

Ag Decision Maker

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UPDATES

The following [Information Files](#) have been updated on extension.iastate.edu/agdm:

A1-20 Estimated Costs of Crop Production in Iowa - 2023

A1-78 Net Returns to Carbon Farming

The following [Video and Decision Tools](#) have been updated on extension.iastate.edu/agdm:

A1-10 Chad Hart's Latest Ag Outlook

A1-20 Estimated Costs of Crop Production in Iowa - 2023 (14 Decision Tools)

A1-33 ARC-CO & PLC Per Acre Payment Estimator for Iowa, 2023-24

A1-33 ARC-CO & PLC Per Acre Payment Projections for Iowa, 2019-22

A1-78 Net Returns to Carbon Farming: IA, ID, IL, IN, KS, MN, MO, NE, ND, SD

The following [Profitability Tools](#) have been updated on extension.iastate.edu/agdm/outlook.html:

A1-85 Corn Profitability

A1-86 Soybean Profitability

A2-11 Iowa Cash Corn and Soybean Prices

A2-15 Season Average Price Calculator

D1-10 Ethanol Profitability

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The 2022 crop year in review

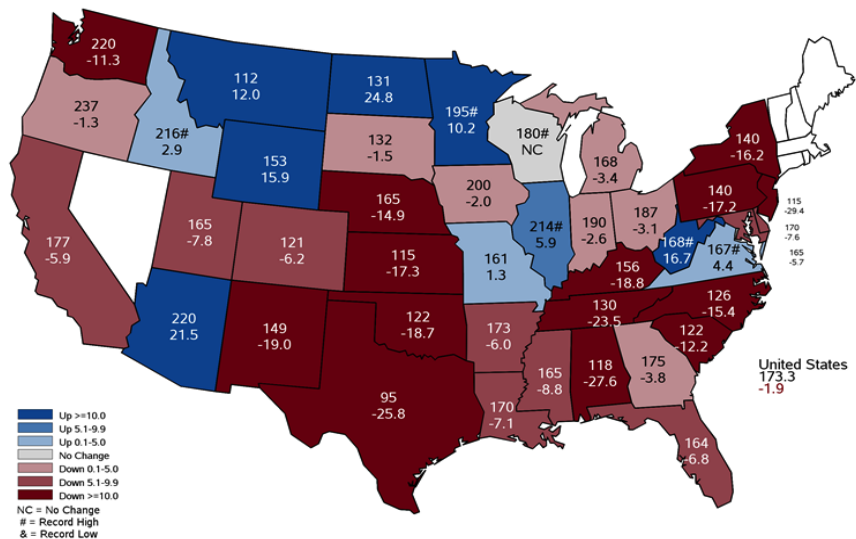
By Chad Hart, extension crop market economist,
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As is customary in January, USDA provides the final production numbers for the previous year and updates usage estimates based on the data from the first quarter of the marketing year. This year's review showed a larger production impact from the drought, in comparison to the past couple of years, but the corn and soybean crops were still large relative to historical crops. Crop usage has declined to somewhat match the smaller crop supplies, with exports bearing the brunt of most of the decline. The price estimates for the 2022 crops

remain quite strong, holding well above last year's prices. So while crop production was more challenging this year, crop prices eased some of the financial burdens.

After a third year of drought across most of the western United States, corn yields across the nation have held up surprisingly well. While the national yield did decline by 3.4 bushels per acre, it is still above 170 bushels per acre, coming in at 173.3 bushels per acre. Mainly, it was the states in the northern parts of the country that captured better corn yields this

Figure 1. 2022 corn yields, bushels and percent change from previous year. Source: USDA-NASS.

