

COSHOCTON COUNTY AGRICULTURE & NATURAL RESOURCES**July 27 (Edition #157)**

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First FARM Friday Slated for August 5
Ohio Farmland Leasing Update is August 11
Dog Days of Summer Lead to First Farm Friday

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Hello Coshocton County! It was good to get some rain over the past week. We will keep praying for more as we close this month and move into August. Time to make our yield!

Congratulations to the Coshocton County Farm Bureau for their excellent recognition banquet held on Monday evening at Schumaker Farms in West Lafayette. Congratulations to Cannon Waters, Elizabeth Porteus, Hayden Shook and Kristina Scheurman for being chosen to each receive a 2022 Coshocton County Farm Bureau Scholarship and to Bob Buxton for being awarded the Farm Bureau Member of Distinction.

A reminder that next Friday (August 5) will be First FARM Friday on Main Street in Coshocton from 5:00 to 7:00 p.m. We are excited to help showcase our great industry to attendees. Please mark this date on your calendars!

Have a great week!

Sincerely,

David L. Marrison

Coshocton County OSU Extension ANR Educator

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THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
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Weather Update

By: Aaron Wilson

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2022-24/weather-update-ample-july-precipitation-most>

Summary

The precipitation pendulum has swung back the other direction for many across the state in July. Figure 1 shows that much of western and central Ohio have picked up more than 150% of normal precipitation, with multiple rounds of showers and storms. [CoCoRaHS](#) observations for the month show rainfall totals in the 8–10-inch range for Delaware, Licking, and Franklin Counties in central Ohio. This wet pattern has been accompanied by temperatures running near average for most of Ohio, and 1–3°F above average for counties in the southwest and northeast. The seesaw nature of this year's growing season has left highly variable crop conditions, though much of the stress from dry weather in June has been alleviated. For the latest up-to-date conditions, seasonal outlooks, and monthly climate summaries, please visit the [State Climate Office of Ohio](#).

Forecast

A front that dropped south of the region on Monday, will edge back northward near the Ohio river on Tuesday and meander there through Thursday. Multiple disturbances will ride eastward along this front, bringing numerous rounds of showers and storms across the state. Most of the activity will be focused south of about I-70, though northern Ohio will not be rainfree. Temperatures will be kept in check, with highs in the 70s expected on Tuesday, and upper 70s to low 80s on Wednesday and Thursday. Dry, tranquil weather will return for Friday through the weekend, with low humidity and mild temperatures. The [Weather Prediction Center](#) is forecasting 1.0-3.0 inches of rain for southern counties, tapering to less than 0.5 inch across the north, primarily over the next 3 days (Figure 2). After this week's near normal temperatures, the [Climate Prediction Center's](#) 6–10-day outlook for the period of July 31 – August 4, 2022 and the [16-Day Rainfall Outlook from NOAA/NWS/Ohio River Forecast Center](#) show above average temperatures and near average precipitation are expected (Figure 3). Climate averages have reached their annual peak including a high-temperature range of 83-87°F, a low-temperature range of 62-66°F, and average weekly total precipitation of 0.75-0.90 inches.

Accumulated Precipitation (in): Percent of 1991-2020 Normals
July 01, 2022 to July 25, 2022

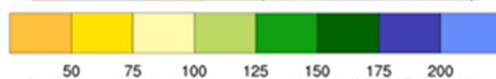
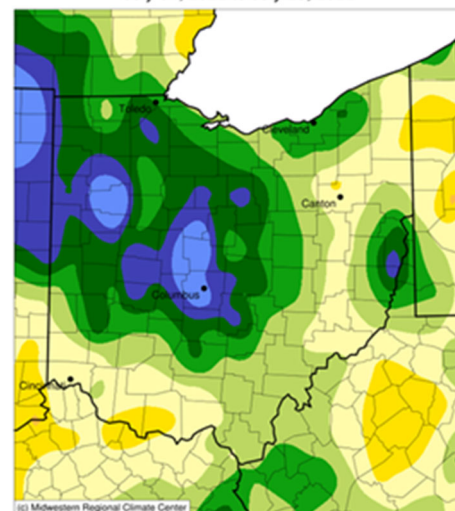


Figure 1). Percent of normal precipitation for the July 2022 to date. Figure courtesy of the Midwestern Regional Climate Center (<https://mrcc.purdue.edu>).

Figure 2). Precipitation forecast from the Weather Prediction Center for 8pm Monday July 25 – 8pm August 2.

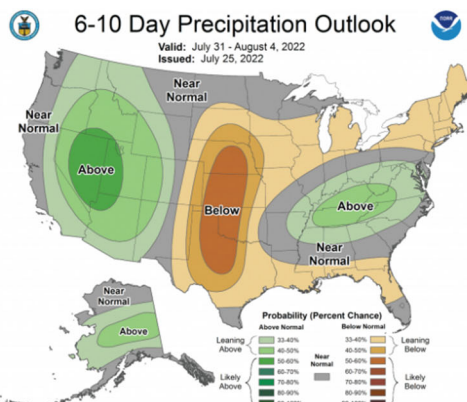
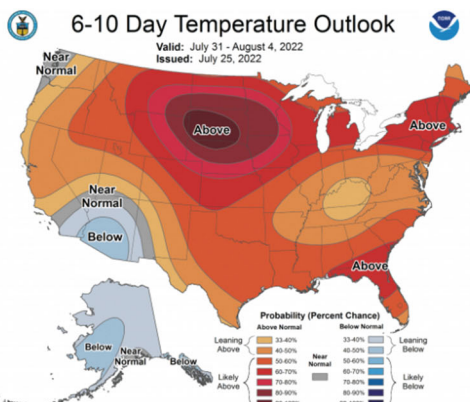
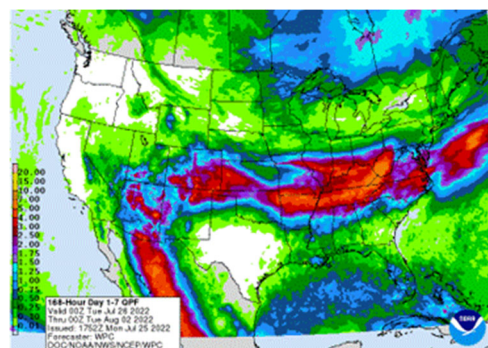


