

## TUSCARAWAS COUNTY AGRICULTURE &amp; NATURAL RESOURCES

September 15, 2021

**CROP PROGRESS IN OHIO**...for the week ending September 12 is provided by USDA National Ag Statistics Service (NASS).

## Crop Progress: Week Ending 09/12/21

Crop/Activity	Percent Completed			
	This week	Last week	Last year	5 Year average
Days Suitable for Fieldwork ..	6.5	5.0	-	-
Corn Dough .....	99	93	99	94
Corn Dented.....	84	73	74	68
Corn Mature.....	28	10	13	20
Corn Harvested for Silage.....	55	34	50	NA
Soybeans Setting Pods .....	96	92	100	98
Soybeans Dropping Leaves....	30	10	31	25
Alfalfa Hay 3rd Cutting .....	90	85	94	92
Alfalfa Hay 4th Cutting .....	59	43	34	38
Other Hay 2nd Cutting.....	96	90	100	96
Other Hay 3rd Cutting .....	64	49	77	65

**GLYPHOSATE SCARCITY**... is forcing decisions about where this product has the most value. We have talked with suppliers who are already saving the glyphosate for spring/summer next year and going with other options for fall burndown for wheat and later fall applications for winter weeds. In the end, we have alternatives, but at increased cost or reduced effectiveness in certain situations. A continued shortage will cause more problems in next year's crops than it does now though.

Herbicide options for burndown of existing weeds prior to emergence of no-till wheat include glyphosate, Gramoxone, Sharpen, and dicamba. Among these, the combination of Sharpen plus either glyphosate or Gramoxone probably provides the best combination of efficacy on marehail, flexibility in application timing and residual control. While Gramoxone alone should control small seedlings of marehail and other winter annuals, its overall effectiveness is usually boosted by mixing with another herbicide, which could include Sharpen, or dicamba if applied if applied early enough ahead of planting. Dicamba labels have the following restriction on preplant applications – "allow 10 days between application and planting for each 0.25 lb ai/A used". A rate of 0.5 lb ai/A would therefore need to be applied at least 20 days before planting. We do not know of any 2,4-D product labels that support the use of 2,4-D prior to or at the time wheat planting. There is some risk of stand reduction and injury to wheat from applications of 2,4-D too close to the time of planting. Liberty and other glufosinate products are also not labeled for use as a burndown treatment for wheat. This is not an injury risk issue – the company controlling the glufosinate label just won't spend the money to label it for burndown in additional crops. Be sure to use the



appropriate adjuvants with any of these and increase spray volume to 15 to 20 gpa to ensure adequate coverage with Sharpen or Gramoxone.

Another option in fields that are not that weedy now is to skip the at-plant burndown and instead apply postemergence herbicides in early November. There are several effective postemergence herbicide treatments for wheat that can be applied at that time to control most winter annual weeds. Effective postemergence treatments for the weeds commonly encountered include Huskie, Quelex, or mixtures of low rates of dicamba with either Peak, tribenuron (Express etc), or a tribenuron/thifensulfuron premix (Harmony Xtra etc). We discourage application of 2,4-D to emerged wheat in the fall due to the risk of injury and yield reduction. It's also possible to use a combination of tribenuron or tribenuron/thifensulfuron with a low rate of metribuzin (e.g. up to 2 oz/A of 75% formulations). The dicamba mixtures have been effective on dandelion in OSU research. Where winter annual grasses are present, be sure to use the appropriate postemergence herbicide based on the grass species. The [wheat herbicide effectiveness table](#) in the weed control guide has ratings on several key grasses. Fall-applied herbicides are more effective on these grasses than spring-applied. Note – the Anthem Flex ratings are for residual control only, not control of emerged plants.

(Source: OSU Extension C.O.R.N. newsletter: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-31/life-time-glyphosate-scarcity-%E2%80%93-part-1-burndown-no-till-wheat>)

**FARM SCIENCE REVIEW**...is September 21, 22, and 23 and will feature exciting areas to learn about agricultural practices being studied at OSU and view some of the latest technology in action. Pre-sale tickets are available at the Extension office.

### **Agronomy plots area**

One major yield thief in both corn and soybeans is compaction. We will show how the utilization of tracks and various types of tires can affect your crop, especially in pinch row compaction. Very high flexation tires can decrease field compaction by lowering inflation pressure once in the field. Deflating after road travel will maximize the tire footprint. See this demonstrated in the plots with a tractor that has tires on one side inflated to road pressure and the other to field pressure. Knowing the correct inflation pressure to the exact psi is critical. Stop in the morning to enter a raffle to win a high accuracy tire pressure gauge by guessing the inflation pressures on this tractor both for road travel and field use. Winners will be announced each day at noon.

