



Dairy Producer
MARKET UPDATE

January 17, 2024

CME Futures as of January 16, 2024

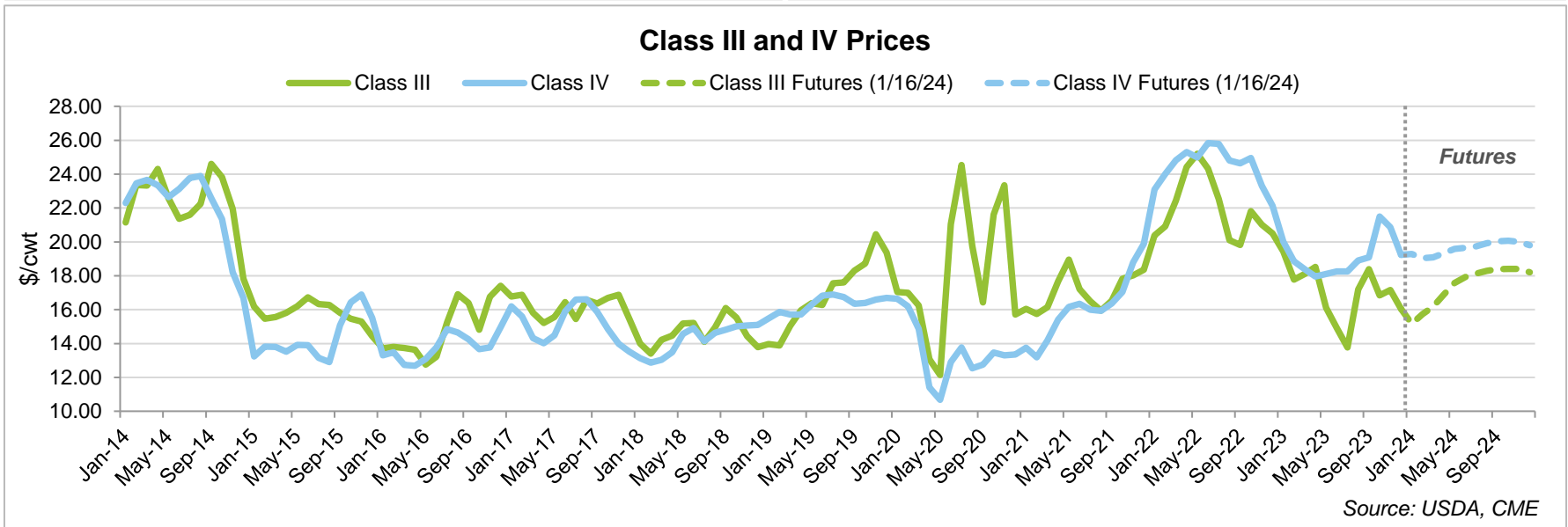
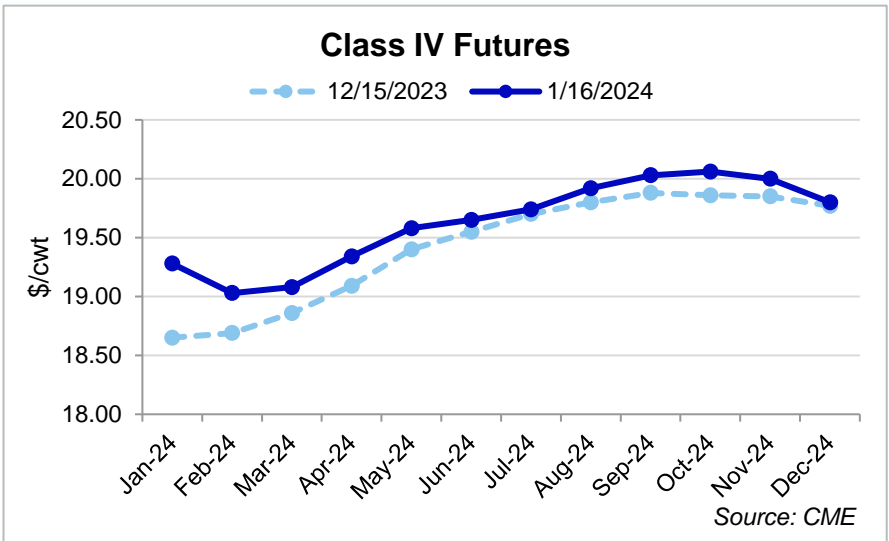
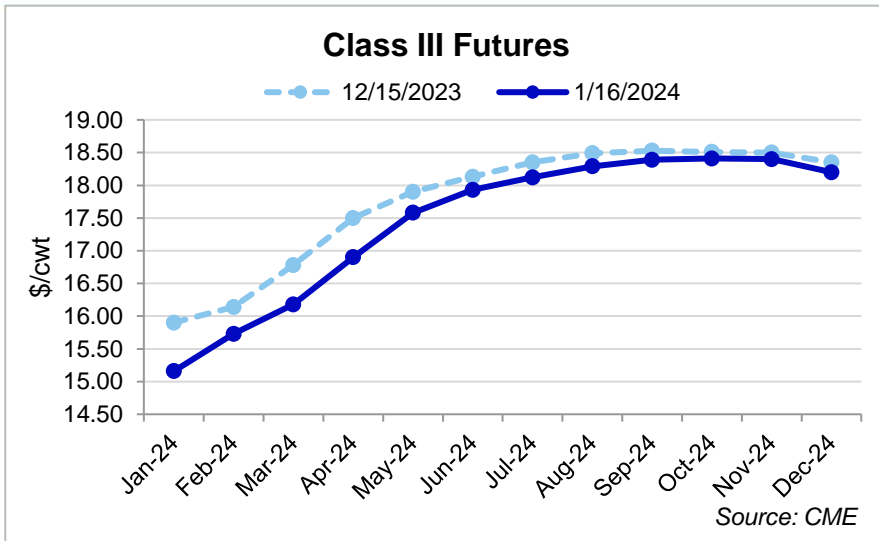
| | Q2 2024 | Q3 2024 | Q4 2024 | Q1 2025 | Q2 2025 |
|--------------------|--------------|--------------|--------------|--------------|--------------|
| Class III (\$/cwt) | 17.47 | 18.27 | 18.34 | 18.00 | 18.00 |
| Vs. Last Month | -0.37 | -0.19 | -0.12 | -0.11 | N/C |
| 10-Yr Percentile | 62% | 69% | 70% | 67% | 67% |
| Class IV (\$/cwt) | 19.52 | 19.90 | 19.95 | 18.90 | 18.13 |
| Vs. Last Month | +0.18 | +0.10 | +0.13 | +0.75 | +0.09 |
| 10-Yr Percentile | 78% | 79% | 79% | 76% | 70% |

