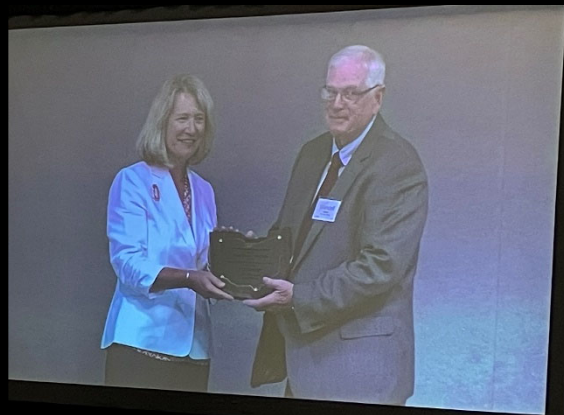


COSHOCTON COUNTY AGRICULTURE & NATURAL RESOURCES**August 11 Issue (Edition #107)**

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Hello Coshocton County! Being woke up at 4:00 a.m. is usually a little unsettling. However, the thunder, brilliant lightening, and 0.9 inches of rain at our home was a welcomed start to the morning. It appears that most of us have received at least 0.50 inches (some over 2 inches) of rain in the past 24 hours. Right on time, right when we needed it the most. Let's pray that timely rains continue this week and month.

Last Friday, Wendell Waters from West Lafayette was inducted into the Ohio Agricultural Council's Hall of Fame at a breakfast ceremony at the Ohio State Fairgrounds. Congratulations to Wendell for this incredible honor.

First Farm Friday was also a huge success. What a great evening for youth and their families to learn about agriculture on Main Street in Coshocton. Thanks to SWCD for their tremendous effort in coordinating this event. What a wonderful evening!

I will continue to work on my rain-dances this month as there is a lot of yield potential in our fields across the county. Time to finish well.

Stay cool today!

Sincerely,

David L. Marrison

Coshocton County OSU Extension ANR Educator



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

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First Farm Friday A Success

After a year pause due to the coronavirus pandemic, First Farm Friday made a smashing return on Friday August 6 on Main Street in downtown Coshocton. It was a beautiful evening and we all were excited to see the number of youngsters and their parents who took time to participate. Well over 300 kids participated in this year's event with nearly 700 (or more!) individuals participating. 187 youth made the complete circuit of the 18 agricultural vendors to receive a free Whit's custard.



The kids were excited to climb in the combine, planter and sprayer and to see the impressive load of lumber from Millwood Lumber. Even better was getting up close and personal with a baby dairy calf, sheep, goats, and beef cows. At our OSU Extension booth, the kids got to use their leg power to make fresh salsa on our blender bike and they got to see some good bugs and bad bugs up close with our Master Gardener Volunteers.

It takes great teamwork and collaboration between the city, farmers, agribusinesses and industry supporters to bring this event to our community. A big thank you to the Coshocton Soil & Water Conservation District for their leadership and to all who made this a great event. Make sure to mark your calendar for August 5, 2022 for next year's event.



Farm Science Review Tickets Now on Sale

The Ohio State University's Farm Science Review, which was held online last year because of the pandemic, will return this year to be live and in person for the 59th annual event. Advance tickets for the Farm Science Review are available at all Ohio State University Extension county offices for \$7. This year's Farm Science Review will be held at the Molly Caren Agricultural Center in London, Ohio on September 21-23, 2021. Tickets are \$10 at the gate; however, presale tickets can be purchased at your local OSU Extension for \$7 per ticket through Monday, September 20, 2021. Children 5 and under are admitted free. The review hours are 8:00 a.m. to 5:00 p.m. on September 21 & 22 and from 8:00 a.m. to 4:00 p.m. on September 23.

Farm Science Review is known as Ohio's premier agricultural event and typically attracts more than 130,000 farmers, growers, producers and agricultural enthusiasts from across the U.S. and Canada annually. Participants are able to peruse 4,000 product lines from roughly 600 commercial exhibitors and engage in over 180 educational workshops, presentations and demonstrations delivered by experts from OSU Extension and the Ohio Agricultural Research and Development Center. More information about the Farm Science Review is at <http://fsr.osu.edu>

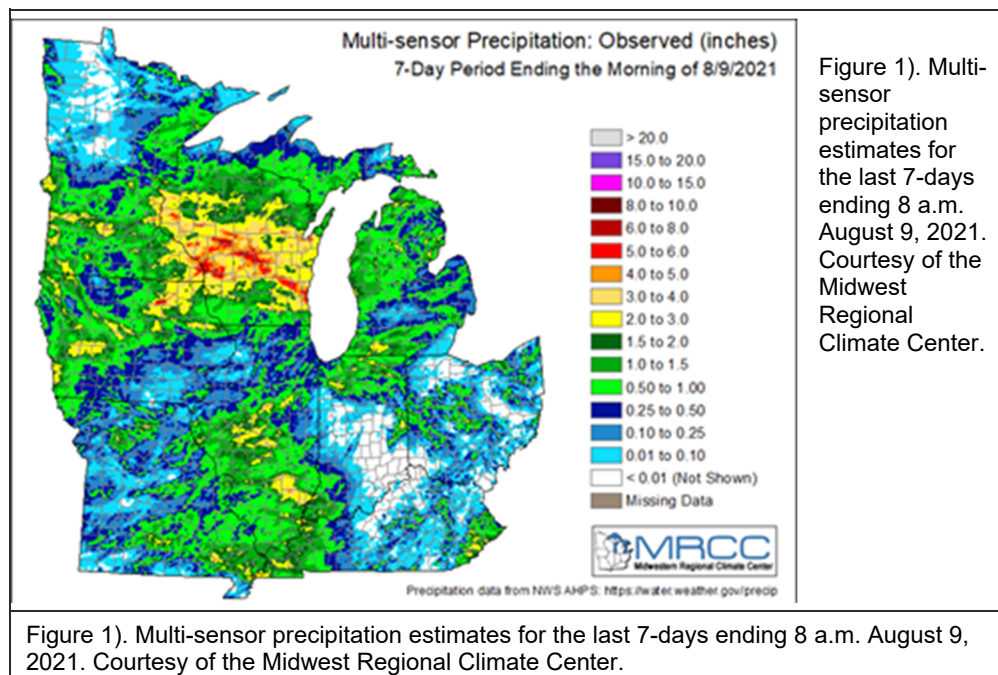
Weather Update: Hot & Humid Conditions Return