Our work with producers around that state to maximize corn and soybean yields is demonstrated in a set of high yield plots. The plots are receiving the exact amount of water they need each week utilizing soil moisture sensors to determine the irrigation amount need. The plots are also being spoon-fed nutrients to make sure nothing limits their ability to maximize yield. These maximum yield plots are much taller and greener this year than the traditional management plots.

Another area we have focused on is cover crops. Cover crop management can be a challenge though at times. One of the management challenges demonstrated this year is whether your agronomic crop should be planted once the cover crop is terminated or while it is still green. Cover crops can be killed utilizing herbicide or a roller-crimper. Crimping these cover crops at the proper growth stage is important for termination. Before we terminate cover crops, we must establish them. One of the challenges with establishment is herbicide carryover. Various herbicides have different effects on our



ability to establish the cover crop. Learn more about the interaction of herbicides and cover crops in our plots. We also inter-seeded 11 different species of potential cover crops for you to see how well they can survive under a corn canopy.

Additional information about FSR, including the schedule of field demonstrations and CCA credit opportunities, is available here: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-31/fsr-2021-finally-only-week-away>.



**IT'S TIME...** to break the stigma of discussing mental health issues. September is National Suicide Prevention Month, and with that comes the opportunity to raise awareness to help prevent even one more suicide from happening.

- The agricultural community is **1.5 times** more likely to die by suicide than any other population in the United States according to a CDC study published in 2017. Suicides are up by over 40% in the last 20 years according to this same study. Farmers and foresters experience unique stressors, whether related to health insurance, market prices, weather, or legal issues it all compounds impacting the mental and physical health of our ag community.
- Farmers have easier access to lethal means in the way of guns and medication that has not been prescribed to them. Allowing for suicide to be more obtainable.
- We all struggle to talk about suicide and mental health. Though the conversations are happening they are still quiet. The stigma or fear of admitting a person needs support is still very real. Bringing this conversation out to the light allows for more open discussion.

The OSU Extension farm stress team has developed a website with more information and resources on the topics of mental health and farm stress for our ag community at <https://u.osu.edu/farmstress/>. Visit and subscribe today for the most up today information!

Contact Bridget Britton, OSU Extension Behavioral Health Field Specialist, at [britton.191@osu.edu](mailto:britton.191@osu.edu) or 330-365-8160.

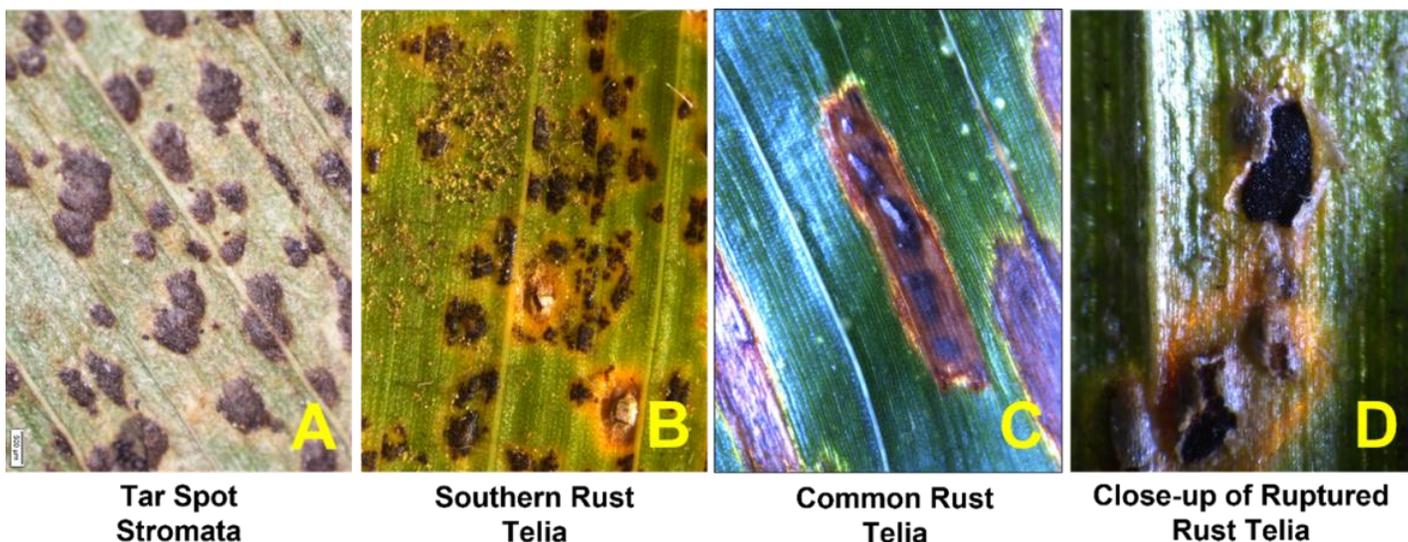
**TAR SPOT**...has been detected in 20 Ohio counties, including Holmes and Wayne. It is a disease that is relatively easy to identify based on visual signs and symptoms, but as we approach the end of the season, it may become increasing difficult for untrained eyes to tell tar spot apart from late stages of some other disease. Yes, tar spot, as the name suggests, is characterized by the presence of raised, black, tar-like spots called stomata predominantly on leaf blades (**A**). However, not all raised, black, tar-like spots on a leaf are tar spot.