Changes shown vs. Dec-15 Settlement Prices

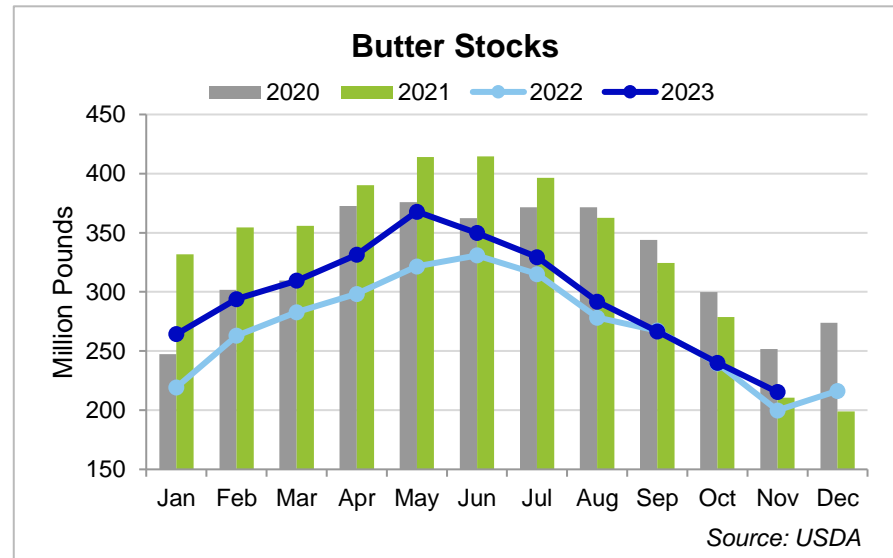
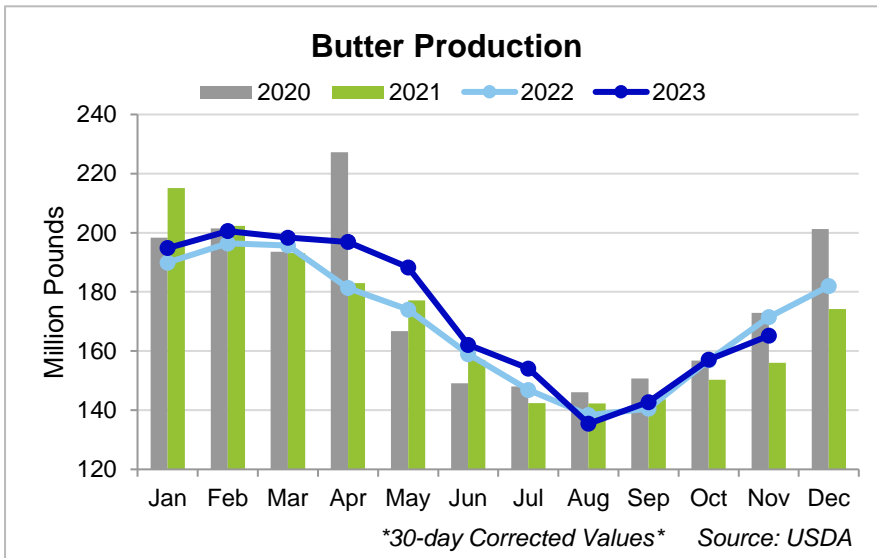
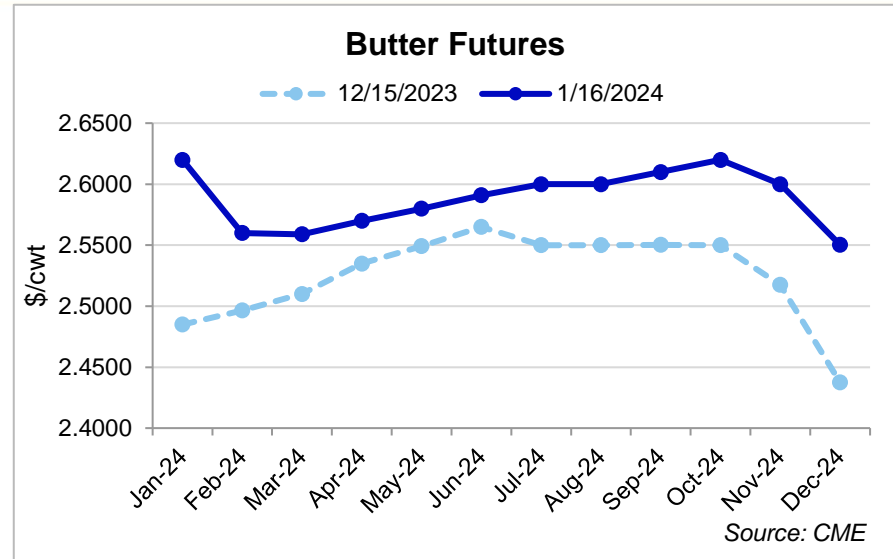
Percentile Shading Key:

Red: 0 - 25% Brown: 25 - 50% Blue: 50 - 75% Green: 75 - 100%

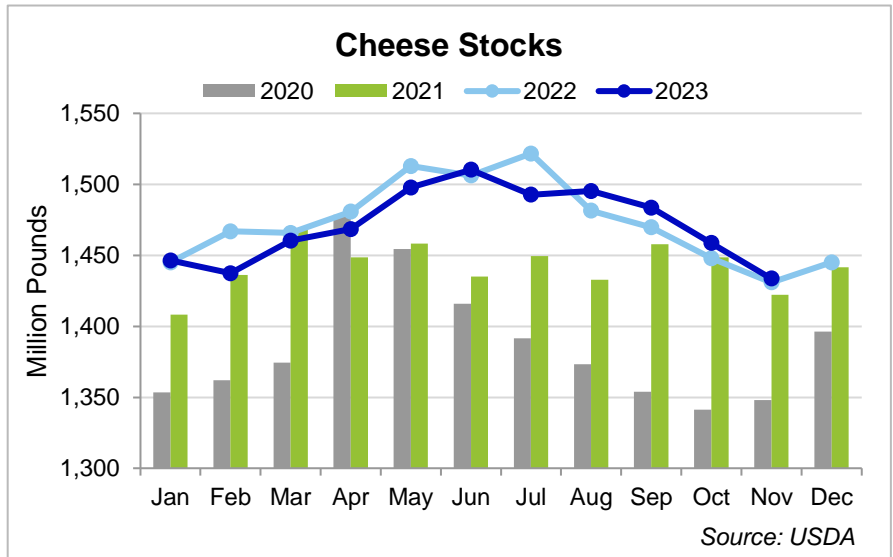
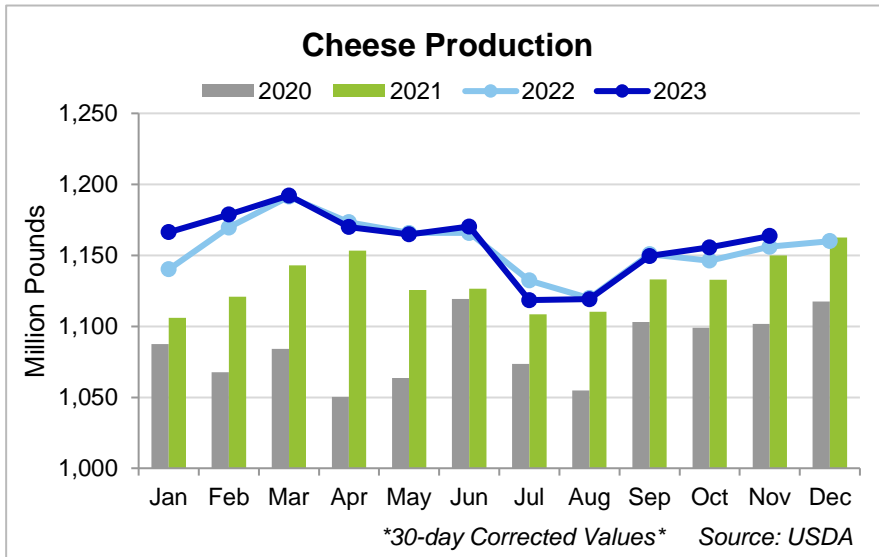
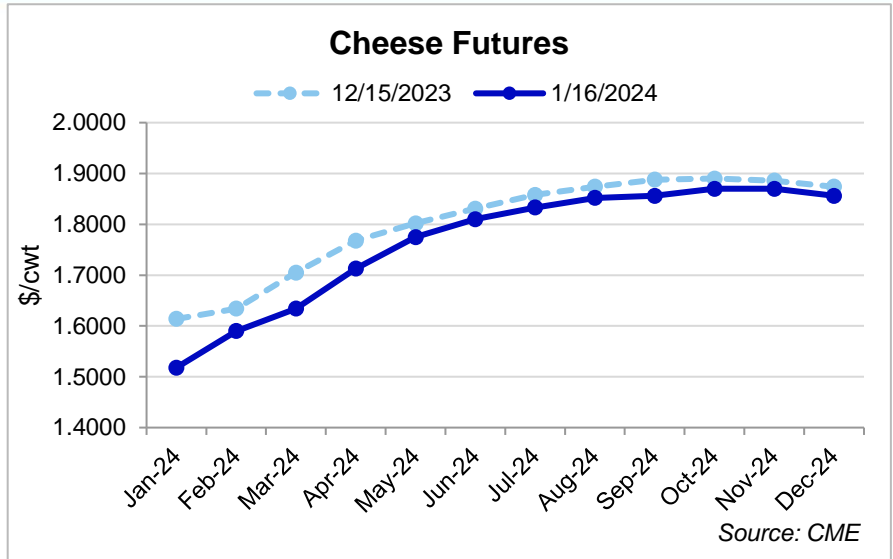
- Class III futures declined from last month, with Q2 2024 decreasing 37 cents/cwt. While futures have fallen, Q2 2024 and beyond remain above the 60th percentile compared to the last ten years of data. Producers shipping to Class III processors are likely feeling the squeeze this quarter, especially with the most recent (January 16, 2024) Class III spot price at \$14.88/cwt.
- Class IV futures have maintained their strength, reflecting improvements from last month. Class IV futures through Q1 2025 are averaging above the 75th percentile, boding well for producers with Class IV pay prices.