Figure 3) Climate Prediction Center 6-10 Day Outlook valid for July 31 – August 4, 2022, for left) temperatures and right) precipitation. Colors represent the probability of below, normal, or above normal conditions.

Seeding Perennial Forages in Late Summer

By: Mark Sulc

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2022-24/seeding-perennial-forages-late-summer>

August is the second good window of opportunity of the year for establishing perennial forage stands (spring being the first good planting time). August is also the ideal time for filling in gaps in seedings made this spring. The primary risk with late summer forage seedings is having sufficient moisture for seed germination and good plant establishment before cold weather arrives. The decision to plant or not will have to be made for each individual field, considering soil moisture status and the rainfall forecast. Rainfall and adequate soil moisture in the few weeks immediately after seeding is the primary factor affecting successful forage establishment.



No-till Seedings

No-till seeding is an excellent choice to conserve soil moisture for seed germination in late summer. Make sure that the field surface is relatively level and smooth if you plan to no-till, because you will have to live with any field roughness for multiple years of harvesting operations. No-till into wheat stubble would be an excellent option.

Sclerotinia crown and stem rot is a concern with no-till seedings of alfalfa or red clover in late summer in fields with a recent history of clover. This pathogen causes white mold on alfalfa seedlings and infects plants during the cool rainy spells in late October and November. Early August plantings dramatically improve the alfalfa's ability to resist or tolerate the infection. Late August or early September seedings are very susceptible to this disease, with mid-August plantings being intermediate.

In a no-till situation, minimize competition from existing weeds by applying glyphosate burndown before planting. Herbicide-resistant weeds, such as marestail, create a very difficult situation and there are no effective control options in no-till management, so conventional tillage for seedbed prep is probably a better choice in those situations.

Conventional Tillage Seedings

Prepare a firm seedbed to ensure good seed-to-soil contact. Be aware that too much tillage depletes soil moisture and increases the risk of soil crusting. Follow the "footprint guide" that soil should be firm enough for a footprint to sink no deeper than one-half inch. Tilled seedbeds usually do not need a pre-plant herbicide.

Patching Spring Seedings

Where gaps exist in seedings made this spring, it is possible to drill in seed now, even in alfalfa. Autotoxicity will not be a limiting factor in alfalfa seedings made this spring. Alfalfa plants that are less than a year old do not release enough autotoxic compounds into the surrounding soil to harm new seedlings of alfalfa. So, this summer is the last opportunity to try to "patch-in" alfalfa in thin areas of alfalfa stands seeded this spring. By next spring, autotoxicity will be a concern.

Grassy weeds are probably present in thin or weak areas of new spring seedings. As soon as possible, consider applying a grass herbicide to pure legume stands or a broadleaf herbicide if needed in pure grass stands. If broadleaf weeds are present in legume stands or mixed grass-legume stands, effective herbicide options are much more limited, because most broadleaf herbicides labeled for use in alfalfa or other legume forages are only effective when the weeds are quite small. Before applying a herbicide, check the label for pre-plant time intervals that may be required. Use only herbicides with little or no time interval between application and seeding forages. Take a cutting in early August and then immediately drill seed into the thin areas. Try to time drilling the seed when you see some rain in the forecast, especially if the soil is dry.

The following steps improve the chances for stand establishment success regardless of what type of seeding

you are making:

- Soil fertility and pH: The recommended soil pH for alfalfa is 6.5 to 6.8. Forage grasses and clovers should have a pH of 6.0 or above. The optimal soil phosphorus level for forage legumes is 30 to 50 ppm Mehlich-3 and for grasses 20 to 30 ppm Mehlich-3. The optimal soil potassium level is 120 to 170 ppm for most of our soils.
- Check herbicide history of field. A summary table of herbicide rotation intervals for alfalfa and clovers is available at <http://go.osu.edu/herbrotationintervals>. Forage grasses are not included in that table, so check the labels of any herbicides applied to the field in the last 2 years for any restrictions that might exist for forage grass seedings.
- Seed selection: Be sure to use high quality seed of adapted varieties and use fresh inoculum of the proper Rhizobium bacteria for legume seeds. "Common" seed (variety not stated) is usually lower yielding and not as persistent, and from our trials the savings in seed cost is lost within the first year or two through lower forage yields.
- Planting date: Planting of alfalfa and other legumes should be completed between late July and mid-August in Northern Ohio and between early and late August in Southern Ohio. Most cool-season perennial grasses can be planted a little later. Check the Ohio Agronomy Guide for specific guidelines (see <http://go.osu.edu/forage-seeding-dates>).
- Planter calibration: If coated seed is used, be aware that coatings can account for up to one-third of the weight of the seed. This affects the number of seeds planted in planters set to plant seed on a weight basis. Seed coatings can also dramatically alter how the seed flows through the drill, so calibrate the drill or planter with the seed to be planted and don't depend on planter calibration charts. There is an excellent video on calibrating drills available at <https://forages.osu.edu/video>.
- Seed placement: The recommended seeding depth for forages is one-quarter to one-half inch deep. It is better to err on the side of planting shallow rather than too deep.