Two other diseases that produce raised, blackish spots on leaves towards the end of the season are southern rust (**B**) and common rust (**C**). Both are very prevalent this year in fields with tar spot. Yes, it is true that rusts, as the name suggests, give leaves a typical yellowish-orangish rusty color, but this is the color of urediniospores, only one of several types of spores produced by corn rust fungi. As the crop begins to dry down and temperatures drop, the rust fungi will produce a different type of spore called teliospores, and these develop in raised, black, structures called telia.



In other words, rust pustules usually change from their typical rusty color to a black, tar-like color as they age. So, do not automatically conclude that you have tar spot or tar spot is the only disease affecting your crop simply because the lesions are black. Take a closer look and send samples to a lab for examination if you are unsure. This is particularly important if you are trying to compare hybrids for susceptibility to tar spot or rust, and if you want to determine whether the fungicide you applied is effect against one or both diseases.

Misdiagnosis my lead to errant conclusions. Here are a few tips to help you tell the difference between tar spot and rust telia. Tar spot stromata do not rupture the leaf or have a split on the top. In addition, they cannot be easily broken or rubbed away with your fingers. Rust telia, on the other hand, usually break or rupture the upper surface of the leaf tissue (**D**). In other words, they usually have a split on top and if you rub them with your finger, the spores are released, leaving your finger with a dark-rusty to blackish tinge.



(Source: OSU Extension C.O.R.N. newsletter: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-31/diagnosis-tar-spot-late-season>)

**2021 MARKETING YEAR AVERAGE PRICES**...for corn and soybeans were revised recently. The MYA for corn is \$5.45 per bushel and \$12.90 per bushel for soybeans. For both corn and soybeans, the 2021 prices are the third-highest price since projections have been made, likely leading to high 2021 farm incomes, particularly in the eastern corn-belt. Given historic relationships, high 2021 prices should not necessarily be expected in future marketing years. Highlights of information provided in this newsletter (<https://farmdocdaily.illinois.edu/wp-content/uploads/2021/09/fdd140921.pdf>) are provided below.