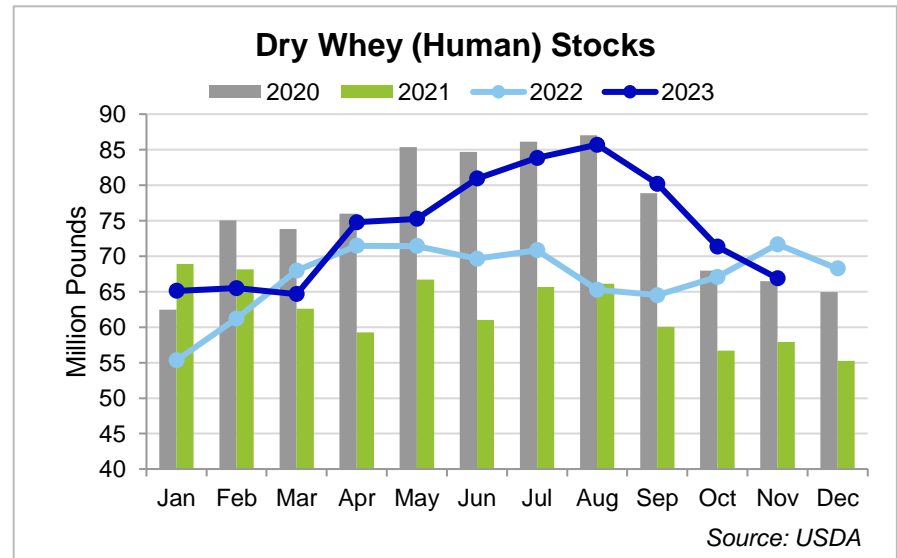
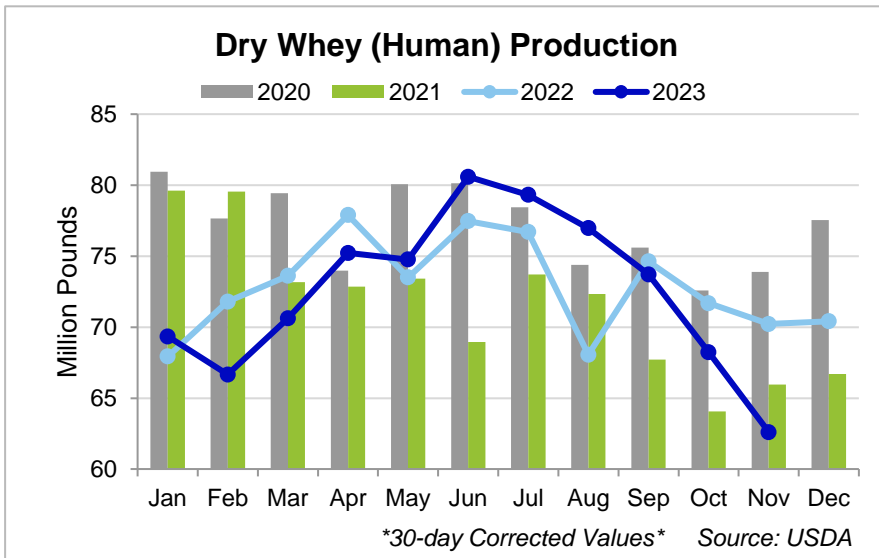
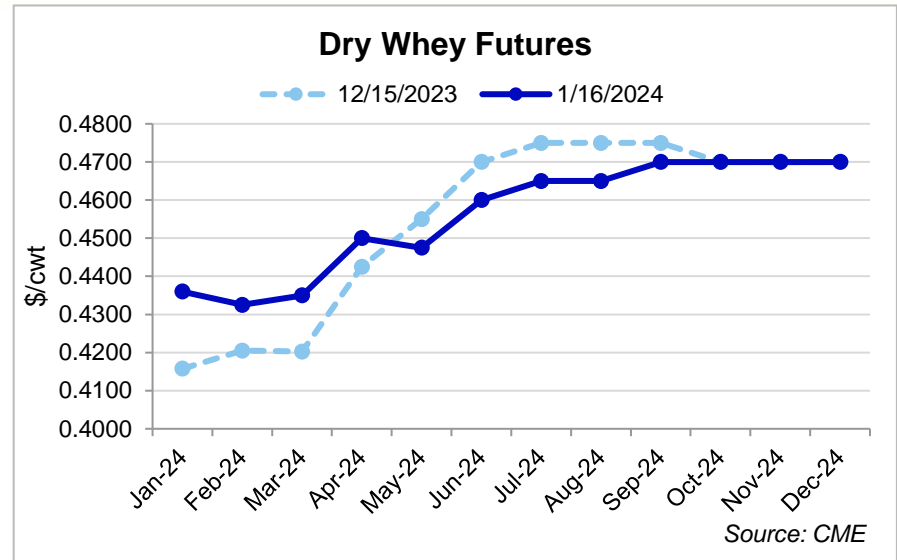
- Butter churns ran slower than a year ago in November, particularly in the Central U.S. In total, production was down 3.7% year-over-year but up 5.8% compared to two years ago. Year-to-date butter production is running 2.4% ahead of 2022.
- November's butter stocks were 7.8% higher than the same month last year. Further, the month-on-month decline of 10.3% or 24.7 million pounds was the smallest since 2012 and less than half of the five-year average decrease of 57.4 million pounds. The slower than expected decrease in warehouse levels raises some concerns about demand, especially considering reduced production for the month.



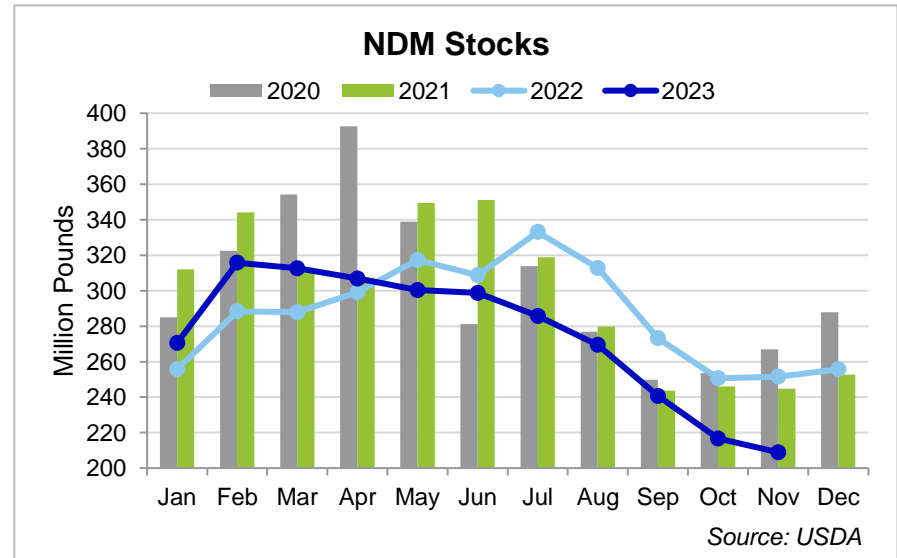
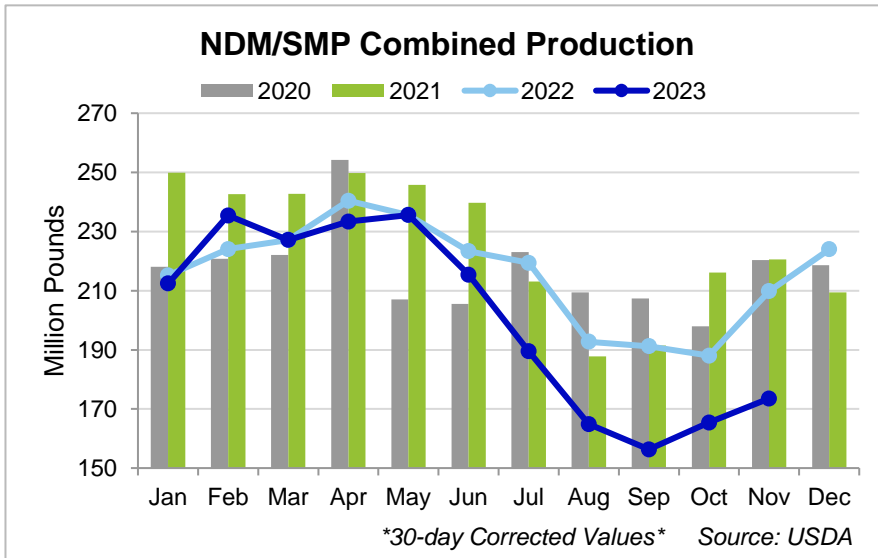
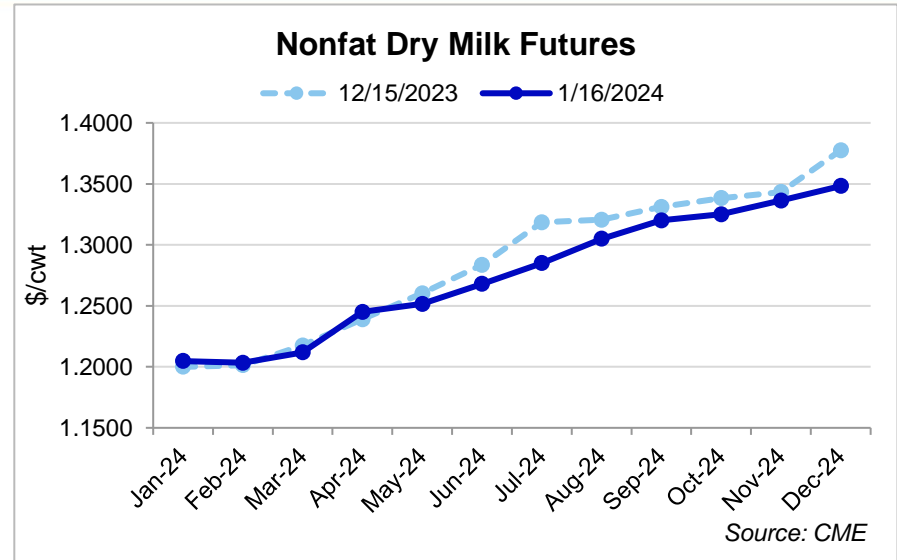
- Total cheese production rose year-on-year for the second month in a row, but the complex had varied results. The two heavyweights, Cheddar and Mozzarella, experienced year-over-year losses, while Cream & Neufchatel and Other American saw year-over-year increases.
- November cheese inventories fell 25 million pounds (-1.7%) from October, nearly twice as steep as the five-year average decrease of 15.7 million pounds. Seasonal demand due to holidays and football may have risen, explaining the big decreases from October to November. Slowed milk production potentially kept cheese supplies from becoming burdensome, keeping a lid on stocks.



