

FARM AND YARD

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FOR RURAL AND URBAN FAMILIES

Cattle Feeders Should Stay Flexible, Seek Advice

Dan Loy, IBC director and Iowa State extension beef specialist

AMES, Iowa – Disruptions caused by COVID-19 grow each day. Volatility in the cattle market was one of the first disruptions, and now with ethanol plant slowing production or shutting down, local availability of corn coproducts may be limited. Iowa Beef Center director Dan Loy said making plans now based on current and potential input availability will help producers determine their next steps.

"This situation is very local, continuously changing, and will vary from producer to producer and community to community," he said. "Supply disruptions could potentially affect other inputs such as feed additives, implants and trace nutrients. Hopefully these disruptions will be short-lived."

Here are three tips to help you manage the current challenges for your operation.

1. In feedlot diets, soybean meal or urea based supplements (dry or liquid) can replace all of the protein from corn coproducts. However, remember smaller calves, calves with lower feed intake or those on growing diets may not be able to utilize all of the protein from urea. Formulating on the basis of metabolizable protein accounts for this. The high solubility of urea also comes with limits. Consider these limits for the safety of beef cows and backgrounding cattle. Other potential protein sources that may be on hand include whole soybeans. At 40% protein soybeans can be a good protein source for beef cattle. The fat content (20%) limits the amount that can be fed. Also cereal rye, harvested at the boot stage can be as high as 20% protein or higher.

2. When substituting a higher protein supplement for distillers grains you will likely be substituting corn for distillers as a source of energy, adding more starch to the diet. Be sure to use an adjustment period and consider adding more fiber to the diet and managing feed bunks more closely.

3. Lean on your nutritionist and other advisors. In Iowa, your regional extension beef specialist is a good resource for advice on options available. [Find your specialist here.](#) If adjustments need to be made to implant or supplementation strategies, base your decision on the options available and research-based information.



Updated views on corn and soybean planting recommendations

Dr. Mark Licht is an assistant professor and extension cropping systems specialist

This year let's all toss out planting windows for corn. Farmers should be focused on when soil conditions are prime to plant. Soil temperatures need to be on the rise; 50oF and rising. Planting 24-36 hours before a cold spell—regardless of how long—is putting your seed at risk of cold injury and reduced germination. The critical corn planting date for Iowa is before May 18 and soybean is May 20; after which you can expect yield losses. Switching to a well-adapted maturity doesn't pay off until after June 1 for corn, and about June 15 for soybean, but at that point, it would be more about reducing fall frost risk more than anything.

There might be some hope when it comes to variable rate seeding. Not necessarily from increasing yields, but from seed cost savings. Typical seeding rate response range for common hybrids is going to be 32,000-35,000 and 2,000-4,000 less, for economic seeding rate depending on seed costs. The weather and its interaction with topography and soil is a huge influencer on how variable rate seeding works. Dry weather typically means depressions and field areas that collect water can support higher seeding rates. However, if conditions are wet then upland areas and course soils can support higher seeding rates.

For soybean, using the same 125,000-140,000 seeding rate is still a solid recommendation. Farmers could possibly drop 25,000 on high productivity field areas. Stress areas from Soybean Cyst Nematode or iron deficiency chlorosis or similar may benefit from higher seeding rates, while areas with high white mold potential may benefit from lower seeding rates.

Row spacing on corn may have higher yields for 20" rows compared to 30" rows when yield potential is greater than 240 bu/ac. However, below 240 bu/ac, 20" and 30" rows are yield neutral. I'm quite confident of this for north of Hwy 30 and west of I-35. Less certain for southern Iowa.

The benefit would be that yield benefits could be realized in soybean (unless white mold potential is high), which could help pay for equipment changes. The problems are that a planter, combine head and tires are a huge capital expense and even a soybean yield response may not be able to cover those costs.

Check out the NEW [Guide to Iowa Corn Planting](#)



Get Your Lawn Ready for the Spring Season

Adam Thoms, Assistant Professor and Extension Turfgrass Specialist; Zach Clemens, Communications Specialist, Integrated Pest Management

Mower maintenance and fertilizer are key to healthy turfgrass

AMES, Iowa – Contrary to the snow and cold temperatures some Iowa residents received this past weekend, it is officially spring, according to the calendar at least. This is a good time to be thinking about your spring and summer lawn care. Working in the yard or garden can also be a good distraction while dutifully following social distancing guidelines.

