

Ag Decision Maker

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UPDATES

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

C5-08 How to Use Grants

C5-18 Marketing Strategies

C6-88 Biomass Measurements and Conversions

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

A1-10 Chad Hart's Latest Ag Outlook

A1-33 Farm Bill Payment Projections and Data by Crop and County (2019-2024 crop years)

A1-44 SCO and ECO County Yields for Iowa

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

A1-85 Corn Profitability

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A2-11 Iowa Cash Corn and Soybean Prices

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Still record crops, but stocks are smaller

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September is the month for the first round of the objective crop yield surveys for corn and soybeans where USDA representatives physically examine the crops across the nation. While that data has created some surprises in the past, this year's early survey confirmed the record crops across the country. But those record crops weren't the only storyline from the September report. Crop usage to finish out the 2023 marketing year provided a little boost to the markets as a few key usage categories finished stronger than expected.

The 2023 marketing years for both corn and soybeans ended on August 31. Traders were watching for an uptick in crop use as the harvest season approaches. And the end of the marketing year data revealed that uptick. For corn, the increases came from the "e's", ethanol and exports. Corn use for ethanol rose by 15 million bushels to 5.465 billion bushels. That is the second largest total for ethanol, only surpassed by the 2017 crop. Corn exports

increased by 40 million bushels, reaching 2.29 billion bushels. That is a 628 million bushel gain from the previous year. The European Union, Japan, Taiwan, South Korea, Canada, and Mexico all increased their purchases of US corn. With the usage increases, estimated 2023-24 corn ending stocks were lowered by 55 million bushels to 1.812 billion bushels. That's a positive development for a market staring down the likelihood of a record crop. But it is not enough movement to shift the 2023-24 season-average price, which stayed at \$4.65 per bushel.

The old crop soybean adjustments were not as large, but were in the same direction. Domestic soybean crush use added another 5 million bushels to reach 2.295 billion bushels. The continuing growth of renewable diesel has aided in this expansion. Thus, estimated 2023-24 soybean ending stocks fell by 5 million bushels to a level of 340 million bushels. So both crops are carrying fewer bushels into the 2024 marketing year than was first anticipated.



As with corn, soybean usage gains were not large enough to shift the 2023-24 season-average price from \$12.50 per bushel.

Corn estimates

While the early summary of the 2023 marketing year provided some positive news, the early harvest outlook shows a substantial wall of crops entering the markets this fall. The September yield estimates are a combination of the data from USDA's objective yield survey and the simultaneous farmer yield survey. This year's objective yield data confirmed the record yields projected earlier this season. Figure 1 displays the ear counts and estimated yields from the field observations for the past five years and the September update. The ear count is shown in the blue bars and uses the left axis of the graph. The 2024 ear count is lower than last year, but in the range we saw during the 2021 growing season. As the historical data show, ear counts tend to decline as months pass, so we may expect that to happen again this year. The measured yield from the field observations is shown in the red dots on the graph and uses the right axis. The September 2024 observation is the highest ever, conveying that while there aren't as many ears, those ears are filling out amazingly well.

Figure 2 shows the current state and national yield estimates and how they have changed compared to last year. The

Figure 1. USDA objective corn yield data in September. Source: USDA-NASS.