By: Aaron Wilson

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-26/weather-update-hot-and-humid-conditions-return>

July was an interesting weather month for the Ohio Valley. According to [NOAA](#), Ohio experienced its 15th wettest July on record (1895-present). Even more interesting, daytime highs for July 2021 rank as the 33rd coolest, yet overnight lows rank as the 27th warmest, the 7th largest spread on record. Indeed, this was the result of numerous cloudy/rainy days that kept daytime temperature in check, not to mention, the occasional influx of wildfire smoke from active fires in the western states.

Since the start of the month, widespread rainfall has been limited across Ohio. Figure 1 shows precipitation over the last 7 days through 8am August 9, 2021. A few rounds of showers and storms managed to drop 0.50-2" across West Central, North Central, and parts of northeast Ohio. Additional areas picked up rainfall on Monday as well as another small disturbance moved through the state. Fortunately, during this drier stretch temperatures have been mild, running 1-3°F below average through the first 8 days of the month.



Forecast

Hot and humid conditions are taking over this week. The sultry air will provide the opportunity for scattered showers and storms each day through Friday. Highs will range from the mid-80s to the mid-90s, with overnight lows in the upper 60s to low 70s through Friday. The weekend is looking drier and a little more comfortable, with highs in the low to mid 80s.

The [Climate Prediction Center's](#) 6–10-day outlook for the period of August 15 – 19 and the [16-Day Rainfall Outlook from NOAA/NWS/Ohio River Forecast Center](#) indicate near to above average temperatures and below average precipitation (Figure 2). Climate averages for this period include a high temperature range of 82-86°F, a low temperature range of 60-65°F, and average rainfall of 0.70-0.90 inches.

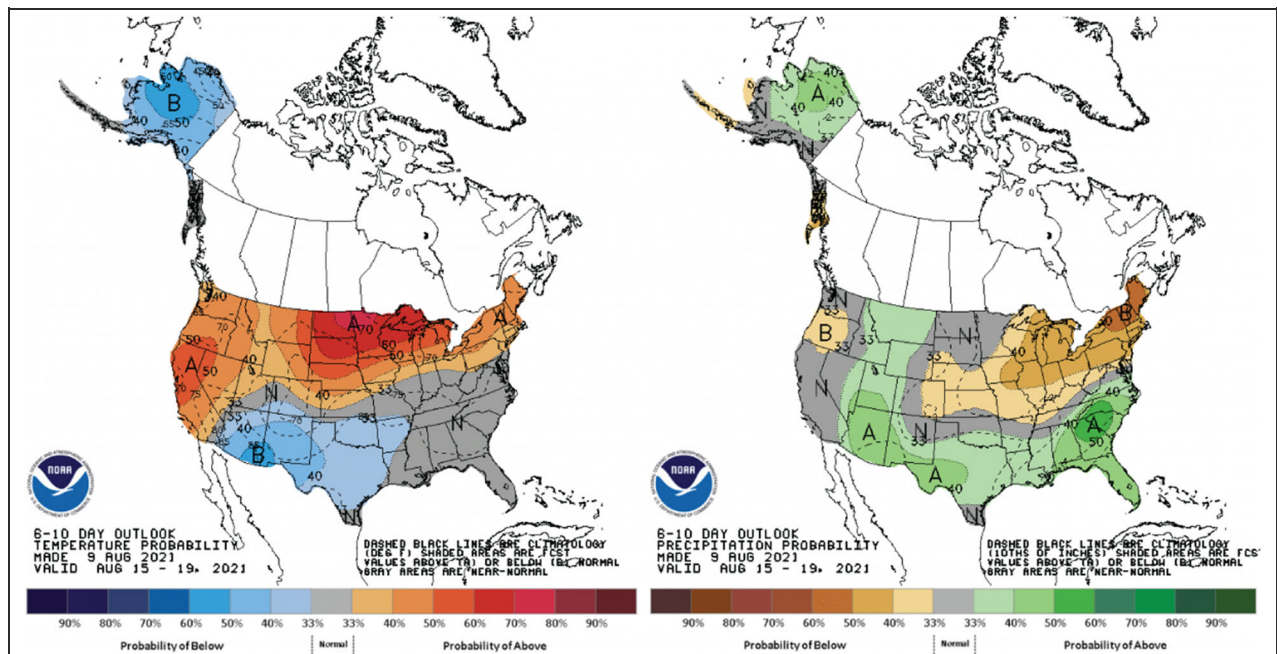


Figure 2) Climate Prediction Center 6-10 Day Outlook valid for August 9, 2021, for left) temperatures and right) precipitation. Colors represent the probability of below, normal, or above normal conditions.

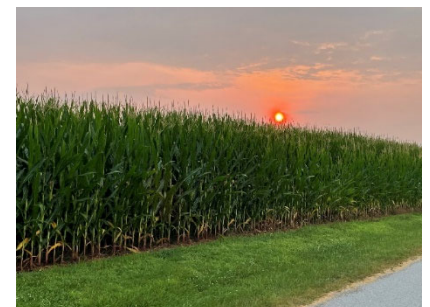
Figure 2) Climate Prediction Center 6-10 Day Outlook valid for August 9, 2021, for left) temperatures and right) precipitation. Colors represent the probability of below, normal, or above normal conditions.