Do not harvest a new perennial forage stand this fall. The ONLY exception to this rule is perennial and Italian ryegrass plantings. Mow or harvest those grasses to a stubble height of two and a half to three-inches in late November to improve winter survival. Do NOT cut any other forage species in the fall, especially legumes.

Scout your new forage seeding this fall on a regular basis. Post-emergence herbicide options exist for alfalfa to control late summer and fall emerging winter annual broadleaf weeds. A mid- to late fall application of Butyrac (2,4-DB), bromoxynil, Pursuit or Raptor are the primary herbicide options for winter annual broadleaf weeds. **Fall application is much more effective than a spring application for control of these weeds especially if wild radish/wild turnip are in the weed mix.** Pursuit and Raptor can control winter annual grasses in the fall in pure legume stands but cannot be used in a mixed alfalfa/grass planting. Consult the 2022 Weed Control Guide for Ohio, Indiana, and Illinois (<https://extensionpubs.osu.edu/crops/field-crops/>) and always read the specific product label for guidelines on timing and rates before applying any product.

Defoliation in Soybean and Corn

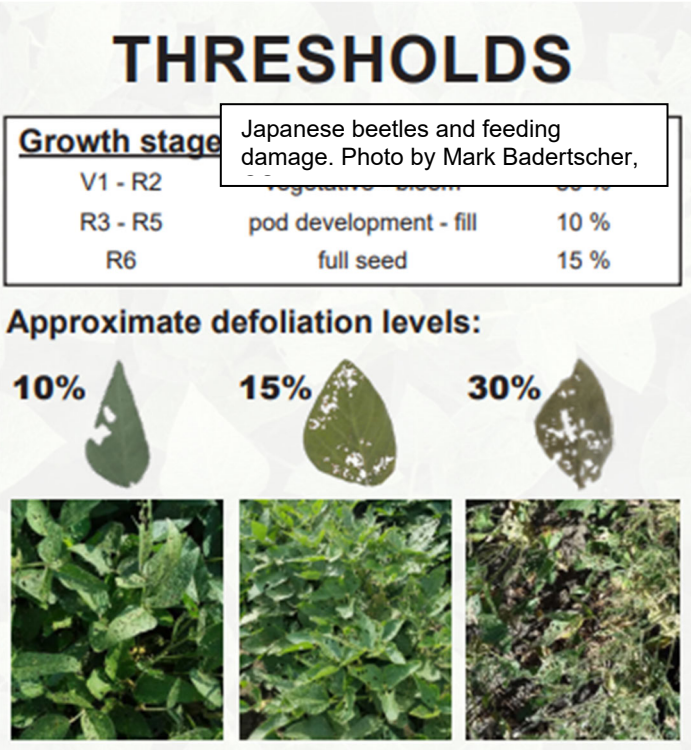
By: Kelley Tilmon and Andy Michel

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2022-24/defoliation-soybean-and-corn>

Starting in July and through August, a number of different insect species (such as beetles and various caterpillars) can feed on corn and soybean leaves. Foliage feeding in corn is almost never economic, though economic damage from silk clipping by beetles is possible (though rare). Consider a rescue treatment when silks are clipped to less than ½ inch and, fewer than 50% of the plants have been pollinated, and the beetles are still numerous and feeding in the field.



In soybean, while the defoliation damage from various species might look startling, it is rather rare that this reaches economic levels. Soybeans are master compensators. OSU agronomist Dr. Laura Lindsey reports that she has even weed-whacked large portions of soybean foliage and seen no difference in yield by the end of the season! For defoliating insects in soybean, we usually use an overall defoliation measure as the threshold, regardless of what species is doing the feeding. This helps account for situations where more than one species may be having its bite. Entomologists have recently calculated new thresholds for soybean defoliation based on more modern crop values and input costs. A rescue treatment is advised when defoliation levels reach 30% in pre-bloom stages, 10% during pod development and fill, and 15% at R6 (full seed). After R6, a spray will not pay. These defoliation levels apply to the plant as a whole, not just certain leaves. Damage is often worst at the top of the canopy but on closer examination most of the plant is relatively unharmed. Make your decision based on the average condition of whole plants, not a scan of the top canopy. Also, defoliation tends to be worse on field edges, so make your assessment based on the field as a whole, including interior.



A visual guide to defoliation is useful because it is very easy to over-estimate defoliation in soybean. For more information, visit our new Soybean Defoliation scouting card at <https://aginsects.osu.edu/sites/aginsects/files/imce/Soybean%20defoliation%20Final.pdf>

Other Corn Ear Abnormalities

By: Osler Ortiz

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2022-24/other-corn-ear-abnormalities-%E2%80%93-when-and-why-do-they-develop>

Despite many corn acres having reached tasseling, other corn acres are still in rapidly growing stages, mid to late vegetative. Any adverse conditions can still affect the crop through or prior to harvest. [Arrested ears](#) occurrence was discussed two weeks ago. Other ear abnormalities of concern up to this point in the season can include tassel ears, fasciated ears, pinched ears, blunt ears, silk-balled ears, incomplete kernel set, banana ears, zipper ears, and tipped back ears.

Based on existing knowledge, table 1 and the following figures present a summary of these abnormalities, including the possible causal factors and their expected timing of development. Plant stages used here are based on the leaf collar method.

