IOWA STATE UNIVERSITY
Extension and Outreach

Ag Decision Maker

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INSIDE . . .

UPDATES

The following Information Files have been updated on extension.iastate.edu/agdm:

A1-20 Estimated Costs of Crop Production in Iowa - 2024

C6-58 Checklist for Iowa Agricultural Employers

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 - 2024 (Individual budgets and rotation analyzer)

A1-33 ARC-CO & PLC Per Acre Payment Estimator for Iowa, 2024-2025

A1-33 ARC-CO & PLC Per Acre Payments for Iowa, 2019-2023

A2-31 Comparison of Drying Systems Calculator

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

D1-15 Biodiesel Profitability

"Would You Rather" pork market edition

By Lee Schulz, extension livestock economist,
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"*Would You Rather*" is an age-old game. Our kids have a favorite. Would you rather be super-fast or super-strong? I heard a good one from a college student. Would you rather have a sneeze that never comes or an itch you can never scratch? Some are deeper. Would you rather have more time or more money?

Really good "Would You Rather" questions reveal surprising insights about those answering them. The best ones make people think about what they value most. With pork producers facing some of their toughest economic times ever, asking "Would You Rather" may provide some perspective.

Would you rather have a free market or supply management?

USDA's National Agricultural Statistics Service tallied the December 1, 2023, US all hogs and pigs inventory at 74.971 million head (Table 1). This is the fourth largest December 1 total inventory on record going back to 1963. Large losses and producers, so far, not trimming production fuels chatter about alternative ways to trim supplies to boost prices.

Supply management attempts to match supply with demand. Typical tools are:

- Regulate output with production quotas.
- Base producer prices on input costs, plus a profit margin.
- Restrict imports with tariff-rate quotas.
- Abdicate export markets to lower cost suppliers.

Supply management is counter to the "invisible hand," which economist Adam Smith introduced in his 1776 book, The Wealth of Nations. Smith theorized that in a free-market, unobservable forces efficiently push supply and demand to an equilibrium. The market becomes self-regulating. Adjustments firms make as they seek profits help create efficiencies that lead to the market equilibrium. Unfortunately, short-term market imbalances can occur.

Supply management, too, has challenges. Production quotas prohibit operations from upping output to spread overhead expenses over more production. This hikes per unit costs for efficient producers. It keeps less efficient producers in business.

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

	United States				Iowa		
	2022	2023	2023 as % of '22		2022	2023	2023 as % of '22
Dec 1 inventory *							
All hogs and pigs	74,956	74,971	100.02		24,100	24,900	103.3
Kept for breeding	6,204	5,999	96.7		930	870	93.5
Market	68,752	68,973	100.32		23,170	24,030	103.7
Under 50 pounds	21,788	21,681	99.5		6,110	6,330	103.6
50–119 pounds	19,134	19,039	99.5		7,130	7,440	104.3
120–179 pounds	14,801	14,908	100.7		5,580	5,700	102.2
180 pounds and over	13,029	13,344	102.4		4,350	4,560	104.8
Sows farrowing **							
Jun–Aug	3,082	2,980	96.7		520	470	90.4
Sep–Nov	3,092	2,968	96.0		535	455	85.0
Dec–Feb [1, 2]	2,952	2,900	98.2		480	470	97.9
Mar–May [3]	2,941	2,907	98.8		470	470	100.0
Sep–Nov pigs per litter	11.22	11.66	103.9		11.55	11.80	102.2
Sep–Nov pig crop *	34,701	34,617	99.8		6,179	5,369	86.9

Full USDA report: https://downloads.usda.library.cornell.edu/usda-esmis/files/rj430453j/b85178151/0g356177t/hgpg1223.pdf.

