



FIELD&FEEDLOT a monthly agriculture publication for Northwest Iowa

September 2022

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Online References

Ag Decision Maker

www.extension.iastate.edu/agdm/

Iowa Beef Center

www.iowabeefcenter.org

Manure Management Action Group

www.agronext.iastate.edu

Iowa Pork Industry Center

www.ipic.iastate.edu/

ISU Extension Dairy Team

www.extension.iastate.edu/dairyteam

Locate a County Office

<https://www.extension.iastate.edu/countyservices/>

Numbers to Know

AnswerLine 800-262-3804

Beginning Farmer Center 877-BFC-1999

Iowa 2-1-1 211

Iowa Concern 800-447-1985

Iowa Healthy Families 800-369-2229

Teen Line 800-443-8336

Precautions Following Heat Stress and Drought

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Although Iowa has had recent rains and cooler temperatures, producers need to be mindful of the aftermath of heat and drought.

Monitor the cowherd for open females.

Heat stress can reduce both semen quality and potential fertility in bulls. Research indicates there is an 8-week lag from the end of heat stress to the return of normal semen production in bulls, and in females heat stress 42 days prior up to 40 days after breeding can affect pregnancy rates.

Analyze the nutritional value of hay to be fed this winter.

As the temperature of the growing environment increases, it has the following overall effects on forage quality: accelerated rate of maturity, increased lignification, decreased leaf-to-stem ratio, and decreased digestibility. Drought-stressed hay may be deficient in energy, available crude protein and Vitamins A & E. Diets including heat- and drought-stressed hay will require reformulation and supplementation to meet the nutritional requirements of the animal.

Test the nitrate level in green-chopped corn and corn silage before feeding.

Because the lower 1/3 of the corn stem is higher in nitrates than the upper stem, raising the cutter bar will reduce the nitrate level in the forage. Research reports that 4-5 weeks of ensiling can reduce the nitrate concentration by about 40 percent. If the nitrate levels are high, dilute the feedstuff with low nitrate feeds and slowly adapt the cattle to the feed. Heavier feedlot cattle, stocker cattle over 700 pounds, and open replacement heifers over 700 pounds are usually more tolerant to nitrates.

Manage sorghum forages to reduce the potential for prussic acid poisoning.

Death is most common when livestock have eaten sorghum-family plants that are very young, stunted by drought, or frosted. Drought-stricken plants are hazardous because they are mostly leaves which contain higher levels of prussic acid than other plant parts. New shoots are especially poisonous and may appear after drought-stressed plants receive rain. Prussic acid poisoning is greatest in grazed > green-chopped > silage. However, do not feed new silage for at least 8 weeks after harvesting and storage. Graze or green-chop sudangrass only after it is 18 inches tall. Sorghum-sudangrass should be 24-30 inches tall before grazing.

More information on managing heat and drought may be accessed from the Iowa Beef Center website at www.iowabeefcenter.org/droughtresources.html.

Reflecting on the 2022 Growing Season

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When the calendar reaches September, I like to reflect on the growing season. I like to reflect on what was experienced during the growing season. Events during this growing season included drought which affected most of Northwest Iowa, a July 5th derecho, and soybean gall midge discovered in several new counties. Northwest Iowa has experienced its fair share of dry conditions in the 2022 growing season. Four counties are currently in D3 extreme drought, while others are in D2 severe drought as of the August 18th Iowa drought monitor. The effects of the drought have been quite variable with some counties severely affected by it.

The 2022 growing season brought about sightings of Soybean Gall Midge to new counties in Northwest Iowa. In 2022, identification of gall midge was discovered for the first time in the counties of Palo Alto, Pocahontas, Webster, Humboldt, and Kossuth. The pest continues to move east across Iowa. With these new discoveries it reminds me of the importance of scouting and understanding life cycles of insects when a new pest is discovered. Good sources of information include the Integrated Crop Management website from Iowa State University Extension and Outreach. Also, the Iowa Pest Alert Network offers text messages to those signed up when a new insect or pest is found in their area. The sites are operated by Iowa State University Extension and Outreach. One nice aspect of the Iowa Pest Alert Network is that it can be tailored to the part of the state that we are interested in. To sign up for the Iowa Pest Alert Network, go to <https://pestalerts.extension.iastate.edu/>.

A derecho moved through western Iowa on July 5th. It brought strong winds that lodged many corn fields in its path. Corn in the path of the derecho was laying at an angle but it was able to gooseneck after a few days and become more upright. Some fields experienced greensnap while others did not. Scouting has been the key to understanding the damage caused by this storm.

This growing season, like all growing seasons, has been memorable.

Farmland Leasing and Value

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Throughout August, I had the privilege to facilitate the annual ISU Extension and Outreach Farmland Leasing and Value meetings across Northwest Iowa with over 200 producers and ag businesses present. If you were able to attend, thank you; if you have questions about that meeting, the below recap may be helpful.