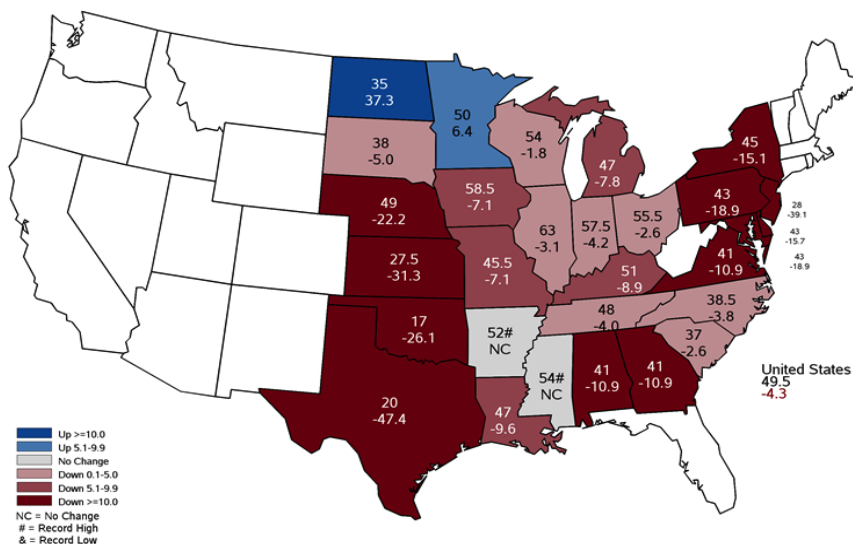


past year, as drought conditions lessened there. However, the drought intensified in the Central and Southern Plains, lowering corn yields from Nebraska to Texas. The Southeast also saw a sizable decline in corn yields. Iowa's corn yield moved along with the national average, with a roughly two percent fall, being estimated at 200 bushels per acre. Record corn yields were estimated for Minnesota, Wisconsin, and Illinois.

The pattern for soybean yields was somewhat similar, but the decline in yield was more widespread. Only two of the states where USDA estimates state-level soybean yields saw increases, North Dakota and Minnesota. Two other states tied their record yields from last year, Arkansas and Mississippi. All other reported states experienced declines. For Iowa, the state average soybean yield fell 4.5 bushels to 58.5 bushels per acre.

For the 2020 marketing year, corn usage exceeded production, leading to increasing prices. For 2021, production jumped by roughly a billion bushels, while usage only grew by 135 million bushels. However, corn prices continued to improve. For 2022, both production and usage dropped significantly, but as with 2020, corn usage exceeded production and prices continued to rise. Within the most recent estimates for the 2022 crop, production, usage, and stocks declined. USDA found that farmers harvested fewer corn acres than previously projected,

Figure 2. 2022 soybean yields, bushels and percent change from previous year. Source: USDA-NASS.



lowering harvested acreage by 1.6 million acres. As the yields from these acres were poor, the national yield estimate actually increased by a bushel. But the end result was a 200 million bushel decline in the corn production estimate, bringing the 2022 national total well below 14 billion bushels. And as is usually the case, when the production estimate declines, so do usage estimates. USDA pulled 25 million bushels from feed and residual usage, 10 million bushels from food, seed, and other industrial uses, and 150 million bushels from exports. 2022-23 ending stock estimates dropped by 15 million bushels, to 1.242 billion bushels, reflecting a further tightening of the corn market as those stocks would be 135 million bushels below the previous year. Despite the tighter stocks, USDA held with its previous estimate for the season-average price at \$6.70 per bushel.

The soybean data again tells a similar story to corn. For the 2020

marketing year, usage exceeded production and prices rose. For 2021, production grew, usage slipped, but prices remained robust. And 2022 returned to the pattern of 2020. Like with corn, harvested area fell, by 300,000 acres. However, unlike corn, the national soybean yield estimate also fell, by 0.3 bushels per acre, to 49.5 bushels per acre. The combination brought the production estimate down by roughly 70 million bushels, lowering national production below 4.3 billion. Soybean usage estimates were lowered by 4 million bushels for seed and residual use and 55 million bushels for exports. So 2022-23 ending stocks declined by 10 million bushels, to an estimate of 210 million bushels, which is roughly 65 million bushels less than the 2021-22 ending stock number. Based on that and the continuing strength in soybean prices, USDA increased its 2022-23 season-average price estimate by 20 cents to \$14.20 per bushel.

Table 1. Corn supply and use. Source: USDA-WAQB.

Marketing Year (2022 = 9/1/22 to 8/31/23)		2021	2022	2022 Change from Previous Estimate
Area Planted	(million acres)	93.3	88.6	0
Area Harvested	(million acres)	85.3	79.2	-1.6
Yield	(bushels/acre)	176.7	173.3	1.0
Production	(million bushels)	15,074	13,730	-200
Beginning Stocks	(million bushels)	1,235	1,377	0
Imports	(million bushels)	24	50	0
Total Supply	(million bushels)	16,333	15,157	-200
Feed and Residual	(million bushels)	5,718	5,275	-25
Ethanol	(million bushels)	5,326	5,275	0
Food, Seed, and Other	(million bushels)	1,440	1,440	-10
Exports	(million bushels)	2,471	1,925	-150
Total Use	(million bushels)	14,956	13,915	-185
Ending Stocks	(million bushels)	1,377	1,242	-15
Season-Average Price	(\$/bushels)	6.00	6.70	0.00

Table 2. Soybean supply and use. Source: USDA-WAQB.