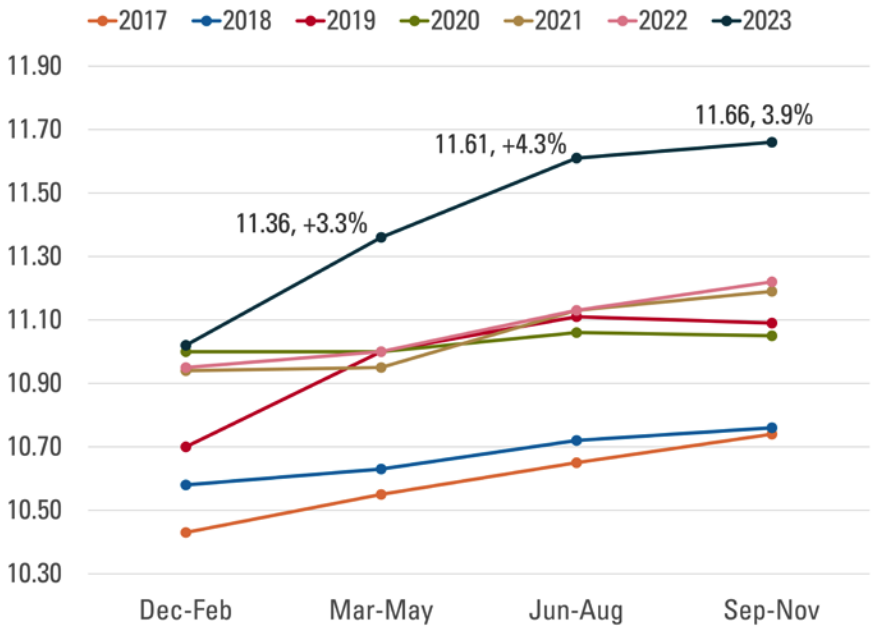
* 1,000 head; **1,000 litters; [1] December preceding year. [2] Intentions for 2023-2024. [3] Intentions for 2024.

Productivity of the US swine breeding herd continues to rise. From September 2023 through November 2023, sows on US farms weaned an average of 11.66 pigs per litter (Figure 1). That's a record level and a 3.9% increase from a year earlier.

A shift to supply management would remove incentives to continuously improve. Building a profit into the cost of production formula perpetuates the status quo. Producers may become less receptive to innovation.

Under supply management, production quotas become marketable assets for existing producers. Intentionally or not, quotas are also a large barrier to entry for beginning producers because new producers need extra capital to purchase the production quotas.

Figure 1. United States pigs saved per litter by quarter. Data Source: USDA-NASS.



Supply management generally seeks to equate domestic supply with domestic demand. Even if there was excess supply, relatively high domestic prices under cost plus supply management would price producers out of export markets. Much of the growth in US pork production during the last two decades is due to higher exports.

Would you rather have demand that weakened or demand that never materialized?

From 2019 into 2022 rising pork demand fueled expansion. Consumers' dollars flowing into the industry drove profits and new investments. Even when demand is strong, an industry will not always be profitable for every producer, nor will it be profitable every year.

Now domestic retail pork demand has eroded year-on-year for six consecutive quarters. Consumer income, prices of substitutes and complements, and tastes and preferences are all demand determinants. Household budgets benefitted from stimulus payments, debt forbearances. and increased savings during the COVID-19 pandemic. Those benefits have come to an end. Total household debt continues to reach new heights led by mortgage, credit card, and student loan balances. Servicing debt curtails spending.

When income falls, people generally buy less. Inflation has the same effect. It erodes buying power—even if consumers' nominal income holds steady, or rises slightly. Less buying power weakens demand.

When demand decreases, consumers are not willing to pay a higher price, after removing the influence of overall price inflation, for the same quantity or even for a smaller quantity. Sagging consumer demand creates a profit squeeze all the way down to producers at the beginning of the supply chain. Losses force the industry to contract.

Domestic and international demand determines what level of pork production is needed. Rising demand would be a catalyst for profits and growth.

Would you rather have more risk or less risk?

Making money generally involves taking risks. Higher profits are typically associated with higher risks.

The pork industry risk-return trade off may currently seem out of balance. But you need to remember the proverb "you have to be in it to win it." That is one reason why pork producers are reluctant to trim production–despite sizable losses.

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, 2024.

	Year-over-Year Change In Commercial Hog Slaughter (%)	ISU Model Price Forecast, IA-MN Base Price, All Purchase Types ($/cwt)	CME Futures (12/29/23) Adjusted for IA-MN Producer Sold Weighted Average Carcass Base Price for All Purchase Types Historical Basis ($/cwt)
Jan-Mar 2024	0.75	68.12	66-70
Apr-Jun 2024	-0.14	80.97	79-83
Jul-Sep 2024	1.45	87.26	85-89
Oct-Dec 2024	1.51	75.32	73-77

Another strong production year

By Chad Hart, extension crop market economist, 515-294-9911 | chart@iastate.edu

At the beginning of the new year, USDA updates the ag sector by providing the final production numbers for the previous year and early look at usage based on the data since harvest. This year's final numbers revealed larger corn and soybean crops, but relatively smaller changes in crop usage. With supplies growing faster than usage, projected stocks at the end of the marketing year have increased and the price estimates for the 2023 crops have declined from the lofty heights of the past couple of years. Profit margins have tightened substantially, but profit opportunities have not completely disappeared. The economic outlook for 2024 is somewhat of a return to normal, where prices are roughly in line with production costs and profits can be captured sporadically throughout the year.