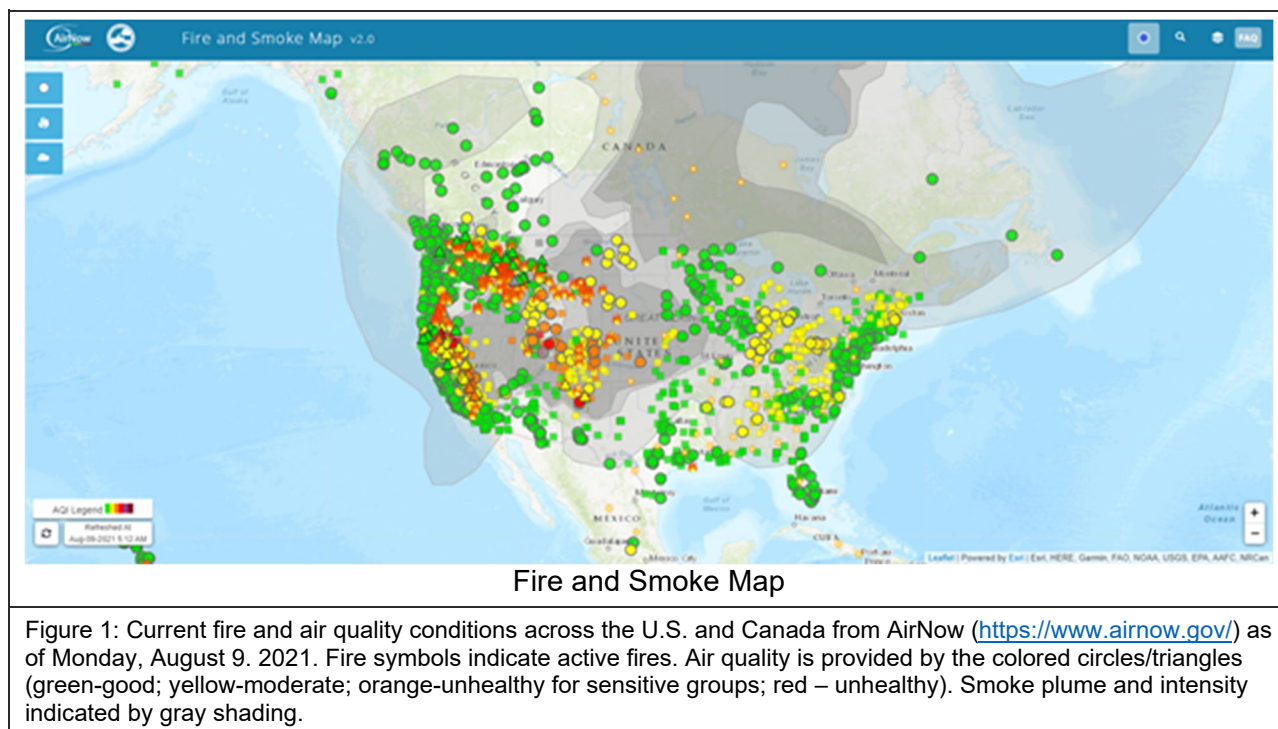
Hazy Days - How Does Light Influence Corn and Soybean?

By: Alexander Lindsey, Laura Lindsey & Aaron Wilson

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-26/hazy-days%E2%80%A6how-does-light-influence-corn-and-soybean>

Quite often this summer, our skies have been filled with smoke from western wildfires. Strong, dominant high pressure has focused record-breaking heat in the west while here across the Midwest, westerly to northwesterly flow has funneled that smoke our direction (See Figure 1 for current active fires, air quality, and smoke plume across the U.S.). Typically, this smoke remains at high altitude, resulting in hazy sunshine. What impact can this filtered sunshine have on crop production?





Capturing sunlight energy, which drives photosynthesis, is important to maximize crop yield. Typical plant canopy-level instantaneous light values (also known as photosynthetic photon flux density) on sunny days range from 1200 to 1800 $\mu\text{mol}/\text{m}^2/\text{s}$ while typical instantaneous plant canopy-level values for cloudy days are 100 to 400 $\mu\text{mol}/\text{m}^2/\text{s}$. In general, sunny days (all else equal) are better for crops, especially if moisture is non-limiting.

For soybean, photosynthetic photon flux densities that exceed 700 $\mu\text{mol}/\text{m}^2/\text{s}$ produce minimal gains in leaf-level photosynthetic efficiency, which ultimately can translate into yield production. With radiation values above or below this level, the plant can still photosynthesize but may need to adjust leaf angle to change how direct interception is. As the sun moves across the sky, leaves can orient themselves perpendicular to incoming direct light to increase interception or parallel to the light to decrease direct interception as too much direct light can be harmful for plants. Changing orientation in the upper canopy can also allow for more light to be intercepted by lower leaves allowing for more leaves to optimize photosynthetic rates at a time.

Corn (having a slightly different photosynthetic pathway) can continue to increase photosynthesis with increasing light and tends to benefit from more sun if temperatures and water levels are not limiting growth. Upper leaves in corn grow more vertically and are smaller but become larger and more horizontal lower in the canopy. This orientation works to increase light penetration into the canopy and optimize interception. Corn's major response to too much light (often paired with water stress or high vapor pressure deficit) is to roll its leaves to minimize excess light exposure.

So, with the wildfire haze and just regular cloudy days, how have our average radiation values for June and July compared to past years? In 2021, the daily average photosynthetic photon flux density was lower for June and July as compared to the last 4 years (2017-2020) (Table 1). Given these are daily values, the cumulative effects of this reduction will likely equate to lower overall yield potential because of the additive nature of light loss. However, cooler temperatures could help extend the season and help crops gain yield from more days with active growth during the grain fill period. The levels of light seen in 2021 may still be sufficient if other factors end up being more limiting to yield production; factors like water stress, biotic factors, and adequate mineral nutrition still play a major role in yield gains during the season.