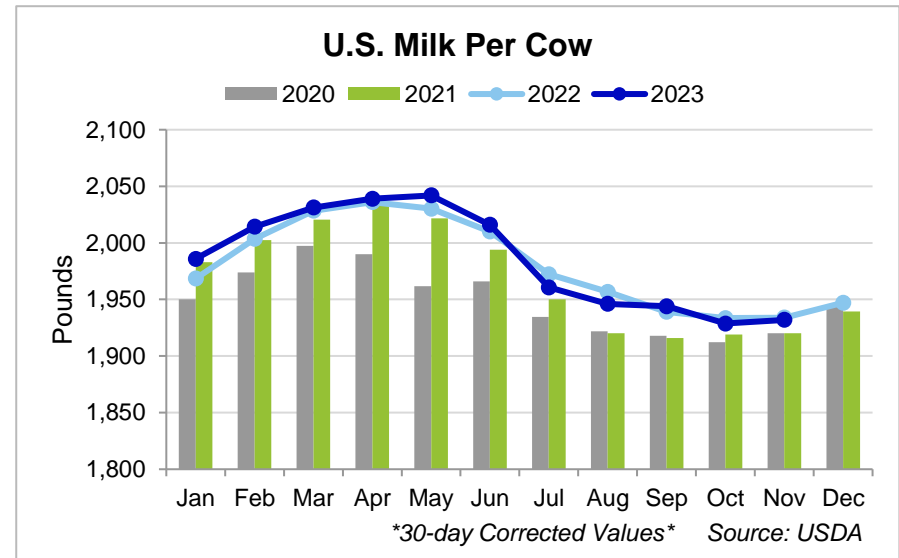
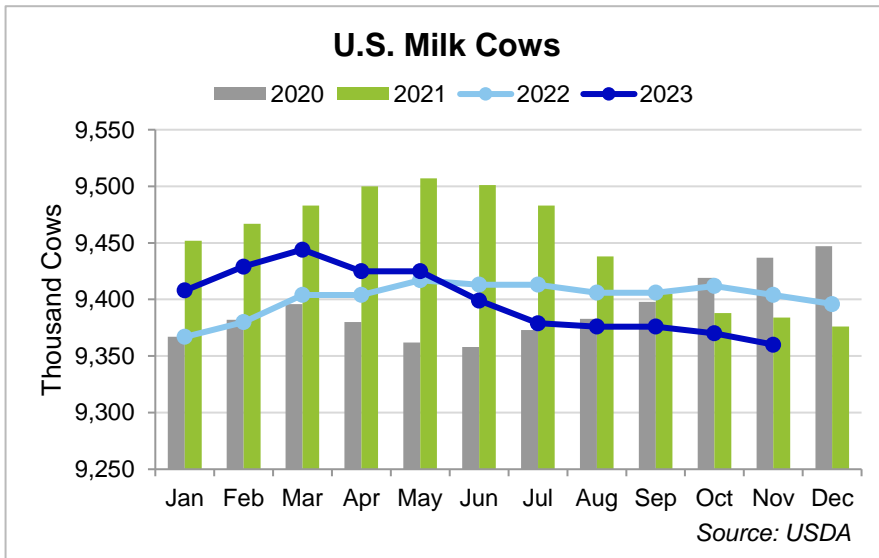
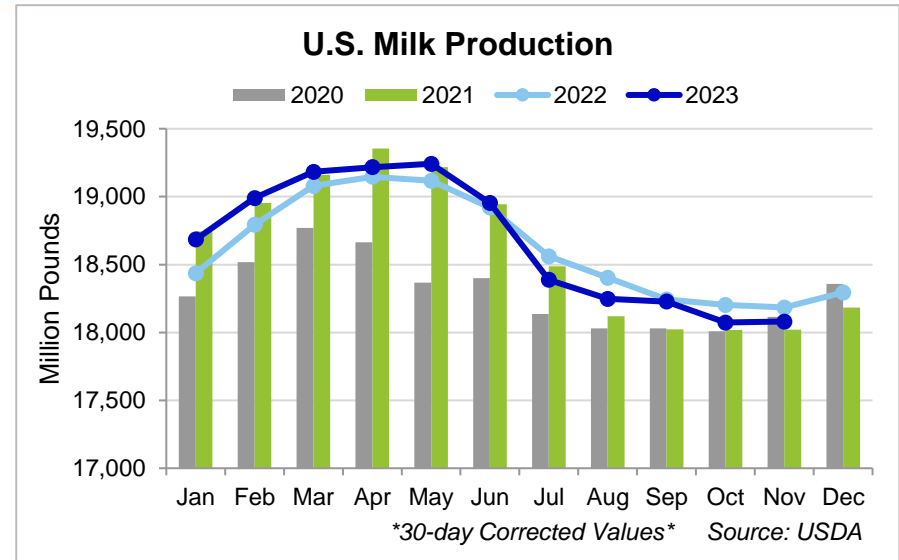
- Dry whey volumes fell swiftly year-over-year and month-on-month. Manufacturers have received the signal, loud and clear, that high-protein whey is in demand and have responded by moving the whey stream away from sweet dry whey powder into higher-value products. This has caused both production and stocks to fall.
- The drop in production along with inventory being at decent levels has held support for dry whey on the spot market around the \$0.40 per pound level.