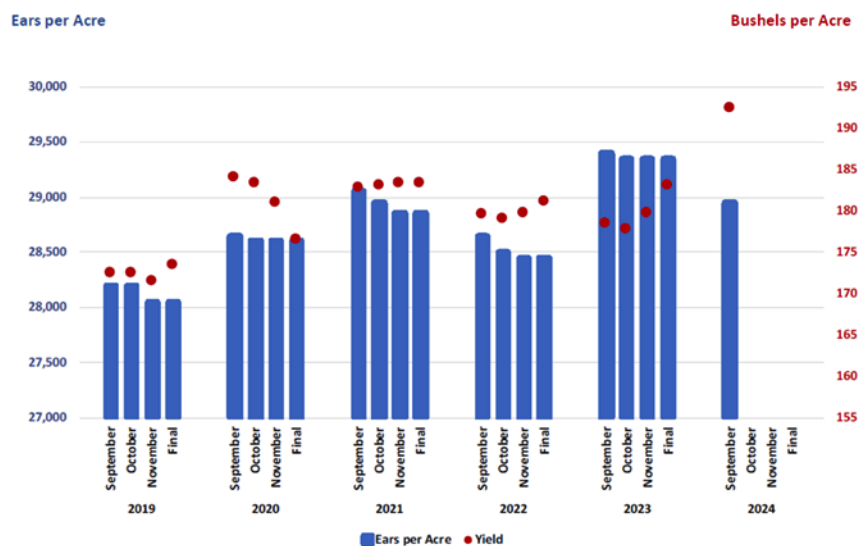
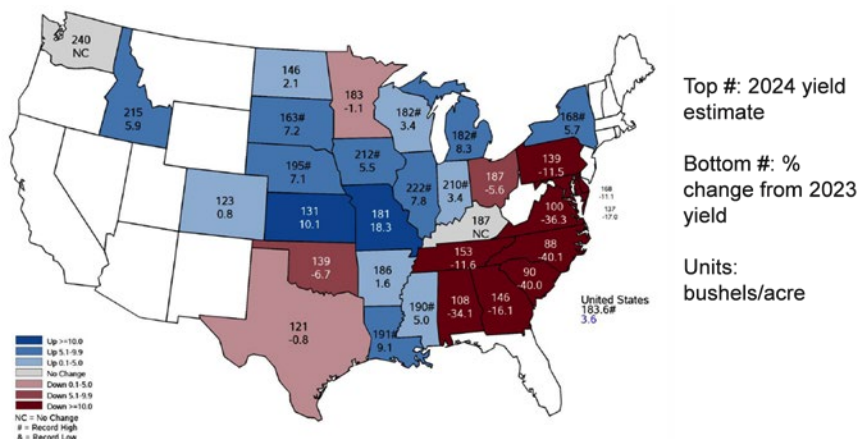


Figure 2. United States corn yield estimates in September. Source: USDA-NASS.



national average corn yield estimate rose by 0.5 bushels to 183.6 bushels per acre. That is 6.3 bushels above last year's record yield. Iowa's corn yield estimate was set at 212 bushels per acre, again setting a record. While the Southeast is experiencing a significant drop from their record crops last year, the heart of the Corn Belt is as bountiful as ever. The record yields span from South Dakota and Nebraska to Michigan and Indiana. The boost in corn yields increased the corn production estimate slightly, by 39 million bushels, to 15.147 billion bushels. And while it is a record yielding crop, last year's corn crop is still the largest with production at 15.342 billion bushel, due the advantage of more acres planted to corn (94.6 million in 2023 vs. 90.7 million in 2024).

Soybean estimates

The soybean objective yield data for this year paralleled the corn data, with fewer pods, but more bushels. This year's pod count is in the middle of the pack historically, behind 2020 and 2023, but above 2019 and 2022. Pod counts tend to increase slightly as harvest progresses. The objective yield estimate is the highest ever estimated, exceeding all previous estimates by at least a bushel. There is no discernable pattern how that will evolve over the next couple of months. In 2020 and 2022, the objective yield estimate slowly declined. In 2021, it slowly rose. And in 2023, it trended lower before finishing higher.

The national average soybean yield estimate came in at 53.2 bushels per acre, unchanged from the August figure. Following the pattern with corn, the southeastern and eastern soybean crops are smaller, but the heart of the soybean belt has records. Iowa's yield estimate was boosted by 2 bushels, to 63 bushels per acre, another record. Illinois and Indiana are also projected to capture record yields. Overall, national soybean production is projected at 4.586 bushels, which is 421 million bushels above last year and 122 million bushels above the previous record from 2021.

On the usage side, there were minimal changes for the 2024 crops. But the end result is actually a slight decrease in ending stocks due to the drop in old crop stocks. For 2024 corn,

Figure 3. USDA objective soybean yield data in September. Source: USDA-NASS.