Now is a great time to work on your lawn mower, said Adam Thoms, assistant professor and turfgrass extension specialist at Iowa State University.

“Make sure the oil is clean and full,” Thoms said. “Knock the dust out of the air filter. Sharpen your mower blades, because if you have a mower with a dull blade, it will cause the turfgrass to use more water to heal from a cut.” Also, Thoms said to make sure your cut height is set for the length you want, ideally 3-3.5 inches.

Fertilizing turfgrass is very common in the spring, and nitrogen will get it growing. An actively growing and dense yard is the best way to limit or prevent weed growth. Thoms said that it is typically recommended to apply about $\frac{1}{2}$ to $\frac{3}{4}$ of a pound of nitrogen per 1,000 square feet of lawn.

“If you are concerned about crabgrass you will want to apply a crabgrass preemergence herbicide typically by May 1 to prevent the summer annual from being a problem,” Thoms said.

After fertilizing in the spring, don't apply more nitrogen until around Labor Day in September. At that time, apply 1 pound of nitrogen per 1,000 square feet. Thoms said you can also do an October feeding as well, with 1 pound per 1,000 sq. ft.

“The fall feedings will feed the roots and make stronger plants for the next growing season. A strong root will be able to survive droughts better, as well as hold soil better than unfertilized turf.”

If you want to sow grass seed this year, it is always important to not plant until later in the year, between mid-August through the end of September, depending on your location. Planting in the spring will cause your seed to compete with annual weeds, like crabgrass, which can overrun an establishment of grass seed. The summer heat and possible droughts are also often hard on young seedlings.

A healthy, growing lawn can be a welcome and peaceful sight for many, and with these tips you can get off to a great start.



Preemergence Herbicide Application Timings: Pros and Cons

Dr. Bob Hartzler is a professor of agronomy and an extension weed specialist.; Meaghan Anderson is a field agronomist in central Iowa and an Extension field specialist at Iowa State University Extension and Outreach; Prashant Jha is an Associate Professor and Extension Weed Specialist with the Department of Agronomy at ISU

In the rush of spring fieldwork, crop planting often takes priority over application of preemergence herbicides when time is crunched. Because of the availability of effective postemergence products this approach has been effective for many farmers. But as multiple resistant weeds have become more prevalent, more attention is needed to maximize the efficacy of preemergence herbicides. While most agronomists would prefer preemergence herbicide being applied immediately after planting, several strategies are available. Regardless of strategy, it is imperative to get a preemergence herbicide on every acre. This article will provide a brief overview of the pros and cons of different application strategies.

Early preplant: Applications made more than 7 to 10 days prior to planting)

Pros

- Applications typically completed before summer annual weeds begin to germinate, thus increasing the likelihood of timely activation by rainfall.
- May provide a weed-free seedbed at planting. In no-till systems, include a burndown product to control emerged winter annual and other weeds.
- Application completed before planting, spreading workload.

Cons

- Residual activity into the growing season is shorter than when product is applied near planting. Use of layered residual (including a residual with postemergence application) approach reduces this risk.
- Final seedbed preparation tillage may 'dilute' the herbicide within the soil profile if tool is run too deep, and may result in uneven distribution of the herbicide.
- Planter units may move herbicide out of the crop row, allowing weed escapes
- If planting is delayed, much of the value of the herbicide may be lost.

Preplant/Preemergence: Applications made within a week of planting.

Pros

- Product applied near time that summer annuals initiate emergence.
- Residual control extended later into growing season than early preplant applications.

Cons

- If rain doesn't occur within a week of planting, early-emerging weeds may escape control due to lack of herbicide activation.
- Planter units may move herbicide out of the crop row if applied preplant, allowing weed escapes.

Delayed preemergence: Applications made more than a week after planting.

Pros

- May spread workload.
- Residual control is extended later into growing season.