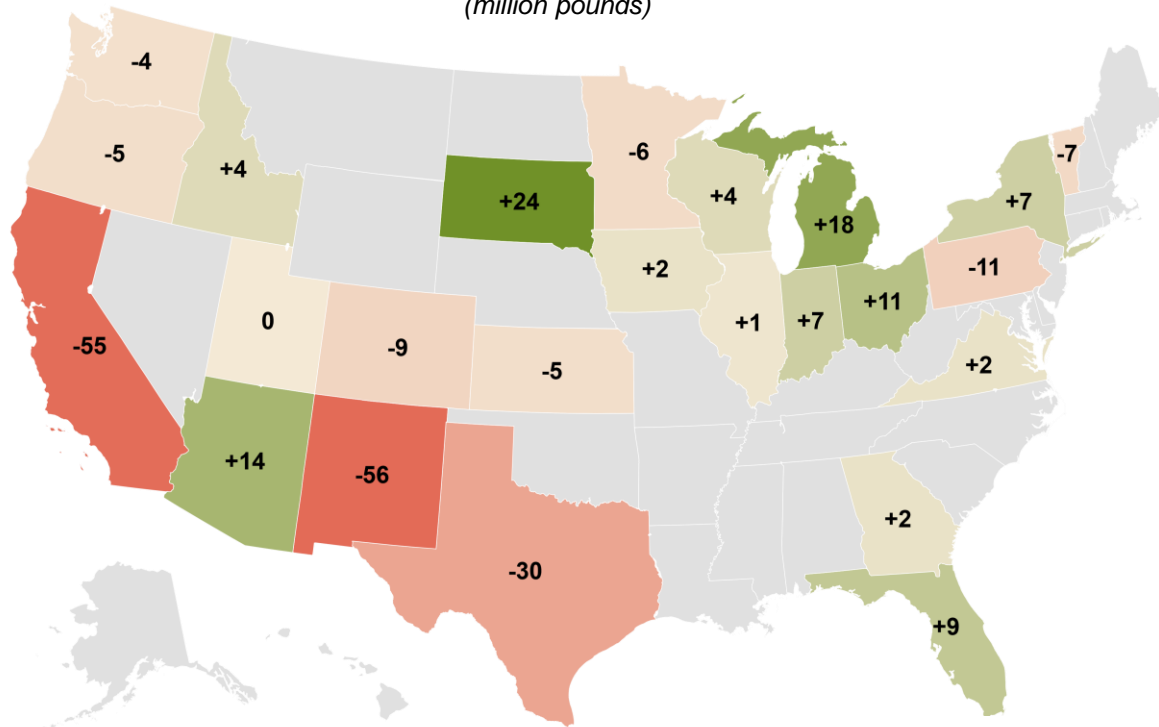
- Combined NDM and SMP production in November fell year-over-year for the sixth consecutive month. NDM volumes continued to fall on poor milk production in the West. However, SMP output climbed, indicating that export demand may have increased slightly from an abysmal showing throughout 2023.
- NDM stocks continued to drop month-on-month in November, marking the lowest warehouse levels since December 2015. International demand is weak, but with stocks at multi-year lows, it would not take much of an increase in demand to send the markets higher.



- U.S. milk production was down year-over-year for the fifth consecutive month in November. A decline of 0.6% relative to November 2022 was driven primarily by ongoing smaller milk production in the West and the Southwest.
- The US herd is smaller than it was a year ago (-44,000 head) causing most of the decline in milk volumes, and November's cow numbers were the lowest since June 2020.
- Milk per cow was also slightly smaller than last November, which holds the record for the month.

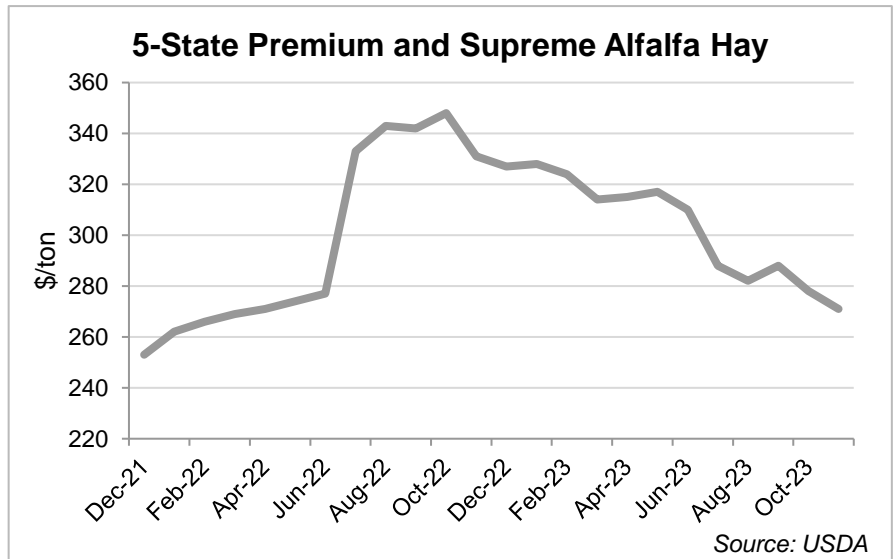
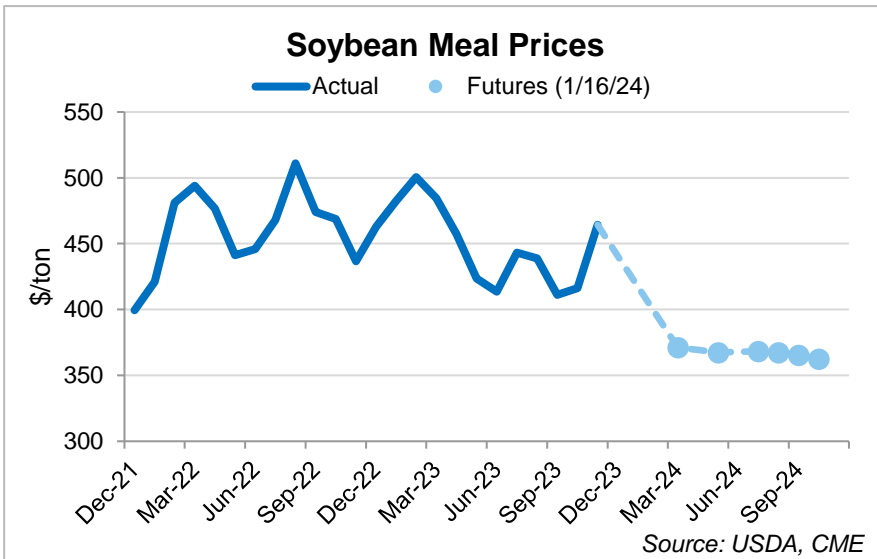
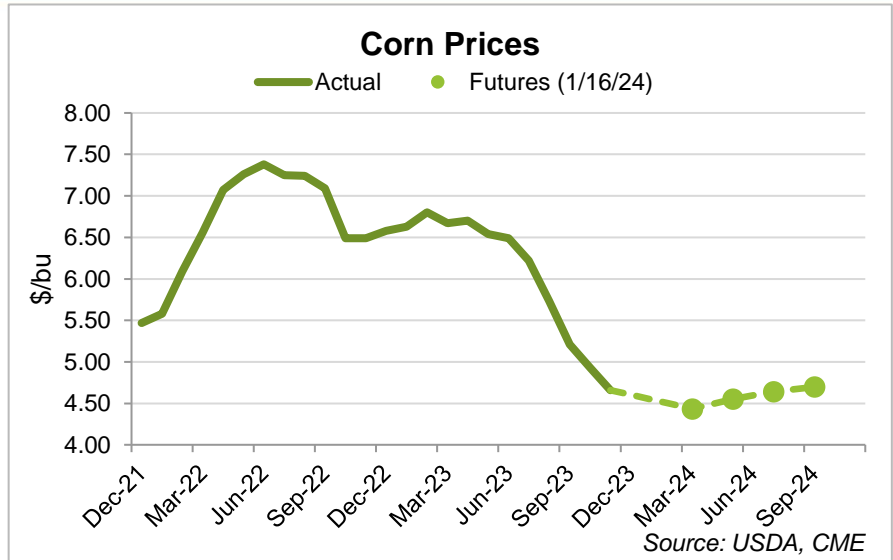


Year-Over-Year Change in Production: Nov-23 (million pounds)

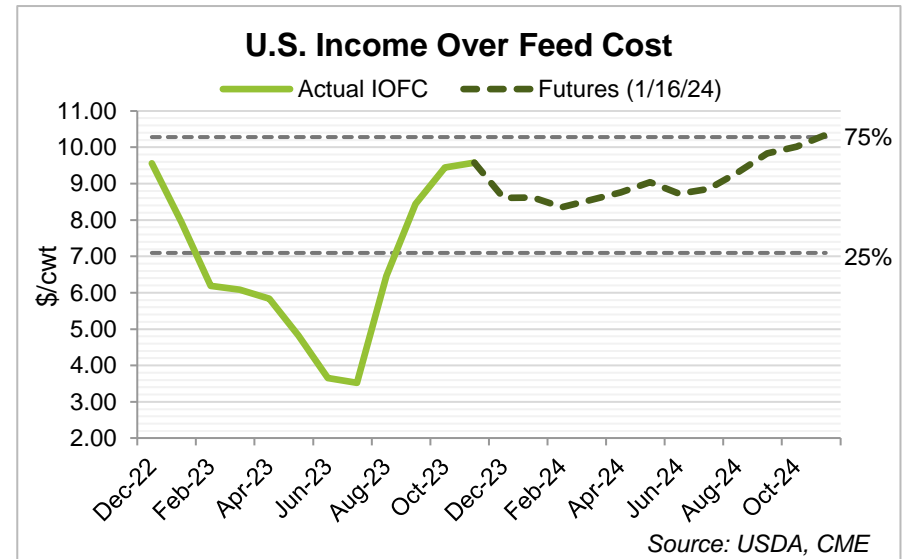
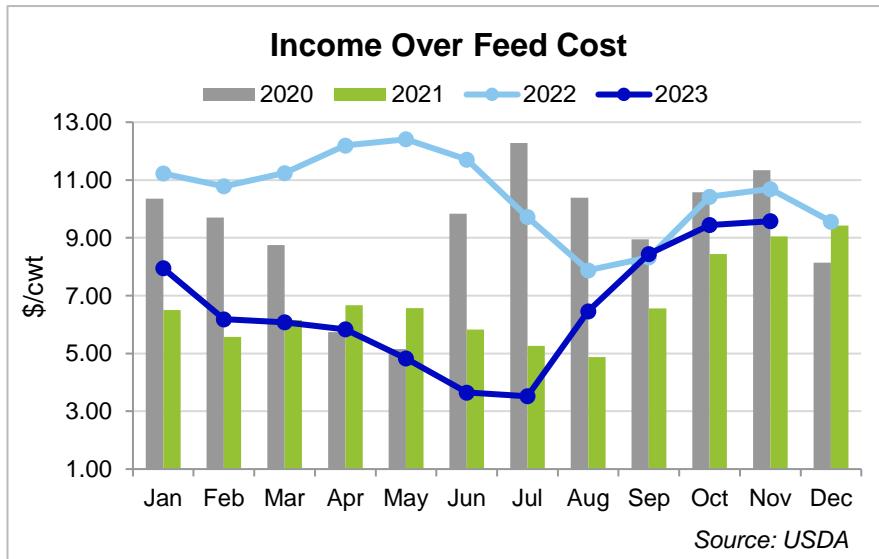