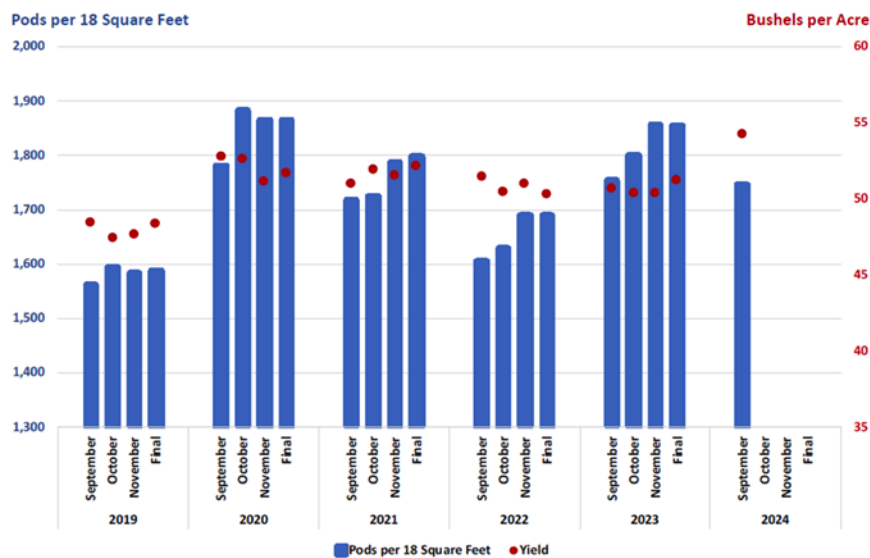
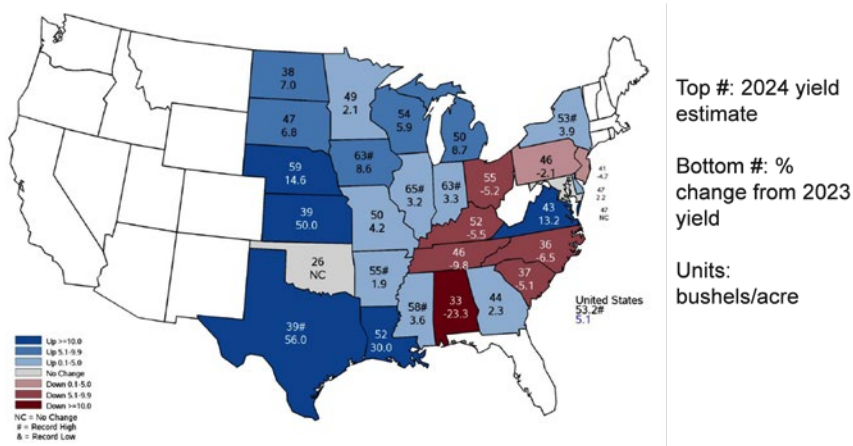


Figure 4. United States soybean yield estimates in September. Source: USDA-NASS.



USDA made no usage adjustments. However, the drop in 2023 ending stocks exceeded the increase in 2024 production, so the 2024 corn ending stocks estimate dropped 16 million bushels, to 2.057 billion bushels. For 2024 soybeans, there was a small increase in soybean residual use. And projected 2024 soybean ending stocks were lowered by 10 million bushels, to 550 million bushels. The slightly lower stocks were not enough to move price estimates higher. In fact, the 2024/25 corn season-average price estimate fell 10 cents, to \$4.10 per bushel. The 2024-25 soybean season-average price estimate remained at \$10.80 per bushel.

Watch the latest [Market Outlook video](https://youtu.be/71XV60rQPL4?si=P-cbZTDpo1qR5YfE), <https://youtu.be/71XV60rQPL4?si=P-cbZTDpo1qR5YfE>, for further insight on ag market outlook for this month.



