

NORTHEAST OHIO AGRICULTURE NEWSLETTER

Your Weekly Agriculture Update for
Ashtabula and Trumbull Counties

August 13, 2024



Storm damaged corn in Trumbull County

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Hello Northeast Ohio Counties!

It has been a crazy week in NE Ohio. I hope you were all safe during the storm and had minimal damage to your property. While scouting for storm damage I found many acres of corn with wind damage (ripped leaves, lodging, green snap). We have a timely article on what to expect for damaged corn for this harvest season.

I hope to see you TONIGHT for our Soybean Weed and Disease Field Night! Learn from our state specialists on issues facing NE Ohio soybean growers. The program starts at 6PM. See the flyer at the end of the newsletter for more information.

Stay safe!

Lee Beers
Trumbull County
Extension Educator

Strong Storm Damage to Corn – What to expect?

By Alex Lindsey and Osler Ortez

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2024-27/strong-storm-damage-corn---what-expect>

Strong storms through the state may have caused issues with corn fields in recent weeks. Questions may arise regarding what to expect after the storm comes through, especially with regards to whether the crop will recover or what the yield impact will be. In general, if the plant is still undergoing vegetative growth or is in early reproductive stages (earlier than R2), it is possible some upright growth may occur. Some lodged plants may recover and exhibit goosenecking/bent stalks, but other damaged plants may not recover and lead to yield losses. However, once plants have entered into the grain filling stages (R2 and later), flattened plants will likely remain flattened through the end of the season.



Yield losses from root lodging (where the stalk remains intact) are most severe (up to 45% yield loss) when it occurs during pollination time (**Table 1**). Root lodging is less of an issue when corn is at vegetative stages (lower percent yield reductions reported in the literature). However, if corn becomes root lodged during the grain fill stages may be non-harvestable resulting in greater losses if the damage is severe and no harvest accommodation can be made to pick ears from plants almost laying flat on a field.

Table 1. Percent grain yield reductions reported as a result of root lodging at different developmental stages. Table originally published in *Severe Storm Damage and Short-Term Weather Stresses on Corn: A Review*, *Crop Science* 64(3):1129-1166. <https://doi.org/10.1002/csc2.21212>.

Development stage range	Carter and Hudelson (1988)	So et al. (2013)	Minami and Ujihara (1991)	Li et al. (2015)	Lindsey, Carter, & Thomison (2021)
	% yield reduction				
V10–V12	2–6	–	–	14	5
V13–V15	5–15	–	<1	–	22
V17–R1	12–31	25–40	16	–	43

Development stage range	Carter and Hudelson (1988)	So et al. (2013)	Minami and Ujihara (1991)	Li et al. (2015)	Lindsey, Carter, & Thomison (2021)
	% yield reduction				
R2–R4	–	–	15–16	30–38	33

Regardless of the lodging type, ears will become closer to the soil surface and canopies may become more restrictive to airflow leading to lower grain quality and greater ear diseases. If a fungicide application occurred this year around flowering, the issues with ear disease formation may be reduced. Susceptibility to root lodging increases with increasing seeding rate due to more plant competition present (Figure 1).

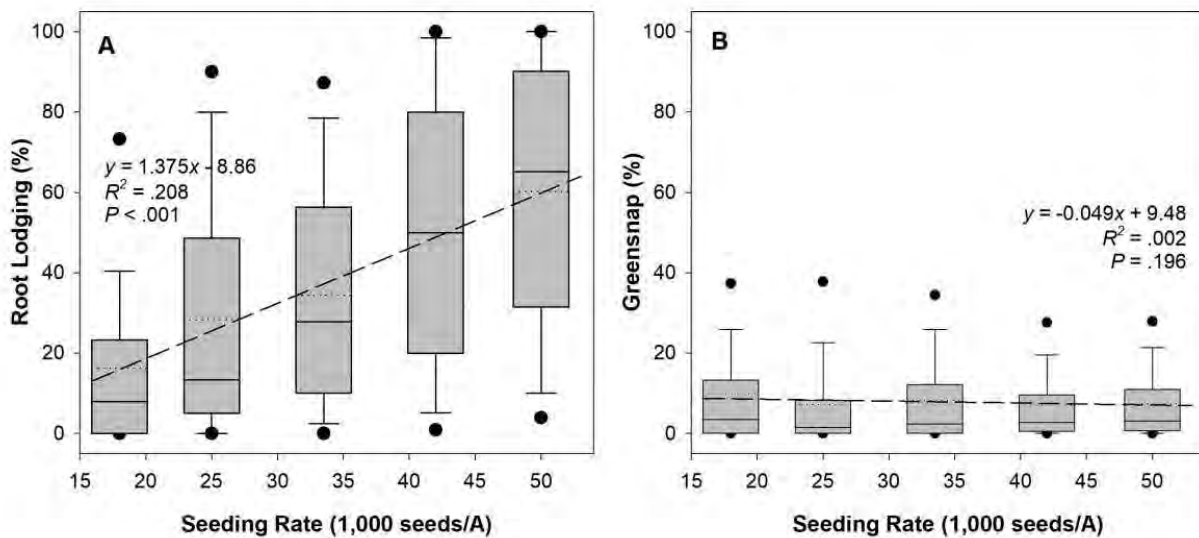


Figure 1. Root lodging incidence (A) and greensnap incidence (B) as influenced by seeding rate. Graphic by Alex Lindsey, PhD, The Ohio State University. Image from AC-1054.