Table 1. Summary of various abnormal ear symptoms, their causal factors, and development timing. Adapted from Ortiz et al., 2022a.

| Symptom | Possible causal factors | Development timing | Figure |
|--|---|--|--------|
| 1. Tassel ears: ears at the top of tiller plants in place of tassels | Lower populations, end or border rows, growing point damage, genetics | Initiation and differentiation of tiller's apical meristem into floral structure | 1 |
| 2. Fasciated ears: increased and non-organized kernel rows | Specific mutants (i.e., genetics), cold temperatures | Ear initiation and development, V4–V7 | 2 |

| | | | |
|---|---|---|---|
| 3. Pinched ears: abrupt change to fewer kernel rows in the ear | Cell division inhibitors, for example, sulfonylurea herbicides | Ear size determination period, V6–V12 | 3 |
| 4. Blunt ears: noticeably shorter and stunted ears | Plant stressors (e.g., chemicals or environment), genetics, management | Ear size determination period, V6–V12 | 4 |
| 5. Silk-balled ears: silks fail to elongate toward the ear tip properly | Cold temperatures, drought, genetics | Silk elongation, V12–R1 | 5 |
| 6. Incomplete kernel set: poor or scattered kernel set in the ear | Silks damage, drought, high temperatures, pollination issues, phosphorus shortages, herbicide injury, cloudy days | Pollination, VT or R1; and early reproductive stages, R1–R3 | 6 |
| 7. Banana ears: the curvature of the cob toward a damaged side of the ear | Severe weather, chemical applications, heat or drought, stink bug injury | Pollination, VT or R1; and early reproductive stages, R1–R3 | 7 |
| 8. Zipper ears: ears with missing kernel rows | Higher seeding rates, drought stress, genetics, defoliation, deficient pollination | Pollination, VT or R1; and early reproductive stages, R1–R3 | 8 |
| 9. Tipped-back ears: missing kernels at the tip of the ear | Pollen and silk availability, kernel abortion, cloudy days, heat, drought, genetics, higher seeding rates | Pollination, VT or R1; and early reproductive stages, R1–R3 | 9 |

1. Tassel ears

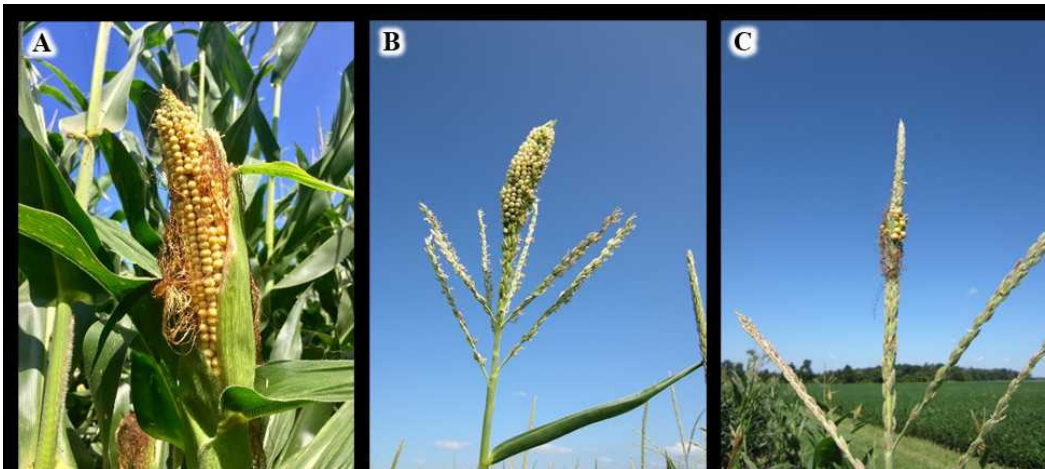


Figure 1. (a) Complete replacement of tassel and (b–c) partial replacement of tassel on tillers in an end row. Images: (a) Osler Orteiz, (b–c) Robert Nielsen.

2. Fasciated ears

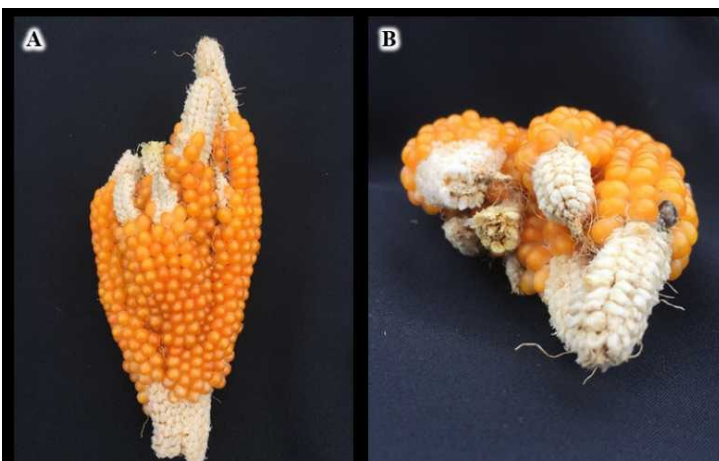


Figure 2. Fasciated popcorn ear with seven ear branches. (a) Side and (b) top views. Images: Osler Orteiz.