Marketing Year (2022 = 9/1/22 to 8/31/23)		2021	2022	2022 Change from Previous Estimate
Area Planted	(million acres)	87.2	87.5	0
Area Harvested	(million acres)	86.3	86.3	-0.3
Yield	(bushels/acre)	51.7	49.5	-0.7
Production	(million bushels)	4,465	4,276	-69
Beginning Stocks	(million bushels)	257	274	0
Imports	(million bushels)	16	15	0
Total Supply	(million bushels)	4,738	4,566	-69
Crush	(million bushels)	2,204	2,245	0
Seed and Residual	(million bushels)	103	120	-4
Exports	(million bushels)	2,158	1,990	-55
Total Use	(million bushels)	4,464	4,355	-59
Ending Stocks	(million bushels)	274	210	-10
Season-Average Price	(\$/bushels)	13.30	14.20	0.20

In the grand scheme of things, the January USDA reports brought the markets some short-term positive news for prices. But they also brought some longer-term concern for pricing deeper into 2023. The smaller crops are a sign that supplies

will remain tight until the next harvest. And while usage has pulled back, production declined even more. So nearby futures prices rose with the release of the reports. However, the cuts in usage, especially exports, are reaching significant levels. Corn

exports are now projected be 822 million bushels less than what we captured for the 2020 crop. Soybean exports are set to be 276 million bushels less than 2020. And domestic usage has some holes in it as well, with corn feed and residual

usage down 332 million bushels from 2020. If crop production rebounds in 2023, as USDA's long-term projections show, then the markets will need a strong rebound in these usage categories. Given the continuing decline in the size of the cattle herd and the concerns about the global economy, that usage rebound looks hard to come by.

Based on that, the pricing outlook for 2023 is mixed. Old crop prices should remain strong and roughly follow the seasonal pattern throughout the spring and summer, given the limited supplies. New crop prices face more challenges to hold current levels. We can expect some downside volatility in March with the release of planting intentions and the weather/drought

conditions will influence futures prices throughout the summer. But the biggest challenge will be in the fall, as the harvest rolls in and we see if usage can match up with where the production number concludes.

View the [January 2023 Crop Market Outlook video](https://youtu.be/vUGKkeK80a0), <https://youtu.be/vUGKkeK80a0>, for further insight on outlook for this month.



Net returns to cereal rye in integrated Iowa operations

By Alejandro Plastina, extension economist, 515-294-6160 | plastina@iastate.edu

Unproven economic returns at the farm level are a major barrier to large-scale adoption of cover crops. A [recent study](https://www.card.iastate.edu/products/publications/synopsis/?p=1360), <https://www.card.iastate.edu/products/publications/synopsis/?p=1360>, evaluated the short-run net returns to producers implementing a cereal rye cover crop preceding the no-till corn phase of a corn-soybean rotation in an integrated crop and cow-calf operation in Iowa. The net returns to cereal rye were estimated using experimental agronomic data and partial budgets for two practically relevant scenarios: no-grazing and partial-grazing.

How was the study conducted?

First, the net returns to cereal rye in the crop system were calculated using

experimental agronomic data and local average prices in a partial budget framework. The agronomic data were collected from six location-years (northwest, central, and southeast Iowa, in 2019 and 2020), and included planting method (broadcast, drill), cereal rye seed density (low, medium, high), termination date (3 or 14 days before planting), cereal rye biomass at termination date, and corn yields. Partial budgets capture the differences between total profits from no-till corn production in fields planted to cereal rye in the fall, and total profits from no-till corn production in fields left fallow over the winter.

Second, using data on cereal rye biomass collected from the experimental plots and local

average prices, researchers simulated the hypothetical net cost savings from grazing cows in the cover-cropped field for a typical cow-calf enterprise. The analysis focused on a typical Iowa cow-calf production system with 48 cows feeding on dry hay in a feedlot during winter and early spring. Cereal rye was assumed to be planted on 160 acres adjacent to the feedlot with proper fencing and watering facilities.

The short-term net returns to cereal rye in an integrated crop-livestock operation were calculated as the direct sum of the net returns in the crop system and the net cost savings in the cow-calf enterprise.

While partial budgets capture all short-term "direct" effects of adding cereal rye to the crop

rotation, they do not include “indirect” benefits from cover crop use, such as reduced soil erosion or nitrate loading from subsurface drainage. This is appropriate because the “indirect” benefits do not affect the net returns to farming in the short-run.

What did the study find for the no-grazing scenario?

Corn yields following cereal rye were, on average, 4.7 bushels per acre lower than corn yields following a winter fallow. Sixty-four percent of the plots with cover crops obtained lower corn yields than their control plots left fallow in the winter. The yield drag was 12.1 bushels per acre, on average. Among the remaining 36% of the plots, the average corn yield bump following cover crops average 8.8 bushels per acre.

Plots where cereal rye was drilled averaged a corn yield bump of 1.8 bushels per acre, while plots where rye was broadcast averaged a corn yield drag of 12.0 bushels per acre. Furthermore, 91% of the broadcast plots showed yield drags, but only 42% of the drilled plots did. While higher seeding rates and later termination were associated with higher yield drags, those differences were not statistically significant.