Green snap (stalk breakage) typically occurs in later vegetative stages but is also possible during reproductive stages (breakage above the ear or below the ear, prior to harvest) and can result in major yield losses. Seeding rate changes had limited influence on green snap occurrence (Figure 1B), suggesting damage corresponds more to genetic susceptibility or crop stage (susceptibility) when storms occur.

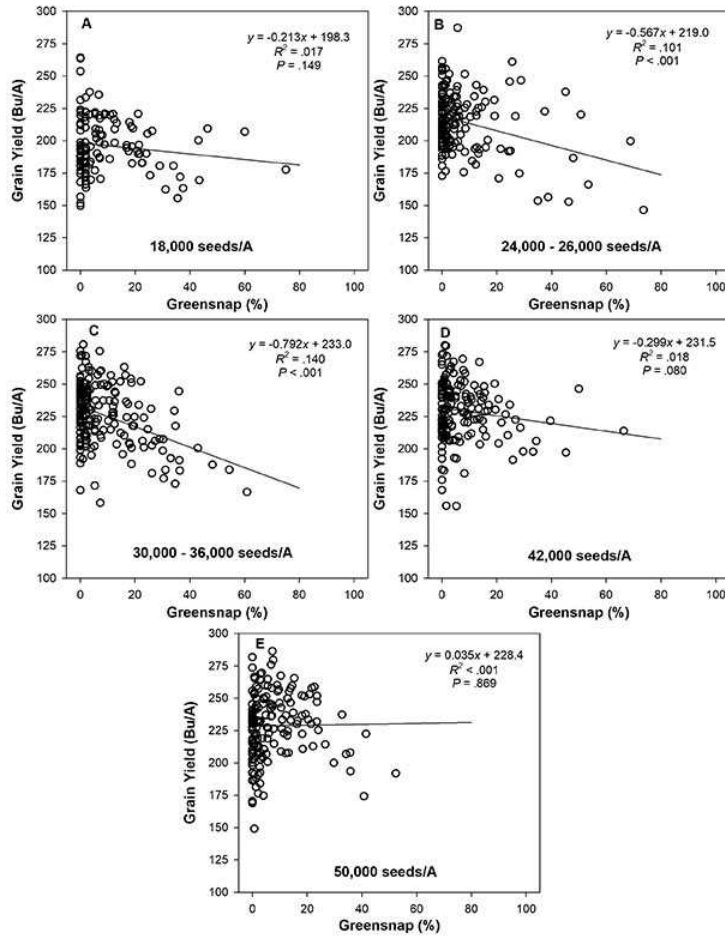


Figure 2. Corn grain yield as influenced by greensnap incidence across Ohio sites and years at (A) 18,000 seeds/A (seeds per acre); (B) 24,000–26,000 seeds/A; (C) 30,000–36,000 seeds/A; and (D) 42,000 seeds/A. The solid line in each panel depicts the linear relationship of yield and greensnap for each seeding rate range (the equations are described in the figure panels). Graphics by Alex Lindsey, PhD, The Ohio State University. Image from AC-1054.

Reports of yield losses as a result of greensnap suggested a more detrimental impact at seeding rates between 24,000 and 36,000 seeds/acre (**Figure 2**).

If flooding or waterlogging conditions occurred with storms,

corn becomes less susceptible to flooding damage as it progresses through the reproductive stages. It is unlikely that much yield damage will be experienced due to standing water associated with recent storm events when corn was already at reproductive stages.

To read more about these and other issues associated with strong storms, consult our recent OSU Factsheets AC-1054 (<https://ohioline.osu.edu/factsheet/ac-1054>) and ANR-0151 (<https://ohioline.osu.edu/factsheet/anr-0151>). More information on this topic can also be found in the full review article published in Crop Science - <https://access.onlinelibrary.wiley.com/doi/full/10.1002/csc2.21212>

Fall Forage Management

By John Yost

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2024-26/fall-forage-management>

The fall is a critical time in our yearly forage management calendar. Regardless of how the growing season has progressed, your fall management practices will set the stage for getting the next spring off on the right foot. In this article, we will give some recommendations on soil fertility, fall planting of new alfalfa stands, and when to take the last forage harvest for the season.



Your soil fertility program is far and above the most critical component of your alfalfa management. While current weather conditions and harvest timing will most influence the quality of a single cutting, a well-balanced fertility program will ensure that the plant has the available resources to perform within its environment. Again, the goal is to finish the growing season with a healthy plant that has had sufficient time to accumulate top growth that will protect the crown from cold temperatures during the late fall and winter. Allowing for enough top growth will also allow the plant to increase its energy reserves to initiate rapid growth in the spring.