3. Pinched ears

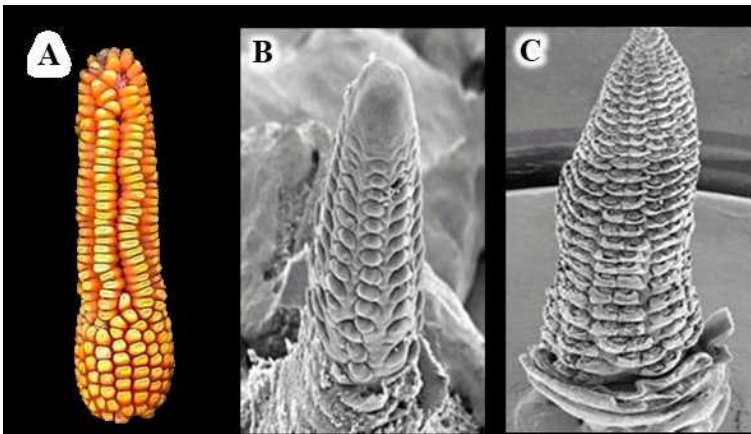


Figure 3. Corn ears at different developmental stages. (a) Mature pinched ear due to sulfonylurea herbicide applied between V7 and V10 stages, (b) developing ear at the V9 stage, and (c) developing ear at V12 stage. Images adapted from Strachan (2010). Images: (a–b) Antonio Perdomo, (c) Stephen Strachan.

4. Blunt ears

Figure 4. Blunt ears, beer-can ears, or stunted ears. (a) The similarity in kernel row number of a blunt ear compared with a normal ear, but with arrested ovule and kernel development. (b) Different degrees of arrested development in blunt ears. Images: (a) Robert Nielsen, (b) Peter Thomison.



5. Silk-balled ears



Figure 5. (a–b) Silk-balled ears or scrambled silks, silks growing in different directions trapped within the husk and (c) ears with various severity levels of damage. Images: Robert Nielsen.

6. Incomplete kernel set

Figure 6. (a) Ears displaying incomplete kernel set; and (b–c) silk-clipped ears, damage caused by insect clipping before or during pollination. Images: (a) Peter Thomison, (b) Robert Nielsen, (c) Osler Ortiz.



7. Banana ears

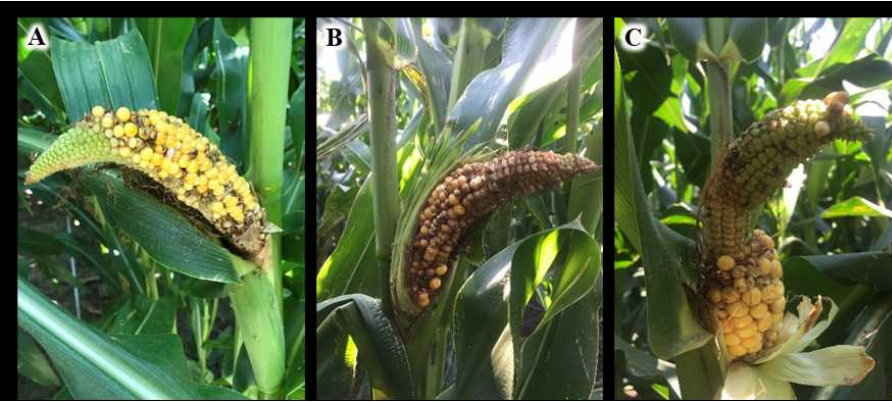


Figure 7. Banana ears exhibit curvature along the cob shape with different degrees of damage (A, B, C). Husk leaves were removed (if needed) for better symptom visibility. Images: Osler Ortez.

8. Zipper ears

Figure 8. (a) Zipper ears increase at higher seeding rates; from left to right (three ears per treatment): 62,000, 86,000, and 111,000 seeds per hectare. (b) Ear with several kernel rows missing due to pollination or abortion issues, husk leaves were removed for better symptom visibility. Images: (a) Peter Thomison, (b) Osler Ortez.



9. Tipped-back ears

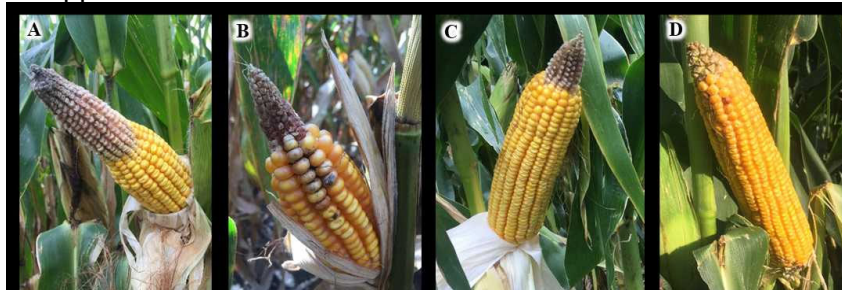


Figure 9. Tipped-back ears with unfilled kernels towards the tip. (a) Ear with about 50% tipped back, (b) about 25% tipped-back, (c) about 10% tipped-back, and (d) about 5% tipped back. Husk leaves were removed for tip-back visibility. Images: (a, b, and d) Osler Ortez, (c) Justin McMechan.

To learn more about these and other abnormal ears, a literature review is summarized here: <https://doi.org/10.1002/agj2.20986>. For more resources, previous work in Ohio has a comprehensive summary available, Troubleshooting Abnormal Corn Ears: <https://u.osu.edu/mastercorn/>. When it comes to abnormal ears, questions still need answers. However, with the knowledge available, abnormal ears can be seen as the result of an “expression triangle” where susceptible hybrids, conducive environmental conditions, and unfavorable management practices can result in abnormal ears. The crop’s exposure to unfavorable conditions can negatively affect ear formation and produce abnormal ears. Abnormal ears reduce yield and can reduce grain quality too.