Help available to determine value of beef-on-dairy crossbreds

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Perception is reality. The market perceives dairy-breed beef has lower value than beef-breed beef. Therefore, dairy cattle aimed at the slaughter market logically trade at lower prices than beef-breed fed cattle. Beef-on-dairy crossbreds have some characteristics of beef breeds and some characteristics of dairy breeds. Logically these crossbreds typically trade at prices between beef-breed cattle and dairy-breed cattle. Those price relationships generally hold from calves through slaughter.

The rising share of beef-on-dairy crossbreds in the slaughter mix fuels interest among market participants in knowing price relationships among types of cattle.

Specifically:

- Are beef-on-dairy crossbred prices closer to dairy-breed or beef-breed cattle prices?
- Do price differences vary within the year?
- When supply or demand changes, do price differences also change?

You can use data from various USDA Agricultural Marketing Service (AMS) reports to help answer these questions.

Formula prices with discounts applied

USDA's [Cattle Contracts Library Pilot Program](https://www.ams.usda.gov/market-news/livestock-poultry-grain/cattle-contracts-library), www.ams.usda.gov/market-news/livestock-poultry-grain/cattle-contracts-library, requires packers within the reporting threshold to provide information on contracts they use to buy cattle. AMS aggregates the data on a national level. Focus is on the base price source, base price adjustments, contract specifications, premiums, discounts, and volume. A discount is an adjustment, expressed either in dollars per one hundred pounds (cwt) or per head, subtracted from the base price.

As of 9/6/2024, "beef/dairy cross" discounts on a per head basis were \$18.75 as a simple average. The 25th to 75th percentile range, used in the Cattle Contracts Library to protect confidentiality, were discounts of \$20.00 to \$18.75 per head. On a per cwt basis, "beef/dairy cross" discounts averaged \$2.34 with a range of \$3.04 to \$1.06. For comparison, the discount for "dairy type" cattle averaged \$32.58 per cwt with a range of \$40.00 to \$14.75.

Data collection for slaughter cattle occurs through either auctions or direct trade

reporting. Auction data is compiled by market reporters who grade the live cattle. Most slaughter cattle reported through auctions are cows and bulls, although some markets also have steers and heifers. Direct trade reporting of slaughter cattle is collected through Livestock Mandatory Reporting (LMR). Most steers and heifers and some cows and bulls sell through direct trade.

Third category would add insight

AMS does not currently identify beef-on-dairy crossbred cattle separately in LMR purchase data collected from packers. It only offers two categories—beef or dairy. As a result, packers report beef-on-dairy crossbred cattle as either beef or dairy. The prevalence of beef-on-dairy crossbred cattle may merit a third reporting category of dairy/beef. Until that occurs, interested parties need to look to other sources of information.

Fortunately, beginning in March 2024, auction market reports began to include "dairy/beef" information. We combine data from the [Iowa Weekly Cattle Auction Summary](https://mymarketnews.ams.usda.gov/viewReport/2167), mymarketnews.ams.usda.gov/viewReport/2167, [South Dakota Weekly Cattle Auction Summary](https://mymarketnews.ams.usda.gov/viewReport/2027), mymarketnews.ams.usda.gov/viewReport/2027, and

Illinois Weekly Cattle Auction Summary, mymarketnews.ams.usda.gov/viewReport/2041, to get a representative market.

Most fed dairy cattle and dairy/beef crosses are purchased by packers through direct trade using forward contracts or formula trade.