Net returns to cereal rye in the absence of grazing averaged $-\$50$ per acre and were negative for 82% of the treatments. Net losses for broadcast cereal rye were $\$67$ per acre larger, on average, than for drilled cereal rye.

What did the study find for the partial-grazing scenario?

Broadcast cereal rye tends to produce higher biomass and larger net cost savings in the livestock enterprise compared to drilled cereal rye, but it also results in higher corn yield penalties.

Net returns to cereal rye in the partial-grazing scenario averaged $-\$10.21$ per acre across all treatments, and were, on average, $\$39.86$ less negative than in the no-grazing scenario. However, the dispersion of net returns around the mean (measured by the coefficient of variation) in the partial-grazing scenario (5.57) is higher than in the no-grazing scenario (1.40).

The average net return across the 24 treatments with negative returns amounted to $-\$48.06$ per acre, which is $\$22.70$ less negative than for the treatments with negative returns in the no-grazing scenario. The average net return across the 18 treatments with positive returns amounted to $\$40.25$ per acre, or $\$5.37$ lower than for the treatments with positive returns in the no-grazing scenario.

While net returns in the partial-grazing scenario tended to be higher for lower seeding rates, the contrasts of drilled rye compared to broadcast rye and late termination compared to early termination were not statistically significant.

What are the implications of the study?

Findings should raise awareness about the low probability of obtaining positive annual net returns to cereal rye in Iowa in the absence of sizable cost-share payments, and inform policymakers about the potential for improving the cost-effectiveness of cost-share programs by incentivizing cereal rye drilling in the program design when the biomass will not be grazed.



Will swine breeding herd increases continue?

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Pig crop numbers and estimates of farrowing intentions, surveyed, compiled, and published by USDA's National Agricultural Statistics Service, are widely used for forecasting future hog slaughter. The most recent pig crop, along with the two lightest weight market hog inventories, provide indications of slaughter roughly three to six months ahead. The pig crop aligns with hog slaughter approximately six months later.

The pig crop is not as accurate of a measure to predict slaughter as the market hog inventory due to production issues. Furthermore, the actual time to slaughter may vary because of differences in marketing weights for hogs or changes in feed efficiency and average daily rates of gain.

Farrowing intention estimates are used as an indication of slaughter from six to 12 months in the future. The first farrowing intentions estimate is made three months before farrowing begins and nine months before slaughter begins. The second farrowing intention estimate is made in the month farrowing begins and six months before slaughter begins. The initial or first estimate is more of a guesstimate and the second estimate is more of a plan.

Producers can change plans after reports

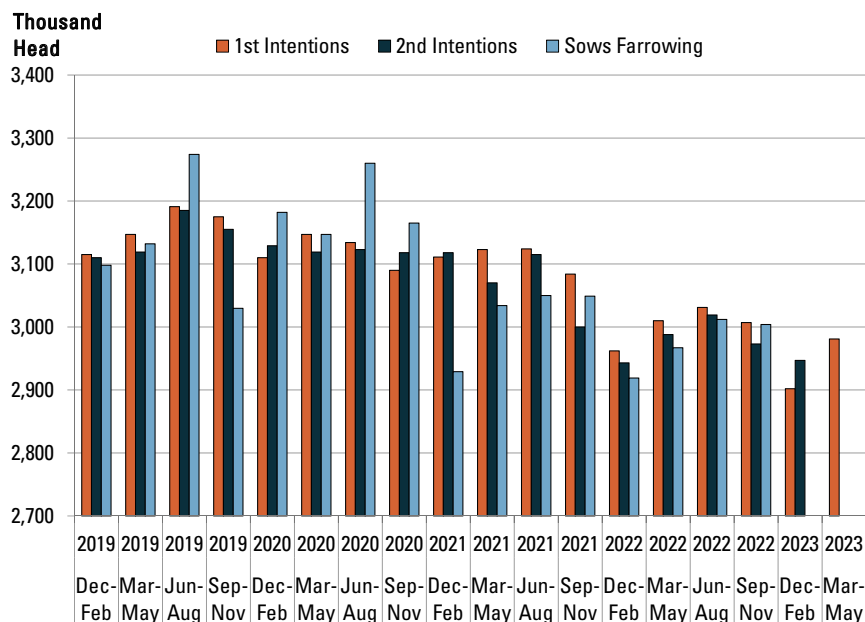
The survey for the December Hogs and Pigs report asked, how many sows and gilts for breeding were owned by this operation on Dec. 1, 2022? (Include unweaned gilts intended for breeding.). How many of these sows and gilts are expected to farrow during December, January, or February? How many of these sows and gilts are expected to farrow during March, April, or May? Typically, it is expected about half of the sows and gilts on a farrowing operation will farrow each quarter to keep a steady flow of pigs being born.