- Production in the West and Southwest continued downward. New Mexico dropped a substantial 56 million pounds from November 2022, down more than 10% from the prior year. This was more than California's year-on-year decrease of 55 million pounds.
- California's milk flows remained negative compared to the prior year, as they have in every month of 2023.
- Most states in the Central Region, combined with New York, saw output continue to increase but at a decelerating pace.

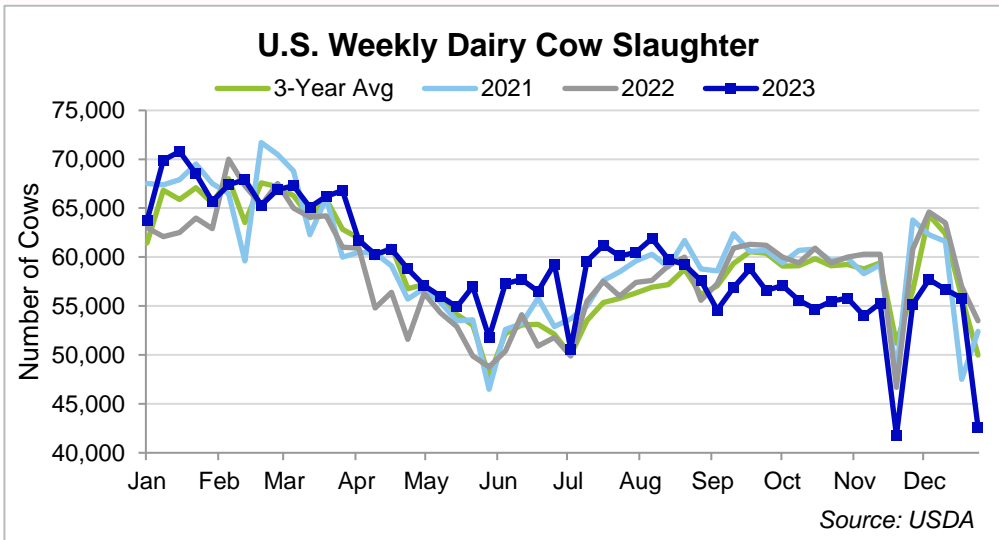
- USDA's January *World Agricultural Supply and Demand Estimates (WASDE)* suggests that the U.S. produced the largest corn crop on record during the 2023/24 season, revising their forecasted yield upward to an all-time high of 177.3 bushels per acre. The record supply pushed corn prices downward with futures over the next 12 months remaining below the \$5.00 mark.
- According to USDA's *WASDE*, soybean production for the 2023/24 crop year is expected to be down 2.5% from the prior year; however, USDA expects a rise in crush. Current futures prices for soybean meal over the next year have fallen below \$375/ton.
- Hay prices have dropped to their lowest value since April 2022, another point of relief for farmers.



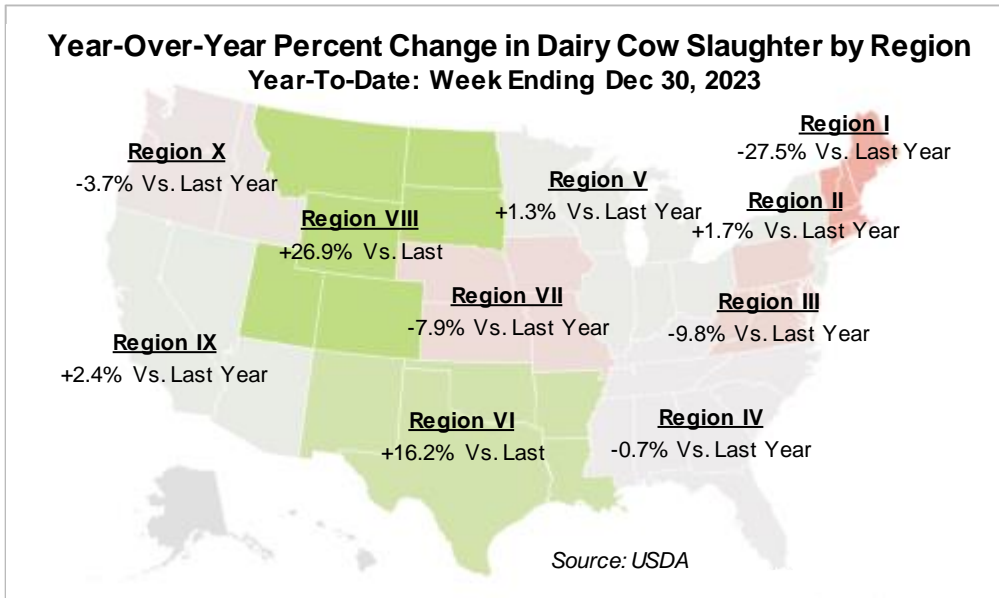
- After marking a record low margin in July 2023, IOFC has continually improved. In November, IOFC rose from the prior month due to lower feed costs and higher milk prices. Namely, corn and alfalfa hay prices declined, while the Class III price increased.
- Looking at current futures prices, producers may feel their margins tightening in the coming months. Lower cheese prices have dragged Class III futures down in the first half of 2024, erasing some of the favorability from declining feed costs. Second half 2024 milk futures are elevated compared to nearby contracts, helping to explain the increase in IOFC in later months.



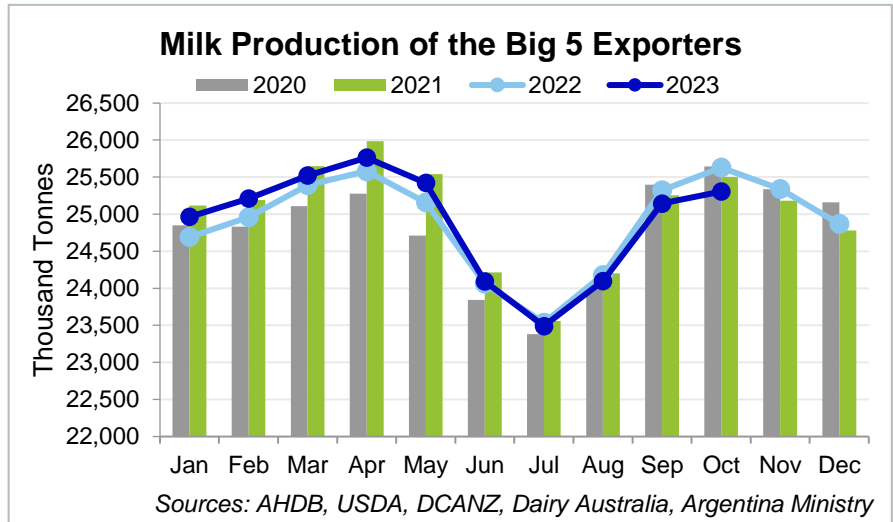
Income over feed cost is calculated using USDA-FSA Dairy Margin Coverage program formulas. The projected margin utilizes milk and feed futures as inputs. An estimate for milk is calculated using Class III and IV milk futures with basis added from historical all-milk prices. Feed is calculated from corn and soybean meal futures along with recent premium alfalfa hay prices.