Since about May of 2022 much has been reported about the ISU Extension and Outreach 2022 Cash Rental Rates Survey and its announced results. This long-time work of ISU Extension and Outreach is collected via a survey of farmers, landowners, agricultural lenders, and professional farm managers, all of whom have a working knowledge of typical cash rental rates. In total, 1,401 useable responses, familiar with some 1.5 million acres across Iowa, were received with 77 percent from either farm operators (43%) and landowners (34%). Individual farm rents are not collected.

Our meetings looked at this information as a starting point (guideline) to determine a fair 2023 crop year lease rate. All nine of the crop reporting districts showed an increase (from 2021 to 2022) to typical cash rents received for corn and soybean acres. For the state of Iowa, the cash rent rate increased to \$256/acre (10.3 percent) from one year ago; The Northwest Iowa average of \$270/acre showed an increase of \$28/acre (11.8 percent).

Since the first 2022 ISU Extension and Outreach Farmland Value Surveys were sent in late-2021, farmland values have mostly continued to show increases. Though not a 1-to-1 correlation, the value of farmland is one of the seven tools that were discussed during the meetings to arrive at a well-thought, 2023 cash rent. After a careful assessment of the local area's lease market rates, six other methods were discussed to calculate a lease rate: (1) Expected Yield; (2) Corn Suitability Rating (CSR2); (3) Share of Gross Crop Value or Revenue; (4) Percent of Farmland Value (ROI); (5) Crop Share Equivalent; and (6) Tenant's Residual.

Additionally important to properly using the above objective guidelines, the lease parties should be cognizant of several subjective factors that may raise or lower lease rates. Several of these factors were discussed, e.g., size/shape of fields; terraces/creeks; field access; unusually high/low fertility or pH levels; other services provided by the tenant; etc.

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Farmland Leasing and Value, *continued*

Regardless of the method used, the economics of farming are an integral part of the management decision. These will likely include (a) commodity market prices; (b) expected yields; (c) government program payments (if any); and (d) production costs. For planning purposes, the 2023 crop year cycle will run from the Fall of 2022 (based upon fertility practices) thru Aug 31, 2024 (government program parameters).

Projecting operating margins faces immense pressures from the unknown. Best information right now seems to be pointing to a corn breakeven approximating \$4.14/bushel and soybeans \$10.77/bushel. Experts are suggesting that market prices may not remain as high as present levels; hence the last year of the 2018 Farm Bill may show a return of ARC or PLC government program subsidies, making the March 2023 deadlines for sign up an important near-term consideration.

[Ag Decision Maker](https://www.extension.iastate.edu/agdm/) (<https://www.extension.iastate.edu/agdm/>) offers several tools to make some “what if” projections. If you have questions about this material or interest in reviewing your operation further, please contact me, Gary Wright at gdwright@iastate.edu or 712-223-1574.

Are You a Master Conservationist?

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Do you consider yourself a conservationist? It could be argued that all folks working within the agricultural field are conservationists in one way or another. Those in agriculture spend much of their time tending and caring for the land in order to ensure the production of successful crops that help feed the world. Conservation of the land is necessary for both the continued success of agriculture and to ensure that the land will be productive and fertile for the next generation.

With that considered, if you are in agriculture, you are a conservationist! Have you ever thought about how you can incorporate more conservation practices into your agricultural production? Que, the Master Conservationist Program. The Master Conservationist Program is an in-depth, flipped classroom style program available through Iowa State University Extension and Outreach. The program provides an overview of the natural environments in Iowa, how natural resource management is done in Iowa, and what you can do to further contribute to successful conservation efforts throughout the state. The Master Conservationist Program is a great way for those in agriculture to learn more about how they can incorporate conservation efforts into their current practices. In 2021, approximately 20 percent of those that participated in the program identified as having a career in agriculture. The program has been offered in 43 percent of the counties in Iowa, including several counties in Northwest Iowa (Dickinson, Emmet, Palo Alto, Pocahontas, Plymouth, Woodbury, and Lyon counties). One participant from the Lyon County offering this year noted, “I can honestly say I learned something new every week and came away from this program with a much better knowledge of Iowa’s natural resources.”



As someone working in agriculture, you probably have a strong relationship to the land you tend. Do you want to learn more about the natural ecosystems within your land? Would you like to do more within your work to contribute to the conservation of land for future generations? Consider participating in the Master Conservationist Program! Learn something new about Iowa’s natural resources and share your personal knowledge and experience with others in the program.

Perhaps you are currently implementing conservation efforts on the land you tend, or maybe you have already participated in the Master Conservationist Program! If so, consider sharing your knowledge and experience with future Master Conservationists. You can offer a tour of your operation to future offerings of the program, or you can even volunteer to be a speaker at one of the sessions! If you want to share your passion and expertise with others, reach out to your county office to see how you can be more involved in the Master Conservationist Program.

The Master Conservationist Program is just one of many programs that offer education and hands-on experience with conservation practices within agriculture. Other great resources for those in agriculture include Iowa Learning Farms, Practical Farms of Iowa, and local conservationist professionals (County Conservation Board, Department of Natural Resources, etc.). Join us in helping to plant the seeds of conservation, and protecting the land for future generations, with the Master Conservationist Program!