In September 2022, US hog producers intended to farrow 2.973 million sows during the September-November 2022

quarter, which would have been down 2.5% from actual sows farrowing during the same period one year earlier. Intended sows farrowing for December 2022-February 2023, at 2.902 million sows, would have been down 0.6% from the same period one year earlier.

In December 2022, actual sows farrowing during September-November 2022 were reported at 3.004 million head, down 1.5% from 2021 but 31,000 litters larger than the September through November expectations in the September report (Figure 1). US hog producers intended to have 2.947 million sows farrow during the December 2022-February 2023 quarter, which would be up 1.0% from the actual sows farrowing during the same

Figure 1. Quarterly United States sows farrowing and intentions.
Source: USDA NASS.



period one year earlier and 45,000 litters larger than the December through February expectations in the September report. Intended sows farrowing for March-May 2023, at 2.981 million sows, would be up 0.5% from the same period one year earlier.

Pig crop estimates are based on reported actual sows farrowing while estimates of farrowing intentions are based on future plans of producers. These plans may change after USDA surveys are taken because of changes in actual or expected prices for hogs, changes in costs or expected costs and as a response to the current industry-wide hog production plans revealed by the survey.

This is particularly true for first estimates of farrowing intentions. One purpose of the estimates of farrowing intentions is to provide information on current production plans so individual producers can make adjustments if they choose.

Breeding herd is increasing

The US breeding herd inventory on Dec. 1, 2022 was 6.154 million head. This was up 0.5% from Dec. 1, 2021 (Table 1). This was the first year-over-year increase in the national swine breeding herd in 2.5 years. Breeding herd utilization, September-November sows farrowing divided by the Sept. 1 breeding herd, at 48.3% is close to what it has been for this quarter over the last three years but one percentage point lower than the 20-year average.

Anticipated breeding herd utilization for the next quarter, December-February farrowing intentions divided by the Dec. 1 breeding herd, is 47.9% which would be higher than the last two years for the same quarter and almost right at the 20-year average (Figure 2). This helps provide some confidence in the breeding herd and farrowing intention estimates. When production is declining and hog prices are profitable or there are expectations of profit, hog producers are likely to retain a larger number of gilts for replacement purposes and make maximum use of their present sow herd.

Table 1. USDA quarterly hogs and pigs report summary. Source: USDA-NASS

	United States			Iowa		
	2021	2022	2022 as % of '21	2021	2022	2022 as % of '21
Dec 1 inventory *						
All hogs and pigs	74,446	73,119	98.2	23,900	23,600	98.7
Kept for breeding	6,125	6,154	100.5	920	930	101.1
Market	68,321	66,966	98.0	22,980	22,670	98.7
Under 50 pounds	21,594	21,153	98.0	5,970	5,910	99.0
50-119 pounds	19,005	18,620	98.0	7,290	7,040	96.6
120-179 pounds	14,374	14,095	98.1	5,340	5,340	100.0
180 pounds and over	13,348	13,098	98.1	4,380	4,380	100.0
Sows farrowing **						
Jun-Aug	3,050	3,012	98.8	505	500	99.0
Sep-Nov	3,049	3,004	98.5	525	510	97.1
Dec-Feb ^{1,2}	2,919	2,947	101.0	475	500	105.3
Mar-May ³	2,967	2,981	100.5	500	515	103.0
Sep-Nov pigs per litter	11.19	11.22	100.3	11.45	11.55	100.9
Sep-Nov pig crop *	34,123	33,691	98.7	6,011	5,891	98.0

Full report: <https://downloads.usda.library.cornell.edu/usda-esmis/files/rj430453j/37721p56r/rn302c239/hgpg1222.pdf>

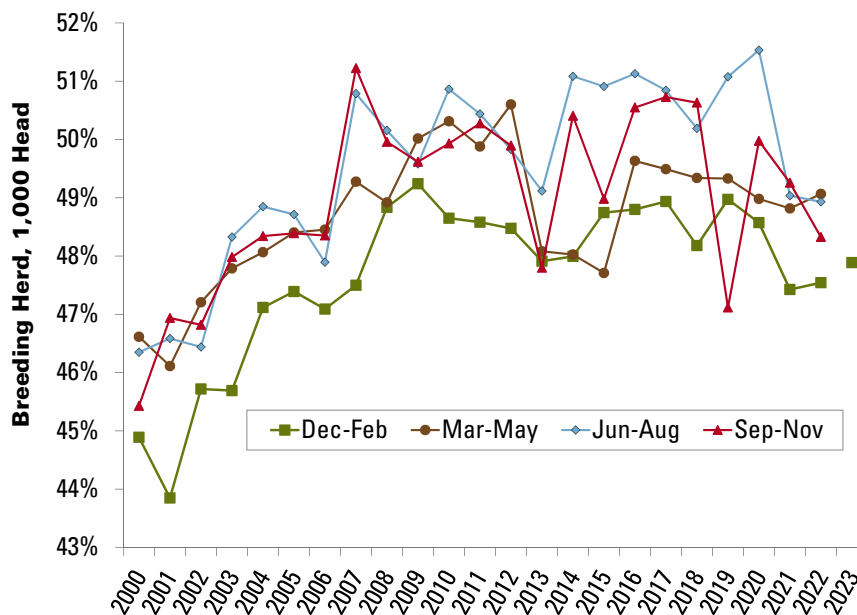
* 1,000 head; **1,000 litters; ¹ December preceding year. ² Intentions for 2022-23. ³ Intentions for 2023.