On the production side, the storyline was very similar to the previous couple of years. After a fourth year of drought across a significant part of the US, corn yields across the nation were better than expected. The final national yield estimate reached a record 177.3 bushels per acre, up 2.4 bushels from the prior estimate and 0.6 bushel higher than the previous record. Record yields were established in the eastern Corn Belt. The Plains states also captured much improved yields, as did most of the Southeast, with the exceptions of the Virginias, Georgia, and Florida. However, the drought intensified in the upper Mississippi region, lowering corn yields in the states surrounding Iowa along the Mississippi River. Iowa's corn yield was slightly higher, gaining a bushel to reach 201 bushels per acre.

The pattern for soybean yields was somewhat similar. While the national yield was not a record, it was a good yielding year despite the weather challenges. The national yield of 50.6 bushels per acre is a bushel higher than the 2022 crop. The eastern Corn Belt (Indiana

Figure 1. Corn yields, 2023. Source: USDA-NASS.

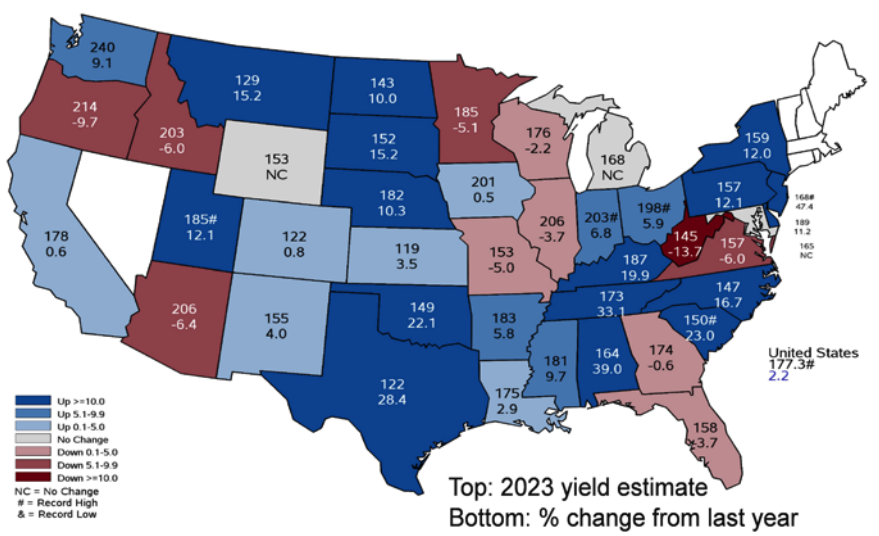
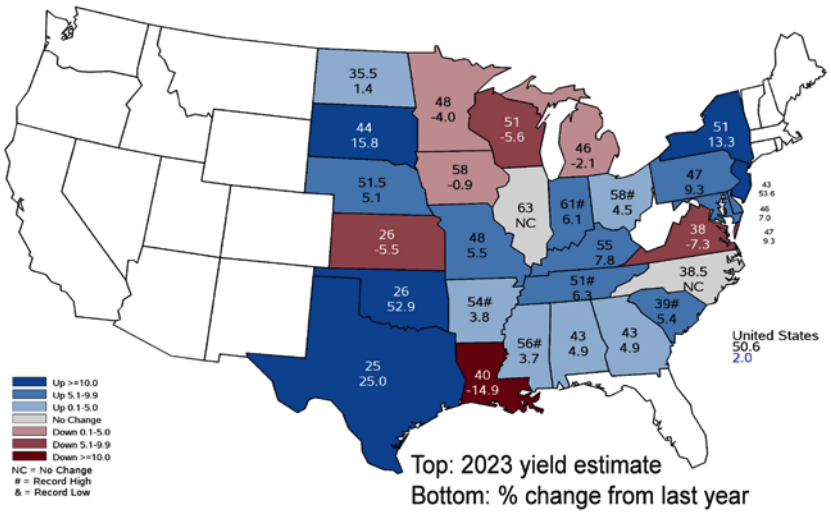


Figure 2. Soybean yields, 2023. Source: USDA-NASS.



and Ohio) set records, along with Arkansas, Mississippi, Tennessee, and South Carolina. Seven states produced lower soybean yields in 2023, with the largest reductions in Louisiana, Virginia, Wisconsin, and Kansas. For Iowa, the state average soybean yield fell 0.5 bushels to 58 bushels per acre.