Table 1: Daily average photosynthetic photon flux density during daylight hours in Wood County, Ohio.

| Year | June | July |
|--------------|-------------------------------------|------|
| | $\mu\text{mol}/\text{m}^2/\text{s}$ | |
| 2021 | 679 | 694 |
| 2017 to 2020 | 730 | 738 |
| Difference | -51 | -44 |

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August 12 CORN Live Focuses on Ohio Yield Potential for Corn & Soybeans

By: Mary Griffith

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-26/august-12th-corn-live-focuses-ohio-yield-potential-corn-and>

Matt Reese, Editor of Ohio's Country Journal, will be joining OSU Extension's CORN Live webinar this Thursday to report corn and soybean yield estimates collected through OCJ's 2021 Ohio Crop Tour, which is underway this week. Along with Matt, Extension educators Taylor Dill, John Barker, and Chris Zoller will give local yield and scouting updates. Soybean specialist Laura Lindsey will join to comment on the overall growing season and yield potential moving forward, along with corn and wheat pathologist Pierce Paul who will discuss disease pressure in corn and yield loss potential. The webinar is on Thursday, August 12th from 8:00-9:00am. 1.0 hours of crop management CCA CEUs are available for attending this free online session. Register to attend at www.go.osu.edu/cornlive.



This year the Ohio Crop Tour will include an in-person tour, with two groups traveling the state and conducting yield estimates, as well as an option to submit yield estimates online so that anyone in the state can contribute information about what they are seeing in the field. The tour is sponsored by Ohio Field Leader. If you would like to participate in the virtual tour by submitting a corn or soybean yield estimates, you can do that online until Thursday, Aug. 12th at 6 p.m. at <https://ocj.com/croptour/>.

Agronomy Field Day at Durbin Farms

By Chris Zoller, Extension Educator

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-25/agronomy-update-scheduled>

The Tuscarawas County office of Ohio State University Extension will sponsor an Agronomy Update on Thursday, August 26, 1pm to 4pm at Durbin Farms. The farm is located at 4227 Durbin Road SE, New Philadelphia, Ohio 44663.

Many agricultural products continue to be in short supply, and this shortage may continue. What will these supply shortages mean for harvest? Will the shortages continue into planting season next year? Dr. John

Fulton, OSU Food, Agricultural, and Biological Engineering, will discuss the situation and provide management recommendations.

Carbon sequestration, carbon credits, and carbon markets are popular terms right now. Nearly every farm publication has an article about the role agriculture can have in this arena. There are many factors to consider prior to entering into a carbon market agreement. Mike Estadt, OSU Extension Educator, ANR, has studied this topic and will address factors farmers must consider.

The program will wrap up with a discussion of agronomy and farm management resources available from Ohio State University Extension and a presentation by Matt and Luke Durbin discussing lessons they learned from building a farm shop.

The agenda includes:

- Parts and Equipment Shortages are Real – Be Prepared: Thoughts on 2021 Harvest & 2022 Planting
 - Dr. John Fulton, OSU Food, Agriculture, and Biological Engineering
- Are You Ready for Carbon Markets?
 - Mike Estadt, OSU Extension Educator, ANR, Pickaway County
- OSU Extension Agronomy & Farm Management Resources
 - Chris Zoller, OSU Extension Educator, ANR, Tuscarawas County
- Lessons Learned from Building a Farm Shop
 - Matt & Luke Durbin, Durbin Farms

There is no fee to attend, but pre-registration is requested no later than August 24. To register, please email zoller.1@osu.edu or call 330-339-2337.

The Legal Round-up: Ag Law Questions Answered

By: Peggy Kirk Hall, Tuesday, August 10th, 2021

Source: <https://farmoffice.osu.edu/blog/tue-08102021-333pm/legal-roundup-ag-law-questions-across-ohio>

I recall sharing my concern with a professor when I was in law school: how will I ever know all the answers to legal questions? No worries, he said. You can't know the answer to every legal question, but you do need to know how to find the answers. I think of that advice often as legal questions come across my desk.

We've had a steady stream of them this summer, and the questions provide a snapshot of what's going on around the state. Here's a sampling of questions we've received recently, complete with our answers—some we knew and some we had to find.

What do you know about the \$500 million to be set aside at USDA for meat processors—who will administer it and what is the timeline? USDA published a notice on July 16, 2021 titled "[Investments and Opportunities for Meat and Poultry Processing Infrastructure](#)" seeking input on how to allocate the funds. The notice solicits comments on how to address challenges and increase competition in meat and poultry processing through the \$500 million in infrastructure and other investments. USDA is looking at current programs, combinations of programs, and potential programs that can leverage the funds to expand and diversify meat and poultry processing capacity and make the supply chain more resilient. A review of the questions USDA raised in the notice gives a good indication of the types of programs we might see, and administration of the programs could be at both the federal and state levels. The comments are due by August 30, 2021 and USDA will review them before moving forward. It will be at least several months before decisions are made and the funds are available.

If I enroll my land in the Wetlands Reserve Program, does the land still qualify for Current Agricultural Use Valuation tax treatment? Yes. Ohio's CAUV law allows eligible land to be assessed as agricultural land for property taxation under the CAUV formula. Eligible land is "land devoted exclusively to agricultural use." The definition of that term is important, and the relevant section that places wetlands and other conservation practices within that definition is ORC 5713.30(A)(1)(c), which states that "land devoted exclusively to agricultural use" include tracts, lots, or parcels of land with at least ten acres which "were devoted to and

qualified for payments or other compensation under a land retirement or conservation program under an agreement with an agency of the federal government.” According to court cases in Ohio, wetlands enrolled in federal conservation programs fit within this term and should qualify for CAUV treatment, even wetlands used as a mitigation bank. An Ohio Attorney General opinion disagrees that a wetlands mitigation bank is a government conservation program, but that is an advisory rather than binding opinion and a mitigation bank is not the same as the federal Wetlands Reserve Program.