The Minnesota breeding herd inventory was down 10.9% from a year ago. At 490,000 head, this is the second smallest Dec. 1 Minnesota breeding herd in the history of the data. The data series goes back to 1963. On Dec. 1, 1975, the Minnesota breeding herd was 465,000 head. The Nebraska breeding herd was down 7.0%, and the smallest Dec. 1 breeding herd since 2014. On the flip side, a few states saw notable growth. The Illinois breeding herd was up 11.9% compared to Dec. 1, 2021. Illinois has its largest Dec. 1 breeding herd since 1993. The South Dakota breeding herd inventory was up 9.4% year-over-year while the Oklahoma breeding herd inventory was up 6.5%. The Iowa breeding herd was up 1.1%.

As expected, with increases in the breeding herd, tend to come increases in farrowing intentions. From the first intentions estimate made in September for the December 2022-February 2023 quarter to the second intentions estimate made in December, Illinois producers added 35,000 litters expected and Iowa producers added 15,000 litters. Minnesota producers reduced December 2022-February 2023 farrowing intentions by 5,000 litters.

A possibility exists that farrowing numbers may end up being higher. Where could December through February sows farrowing be larger? In Illinois, the ratio of sows farrowing in December-February to the Dec. 1 breeding herd

Figure 2. United States breeding herd utilization. Source: USDA NASS.



would drop to 43.2%, compared to 44.1% last year and a 20-year average of 49.2%.

Similarly, the Oklahoma farrowing-to-breeding herd ratio would be 39.8% for the coming quarter, which would be 2.6 percentage points below last year, and below the 20-year average of 45.6%. While the South Dakota ratio of 48.3% would be the same as last year, this would be below the 20-year average of 50.8%.

The potential declines in the farrowing rate could be aberrations, or more sows could, in fact, be farrowed than previously estimated. Of course, this assumes no revisions to breeding herd estimates.

Give credit where credit is due

The last two USDA Hogs and Pigs reports have been remarkably accurate. Over the 17 weeks stretching from

the beginning of June to late September, when the September Hogs and Pigs report was released, hog slaughter was down 0.92% from the same period the year prior. The June Hogs and Pigs report indicated hog slaughter would be down 0.70%. From the beginning of September to the week ending December 10, 2022 hog slaughter was down 1.48% from the same period last year. The September Hogs and Pigs report indicated slaughter would be down 1.41%.

In the short run, the number of hogs and pigs are on the ground is what matters. Current and pipeline supplies along with the demand situation, determine prices. The Dec. 1, 2022 market hog inventory, at 66.966 million head, was down 2.0% from last year. The 180-pound-and-over category was down 1.9% and will be slaughtered in the next 30 to 45 days and by the time a

quarterly hogs and pigs report is released, a good portion of these hogs have already come to market. Hog slaughter during the first three weeks of December was down 1.8% compared to the same three weeks in 2021.

Pigs weighing 120 to 179 pounds were down 1.9% and will be market ready in approximately 60 days. Pigs weighing 50 to 119 pounds were 2.0% below last year and will reach market weight in about 100 days and pigs weighing less than 50 pounds were also down 2.0% and will be slaughtered in 120 to 180 days.

Weather woes and Holiday scheduling impact slaughter

The years when Christmas and New Year’s Day fall on a weekend, throw a dynamic into slaughter planning. Adjusting operations for the two-week period introduces more variability within each plant and across the industry. In addition, heavy snow and blizzard conditions smashed into the Great Plains and Midwest beginning on late Dec. 19 and stretching into early Dec. 24. This storm upended hog slaughter for the week ending Dec. 24, 2022. Hog slaughter was down 7.4% compared to the same week the previous year. Slaughter numbers ramped up the following week but then declined notably year-over-year for the week ending Jan. 7, 2023. Saturday slaughter allows packers to

somewhat make-up for holidays and weather challenges. For instance, Saturday, Jan. 7, 2023 hog slaughter was the third largest Saturday slaughter on record. The data goes back to 1993.