We have to begin any soil discussion with a reminder to soil test. As you implement your testing procedures, remember that you are submitting a few ounces of soil to the lab, and you will take those results and develop recommendations that will apply to the whole field. You need to have a high level of precision between sampling years so that you can accurately track your progress. Whether you use whole field, grid, or zone sampling, incorporating GPS technologies to mark sampling locations will help increase your accuracy. At a minimum, you should be collecting 15 cores for every 25 acres. These cores can be combined to create one pooled sample for submission to the lab. To determine soil nutrients, you need an 8-inch core, or if you are only interested in pH, you can sample the top 4 inches. Remember to remove the surface layer of soil so that crop debris is not included. Soil sampling should be done at least every 5 years, and recommended fertilization can be estimated off crop removal rates. For every ton of alfalfa harvested, you are removing approximately 12 pounds of P_2O_5 and 49 pounds of

K₂O. The recommended soil test ranges for phosphorus and potassium are 30 to 50 ppm and 120 to 170 ppm, respectively. Subsoil pH should be approximately 6.8.

When considering a fall alfalfa seeding, it is important to have pH and soil nutrients at the recommended levels. This will facilitate rapid stand establishment, so that the plants are prepared for the coming winter. Most importantly, if soil pH is below a 6.5, you may need to consider making your lime application and delaying planting until next spring. If soil fertility is adequate, a fall seeding of alfalfa can be the most productive. In the fall, there will be less weed pressure and a nurse crop is generally not recommended as compared to the spring. Weeds that emerge with the crop are the most damaging. Your goal should be for the first 60 days after planting to be weed-free. If you will be no-till seeding, it is important to control existing vegetation prior to planting, especially perennial weeds. You can determine which herbicides to use, based on your existing weed populations, by consulting the 2024 Ohio, Indiana, and Illinois Weed Control Guide. Seeding rates can range from 10 to 20 pounds per acre depending on planting method and soil type. If no-till seeding, you should be in the 15 to 20 pound range, and when seeding into a prepared seedbed, you can reduce seeding rates to 10 to 15 pounds per acre. Your planting depth should be ¼ to ½ inch. When no-till seeding, make sure that your no-till coulter depth is not deeper than your seed placement depth.

It is unlikely that you will have an opportunity to harvest your fall seeding prior to winter dormancy. The recommendation is to complete planting 8 weeks prior to the first expected frost. In established stands, the last cutting should be made no later than 6 weeks prior to the first frost. For most of northern Ohio, the first potential frost date is October 6th. Once the plants have entered winter dormancy, they have stopped photosynthesis, and it is possible to take a post-dormancy harvest. This isn't recommended for newly seeded stands. As mentioned previously, it is important to ensure that there has been sufficient growth to help the plant overwinter and initiate growth next spring. Sufficient top growth will help protect the crown from heaving. The added benefit of the top growth is supporting any snow load, which can insulate the crown when temperatures drop below 25°F.

Be Mindful of Fall Armyworm, Which Could Get Interesting

By Kelley Tilmon, Amy Raudenbush, Andy Michel, James Morris, Curtis Young, CCA

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2024-27/be-mindful-fall-armyworm-which-could-get-interesting>

Since the extremely unusual fall armyworm outbreak of 2021 which affected forage including alfalfa and sorghum sudangrass, and turf, we have instituted a monitoring program in 14 Ohio counties. Though it's too early to declare an outbreak, we're seeing higher numbers in the traps than typical for the last couple of years (see Lep Monitoring report in this newsletter for more details). These moths will lay eggs which will hatch into the first instar, the smallest caterpillars which will grow as they feed. Control is easiest in younger instars. Fall armyworm migrates into Ohio during the latter part of summer and could cause problems into late summer. Unlike the true armyworm that only feeds on grasses (i.e., corn, wheat, forage grasses), the fall armyworm has well over 100 different types of plants upon which it feeds including many grasses but also alfalfa, soybeans, beets, cabbage, peanuts, onion, cotton, pasture grasses, millet, tomato, and potato. Obviously, a few of these crops are not produced in Ohio, but several of them are. As a result, we encourage farmers to be aware of feeding damage in their fields, especially forage crop fields, where we saw a lot of action in 2021.

Fall armyworms are much easier to kill when they are smaller, and feeding accelerates rapidly as they grow, so early detection is important. Look for egg masses glued not only to vegetation but to structures like fence posts. Egg masses have a fluffy-looking cover (Figure 2). When the cover is peeled back, eggs are pearly and tan when new, and turn darker as they approach egg-hatch.



Fall Armyworm Photo Credit Mark Badertscher



Figure 1. Fall armyworm feeding damage. Photo by James Morris, OSU Extension

Fall armyworm caterpillars vary in color from greenish to tan to dark brown with stripes along the body. They can be easily confused with other species, but a good identifier is an inverted white “Y” shape behind the head. (Figure 3). Another species, true armyworm, feeds at night but fall armyworm will feed during the day.

Insecticides will not penetrate egg masses well; it’s best to spray caterpillars when they are less than $\frac{3}{4}$ inches long, at which point most armyworm-labeled pyrethroids will kill them reasonably well. For larger caterpillars, products containing chlorantraniliprole will provide longer residual which may help with control of the harder-to-kill caterpillars over $\frac{3}{4}$ inches.