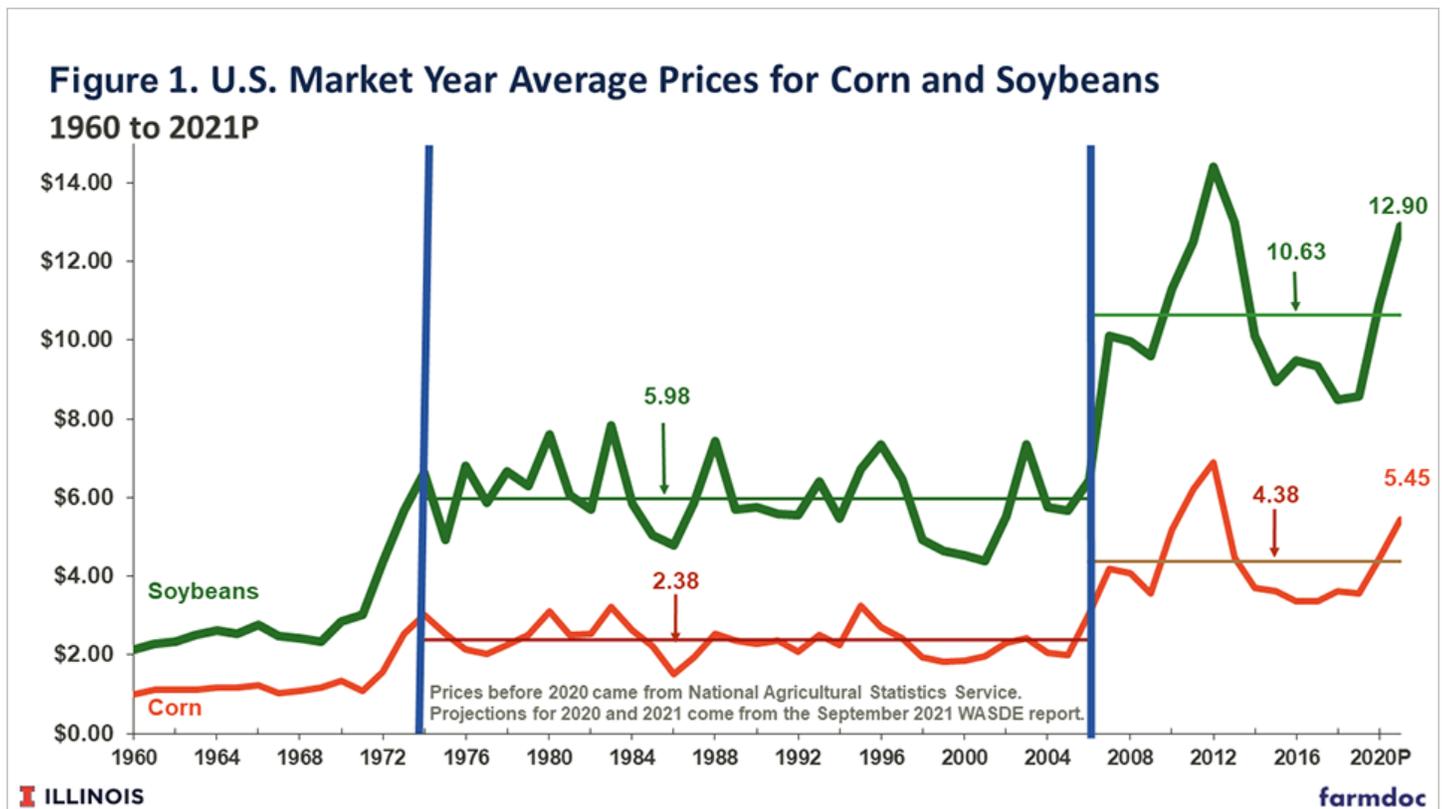
## Corn

The Office of the Chief Economist (OCE) releases market information and MYA price projections in its monthly World Agricultural Supply and Demand Estimates (WASDE) report. In the September 2021 report, the 2021 MYA projection was \$5.45 per bushel for corn. This September projection is lower than the \$5.70 projection made in the May report, the first projection of 2021 MYA by the OCE. OCE's



estimate of MYA corn price has declined by \$.35 since May. Still, a \$5.45 MYA price would be the third-highest price in history. The 2020 forecast will be final at the end of September and likely will be very close to \$4.45.

Both corn and soybeans did not trend up or down from roughly 1974 to 2006, varying around an average of \$2.38 per bushel (see Figure 1). Changes in long-run plateaus usually are associated with a change in demand. For example, corn and soybean prices reached a higher level around 1974 because of increased crop export demand. A new plateau again was reached around 2006 because of increasing corn use in ethanol production, along with continuing strong export demand for soybeans.



From 2007 to 2021, MYA prices for corn averaged \$4.38 per bushel, ranging from a low of \$3.36 in the 2016 and 2017 marketing years to a high of \$6.89 per bushel in 2012. From 2007 to 2021, MYA prices were below the average of \$4.38 in ten of sixteen years, or 63% of the time. Within that period, a six-year run of prices below the long-run average also occurred from 2014 to 2019.

Without compelling evidence for a structural change leading to increased demand, there is a strong likelihood that the 2021 projection of \$5.45 does not signal a new era of prices, and that corn prices likely are in the same regime that has existed since 2006. This would suggest that corn prices will continue to average near \$4.38, and that there will be declining prices below \$4.38 sometime in the future.

## **Soybeans**

The September 2021 WASDE report contains a 2021 MYA projection of \$12.90 per bushel for soybeans. The 2021 soybean projection has declined from the initial projection of \$13.85 per bushel in the May report. The 2021 forecast of \$12.90 is \$2.00 per bushel higher than the 2020 forecast of \$10.90 per bushel.