Are there any special requirements for a cottage food producer for selling “gluten free” or “vegan” products? Yes. You need to ensure that you meet federal regulations to use “gluten free” terminology on your cottage food label. There isn’t a label review and approval process for using the language, though, as it’s “self-policing.” You must be sure that your product does not include any gluten containing ingredients. And because low levels of gluten could result from cross contamination in your kitchen, your product must be below the tolerance level of 20 ppm of gluten. There isn’t a testing requirement to prove that you’re under 20 ppm before you sell it, but if for some reason someone challenged your product or ODA randomly sampled it, it must meet the 20 ppm standard. You can have your food lab tested if you want to have that assurance. Otherwise, you should carefully manage your kitchen to reduce cross contamination. The FDA provides the gluten free labeling rule [on its website](#) and has a helpful FAQ page also. FDA has said it will be updating the gluten free rule, but I haven’t seen anything new yet.

Vegan labeling is a lesser regulatory concern. If you use that or related terms like “animal free” on your product, federal law requires that you be “truthful and not misleading” to the consumer. There isn’t a federal or state definition of “vegan” to help with that determination, but the agencies explain the term basically as not containing any animal products. Your ingredient list should confirm any vegan or animal free claims on the product.

Are there regulations pertaining to online sales of perennial plants? Yes. The seller must obtain a [nursery license](#) from the Ohio Department of Agriculture. The type of license will depend on their type of sales. A phytosanitary certificate might also be required by the importing states where their sales will take place; ODA also handles those certificates. Additionally, the seller will need to obtain [a vendor’s license](#) from the Department of Taxation to collect and submit sales tax on the plant sales.

Does a “Scenic River” designation by the Ohio Department of Natural Resources allow the agency to take my property that’s along the river? No. The language in the [Scenic Rivers statute](#) is misleading, as it states that “the area shall include lands adjacent to the watercourse in sufficient width to preserve, protect, and develop the natural character of the watercourse, but shall not include any lands more than one thousand feet from the normal waterlines of the watercourse unless an additional width is necessary to preserve water conservation, scenic, fish, wildlife, historic, or outdoor recreation values.” Without reading the entire statute, it does sound as though ODNR could be laying some type of claim to up to 1,000 feet of the lands adjacent to the river. However, further along in the statute is this language that prohibits the agency from having any authority over the private land: “Declaration by the director that an area is a wild, scenic, or recreational river area does not authorize the director or any governmental agency or political subdivision to restrict the use of land by the owner thereof or any person acting under the landowner’s authority or to enter upon the land and does not expand or abridge the regulatory authority of any governmental agency or political subdivision over the area.” The designation is a declaration, and not a land claim, transfer of rights, or a taking. Additionally, my further research indicates that ODNR has never used eminent domain to take private property along a scenic river, nor does it have funding allocated from the legislature to purchase scenic river lands.

Do I need a license to make and sell egg noodles from the farm? Yes. Egg noodles don’t fall under Ohio’s Cottage Food Law, which allows you to make and sell certain low-risk “cottage foods” with little regulation or licensing requirements. Instead, producing egg noodles for sale from a home kitchen requires a [home bakery registration](#). You obtain the registration from the Ohio Department of Agriculture’s Food Safety Division. It requires that you submit a request for inspection form, pass an inspection of the home, and submit a \$10 fee. The inspection will confirm that walls, ceilings and floors are clean, easily cleanable and in good repair; the kitchen does not have carpeted floors; there are no pets or pests in the home; the kitchen, equipment and

utensils are maintained in a sanitary condition; the kitchen has a mechanical refrigerator capable of maintaining 45 degrees and equipped with a thermometer; if the home has a private well, proof of a well test completed within the past year showing a negative test result for coliform bacteria; the food label meets labeling requirements.

Is raising and training dogs considered “animal husbandry” for purposes of the agricultural exemption from township zoning authority? Yes. The Ohio Supreme Court held in *Harris v. Rootstown Twp.* that “the raising and care of dogs constitutes animal husbandry and is included in the term “agriculture” within the meaning of R.C. 519.01.” This means that the agricultural exemption in Ohio Revised Code 519.21 applies to raising and caring for dogs, and township zoning can’t prohibit the use of any lot over five acres for those purposes. The township would have limited regulatory authority over dog raising on smaller lots in some situations, though. There is often confusion among townships over how to classify dogs, and that may be because they differ from what we typically think of as “farm animals.” But the *Rootstown Twp.* case, along with many other appellate level cases in Ohio, confirm that dogs are to be treated the same as “livestock” for purposes of the agricultural exemption from zoning.

Can both landowners be assessed half the cost of removal of noxious weeds that are growing in a partition fence? Maybe. The [Ohio line fence](#) law does allow a township to step in and clear the fence row of noxious weeds, brush, briars and similar vegetation if a complaint is filed by one landowner against an adjacent landowner who refuses to clear the weeds. The costs for doing so are assessed back on the refusing landowner whose fence row was cleared. If the noxious weeds arise from both sides of the fence, are growing in the fence, and must be cleared from both sides of the fence, the township trustees would have the authority to assess the costs of removal back on both landowners. I’ve never heard of that happening, but it’s certainly one of those “be careful what you wish for” situations.

Top Ten Curve Balls Which Can Prevent Successful Farm Transfer

By: David Marrison

Written for Dairy Excel Column for Farm & Dairy Newspaper, August 12

Hello, Northeast Ohio! One of the key components of farm and estate planning is taking time to discuss how your farm business will handle the unexpected, the ah-crap moments, or the proverbial curve balls which life throws at our families and businesses.

It is hard to plan for something that may or may not happen. However, the discussions which your family can have now, will make it easier to respond when hiccups do arise. In our “Passing on our Family Farm” series, we challenge farm families to be proactive. How would you respond to the following scenarios?