Cons

- Herbicide options may be reduced if crop has emerged before application.
- Summer annual weeds likely will have emerged at application, requiring additional postemergence product to control these weeds.
- Rainfall is needed within a few days of the application to activate product.
- Application delays can result in early-season competition between crops and weeds, and may allow weeds may exceed optimum size for postemergence control.

Preemergence herbicides are the foundation of herbicide-based weed management systems, and effective use of these products is essential to protect crop yields and reduce selection pressure for herbicide resistant weeds. In a perfect world, applying preemergence herbicides immediately after planting would provide the greatest likelihood of maximum performance, but equipment and labor availability limit many farms from using this approach. Herbicide resistant weeds have limited our ability to 'rescue' fields with postemergence treatments when weather delays preemergence applications following planting. Thus, consider how you can ensure that all acres are protected with appropriate preemergence herbicide applications when prolonged wet periods or other factors interfere with field operations.

When it's time to roll!

Aaron Saeugling is a field agronomist in southwest Iowa for Iowa State University Extension and Outreach

Planting season will soon be upon us, despite the current pandemic. This ICM Blog will discuss a few key things to focus on regarding planter set-up as we approach the 2020 planting season. For a video version of this article, see [Planter Maintenance and Set-up](#).

Proper planter set-up is critical for optimizing plant spacing no matter the color, age, or size of your planter. While newer equipment may allow us to plant in less than ideal conditions, I sometimes see those fields later in the year with interesting results—some good and some not. If you have not made adjustments to your planter set-up in the past few years, things to keep in mind include the following:

- Row cleaners come in various configurations. However, remember with row cleaners, the concept is to not till a trench. Instead the purpose of row cleaners is to only move aside any residue from prohibiting the double-disc openers from placing seed at the proper seeding depth. In other words, tickle the soil and don't till a path. I often see seeding depth issues related to aggressive row cleaners in no-till corn planted into soybean stubble. If you are in a strip-till system, you may be more aggressive with the row cleaners. If planting into standing fall-planted cereal cover crops, I am hesitant to use row cleaners due to wrapping and plugging from the cereal crop.
- Single-row coulters function as a form of tillage ahead of the double-disc openers. There are several styles of single row coulters available and in most planting conditions some soil contact is desirable. The major challenge when using coulters is soil moisture and speed. The deeper we run coulters, the higher the risk of soil sticking to the coulters. Consequently, soil may be tossed from the row, especially as planter speed increases. This can result in shallower seed placement. Additionally, if soil sticks to the coulters, it can contribute to sidewall compaction.
- One can make the case that the double-disc openers are the single most important thing on your planter. The double-disc openers will allow proper seed depth and slice an opening to properly place the seed at the ideal planting depth. If you are not sure the last time you purchased new ones, I recommend you do some measuring to check for wear on the openers. With most planters, the double-disc openers should measure 15" in diameter; however, this can vary based on the brand. There should never be more than a ½" of wear. When worn openers are used, it typically results in "hair pinning" of residue causing shallow planting depth. If increasing planter speed, more down pressure is needed. How much more pressure depends on soil moisture conditions and residue cover. Take time to get out and check field conditions and planter settings to make sure the seed is getting placed at the proper depth. Make adjustments as needed. For more information see [High Speed Planting Technology](#).
- There are numerous closing wheel and drag chain setups; however, their functions are the same: to provide proper seed-to-soil contact. This is critical to help with even crop emergence. Also, consider as planter speed increases, down-pressure should be increased. Almost any set-up can mash the seed slot closed; however, ask yourself "do you want the seed slot to open back up after it dries?" Again, taking time to check behind the planter and look for good seed-to-soil contact in the furrow, as well as potential issues like compaction or malformation of the seed furrow is worth the effort while planting.

Be sure to monitor seed depth while planting as all the technology in the world is no substitute for a pair of pliers and digging behind the planter. The technology is fabulous to watch and can greatly improve the capacity for most farmers. Nevertheless, it is still important to ground truth planter settings. Do not "set it and forget it" as soil conditions vary from field to field and even within a field. Take the time to make the proper adjustments.



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Calendar of Events



Following CDC and Iowa State University guidelines regarding the Covid 19 virus, our meetings and events are cancelled or postponed until further notice. We will keep you informed on future developments. Stay healthy.