drainage. The plants will wilt first, leaves will turn yellow, and a chocolate brown canker will form from the bottom of the plant to almost mid-height. The key difference between this and

Northern Diaporthe stem canker is the length of the canker and where it originates. If the canker begins below ground, the roots are discolored it is Phytophthora.

Phytophthora stem canker



Phytophthora Stem Canker

Author(s):

Anne Dorrance

Are Stink Bugs in Your Soybean?



Brown marmorated stink bug

As soybean begin to produce pods and seeds, it becomes a good food source for stink bugs. These insects like to feed on the developing seed, leading to wrinkled or shriveled seed. There are many types of stink bugs, but Ohio's most common stink bugs include the green, the brown and the brown marmorated. Also, stink bugs have nymphal stages that can look very different than the adults—nymphs are smaller and lack wings but feed all the same, if not more, than the adults. To look for stinkbugs, take a set of 10 sweeps in 10 different areas of the field (although stink bugs are mostly found along the edges, they can also be found in the interior of the field). If the average number of stink bugs is higher than 4 per set of 10 sweeps, treatment is necessary (this decreases to 2 per set of 10 sweeps if soybean is grown for seed or food grade). Visit our website for more information on stink bugs in soybean, including helpful guides for identification (aginsects.osu.edu).

Author(s):

Andy Michel, Kelley Tilmon

Fertility Calculator for Ohio Recommendation



Image of Fertilizer Calculator Program

A Microsoft Excel spreadsheet has been developed to support nutrient management education programs provided by Ohio State University Extension and for users who want to generate their own recommendation or compare recommendations provided to them to the *Tri-State Fertilizer Recommendations for Corn, Soybeans, Wheat, and Alfalfa, 2020*. The spreadsheet is designed to be compatible with Excel version, Excel 1997-2003 or later.

The tool generates recommendations for the following crops:

1. Corn
2. Corn-Silage
3. Soybeans
4. Wheat (Grain Only)
5. Wheat (Grain & Straw)
6. Alfalfa
7. Grass Hay
8. Grass/Legume Hay

Overview of spreadsheet features:

- There are 21 data lines.
- Data can be copied from another spreadsheet or within the spreadsheet

- User controls whether recommendations are build/maintenance or maintenance only for phosphorus (P) & potassium (K) recommendations.
- User can select when a field the critical level used for corn/soybean rotations or wheat, alfalfa, or grass legume hay for P recommendations.
- Can select a shorter or longer buildup period than standard 4 year for P & K.
- P & K recommendations are displayed with buildup and maintenance requirements separately.
- Total fertility need can be determined for a 1-, 2- or 3-year application on P & K Recommendation page.
- User can determine total cost of P & K fertilizer needed to meet the nutrient recommendation.
- Lime recommendations are developed using target final soil pH and tillage depth.
- User can compare cost of two lime sources.
- User can determine total cost of Lime needed in the recommendation developed.

The spreadsheet is available at: <https://go.osu.edu/ohiofertilitytool>
A printed User Guide is available at: <https://go.osu.edu/ohiofertilitytoolguide>
A video demonstration at: <https://go.osu.edu/ohiofertilitytoolvideo>

Author(s):
Greg LaBarge, CPAg/CCA

Past WBC Peak Flight, Low Numbers Across State



Western Bean Cutworm moth

Western bean cutworm (WBC) trap counts for the week of August 10 – 16 decreased over the past week putting all monitoring counties below scouting threshold. The low numbers indicate we are officially past peak flight. Overall, a total of 27 counties monitored 90 traps, resulting in 38 WBC adults (a statewide average of 0.4 moths per trap) (Figure 1).