In forages, a threshold that can be used is 2-3 fall armyworm larvae per sq foot. If larvae are smaller (less than $\frac{3}{4}$ inch), they can still do a lot of feeding and are worth treating with an insecticide application. An early cut can help limit damage to the alfalfa, but one must check the field for survivors. If survivors are abundant, an insecticide application may be warranted to protect nearby fields. Armyworms get their name from moving in large bodies (marching) to new feeding areas.

In corn, armyworms can randomly feed on leaves, with holes occurring throughout the leaf surface. The more damaging stage is when they feed on developing silks and kernels after entering the ear. Once they enter the ear, control by insecticides is much more difficult. Most Bt corn varieties with above ground protection is labelled for armyworm control, but resistance to several Bt traits has appeared in the US. While we have not found Bt resistance in armyworms in Ohio, we would recommend growers scout ALL corn (Bt or non-Bt) for any evidence of damage or resistance.



Figure 2. Fall armyworm egg mass, with cover peeled back. Photo by Ric Bessin, University of Kentucky.



Figure 3. Fall armyworm caterpillar, with an inverted “Y” near the head. Photo by James Morris, OSU Extension

Fall armyworm does not overwinter in Ohio. Moths come up from the South early in the season and temporarily colonize the area, especially in grassy areas. The current caterpillars are second generation. If we have a warm fall we could possibly see a problem third generation, especially in forage, cover crops, and winter wheat planted before the fly-free date (see Figure 4). Because of this, scouting for fall armyworm should continue for the rest of the season. Closely observe hay and pasture crops even after cutting or grazing, especially where the crop was heavily damaged. Additional treatment later might be necessary. Moths prefer light-colored surfaces for egg-laying. Check fence rails, fence posts, and tree limbs in and around pastures and hayfields



Figure 4. Fly Free Dates in Ohio. Wheat planted after this date have lower risks of damage from Hessian Fly as well as other pests, including fall armyworm and aphids that spread wheat viruses

Please visit the Forages chapter in the Michigan State/Ohio State Field Crops Insect Pest Management Guide for management notes and labeled insecticides in forages. <https://aginsects.osu.edu/sites/aginsects/files/imce/MSU%20-%20OSU%20Insect%20IPM%20Guide.pdf>

Hay fields with infestation that are near harvest should be harvested as early as practical, and then the regrowth closely monitored for fall armyworm activity. In Kentucky, the fall armyworms have been reported to be present in hayfields after harvesting the crop off. This and the fact that we could get another generation if the fall is long and warm are reasons to continue monitoring closely.

Badly damaged alfalfa or grass hay fields should be cut and then rested the rest of this fall with no fall cutting. Fertilize according to soil test recommendations. Monitor the regrowth closely to catch any re-infestation that occurs. Established alfalfa should come back from fall armyworm damage. Recovery of the cool-season perennial grasses will depend on the relative severity of the damage, the overall health of the stand going into the infestation, and how many young tillers were not consumed. It is hard to predict how they will recover, time will tell.

Planning for Future of Farm Workshop to be held in Cortland, Ohio

The OSU Extension offices in northeast Ohio invite you to participate in a **Planning for the Future of Your Farm** workshop on August 22, 2024 from 9:00 a.m. to 4:00 p.m. at the Trumbull County Extension office in Cortland, Ohio. This workshop is designed to help farm families learn strategies and tools to successfully create a succession and estate plan that helps you transfer your farm's ownership, management, and assets to the next generation. Learn how to have the crucial conversations about the future of your farm.

[Click here for registration flyer](#)

Workshop topics include: Developing Goals for Estate and Succession; Planning for the Transition of Control; Planning for the Unexpected; Communication and Conflict Management; Legal Tools and Strategies; Developing Your Team; Getting Your Affairs in Order; and Selecting an Attorney.

Our teaching team will help answer the following questions and much more!

- Who should we leave the farm to?
- How do we prepare the next generation to manage the farm in the future?
- How can we overcome family communication issues?
- How do we value sweat equity?
- What is the difference between a will and trust?
- Will I lose my farm to estate taxes or to the nursing home?
- What do we need to do to be better prepared to meet with an attorney and other professionals?
- What resources does OSU Extension have to assist us as we develop our plan?

Event sponsors include OSU Extension – Ashtabula, Trumbull & Geauga Counties, Farm Financial Management & Policy Institute and the Hertzner Family Trust. The featured speakers will be David Marrison (OSU Extension Field Specialist, Farm Management), Robert Moore (Attorney, OSU Agricultural and Resource Law Program) and Lee Beers (OSU Extension Educator, Agriculture and Natural Resource)

The registration fee is \$25 per person which includes lunch, refreshments, and course materials. Registration deadline is August 16, 2024. This program is made possible at a discounted rate due to the generous support from the Hertzner Family Trust.

More information can be obtained by contacting Lee Beers at the Trumbull County Extension office at 330-638-6738 or via email at beers.66@osu.edu.