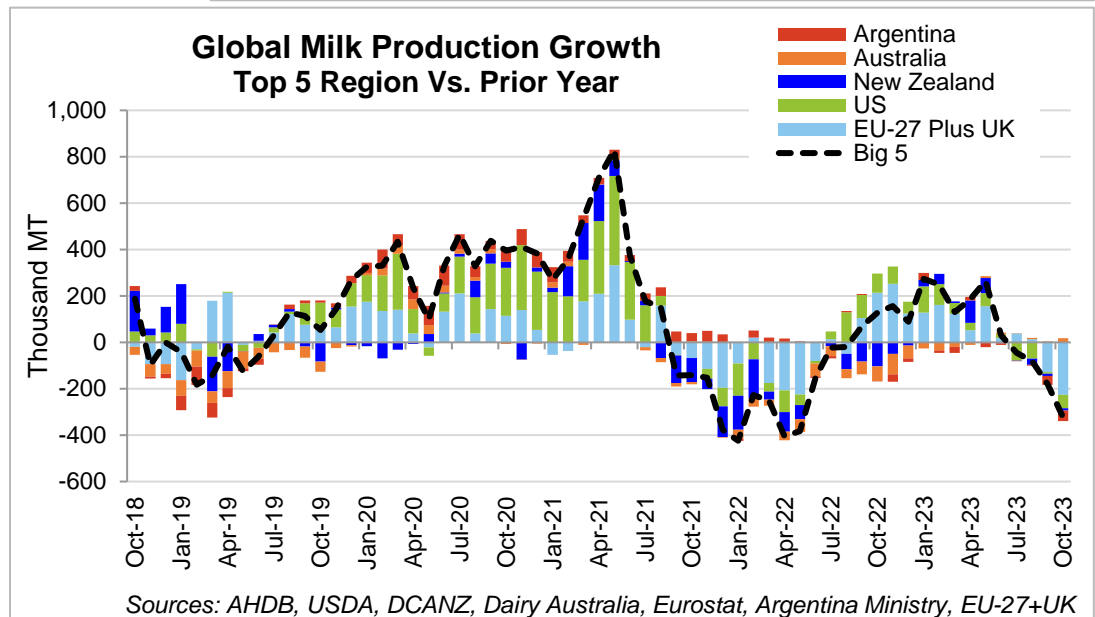
- Weekly dairy cow slaughter ended 2023 with the largest year-over-year decline since December 2021. Despite the substantial year-on-year decreases in slaughter since September, slaughter in 2023 was up 0.9% from 2022 and up 0.4% from the three-year average.
- For the week ending December 30, 2023, the Western region (Region IX) recorded the largest loss versus the prior year since December 2021 (-3,200 cows).
- Slowed slaughter rates should help to level out the milking herd as producers hang onto cows and manage small heifer inventories.



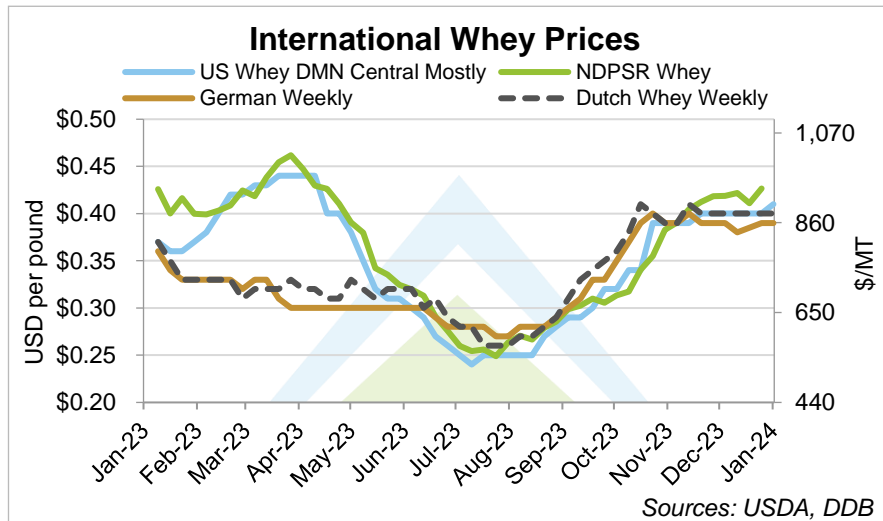
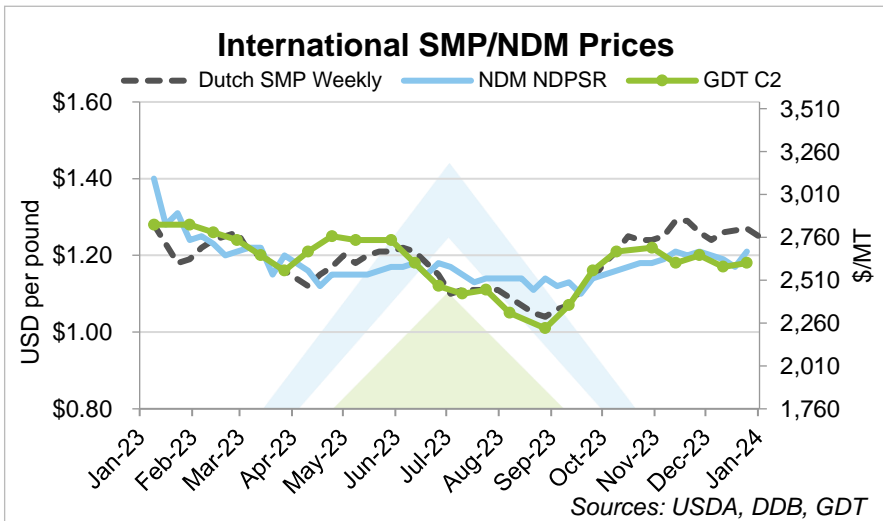
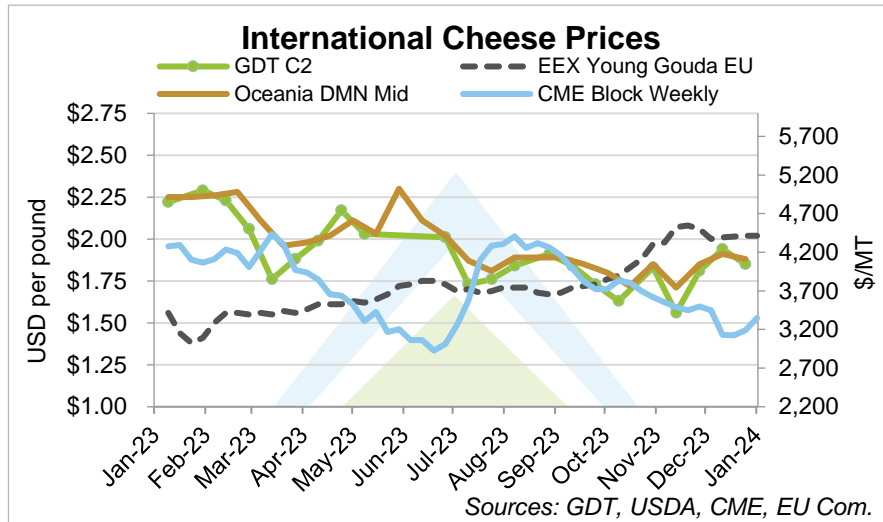
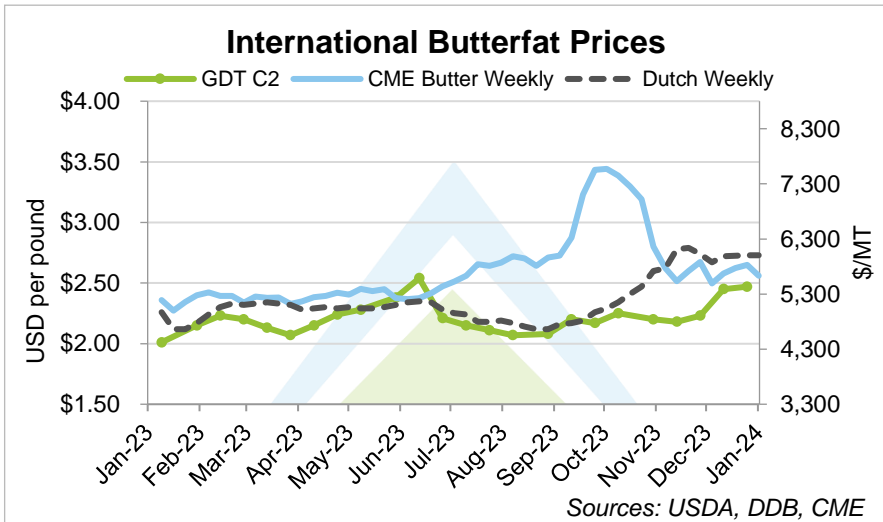
- In October, milk produced by the top 5 dairy exporting countries decreased by 1.3% from the same month last year. This marked the fourth straight year-over-year decline in combined production of the big 5.
- The EU and UK led the charge downward, dropping 1.8% from the prior year, followed by the U.S. and Argentina.
- Australia was the only country to see an improvement in production from last year, as farmers have enjoyed better conditions this season.