Within the most recent estimates for the 2023 corn crop, production, usage, and stocks increased. USDA found that farmers harvested fewer corn acres than previously projected, lowering harvested acreage by 0.6 million acres. However, the increase in corn yields more than offset the drop in acreage. The final estimate for corn production came in at a record 15.342 billion bushels, up 108 million from the previous estimate. And, as is usually the case, when the production estimate increases, so do usage estimates. USDA added 25 million bushels to feed and residual usage and 50 million bushels to ethanol production. With production rising faster than usage, the 2023-24 ending stock estimate rose by 31 million bushels, to 2.162 billion bushels, adding roughly 800 million bushels to stock levels. Given the small upward adjustment in stocks, USDA lowered its season-average price estimate by five cents to $4.80 per bushel.

The soybean data tells a similar story to corn. Like with corn, the 2023 projected harvested area fell, by roughly 400,000 acres, but the increase in yields more than offset that. The combination brought the production estimate up by 36 million bushels, putting national production at 4.165 billion bushels. For the most part, soybean usage estimates were held steady, with soybean crush at 2.3 billion bushels and exports at 1.755 billion bushels. Thus, 2023-24 ending stocks increased by 35 million bushels, to an estimate of 280 million bushels, which is 16 million bushels higher than the 2022-23 ending stock number. Based on that, USDA reduced its 2023-24 season-average price estimate by 15 cents to $12.75 per bushel.

Table 1. Corn supply and use. Sources: USDA-WAOB.

Marketing Year (2023 = 9/1/23 to 8/31/24)		2022	2023	2023 Change from Previous Estimate
Area Planted	(million acres)	88.2	94.6	-0.3
Area Harvested	(million acres)	78.7	86.5	-0.6
Yield	(bushels/acre)	173.4	177.3	2.4
Production	(million bushels)	13,651	15,342	108
Beginning Stocks	(million bushels)	1,377	1,360	-1
Imports	(million bushels)	39	25	0
Total Supply	(million bushels)	15,066	16,727	106
Feed and Residual	(million bushels)	5,486	5,675	25
Ethanol	(million bushels)	5,176	5,375	50
Food, Seed, and Other	(million bushels)	1,383	1,415	0
Exports	(million bushels)	1,661	2,100	0
Total Use	(million bushels)	13,706	14,565	75
Ending Stocks	(million bushels)	1,360	2,162	31
Season-Average Price	($/bushel)	$6.54	$4.80	$-0.05

Table 2. Soybean supply and use. Sources: USDA-WAOB.

Marketing Year (2023 = 9/1/23 to 8/31/24)		2022	2023	2023 Change from Previous Estimate
Area Planted	(million acres)	87.5	83.6	0
Area Harvested	(million acres)	86.2	82.4	-0.4
Yield	(bushels/acre)	49.6	50.6	0.7
Production	(million bushels)	4,270	4,165	36
Beginning Stocks	(million bushels)	274	264	-4
Imports	(million bushels)	25	30	0
Total Supply	(million bushels)	4,569	4,459	31
Crush	(million bushels)	2,212	2,300	0
Seed and Residual	(million bushels)	101	124	-3
Exports	(million bushels)	1,992	1,755	0
Total Use	(million bushels)	4,305	4,179	-3
Ending Stocks	(million bushels)	264	280	35
Season-Average Price	($/bushel)	$14.20	$12.75	$-0.15

The pricing outlook for 2024 is mixed. Current futures for the 2023 crops have fallen below USDA's season-average estimates. However, futures for the 2024 crops are higher than USDA's early projections for those crops. For old crop pricing, the markets are searching for potential increases in crop usage, with exports being the most likely target. Both corn and soybean prices have some carry built into futures through mid-year. Corn futures continue to build on that carry into the new crop, reflecting the continuing drought and the expectation of fewer corn acres planted this spring. Meanwhile, soybean futures take a step back for the new crop, as many of the acres leaving corn will end up in soybean production. For both crops, prices have moved back into the range of production costs. So, in a sense, the markets have returned back to normal, where prices roughly equal costs and profits can sporadically be captured.

View the latest **Ag Market Outlook video**, https://youtu.be/SmsKbRvFkfQ, for further insight on outlook for this month.