Soybean Vein Necrosis Virus and Downy Mildew

By Horacio Lopez-Nicora

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2024-26/soybean-vein-necrosis-virus-and-downy-mildew>

As we progressed with our field scouting this past week, it has become evident that Soybean Vein Necrosis Virus (SVNV) is making a noticeable presence in our soybean crops across various regions. SVNV, a viral disease primarily spread by thrips, manifests typically as yellowing and necrosis along the veins of the soybean leaves. Initial symptoms include chlorotic lesions that evolve, resulting in a necrotic, vein-associated appearance. The impact of SVNV on overall yield is still under investigation, but early infection is generally more detrimental. Growers should be vigilant about thrip populations and adopt integrated pest management strategies, including the use of resistant varieties if available, to mitigate the spread of this virus.



In tandem with the rise in SVNV cases, we have also observed an uptick in Downy Mildew infections. Downy Mildew (Fig. 1), caused by the oomycete *Peronospora manshurica*, presents on the top of the leaves as pale green to yellow spots which can become more extensive and ultimately lead to leaves curling and becoming necrotic. On the underside, the pathogen produces a greyish, fluffy growth. This pathogen thrives in cool, moist conditions, making our recent weather patterns prime for its propagation. The disease rarely causes severe damage to a crop, but there are some reports that it has reduced seed size and quality if present early in the season and at high levels. Effective

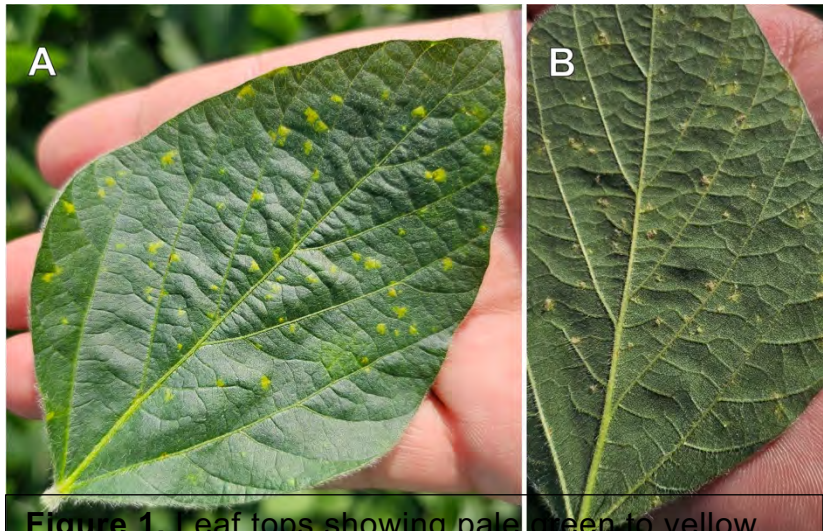


Figure 1. Leaf tops showing pale green to yellow spots (A); underside with greyish, fluffy pathogen growth (B). [Photo courtesy: Frank Becker – OSU Extension – Wayne County, Ohio]

Northeast Ohio Agriculture

OHIO STATE UNIVERSITY EXTENSION
Ashtabula and Trumbull Counties

management includes crop rotation, planting clean seeds, and resistant varieties. Fungicides commonly used on soybeans are not recommended for downy mildew.

Scouting is crucial in catching an outbreak early to implement timely control measures. By maintaining vigilant crop monitoring and adopting proactive management practices, we can efficiently tackle these diseases and safeguard our soybean yields. **Walk your fields, scout for soybean diseases, and submit your samples to the Soybean Pathology and Nematology Lab at Ohio State University.**

For more information on how to submit a sample to our lab, **click [HERE](#)**.

Mail your samples to:

OSU Soybean Pathology and Nematology Lab

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Increasing Pessimism About 2024 and 2025 Corn and Soybean Returns

By Gary Schnitkey, Nick Paulson, Jim Baltz, Bradley Zwilling, Carl Zulauf, and Bob Rhea

Source: <https://farmdocdaily.illinois.edu/2024/07/increasing-pessimism-about-2024-and-2025-corn-and-soybean-returns.html>