Death- We are all going to leave this earth. How prepared is your business for the death of one of your principal farm operators? Has the next generation been trained up to manage all aspects of the business? If you knew you only had a month to live, what would be the most important items on your to-do list? Most of our planning revolves around the farm passing from the senior to the junior generation. What happens when a family member dies “out of turn?”

Disability- Agriculture ranks among one of the most hazardous industries in the United States. Farmers are at very high risk for both fatal and nonfatal injuries. What plan does your business have to overcome short or long-term absences of key managers and employees? Additionally, as we age, our bodies don’t bounce back as fast as they did previously. How will the business account for the slowing down of family members and employees as they age?

Divorce- Statistics from the US Census Bureau indicate that 50 percent of Americans will be married only once. Thus, the likelihood of a divorce impacting someone involved in the business is a stark reality. What mechanisms does your business have to protect assets from a divorce? What happens when a divorce occurs to a key employee who also happens to be your son or daughter-in-law?

2nd Marriages- After the death of a spouse or after a divorce, family members may re-marry. How will you react when a remarriage occurs? Some adult children may be unsettled when their middle-aged or senior parent remarries especially following a death of a spouse. What impact will a re-marriage have on your farm business? What concerns may arise when the senior generation who owns the majority of the land remarries?

Long Term Care- No one plans on having to go to a nursing home. However, for many families this may become a reality. Do you have plans to fund the long-term care for one or more members of the family farm? Where would \$75,000 to \$100,000 per year come from to pay for a skilled care center? Will you have to sell land? Should you buy long-term care insurance? Or do you just pray that this situation never arises?

Lack of Retirement Funds- Social security is one of the major retirement sources for many farm families. Currently, the average couple who both are receiving benefits would average \$2,596 per month. An aged widow(er) living alone would average \$1,453 per month. Based on your family living expenses, will social security be enough? Or will other retirement funds be needed? Will the succeeding farm generation need to pay a rental payment to help fund their parents and/or grandparent's retirement?

Buying Out Business Partner- What would you do if your brother who has been your business partner for over 30 years suddenly want to cash his half of the business out and retire? Or what if he dies and you have to buy out his heirs? Is there enough equity for a buy-out or will the farm have to be sold? Does your operating agreement address this issue?

Lawsuits- We live in an increasingly litigious world. How is your business protected from a lawsuit which might arise from a farm accident or from an ag product you sold? How much protection is offered by your business structure? Do you have enough liability insurance coverage?

Discourse- Like it or not, we all have some type of dysfunctionality. There are bound to be disagreements between generations, spouses, siblings, and in-laws. Stress can enhance these disagreements. What can you do today to improve the effectiveness of your family communication?

Global Issues- the coronavirus pandemic is a perfect example of an unexpected issue which we had little control over. Weather events and trade issues can also impact our business. How well is your business positioned financially to weather global issues?

So, a lot more questions than answers. But hopefully, this will help you begin the discussion on how to better prepare for the bumps in the road ahead. Have a good and safe day!

Corn Silage for the Beef Herd

By: Dr. Jeff Lehmkuhler, Extension Professor, University of Kentucky

Source: <https://u.osu.edu/beef/2021/08/11/corn-silage-for-the-beef-herd/>

It is hard to believe that it is near that time of year when corn will start to be harvested for silage. We have been fortunate in many areas of the region to receive timely precipitation providing for good corn stands. As the price of corn is still over \$6/bushel on the spot market and the futures prices is in the mid 5's, folks are asking about corn silage as an alternative feed this year.

When considering corn silage, first be sure that you are prepared. In many situations the harvest equipment may not be owned, and a custom harvest crew will come to chop and haul the silage. You need to get on their schedule and understand that weather and breakdowns can impact the harvest window for your corn crop. How do you plan to store the silage? For many beef operations, a silo bag is often the best choice. Again, the bagger will likely have to be rented and bags purchased. Be sure to get the bagger rented for sufficient time to fit the harvest window. Prepare the site for bags or drive over piles to ensure they drain well and water is diverted away from them. You don't want to be driving through mud when trying to feed out silage from a pile or bag.

Corn will be ready to harvest when the whole plant moisture level is 62-65% or 35-38% dry matter. Fields will continue to dry down during the harvest and it is better to start harvest a bit wetter, so the last part of the field doesn't get too dry. Corn that is less than 60% moisture should be considered for harvest as high moisture corn or allowed to dry and combined later. Corn harvested too dry simply doesn't pack well and fermentation outcomes are less than ideal leading to poor quality feed.

Once corn is chopped and delivered to the storage area, ensure the highest quality of feed by obtaining the proper packing density. A packing density of 11-15 lb or on average 13 lb of dry matter per or 40-44 lb as-is per cubic foot would be targets. The fermentation process is mostly anaerobic. Therefore, packing reduces gaps where air is present in the silage and allows bacteria to quickly go from aerobic to anaerobic fermentation leading to greater lactic acid production leading to a lower pH for preserving the silage. Improperly packed silage will result in poor fermentation, higher pH, and greater yeast and mold growth.

When feeding out corn silage, the silage will be exposed to air and oxygen will be able to permeate into the silage at the exposed face. Oxygen exposure will begin an aerobic fermentation which can be felt as increased heat on the surface of the silage. This will lower the "shelf-life" or stability of the silage and impact intake and performance. In warm weather, it is recommended that 12" be removed daily from the exposed surface or face to minimize spoilage losses. During colder months, this may be reduced to six inches, but monitor the face for heating. In most instances, trenches, and drive over piles are made too wide for medium to small beef operations and excessive spoilage occurs. This is where a silo bag may be of value as they come in various diameters to better align with the feed out rate. Corn silage should be fed daily since secondary fermentation occurs immediately once exposed to oxygen. Additionally, listeria can grow in the presence of oxygen. Circling disease is the common term for listeriosis which may also be seen in partial facial paralysis. Cows that appear to not be able to swallow and their tongue is extended out as if chewing on the tongue are symptoms as well. It is important to manage silage feed out to minimize the risk of this disorder.