References

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Algae Loves Your Cattle Waterers

by: [Richard Purdin](#), OSU ANR/CD Educator, Adams County

Source: <https://u.osu.edu/beef/2022/07/20/the-heat-is-on-and-the-algae-loves-it/>

July got off to a hot and dry start for much of Ohio and for livestock managers this brings on added chores on the to do list to keep livestock healthy and productive. Water is the source of life and I often preach on the importance and the critical role it plays in animal health. When livestock have clean fresh water to always drink, they will better consume feed and forage and absorb its nutrients more efficiently. More adequate water consumptions can equate to better rate of gain, increased fertility and reproductive performance, increased milk production and weaning weights, and much more benefits. When water is not available or the tainted in anyway livestock will avoid drinking or try to find water in other areas, this can have a detrimental effect on animal health and should be priority for managers to prevent. There can be multiple factors that lead to water be tainted or unpleasant for livestock consumption but one of the most common factors during the summer is the build up of algae growth in water tanks, troughs, or reservoirs.



If the water doesn't look appealing for you to drink, don't expect your livestock to drink it.

Keeping algae out of the livestock drinking facilities can be a big challenge. Algae in livestock water tanks is not just a nuisance but it can also be toxic to livestock. There are different types of Algae that can grow and thrive in livestock water tanks, warm weather, livestock saliva, sunshine, and introduction of organic matter or manure can provide a perfect growing condition for algae. There are several different types of algae that can be found growing in livestock water tanks but one that get the most attention is the blue green algae or also called cyanobacteria. This type of algae can be toxic to livestock causing symptoms of blue green algae toxicosis. Symptoms of blue green algae toxicosis include muscle tremors, bloody diarrhea, seizures, excessive salivation, and liver failure. Steps should be taken to maintain a clean water supply for livestock no matter what time of year it is but it is especially important during the hot summer months. Livestock will refuse to drink water with high population of algae, and this can lower overall animal performance and put their health in jeopardy. Some steps to take to maintain a clean water supply and reduce algae growth include.

- Routinely drain and clean water facilities with a scrub brush.
- Put up railing or barriers along water tanks, this will help eliminated feces and urine from entering the tank or watering area.
- Placing water tanks in shady areas can reduce algae growth. Watering facilities in shady areas also have cooler water temperatures reducing growth.
- Think about types of water tanks or troughs used, rubber tanks stay cooler than concrete or steel tanks.
- Monitor water PH. Algae prefers water ph. levels around 8.0-8.5, maintain water ph. levels between 6.5-7.0 can help reduce algae growth.
- Disinfect often- using regular home grade unscented bleach at a rate of 2-3 oz per 50 gallons of water can be used and safe for livestock.
- Copper sulfate products can be mixed and used in larger facilities or ponds to reduce algae growth.

In summary algae growth in livestock watering facilities should not be overlooks or ignored, taking time to prevent and clean watering facilities on a routine basis should be toward the top your to do list. On my farm I have set a day in my weekly schedule to drain and clean water tanks, this has also allowed me to observe my livestock's drinking habits and amount water consumed. Remember, if the water doesn't look appealing for you to drink, don't expect your livestock to drink it, grab the brush and happy cleaning!

Other helpful resources

<https://www.aces.edu/blog/topics/beef/keeping-it-clean-livestock-water-tank-maintenance/>

<https://burke.ces.ncsu.edu/2016/05/controlling-algae-in-livestock-water-tanks/>

<https://afs.ca.uky.edu/dairy/harmful-algal-blooms-are-my-cattle-danger>

Johnsongrass: Friend or Foe?

Johnsongrass: Friend or Foe?

By: [Christine Gelley](#), Agriculture and Natural Resources Educator, Noble County OSU Extension

Source: <https://u.osu.edu/beef/2022/07/20/johnsongrass-friend-or-foe/>

Johnsongrass is easy to find in July in Ohio. It is a warm-season grass that is related to corn. Unlike its relatives- corn, sorghum, and sorghum-sudangrass, which are annual species commonly used for agronomic purposes, johnsongrass is a perennial that has naturalized itself in our environment. Johnsongrass begins actively growing when soil temperatures reach 70 degrees Fahrenheit, which is why it is more prevalent in Ohio in mid-summer to fall.



Whether we classify johnsongrass as a weed or as a forage could be debated, but it is formally listed as a noxious weed in Ohio and therefore the debate is resolved. Johnsongrass is a non-native, aggressive, naturalized weed that does provide some value as a forage, but by no means should be purposefully planted or propagated due to the threats it poses to our native species and agronomic cropping systems. It was initially introduced from the Mediterranean as a forage crop and then dispersed in an attempt to fight erosion in floodplains, which it can do effectively, but the problem is the ability it has to swallow up habitat for native plants that rely on those environments to persist.

Like other members of the sorghum family, johnsongrass can cause nitrate or prussic acid toxicity.

Because johnsongrass is a grass, it can be very challenging to control with herbicides in pastures and hayfields that are predominately grass swards. There are a greater range of options for effective herbicide use in legume systems, which I will not elaborate on in this article. The best news for pasture and hayfield managers regarding this weed is that although johnsongrass is aggressive and spreads both by seeds and rhizomes, it is not tolerant of close grazing or mowing.

Continually using animals to graze down johnsongrass or defoliating it with machinery can prevent the development of seedheads and weaken the root system over time, while also providing a source of feed for livestock, with the exception of equine animals. Horses should not be introduced to areas where they would have the opportunity to graze johnsongrass or other sorghum type forages due to the risk of developing equine cystitis.

Alas, there are also other concerns with grazing johnsongrass which stem from how the plant responds to environmental stress. Like other members of the sorghum family, johnsongrass can cause nitrate or prussic acid toxicity if plants are overfertilized with nitrogen, subjected to drought, and/or frost. During times of stress nitrogen cannot be effectively metabolized by the plants and thus can accumulate at levels that are dangerous for animals to consume. In turn, prussic acid is produced by the plant in response to stress, which is also dangerous and can lead to animal distress or death.