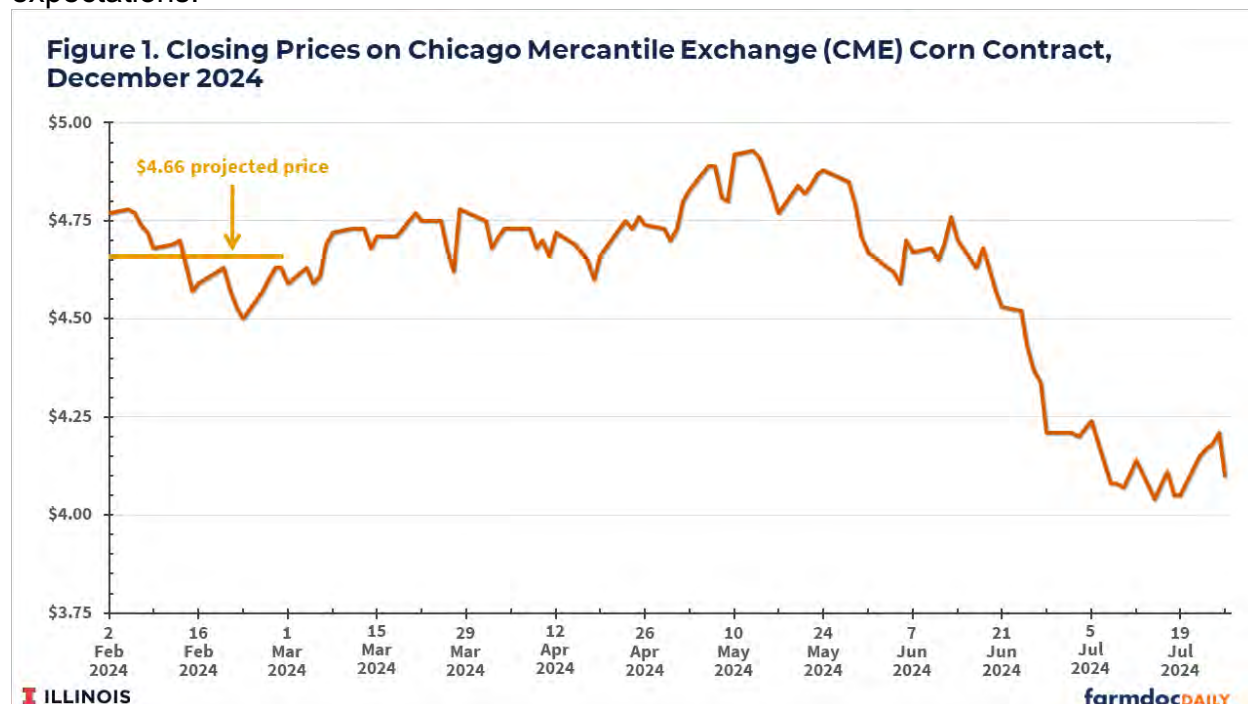
Current levels of futures contracts suggest that appropriate budgeting prices for 2024 crops production are \$4.00 per bushel for corn and \$10.50 per bushel for soybeans. Those prices would result in low returns in 2024, far lower than the last low-price period from 2014 to 2019. Much higher costs cause lower 2024 returns. Those budget price forecasts could change with unforeseen events, as does occur in agriculture. Over the next several months, estimates for returns and incomes will solidify. Still, it seems prudent to plan for much lower prices.

Corn and Soybean Prices

Expectations generally have been for much lower corn and soybeans prices in 2024 compared with the 2021 to 2023. In February, the projected price used to set guarantees on crop insurance was set at \$4.66 per bushel for corn. The projected price is the average of February settlement prices of the December corn traded on the Chicago Mercantile Exchange (CME) and represents an unbiased indicator of prices at

harvest. The \$4.66 projected price is well below the \$5.90 projected price for 2022 and \$5.91 for 2023.

Since February, the December CME futures contract has fallen, currently trading near \$4.10 per bushel (see Figure 1). This decline in price is consistent with a growing belief that yields in the U.S. will be above trend. Moreover, no significant market surprises have occurred that would either reduce supply or increase demand. In other words, a good supply of corn and roughly stable demand are leading to lowered price expectations.



The current December futures price for corn is consistent with cash prices below \$4.00 at harvest, roughly \$3.80 per bushel. Given usual price patterns, one expects cash prices to increase over the marketing season, and an average cash price of \$4.00 per bushel for 2024 production seems reasonable.

A \$4.00 price is well below recent prices. USDA reports the national market year average (MYA) price at \$6.00 for 2021 and \$6.54 for 2022. The 2023 marketing year will end in August, with a current forecast of \$4.65 per bushel. If a \$4.00 price occurs for 2024, it would be the lowest since 2019, when the market year average price was \$3.56 per bushel.

Futures markets are currently suggesting roughly similar prices for 2025 for corn. The December 2025 futures contract is trading near \$4.60, indicating that cash corn prices at harvest in 2025 could be in the low \$4.30 range.

A similar story exists for soybeans. The 2024 projected price for soybeans is \$11.55 per bushel, well below projected prices in 2022 (\$14.33) and 2023 (\$13.76). November futures prices have fallen since February, now trading near \$10.20 per bushel. Cash price at harvest below \$10 per bushel are likely, with an overall 2024 MYA price of \$10.50 being an appropriate projection. Futures prices suggest continuing low prices into 2025, with a \$10.80 price being an appropriate projection for the 2025 MYA price.

2024 Return Implications

Current markets are pointing to corn prices averaging near \$4.00 per bushel and soybeans prices averaging near \$10.50 per bushel over the next several years. Overall, the higher prices from 2021 through 2023 appear transitory, and prices are now moving to lower levels (see *farmdoc daily*, [July 9, 2024](#)). We may be again entering a period of lower prices like that from 2014 through 2019. From 2014 to 2019, central Illinois farmers received an average price of \$3.64 per bushel for corn and \$9.69 for soybeans.