Corn silage is about 8% crude protein and will require supplementation when provided to lactating cows and growing calves. If used as the main feed source for growing calves combined with corn derived protein supplements such as distillers grains or corn gluten feed, be sure to supplement with calcium to meet their dietary calcium needs and reduce the risk of urinary calculi. Work with your Extension agent or nutritionist to develop feeding programs for your herd to ensure you offer a balanced diet that meets performance goals. For more information on feeding corn silage to beef cattle, be sure to read our fact sheet ID-264 Feeding Corn Silage to Beef Cattle at <http://www2.ca.uky.edu/agcomm/pubs/ID/ID264/ID264.pdf>

Answering Farmers' Questions about the Pandemic in 2021

By: [Gustavo M. Schuenemann](#), DVM, MS, Ph.D., OSU Extension Dairy Veterinarian, and [Jeffrey D. Workman](#), OSU Veterinary Extension Program Coordinator (originally published in [Farm & Dairy](#))

Source: <https://u.osu.edu/beef/2021/08/11/answering-farmers-questions-about-the-pandemic-in-2021/>

COVID-19 has certainly dominated the headlines and many of our daily conversations since March, 2020. For those directly involved in production agriculture, our lives and routines may have been disrupted; but our daily business and responsibilities of farming and raising livestock never stopped.

Times like these should remind everyone of the importance of having a robust food production system to ensure a nation's food security. Below are the frequently asked questions we receive when visiting farms. To answer these questions, we should look at the unbiased science. The challenge with looking at the science regarding COVID-19 is that portions of the science do not yet exist, or are not yet confirmed through replication and hard evidence. Time must pass in order to generate data.

Science is evolving as researchers around the world continue to study and learn more to create unbiased new knowledge that informs all of us. Answering one research question may lead to several new research questions, or the correct answer backed by science is no longer relevant moving forward as the virus has changed.

The “gold standard” that we typically use in the U.S. for sharing information and making decisions regarding public health are the recommendations coming from the Centers for Disease Control and Prevention. The CDC develops and changes their recommendations based on the available scientific data at any given time. There are coronaviruses on my farm — is this the same as COVID-19?

No, there are animal coronavirus infections that are caused by different strains of coronavirus such as: calf diarrhea, winter dysentery in cows and bovine respiratory disease complex (shipping fever). To prevent losses, producers vaccinate their animals to protect against diseases caused by coronavirus.

When and how will the COVID-19 pandemic end?

We can't yet say exactly when the pandemic will end, but we do know that the pandemic will essentially be over when the individuals who make up the population achieve some level of immunity which ultimately stops the spread.

How do you get immunity?

Immunity may be natural, or infection-induced, in which a person is infected with the virus and recovers. Immunity can also be vaccine-induced in which a vaccine helps the body to produce antibodies. Individuals who make up the population must achieve immunity to stop the spread and ultimately end the pandemic.

What is herd immunity?

Herd (or group) immunity occurs when a large portion of the population (or herd) has some level of immunity to a virus. This means if someone who didn't have enough immunity becomes exposed and infected, the likelihood of them passing it on to someone else is much less because the majority of their contacts in their surroundings already have immunity.

When a virus infects an individual, the individual either recovers or succumbs, and the virus can only survive by spreading to another host individual. We see in other viruses such as the measles and mumps, in which the US population already has herd immunity, there are occasional small, isolated outbreaks, but the virus is unable to develop into a pandemic.

Is immunity a sure thing?

Typically, immunity from most viruses is never 100%. For example, we achieve immunity from the chickenpox virus through natural infection or vaccination, but there are still a few cases of reinfection identified worldwide. Influenza (flu) viruses have the ability to mutate, adapt, change and jump across species. As the flu virus changes, a person who has been vaccinated over several years, and also has some infection-induced immunity may still become infected. However, they have some immunity that lessens the severity of their infection and results in a faster recovery.

Why should I get vaccinated?

The safest way to achieve some degree of immunity against COVID-19 is through vaccination. The current COVID-19 vaccines have been shown to be as high as 94% effective at preventing COVID-19 hospitalizations. The Delta variant is the newest strain of concern because it appears to be more contagious and severe than earlier strains of COVID-19.

All indications thus far are that individuals who are fully vaccinated have protection from the Delta variant. It is important to keep in mind, if we learn that immunity wanes over time, or that the virus has significantly changed so that the current vaccine-induced immunity (or infection-induced immunity) is no longer effective; there could be recommendations for booster shots or other vaccine formulations at some point in the future. Individuals should choose whichever vaccine is available and they have the opportunity to receive. Current efficacy percentages reported are developed from subsets of people, and the true efficacy numbers will become much more valid and reliable as datasets become much larger and time passes.

Keep in mind that the efficacy of the annual influenza vaccines is typically only 40-60%. All three COVID-19 vaccines have been found to be safe and effective. Everyone is biologically different and side effects vary. The

reward (immunity or some degree of immunity from COVID-19) outweighs the risk (potential vaccine side effects).

To conclude, the safest way to achieve immunity or some degree of immunity is by becoming fully vaccinated (individuals need both doses of a two-dose series). If an individual doesn't achieve immunity that fully prevents infection, they may achieve a degree of immunity that decreases the severity of symptoms and duration. We all do personal risk assessments and consider the risk-benefit ratio each and every day without even thinking about it. There is risk in getting up in the morning and going to work. There is risk in driving a vehicle, operating machinery, flying on an airplane and so on.

Essentially everything we do in life has some degree of risk, but when individuals determine the benefit or reward outweighs the risk, they must carry on and move forward. Talk to your doctor or health care provider to discuss the best option for you and your family.