Similar to corn, the 2021 soybean projection is the third highest in history. The 2012 price of \$14.40 and the 2013 price of \$13.00 per bushel exceeded the current \$12.90 projection.

Periods of long-run plateaus typically coincide for corn and soybeans. From 1974 to 2006, soybean prices averaged \$5.98 per bushel. A new plateau was reached in 2006, and the average price from 2007 to 2021 has been \$10.64 per bushel. During the 2007-2021 period, the high was \$14.40 per bushel in 2012 and the low was \$8.48 in 2021. The MYA price for soybeans was below the \$10.64 average in 60% of the years from 2007 to 2021.

Similar to corn, the 2021 soybean projection of \$12.90 likely does not signal that prices have reached a new higher plateau. Rather, soybean prices likely will decline in the future.

## **Commentary**

Expectations are for high prices in the 2021 market year. In Illinois and much of the eastern corn-belt, yields are projected to be above-trend levels. Relatively high prices and above-trend yields should lead to relatively high farm incomes in much of the eastern corn-belt. However, incomes will be lower in the western corn-belt as drought has impacted Iowa, Minnesota, North Dakota, and South Dakota yields.

Current high prices likely are not harbingers of continued high prices in future years. Generally, a commodity price regime change occurs when demand conditions change. No long-term changes in demand can be identified at this point. Instead, supply responses and higher yields will likely lead to lower prices, and future prices of these commodities are expected to continue to vary around the 2007-2021 averages of \$4.35 per bushel for corn and \$10.64 per bushel for soybeans. Moreover, prices in the future will include periods when prices fall below these long-run averages, like the period from 2014 to 2019 when MYA prices averaged \$3.53 per bushel for corn and \$9.15 for soybeans.

Having noted the likely decline in prices, the timing of this decline is unpredictable, depending on the realization of supply and demand factors. As an example, MYA prices were at record levels of \$6.22 for corn and \$12.50 per bushel for soybeans in 2011, well above average prices. Another record of \$6.89 for corn and \$14.40 for soybeans was set in 2012, when a large drought in the Midwest caused low supplies. Similarly, a yield shortfall in 2022 could lead to higher prices than exist today. Other demand events also could impact prices.

Still, one should expect lower corn and soybean prices sometime in the future. As a result, prudent farm management should account for this possibility.



**WHEN DEVELOPING A GRAZING SYSTEM**...water is often the top concern, as discussed in this OSU Extension Beef newsletter: <https://u.osu.edu/beef/2021/09/15/water-is-everything/#more-11259>.

An important consideration, if an option, is will the livestock go to the water or will you take the water to the livestock? When possible, it is almost always the best option to take the water to the livestock because water is generally the most powerful force determining where livestock will spend their time. A three-year study at the Forage System Research Center in Missouri showed that when cattle had to travel more than 800 feet to water, uneven grazing occurred: overgrazing close to the water and undergrazing on the opposite end of the paddocks. In addition, when cattle have to travel long distances to water, they tend to go in groups so an adequate supply of water needs to be available so all of the cattle can receive an adequate supply.

How about water quality? If you have ponds or streams in paddocks and use them as a water source, we know that when it is hot, cattle like to stand in water, especially non-moving, shaded water, which will reduce quality. Pollution can come from erosion along the banks of the ponds and streams, and from manure and urine while standing in the water. For ponds we do know that installing a tank with the pond as the source improves water quality or fencing out the pond with a small corner with a stone base and limiting standing in the pond will improve quality.

There are different thoughts on what to do with streams in paddocks and I am not sure what the right answers is, but I do know that rotating to paddocks without streams limits exposure to paddocks with streams. Cattle like to stand in water not moving, so if you make part of a stream available for water, use a portion where the water is moving with a stone base. Finally, if given a choice, cattle that have access to clean water from a different source they will generally use that. I have one paddock where I had a spring developed with a stream running through it and the cattle use the stream less. Finally, I do know that during the summer, if your cattle are on fescue and you have a stream with standing water and shade, I bet I know where they will be during the day.

**ATYPICAL CASES OF BSE**...commonly referred to as "mad cow" disease have been confirmed in Brazil. The impact of this announcement on U.S. beef is discussed in this OSU Extension Beef newsletter: [https://tuscarawas.osu.edu/sites/tuscarawas/files/imce/Program\\_Pages/ANR/Newsletters/ANR%20Newsletter%20September%202021.pdf](https://tuscarawas.osu.edu/sites/tuscarawas/files/imce/Program_Pages/ANR/Newsletters/ANR%20Newsletter%20September%202021.pdf).