Current market price indicators of \$4.00 per bushel for corn and \$10.50 for soybeans are above the 2014 to 2019 averages. Still, return levels likely will be much lower than from 2014 to 2019 because of higher costs. According to Illinois Farm Business Farm Management (FBFM) data, non-land costs for corn averaged \$587 per acre from 2014 to 2019 (see Revenue and Costs for Illinois Grain Corps [here](#)). Those non-land costs increased to a projected \$772 per acre, an increase of \$185 per acre. Non-land costs for soybeans increased from an average of \$363 per acre in 2014 to 2019 to a projected \$512 per acre in 2024, an increase of \$149 per acre. Cash rents increased from an average of \$277 per acre from 2014 to 2019 to a projected \$359 per acre in 2024, an increase of \$82 per acre.

We revised prices and yields in the central Illinois high-productivity budgets (see *farmdoc daily*, [June 25, 2024](#)) to reflect lower prices, higher yields, and some Price Loss Coverage (PLC) and Agriculture Risk Coverage (ARC) payments. Corn prices were lowered from \$4.50 per bushel to \$4.00 per bushel (see Table 1). Growing conditions have been good across Illinois, leading to an increase in yield from 227 bushels per acre to 234 bushels per acre. Soybean prices are reduced from \$11.30 per bushel to \$10.50 per bushel, while yields are increased from 72 bushels per acre to 75 bushels per acre. Also included are \$5 of PLC/ARC payments. If those payments occur, they will be received in October 2025. Based on current crop conditions, crop insurance payments likely will be minimal in 2024. We also added \$5 per acre to reflect modest crop insurance payments. On revenue products, lower prices likely will be offset by higher yields.

Those changes cause farmer returns from cash rent farmland to decrease. For corn, farmer return decreases from -\$100 per acre to -\$185 per acre (see Table 1). Soybean returns decrease from -\$57 per acre to -\$74 per acre. Most of central Illinois is in a 50% corn and 50% soybean rotation, leading to an overall net farmer return of -\$129 per acre on cash rented land.

A -\$129 per acre return would be the lowest since comparable records began in 2000. Over the entire 2000 to 2023 period, farmland returns averaged \$90 per acre, but there is a great deal of variability across years. High return periods occurred between 2007 and 2012, the period in which prices were higher because of the increased use of corn in ethanol and in 2021 and 2022 because of various factors (see *farmdoc daily*, [July 9, 2024](#)).

Negative returns occurred after both high-price periods. Returns were -\$3 in 2013 and -\$10 in 2015. The 2014 projected returns are more negative at -\$129 per acre.

Table 1. 2024 Projected Corn and Soybean Returns, Central Illinois with High-Productivity Farmland

	Corn		Soybeans	
	Previous ¹	Revision	Previous ¹	Revision
Yield per acre	227	234	72	75
Price per bu	\$4.50	\$4.00	\$11.30	\$10.50
LDP per bu				
	\$/acre	\$/acre	\$/acre	\$/acre
Crop revenue	\$1,022	\$936	\$814	\$788
ARC/PLC	0	5	0	5
Crop insurance proceeds	0	5	0	5
Gross revenue	\$1,022	\$946	\$814	\$798
Fertilizers	180	180	73	73
Pesticides	124	124	75	75
Seed	129	129	82	82
Drying	24	24	0	0
Storage	11	11	6	6
Crop insurance	20	20	8	8
Total direct costs	\$488	\$488	\$244	\$244
Machine hire/lease	21	21	21	21
Utilities	6	6	6	6
Machine repair	37	37	37	37
Fuel and oil	21	21	25	25
Light vehicle	2	2	2	2
Mach. depreciation	85	85	74	74
Total power costs	\$172	\$172	\$165	\$165
Hired labor	26	26	24	24
Building repair and rent	11	11	10	10
Building depreciation	17	17	13	13
Insurance	15	15	15	15
Misc	12	12	12	12
Interest (non-land)	31	31	29	29
Total overhead costs	\$112	\$112	\$103	\$103
Total non-land costs	\$772	\$772	\$512	\$512
Operator and land return	\$250	\$174	\$302	\$286
Land costs (cash rent)	359	359	359	359
Farmer return	-\$110	-\$185	-\$57	-\$74
Break-even price to cover	\$/bu	\$/bu	\$/bu	\$/bu
Non-land costs	\$3.40	\$3.30	\$7.11	\$6.83
Total costs ²	\$4.98	\$4.83	\$12.10	\$11.61

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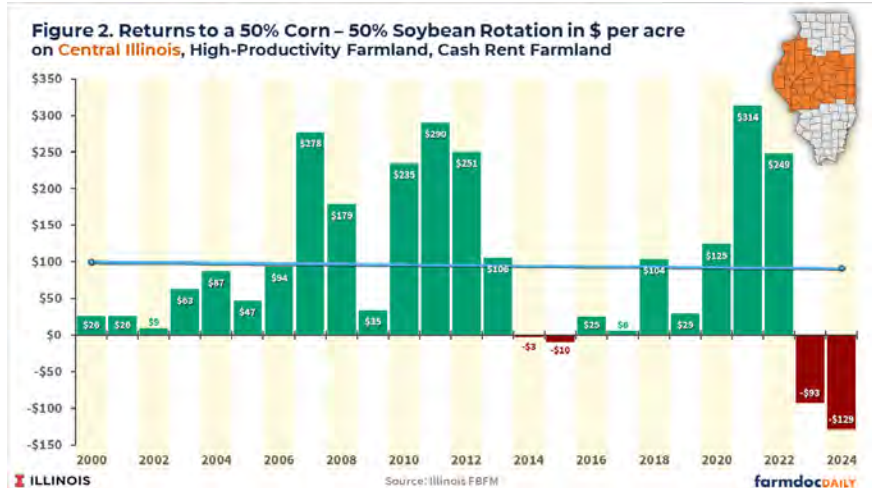
Potential Positive Upsides