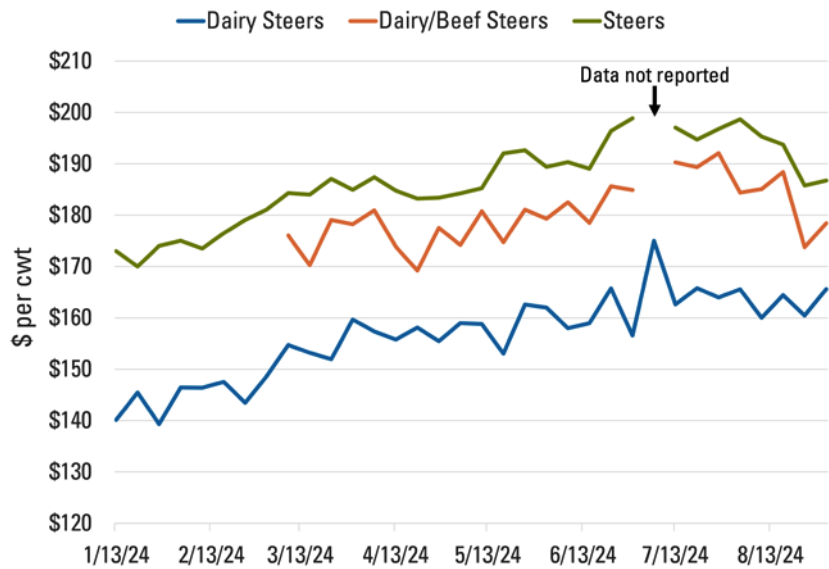
Since March 2024, of the total slaughter cattle receipts in these three weekly auction market reports, 40% have been steers (AMS leaves off the beef-breed descriptor for short-hand), 28% heifers, 22% cows, 4% dairy steers, 3% bulls, 2% dairy/beef steers and 1% dairy/beef heifers. Dairy heifers have accounted for less than 1% of the volume.

The discount for dairy/beef steers compared to steers has averaged \$9.51 per cwt so far in 2024 (Figure 1). The discount for dairy steers compared to steers has averaged \$30.27 per cwt. Comparisons are for the Choice quality grade and 2-3 yield grade designation, which is where most of the comparable steer volume is.

Feeder cattle data more limited

Feeder cattle auction market reports have also begun to include “dairy/beef” information. One report is the [Superior Livestock Video/Internet Auction](https://mymarketnews.ams.usda.gov/viewReport/2713), mymarketnews.ams.usda.gov/viewReport/2713. In this report, Iowa is in the North Central reporting region with Colorado, Montana, North Dakota, Nebraska, South

Figure 1. Weekly Choice 2-3 Slaughter Steer Auction Market Prices. Iowa, Illinois, South Dakota. Data Source: USDA-AMS.



Dakota and Wyoming. For the week ending 8/23/2024, under the medium and large 1-2 designation, 35 head of dairy/beef steers averaging 750 pounds for current delivery sold for \$240 per cwt. For August-September delivery, 310 head of dairy/beef steers averaging 650 pounds sold for \$272 per cwt. Three-hundred head of dairy/beef steers averaging 650 pounds for November delivery sold for \$269 per cwt.

South Dakota auctions have reported a few dairy/beef feeder cattle. However, you have to look to the [Pennsylvania Weekly Cattle Auction Summary](https://mymarketnews.ams.usda.gov/viewReport/1919), mymarketnews.ams.usda.gov/viewReport/1919, for any appreciable volume. There, dairy/beef steers and dairy/beef heifers have each accounted for 4% of the feeder cattle receipts since March 2024. For the week ending 8/17/2024, medium and

large 2 steers averaging 766 pounds brought \$221.33 per cwt. The equivalent dairy/beef steers averaging 768 pounds brought \$197.46 per cwt. The following week, steers averaging 766 pounds brought \$210.35 per cwt and dairy/beef steers averaging 760 pounds brought \$205.00 per cwt.

National Farm Safety and Health Week 2024

The 2022 data for the U.S. Bureau of Labor Statistics indicates that the agricultural sector is still the most dangerous in America with 417 fatalities. Fall harvest time can be one of the busiest and most dangerous seasons of the year for the agriculture industry. For this reason, the third week of September has been recognized as [National Farm Safety and Health Week](https://www.necasag.org/nationalfarmsafetyandhealthweek/), <https://www.necasag.org/nationalfarmsafetyandhealthweek/>. This annual promotion initiated by the National Safety Council has been proclaimed as such by each sitting U.S. President since Franklin D. Roosevelt in 1944. National Farm Safety and Health Week is led by the National Education Center for Agricultural Safety (NECAS), the agricultural partner of the National Safety Council.



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