Commercial slaughter and price forecasts

Table 2 contains the Iowa State University price forecasts for the next four quarters. Prices are for the Iowa-Minnesota producer sold weighted average carcass base price for all purchase types. Basis forecasts along with lean hog futures prices are used to make cash price projections. The table also contains the projected year-over-year changes in commercial hog slaughter.

Table 2. Commercial hog slaughter projections and price forecasts, 2022-2023

	Year-over-Year Change In Commercial Hog Slaughter (%)	ISU Model Price Forecast, IA-MN Base Price, All Purchase Types (\$/cwt)	CME Futures (12/23/22) Adjusted for IA-MN Producer Sold Weighted Average Carcass Base Price for All Purchase Types Historical Basis (\$/cwt)
Jan–Mar 2023	-1.48	87–91	88.66
Apr–Jun 2023	-1.70	98–102	100.16
Jul–Sep 2023	1.06	99–103	101.06
Oct–Dec 2023	0.95	83–87	85.32



Importance of using a written lease: trends and resources

By Melissa O'Rourke, farm and agribusiness management specialist,
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Women are an increasingly important group of Iowa farmland owners. According to the last comprehensive study of Iowa farmland tenure trends, 47% of Iowa farmland is owned by women – and women own 55% of the leased farmland acres in Iowa. A 2021 study of women farmland owners indicated that about 60% of these women utilize a written lease, while 40% do not. Especially as farmland owners age and transitions continue, it is increasingly important that leasing agreements be in writing.

There are multiple advantages for farmland owners and operators to have a written lease agreement. When agreements are in writing, the parties are much more likely to cover all the provisions intended, from the financial terms to respective duties of the parties. Terminology and related details can be addressed, such as what is meant by hunting rights or fence maintenance.

Parties sometimes resist putting the agreement in writing due to a misplaced notion that this implies a lack of trust in the other party. Rather, parties to a farmland leasing agreement should put their terms in writing because they value the relationship. It is entirely human for people to forget or misunderstand perceptions of a

verbal agreement, and written agreements are much less likely to be the subject of later misunderstandings or disputes. A written lease agreement is invaluable in circumstances where one of the parties becomes disabled, ill, dead or otherwise unavailable and someone else must take over.

Whether farmland owners and operators currently have a written lease, or are contemplating a future written farmland lease, these agreements should be reviewed and discussed by the parties on a regular basis. Conversations regarding goals and changes in circumstances lead to better relationships and outcomes for both farmland owners and producers. ISU Extension and Outreach provides suggested forms for basic cash leases as well as longer forms that provide guidance for cash, flexible, and crop share leases. There are focused resources to add conservation supplements to written leases. These suggested lease forms provide both owner and operator with a guide for developing agreements to fit the circumstances. And remember, these forms should not be used as a substitute for legal advice applicable to the parties' agreement.

Resources

[2022 Iowa Women Farmland Owners Survey](http://www.extension.iastate.edu/agdm/articles/others/SchSep22.html), www.extension.iastate.edu/agdm/articles/others/SchSep22.html

[Do I Need A Written Lease?](http://www.extension.iastate.edu/agdm/wholefarm/html/c2-03.html), www.extension.iastate.edu/agdm/wholefarm/html/c2-03.html

[Improving Your Farm Lease Contract](http://www.extension.iastate.edu/agdm/wholefarm/html/c2-01.html), www.extension.iastate.edu/agdm/wholefarm/html/c2-01.html

[Iowa Farm Leases: A Legal Review](http://www.calt.iastate.edu/files/farm_lease_law.pdf), www.calt.iastate.edu/files/farm_lease_law.pdf

[Survey of Iowa Leasing Practices, 2017](http://www.extension.iastate.edu/agdm/wholefarm/html/c2-15.html), www.extension.iastate.edu/agdm/wholefarm/html/c2-15.html

[Iowa Cash Rent Farm Lease \(Short Form\)](http://www.extension.iastate.edu/agdm/wholefarm/html/c2-16.html), www.extension.iastate.edu/agdm/wholefarm/html/c2-16.html

[Iowa Farm Lease Form \(Long Form, for cash, flexible or crop share\)](http://www.extension.iastate.edu/agdm/wholefarm/html/c2-12.html), www.extension.iastate.edu/agdm/wholefarm/html/c2-12.html

[Lease Supplement for Obtaining Conservation Practices](http://www.extension.iastate.edu/agdm/wholefarm/html/c2-08.html), www.extension.iastate.edu/agdm/wholefarm/html/c2-08.html

Women Managing Farmland programs and resources are financially supported by a USDA National Institute of Food and Agriculture - Critical Agriculture Research and Education grant (2021-68008-34180) and a Farm Credit Services of America gift.