Grazing and Forage Field Day in Licking & Knox County on August 28

By Dean Kreager, Licking County Extension

Extension in Licking and Knox Counties are teaming together with the Ohio Forage and Grasslands Council to provide a drive it yourself tour of two locations in Licking County and one in Knox County on August 28th. Our tour will begin at Lightning Ridge Farm in Granville where Bill O'Neill raises Longhorn cattle utilizing intensive grazing. With twelve divided lots and the capability to increase divisions into twenty-four paddocks, cattle are moved daily and have access to portable piped water. We will also discuss the value of hay quality preservation while touring a new hoop barn constructed for hay storage. The second stop in the tour will move six miles north to a field managed by Ned Campbell who has provided space to plant about twelve varieties of forages following wheat harvest. Attendees will be able to observe and discuss the value of these forages for grazing or harvesting. For the final stop, we will move further north into Knox county to learn about the use of Conservation Reserve Program (CRP) approved warm-season grass production. This field day will begin at 6817 Cat Run Rd. Granville, OH 43023 at 11:00 a.m. and conclude at 3:00 p.m.

There is a \$10 registration fee per person. Lunch is included with registration. A \$5 discount will be applied if the person registering is an OFGC Member or a resident of the host county. Payment will be collected at the field day. Please register within one week of the event you plan to attend by completing a quick [registration form here](https://osu.az1.qualtrics.com/jfe/form/SV_0jRpxTFYnCsHtd4) at https://osu.az1.qualtrics.com/jfe/form/SV_0jRpxTFYnCsHtd4

Questions about the Summer Forage Field Day can be directed to Gary Wilson by calling 419-348-3500, Dean Kreager 740-618-6332, or Sabrina Schirtzinger 740-397-0401 .

BQA Re-certification Sessions Planned

BQA Re-certification Sessions Planned

The Coshocton County Extension office will be offering a series of **Beef Quality Assurance (BQA)** re-certification meetings throughout the remainder of this year as a total of 179 producers will need to obtain re-certification before the end of 2021.

To help producers obtain their certification, we have scheduled a series of re-certification sessions for the remainder of the year. These sessions will be held in Room 145 at the Coshocton County Services Building located at 724 South 7th Street in Coshocton County. Producers can choose the session which best fits their schedule. Sessions will be held on:



- Monday, September 13 (7:00 to 8:30 p.m.)
- Monday, October 11(7:00 to 8:30 p.m.)
- Wednesday, November 3 (7:00 to 8:30 p.m.)
- Wednesday, December 1 (7:00 to 8:30 p.m.)
- Tuesday, December 14 (7:00 to 8:30 p.m.)

Pre-registration is required for each session as space is limited. There is no fee to attend. Call 740-622-2265 to pre-register. These sessions also qualify for anyone who is seeking a first time certification. A program flyer is also attached to this newsletter.

Other Ways to Re-certify:

- Online certification and recertification is also available and can be completed anytime at <https://www.bqa.org/beef-quality-assurance-certification/online-certifications>.
- Producers can also attend sessions hosted by the Tuscarawas County Extension office at the Sugarcreek Stockyards on August 10 (1 p.m.) or August 25 (7 p.m.). Pre-registration is requested by calling 330-339-2337 or by emailing Chris Zoller at Zoller.1@osu.edu





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Agronomy Update

Thursday, August 26, 1pm - 4pm at Durbin Farms
4227 Durbin Rd. SE, New Philadelphia, OH 44663

Please pre-register by **August 24** in order to have materials prepared.
Call 330-339-2337 or email zoller.1@osu.edu to register.

- **Parts & Equipment Shortages are Real - Be Prepared: Thoughts on 2021 Harvest & 2022 Planting**
 - Dr. John Fulton, OSU Food, Agriculture, and Biological Engineering
- **Are You Ready for Carbon Markets?**
 - Mike Estadt, OSU Extension Educator, ANR, Pickaway County
- **OSU Extension Agronomy & Farm Management Resources**
 - Chris Zoller, Extension Educator, ANR, Tuscarawas County
- **Lessons Learned from Building a Farm Shop**
 - Matt & Luke Durbin, Durbin Farms



Chris Zoller, Associate Professor, Extension Educator, Agriculture & Natural Resources
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[Tuscarawas.osu.edu](https://tuscarawas.osu.edu)



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OHIO STATE UNIVERSITY EXTENSION

BEEF QUALITY ASSURANCE

Re-certification Trainings for Livestock Producers

Coshocton County will be hosting a series of Beef Quality Assurance re-certification programs to allow beef and dairy producers to re-certify their beef quality assurance. Pre-registration is required for each session as space is limited.

Sessions Will Be Held:

July 12, August 9, September 13, October 11, November 3, December 1 & 14
7:00 to 8:30 p.m.

Coshocton County Services Building
724 South 7th Street - Room 145, Coshocton, OH 43812
Seating is limited, so please RSVP
Register by calling: 740-622-2265

Other Sessions are being offered in neighboring counties or can be completed on-line anytime at bqa.org.

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OSU EXTENSION – TUSCARAWAS COUNTY

Beef Quality Assurance (BQA) Recertification

Beef and dairy producers who have a BQA certification that expires in 2021 can attend one of the following sessions to satisfy recertification requirements.

- July 21 at 1pm
- July 29 at 7pm
- August 10 at 1pm
- August 25 at 7pm

Location:
Sugarcreek Stockyards
Cost:
No Charge

Pre-Registration is requested in order to have materials prepared.

Please call: **330-339-2337**

Chris Zoller, Associate Professor, Extension Educator, Agriculture & Natural Resources
OSU Extension, Tuscarawas County 419 16th St SW, New Philadelphia, OH 44663
Email: zoller.1@osu.edu Office: 330-339-2337 Direct: 330-365-8159

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