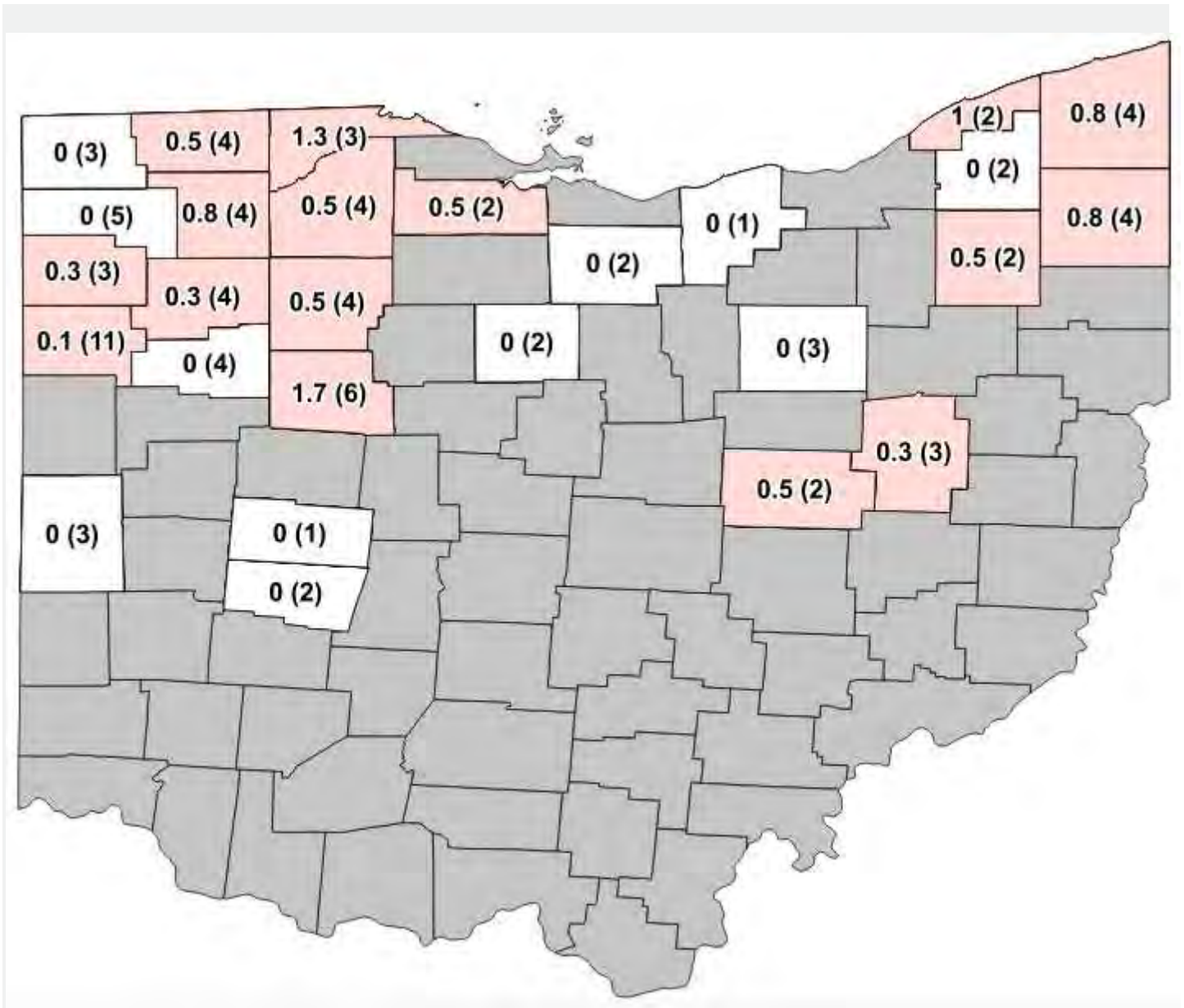




Figure 1. Average Western bean cutworm adult per trap followed by total number of traps in the county in parentheses for week ending August 16, 2020.

Author(s):

Amy Raudenbush, Angela Arnold, Mark Badertscher, Jordan Beck, Frank Becker, Lee Beers, CCA, Bruce Clevenger, CCA, Sam Custer, Tom Dehaas, Craig Everett, Allen Gahler, Jason Hartschuh, CCA, Andrew Holden, James Jasinski, Stephanie Karhoff, Alan Leininger, Ed Lentz, CCA, Rory Lewandowski, Cecilia Lokai-Minnich, Matthew Lorentz, David Marrison, Sarah Noggle, Les Ober, CCA, Eric Richer, CCA, Garth Ruff, Beth Scheckelhoff, Clint Schroeder, Mike Sunderman, Curtis Young, CCA, Chris Zoller, Andy Michel, Kelley Tilmon

Other Articles

Thinking about storing more grain this fall?

August 18₂₀₂₀

Source: Chris Bruynis, Associate Professor/Extension Educator

There are several market factors that may have farmers looking to increase their storage for this fall. With lower prices, some farmers will look to store grain and hope prices will improve. With the current basis and price improvement between the harvest period compared to the January/March delivery period of 22 to 40 cents for corn and 16 to 34 cents for soybeans, elevators are sending a message to store grain.

The concern I have is that we will use some facilities that are not typically used for grain storage making aeration challenging at best. With poor air movement, grain going into storage will need to be of better quality, lower foreign material, and probably lower moisture.

Farmers interested in learning some strategies for successful drying and storage of grain, specifically corn and soybeans, are invited to join a **Zoom Webinar on Monday August 24, 2020 at 8:00 PM. Dr. Kenneth Hellevang, Ph.D., PE, Extension Engineer and Professor from North Dakota State University** will be the featured speaker. He is one of the leading experts on grain drying, handling and storage.

To join the webinar, go

to <https://osu.zoom.us/j/7911606448?pwd=L1pQQ0VoODROZG56Q015enNBQkVVUT09> and enter the Password: STORAGE

Also, if you cannot attend the program during the broadcast time, the recording will be available on the Ohio Ag Manager website following the program. The recording will be located at <https://u.osu.edu/ohioagmanager/resources>.

If you have questions, contact Chris Bruynis, bruynis.1@osu.edu or 740-702-3200. If you need assistance logging in on the evening of the program, contact David Marrison at 740-722-6073 or marrison.2@osu.edu.

Prepared by Jeff Stachler

Ohio State University Agriculture and Natural Resources Extension Educator, Auglaize County
stachler.1@osu.edu and 701-541-0043