For information on Women Managing Farmland courses, visit the Women in Ag website at www.extension.iastate.edu/womeninag/.

For information on upcoming Women Managing Farmland webinars, visit <https://go.iastate.edu/2IMUAT>.

Nationwide management practice tool: Saving Tomorrow's Agricultural Resources (STAR)

By Dennis Carney, retired 5th generation farmer from North Central Iowa.

Dennis has been active in conservation organizations and causes throughout his career and is the immediate past president of the Conservation Districts of Iowa. He also uses STAR as a condition of renewal in his farm leases.

Farmers and consumers are increasingly aware of and concerned about the consequences of commercial food, feed, and fiber production on our natural resources; and they are looking for a mechanism to measure these effects. [Saving Tomorrow's Agricultural Resources \(STAR\)](https://cdiowa.org/s-t-a-r/), <https://cdiowa.org/s-t-a-r/>, is a FREE nationwide management practice tool designed to assist farm operators and landowners in evaluating their current practices on individual fields. Once practices on individual fields are evaluated, farm operators and landowners can then make any necessary adjustments to reduce nutrient loss, conserve soil, and enhance soil health.

STAR was developed in 2017 by Illinois' Champaign County Soil and Water Conservation District as a means to contribute to the important goals outlined in the state's Nutrient Loss Reduction Strategy (NLRS). Since its creation, STAR has been adopted in many county soil and water conservation districts in Illinois, including several in Indiana. Other states have also adopted STAR, including Iowa, Missouri, and Colorado to administer the tool in their area, tailored to their local resource concern.

As the STAR program has grown, processors, ag suppliers, and end-users have responded to consumer demands for sustainable ag production by increasing their support for agriculture practices that improve soil and water quality. In the future, these purchasers may well offer incentives to producers who can prove their product was grown in an environmentally responsible manner.

The STAR evaluation system assigns points for management activities on an annual basis. Participants answer a series of simple questions about their crop rotation, tillage, nutrient applications, and use of conservation practices to generate their overall field score. STAR relies on the expertise of a local state science committee, comprised of farmers, conservation professionals, and university scientists, to assign point values to practices identified to address local resource concerns. Scores are converted to a STAR rating of 1 to 5, with 5 STARS indicating commitment to a suite of practices proven to improve soil health and water quality.

As the adoption of the STAR program has expanded, the need for a national STAR organization

to ensure rating consistency across crops and production systems has grown. Work has been underway for several months on the organizational structure and makeup of this group; recently obtained funding will allow completion of this work. This oversight organization will be able to represent all the different state and local administering agencies in national level negotiations with end-users, consumer groups, STAR affiliates, and new groups that would benefit from STAR support and participation.

An additional benefit to the STAR program is that it provides landowners an easy method to ensure their valuable farmland is being farmed with the desired level of environmental awareness. A specific STAR rating that must be obtained as a condition of lease renewal can be included in the lease agreement, thus eliminating the need for a lengthy list of specific conservation practices to be followed. In addition, producers who are currently carrying high STAR ratings on their fields should attract additional land rental agreements from environmentally engaged landowners in their area.

In Iowa, the STAR program is administered through

Conservation Districts of Iowa (CDI), an organization comprised of the state's 500 soil and water conservation district commissioners. Soil and Water Conservation District Commissioners, the Iowa Department of Agriculture and Land Stewardship (IDALS) staff, and Natural Resource Conservation Service (NRCS)

employees administer a wide variety of cost share funds to implement conservation practices on private lands.

Iowa landowners and producers who are interested in the STAR program can go to <https://cdiowa.org> and look under the STAR tab for more information and the most current field form.

You can fill out the form for one of your fields and click submit; upon review of entered data, CDI will inform you of your STAR rating. CDI re-evaluates the Iowa field form each year with science committee members to ensure that the most effective practices that result in improved soil health and water quality in the state are included.

Managing 2023 Farm Margins

Iowa Farm Bureau, in partnership with Iowa State University Extension and Outreach, will be hosting timely, informative events designed specifically to help Iowa farmers navigate through the continued pressure of tight operating margins. These events will be taking place in February at five locations around the state.

For additional information and registration links, visit the [Ag Decision Maker website](https://go.iastate.edu/21MUAT), <https://go.iastate.edu/21MUAT>.

Thursday, February 2, Nevada, IA

Monday, February 6, Atlantic, IA

Tuesday, February 7, Storm Lake, IA

Monday, February 20, Washington, IA

Tuesday, February 21, Independence, IA



Ag Decision Maker is written by extension ag economists and compiled by Ann Johanns, extension program specialist, aholste@iastate.edu.

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