Both nitrate and prussic acid levels will dissipate over time after the stress event and can be fed again safely, but managers must be observant and responsive when growing conditions inhibited by environmental stress. Nitrates and prussic acids do not dissipate to safe levels with the act of harvesting or ensiling. Therefore, managers cannot speed up the time to safe consumption with mechanical harvest. Patience is the tool that is needed.

Additional information about the forage value of johnsongrass and options for control are available by request from local service agencies and educational fact sheets that elaborate on the complexities of managing johnsongrass. Testing services are also available for managers who have concerns about nitrate levels in sorghum crops. If you want to learn more about johnsongrass management or nitrate testing, connect with your local Extension Educator.

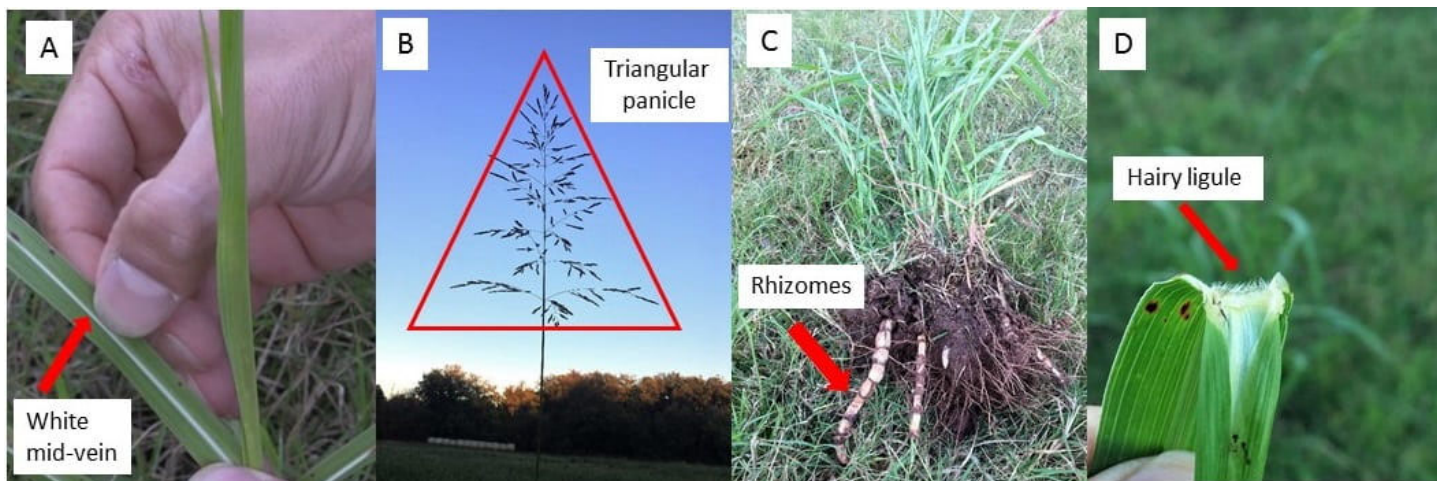


Photo: Oklahoma State University

Using Multiple Entities for Transition of Farming Operation

By: Robert Moore, Thursday, July 21st, 2022

Source: <https://farmoffice.osu.edu/blog/thu-07212022-652am/using-multiple-entities-transition-farming-operation>

A challenge that many farm families face is how to bring the next generation of farmers into the farming operation. In addition to the challenges of management, delegation of responsibility and communication, the intensive capital nature of farming presents a unique challenge to many farm families. That is, how to bring a 25 year-old into a multi-million dollar farming operation? The next generation farmer may not have the resources to buy into the farming operation. Also, the current generation may not want to make a large gift to get the next generation into the farming operation. Using multiple entities can help reduce the challenges of this situation.



Let's start with a typical farming operation that has all assets under common ownership, either as individuals or an entity. The value of this entity is the combined value of all the farm assets. For the next generation farmer to gain ownership in this operation, the total value of the farm assets is used to calculate their buy in or gift. This scenario is illustrated in the following diagram:

In this scenario, Mom and Dad own all the farming assets in their names. The total farming operation is valued at \$3.5 million. For Daughter to even enter the farming operation as a small percentage owner, say 10%, she should either need \$350,000 to buy into the operation or Mom and Dad would need to gift her \$350,000. Also, Mom and Dad may be reluctant to give Daughter part ownership of the machinery and land in event Daughter ends up not staying on the farm.



To overcome this difficult situation, the farming operation is divided into three separate entities. The operating assets are held in an Operating LLC, the machinery in a Machinery LLC and the land in a Land LLC. By dividing assets among multiple entities, the total value of the farming operation has been divided among the entities. See the following diagram:

Each entity has a value which is considerably less than the total value of all farm assets. Now, Mom and Dad can bring Daughter into the Operating LLC as a 10% owner for only \$50,000. Daughter may have \$50,000 available for a buy-in or, more likely, Mom and Dad are more comfortable making a \$50,000 gift. Also, it may be possible to get the Operating LLC to a near \$0 value by distributing out the cash and grain to Mom and Dad before Daughter enters the operation.



The entity diagram after Daughter becomes an owner in the Operating LLC is as follows:

Daughter has become an owner in the Operating LLC and can help with management and decision making for the farming operation. However, Mom and Dad retain full ownership and control over the machinery and land. Perhaps after a few years, when Mom and Dad are more confident Daughter intends to stay on the farm, Daughter begins to buy into the Machinery LLC or is gifted ownership. Or, perhaps Daughter eventually buys her own machinery for the farming operation. The same can be done with the land LLC.