Some unanticipated events could increase prices, as happens in agriculture. As a reminder of possibilities, corn prices were approaching \$3.00 per bushel in the summer of 2020, the beginning of the COVID pandemic. Then, a Derecho storm hit central Iowa in August, extending into northern Illinois, taking the top end off of U.S. yields. It also became evident that the China swine herd was being rebuilt after being severely impacted by African Swine Fever. Those two events began a period of higher prices,

which were further fueled by the Ukraine-Russia conflict and lackluster yields across the world. Something similar could happen in late 2024, but those events are difficult to anticipate and seem unlikely.

The federal government could institute an ad hoc disaster assistance

program. A continuation of the Economic Relief Program (ERP) seems likely, given its prevalence in recent years (see *farmdoc daily*, [June 6, 2022](#)). Essentially, ERP offers a top-up of the coverage level of crop insurance. However, those programs likely will not fill the gap. Like crop insurance, ERP protects against within-year declines in revenue. One of the income issues now is the decline in price over the years. For example, the projected cost for corn fell from \$5.91 to \$4.66. An extension of the ERP program will do nothing to cover this \$1.25 fall in price. An alternative ad hoc disaster assistance program could arise. It is, after all, an election year.



Summary and Implications

Budgeting for \$4.00 corn and \$10.50 soybean prices seems appropriate for 2024. Slightly higher price expectations – \$4.30 for corn and \$10.80 for soybeans – are accurate estimates of market-driven estimates for 2025. Using these prices will result in negative returns for most cash-rented farms. Depending on a farm’s debt position, owned farmland could still provide positive cash flows. Returns and farm income will come into clearer focus in the next several months.

Most farm operations have strong financial positions, with relatively low debt and high working capital (see *farmdoc daily*, [March 13, 2024](#), [March 22, 2024](#), [April 24, 2024](#), and [April 26, 2024](#)). However, the low returns that are expected will quickly erode that position, particularly the working capital position. Some farms may need to make changes to their operations to avoid severe losses of liquidity.

The price and return outlook suggest downward adjustments in cash rental rates. However, cash rents typically have lags in moving downward when prices fall. Still, the severity of income declines may dictate that cash rents will come down for specific tracts, particularly if the farms operating those tracts currently have lower working capital levels.

Some have suggested that farming is a boom to bust business. Long periods of low incomes like those from 2014 to 2019 need to be survived to gain financial resources from higher price and income periods like those in 2021 and 2022. We may have now entered another extended period of low prices again. Time will tell.

Acknowledgment

The author would like to acknowledge that data used in this study comes from Illinois Farm Business Farm Management (FBFM) Association. Without their cooperation, information as comprehensive and accurate as this would not be available for educational purposes. FBFM, which consists of 5,000 plus farmers and 70 plus professional field staff, is a not-for-profit organization available to all farm operators in Illinois. FBFM field staff provide on-farm counsel with computerized recordkeeping, farm financial management, business entity planning and income tax management. For more information, please contact the State FBFM Office located at the University of Illinois Department of Agricultural and Consumer Economics at 217-333-8346 or visit the FBFM website at www.fbfm.org.

Saturday
August
24

2 p.m.- 4 p.m.

Andover, Ohio

RSVP for full address
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Women in Ag 9th of September Flower Farm Tour

Join us to explore one of the county's floriculture farms. Learn about growing cut flowers, operating an agritourism venture, and which flowers are edible.



**Register by August
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Limit: 30 people

To register, email or call:

Julie Wayman

wayman.31@osu.edu

440-576-9008



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TRUMBULL COUNTY EXTENSION PRESENTS

Soybean Weed and Disease Field Night

OSU Extension Trumbull County will be hosting a field night focused on soybean weed and disease management. Speakers include OSU State Specialists and OSU Extension Educators. This **free** event is sponsored by Schwartz Farms and will offer Certified Crop Advisor Credits.

DATE: August 13, 2024

TIME: 6:00-8:00 p.m.

LOCATION: 4300 Sodom Hutchings Road, Fowler, OH 44418
(north of the Everett Hull intersection, see map on back)

COST: FREE

PRE-REGISTRATION REQUESTED: Call 330-638-6783

For more information, visit trumbull.osu.edu or call 330-638-6783



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Q&A

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Soybean Field Night location is on Sodom Hutchings Rd, north of Everett Hull Rd in Fowler, OH. Use 4300 Sodom Hutchings Road, Fowler, OH 44418 in your navigation apps or devices.

Signs will be posted for the event.