Keys to understanding cattle market report lingo

By Lee Schulz, extension livestock economist, 515-294-3356 | lschulz@iastate.edu

USDA Market News Reporters use specific lingo to describe action–or lack of action–in cattle markets. Those narratives are preludes to hard data on cattle markets.

Non-market participants might construe the abundance of data as information overload. But market participants gain valuable insight on potential price action from information Market News, part of USDA's Agricultural Marketing Service, publishes in cattle market reports.

The information is available to all market participants. Equal access helps level the playing field for buyers and sellers.

The introductory text in many USDA Market News cattle reports describe market conditions on receipts and supply or offerings, trends, demand and trade activity. Narratives include price ranges to indicate where the bulk of trade occurred.

Reviewing the vernacular can help even veteran market participants better understand Market News Reports. Reporters use terms like *mostly*, *bulk*, and *majority* to indicate where the majority of sales occurred. An *undertone* is the sense of direction in an unsettled market. For example, it was stated in the Iowa Weekly Cattle Auction Summary report for 12/17/2023–12/23/2023 that, "Feeder steers and heifers sold on a light test though a lower undertone was noted."

Receipts and supply or offerings

A report lists the number of cattle sold. For direct trade that's confirmed head counts or sales. For auctions its receipts or the number of cattle covered in the report. Reporters describe supply or offerings as *light*, *moderate*, and *heavy*. Those terms are relative to the typical volume for that market.

Reporters sometimes use the phrase *light test*. That means too few cattle are being sold to give reporters a very solid feel for price direction.

Trends

A trend describes how the current price differs from the last market period price when a sufficient volume was available for comparison. The latter is sometimes referred to as the last established market. Reporters consider quality of the cattle when describing trends. Sales outside the normal price range usually have little impact on the formulated trend.

Terms used to describe price trends are *steady*, *firm*, and *weak*. *Firm* is when prices are tending higher, but not measurably so. *Steady* is when prices are unchanged from previous period. *Weak* is when prices are tending lower, but not measurably so. When the terms *higher* or *lower* are used, the specific amount of the price advance or decline is stated. *Higher* is when the majority of sales are at prices measurably higher than the previous period. Lower is when prices for most sales are measurably *lower*.

Demand

Demand is the desire to possess cattle coupled with the willingness and ability to pay for them.

Demand may be described as *very good*, *good*, *moderate*, *light*, or *very light* in relation to what is considered typical or normal demand at each market for the period. Seasonality is taken into consideration. *Very good* demand means offerings or supplies are rapidly absorbed. *Good* demand is firm confidence on the part of buyers that general market conditions are good. *Moderate* demand is average buyer interest and trading. *Light* demand is below average interest and trading. *Very light* demand means few buyers are interested in trading.

Reporters recognize that *good* demand might exist for certain grades, weights or classes of cattle, while at the same time, others are in *light* demand.

Indicated shifts in the needs of buyers could well be a tell of a changing market. For example, the following was a quote in the SJ_LS850, National Feed & Stocker Cattle Summary - WEEK ENDING 01/06/2024 report. "Buyers continue to want cattle that have had vaccination and weaning programs. Some buyers now have orders for calves that are required to have a 60-day weaning period, up from the typical 45-day period that was standard not that long ago."

Demand should not be confused with market, or trade, activity. An active trade at firm to higher prices for light supplies does not necessarily imply a better demand than existed the previous period for larger supplies. Neither does a slow trade at weak-to-lower prices on heavy supplies mean a light demand, since the price level may be influenced by an increase in quantity supplied rather than by contraction of demand.

Trade activity

Reporters may not mention trade activity if the market shows no change in action, or the pace of trading, from normal activity.

Aggressiveness of buyers in seeking supplies, attitude of sellers toward marketing or holding supplies and other cues can indicate the level of trade activity. The terms *active*, *moderate*, *slow*, and *inactive*, are used to indicate how available supplies or offerings are clearing the market. Inactive trade is when sales are intermittent with few buyers or sellers.

The **USDA Agricultural Marketing Service Livestock, Poultry and Grain General Market News Terms website**, /www.ams.usda.gov/market-news/livestock-poultry-and-grain-general-market-news-terms, provides a complete listing of terminology and definitions and the **Market Reporter's Handbook**, www.ams.usda.gov/sites/default/files/media/LPGMNReporterHandbook.pdf, provides detailed explanations of Market News Reports and procedures.

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