When bringing in the next generation into the farming operation, a multi-entity should be considered. It is a good method for the next generation farmer to enter the farming operation without the burden of accounting for the value of all farm assets. It also allows the current generation to maintain ownership and control of the more important farm assets.



First FARM Friday Slated for August 5

We invite you to attend **First FARM Friday** on Friday, August 5 on Main Street in Coshocton from 5:00 to 7:00 p.m. This event is spearheaded by our friends from the Coshocton Soil & Water Conservation and there will be interactive displays from over 20 different agricultural organizations, agencies and farms.

The goal of First FARM Friday is to be a fun, educational event that helps the general public understand the importance of agriculture in our community and beyond. Visit one of our many displays, climb into farm machinery, and get up close to farm animals. Bring the kids to complete a stamp card and receive a free cup of custard from Whit's Frozen Custard. There is no fee to attend this event and reservations are not needed. Just come down to Main Street on Friday, August 5 from 5:00 to 7:00 p.m. Upon the conclusion of the event, you are encouraged to stay and enjoy the music of Ernest who will be performing starting at 8:00 p.m. for the Coshocton Summer Series. It will be a great evening to celebrate agriculture in Coshocton County!



Ohio Farmland Leasing Update is August 11

By: Peggy Kirk Hall, Associate Professor, Agricultural & Resource Law Tuesday, July 26th, 2022

Source; <https://farmoffice.osu.edu/blog/tue-07262022-1246pm/ohio-farmland-leasing-update-august-11>

Is it time to start thinking about your farmland lease for next year? We think so! There are new legal issues and updated economic information to consider for the upcoming crop year. That's why we've scheduled our next Ohio Farmland Leasing Update for Thursday, August 11 at 8 a.m. Join the Farm Office team of Barry Ward, Robert Moore and Peggy Hall for an early morning webinar discussion of the latest economic and legal farmland leasing information for Ohio.

Here are the topics we'll cover:

- Ohio's new statutory termination law for verbal farmland leases
- Using a Memorandum of Lease and other lease practice tips
- Economic outlook for Ohio row crops
- New Ohio cropland values and cash rents survey results
- Rental market outlook

There's no cost to attend the Zoom webinar, but registration is necessary.

Visit <https://go.osu.edu/farmlandleasingupdate> for registration. And if you're already thinking about your next farmland lease, also be sure to use our farmland leasing resources on <https://farmoffice.osu.edu>.



Dog Days of Summer Lead to First Farm Friday

By: David L Marrison

For Publication on July 28, 2022 for the Beacon Newspaper

Hello Coshocton County. The term “dog days of summer” traditionally refers to the hot and sultry days we receive during July and August. The Old Farmer’s Almanac considers the “dog days” to be the 40 days between July 3 and August 11. In ancient Greece, the “dog days” were believed to be a time of drought, bad luck, and unrest, when dogs and men alike would be driven mad by the extreme heat.

For many when they think of the dog days of summer, they think of 90 degree temperatures, ice cream, and time cooling off in the pool. But for me, I think of the hot sun, lemonade in a water jug, humidity, sweat, and scratched up arms. You see, the summers of my childhood were spent baling hay with my dad and grandfather. Even now, sweating in a hay mow brings back so many childhood memories.



I know I am not alone when I associate hay making with the dog days of summer. Here in Coshocton County our farmers harvest 29,323 acres of hay each year. In fact, hay is the most common crop grown as 720 farms or 60% raise hay. In comparison, our second leading crop, corn, is grown by only 21% of our farms. It takes a lot of hay to feed the 28,500 cows, sheep, goats, horses, donkeys, and llamas here in Coshocton County.

As we turn our calendars to the month of August this weekend, the excitement builds for many of us involved in agriculture. Why are we excited? First, because this is the month that our gardens and commercial vegetable farms begin harvesting in full force. Thus far, our family has enjoyed a lot of fresh zucchini, cucumbers, green beans, and fresh tomatoes. It is also the time that our commercial crop fields of corn and soybean are in their

reproductive stages which allow farmers to start to sense the potential yield of this year's crop. Timely showers during August will be very much appreciated by our farmers based on how dry the past six weeks have been.

August is also extra special here in Coshocton County as August means the return of First FARM Friday! We are excited to invite you to circle Friday, August 5 on your calendars for this year's event. Plan on coming down to Main Street in Coshocton from 5:00 to 7:00 p.m. on August 5 to learn more about our great industry of agriculture.

The goal of First FARM Friday is to be a fun, educational event that helps the general public understand the importance of agriculture to our community. There will be displays from over 20 different agricultural organizations, agencies, and farms. We encourage you to bring your children and grandchildren down to Main street so they can learn more about what our great industry has to offer. Visit one of our many interactive displays, climb into farm machinery, and get up close to farm animals. Children who complete an agriculture stamp card will receive a free cup of custard from Whit's Frozen Custard.

There is no fee to attend this event and reservations are not needed. Just come down to Main Street on Friday, August 5 from 5:00 to 7:00 p.m. Upon the conclusion of the event, you are encouraged to stay and enjoy the music of Ernest who will be performing starting at 8:00 p.m. for the Coshocton Summer Series. It will be a great evening to celebrate agriculture in Coshocton County!

And finally, as we think of the dog days of summer, I am reminded of a quote from Jean Paul Malfatti which **states "A friend is a friend and a dog is a dog. A friend will never be a dog, but a dog won't ever quit being a friend."** Have a good and safe day!