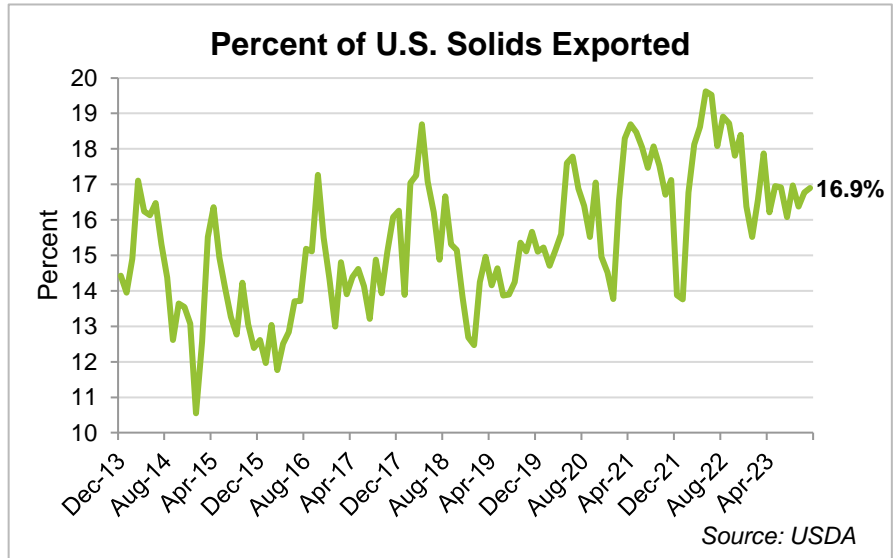
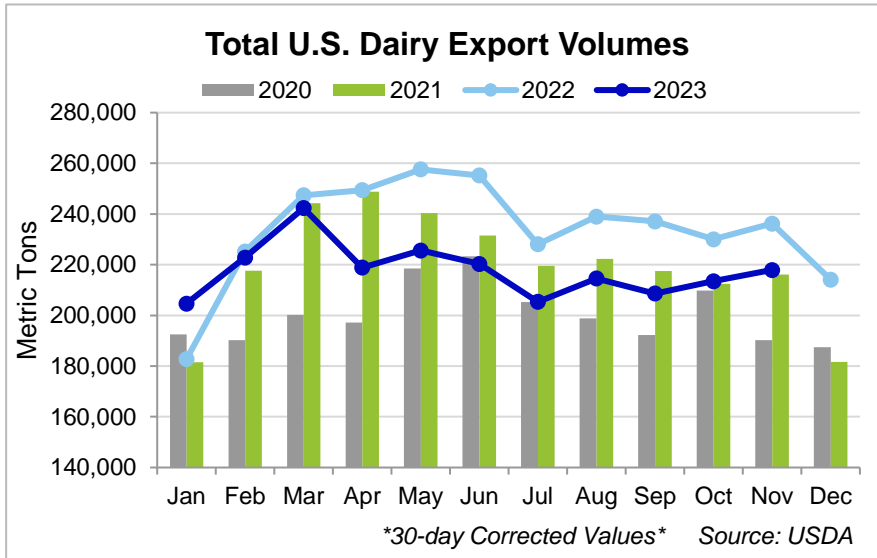


| Year-Over-Year Percent Change: Oct-23 | |
|---------------------------------------|----------------|
| Country | Percent Change |
| EU-27 Plus UK | -1.8% |
| United States | -0.7% |
| New Zealand | -0.3% |
| Australia | 2.0% |
| Argentina | -4.3% |
| <i>Big 5</i> | -1.3% |



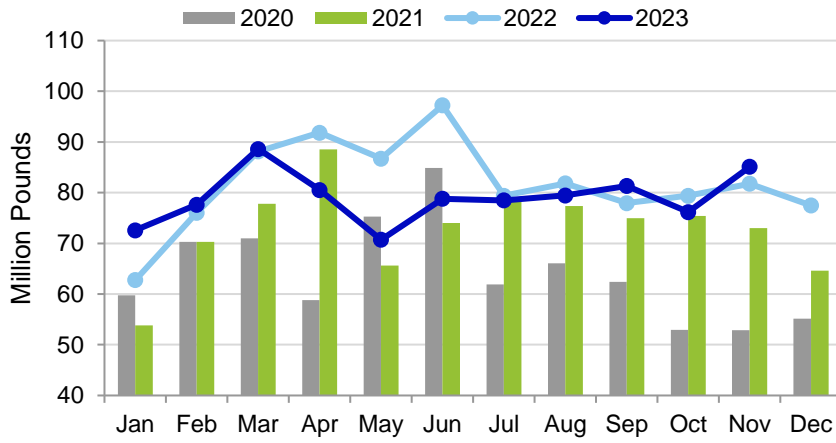
U.S. prices are at a discount for cheese. Manufacturers may be able to catch some export sales in Q2 2024.





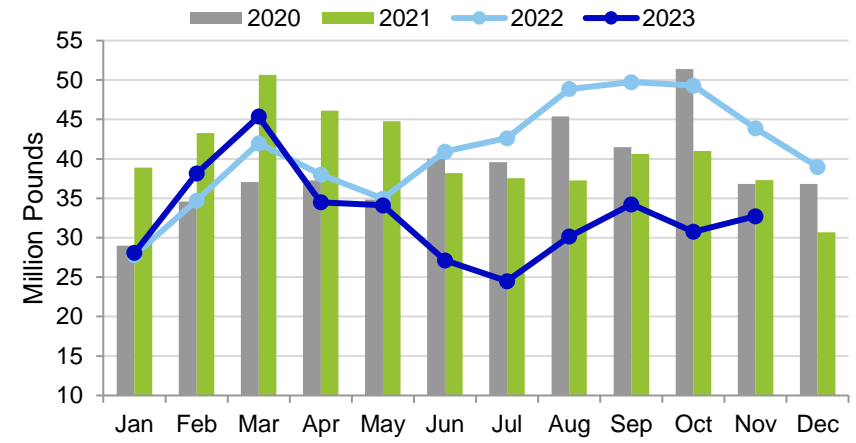
- Total U.S. dairy export volumes continued to trail prior year levels for the tenth consecutive month, down 7.7% year-over-year in November. The U.S. sent an estimated 16.9% of its solids abroad, down from 18.4% in November 2022. Year-to-date, the U.S. has exported 7.1% fewer solids than the same period in 2022.
- Exports of butter, dry whey, and NDM/SMP all declined over prior year levels in November. While the U.S. is priced out of the butter market, explaining its poor export figures, demand for the other commodities is weak, largely due to macroeconomic concerns.
- Exports of cheese rose year-on-year in November on record shipments to Mexico. Looking forward, U.S. prices have been at a discount to the EU since the fall, which may lead to additional export volumes in the coming months.

Total U.S. Cheese Exports



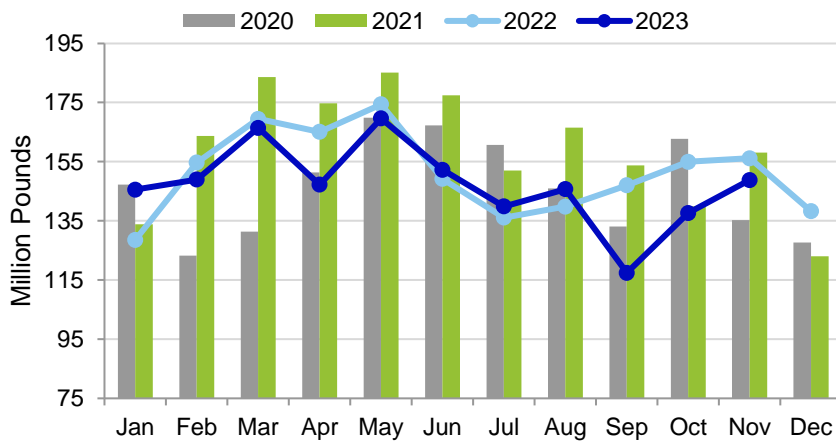
30-day Corrected Values Source: USDA

U.S. Dry Whey Exports



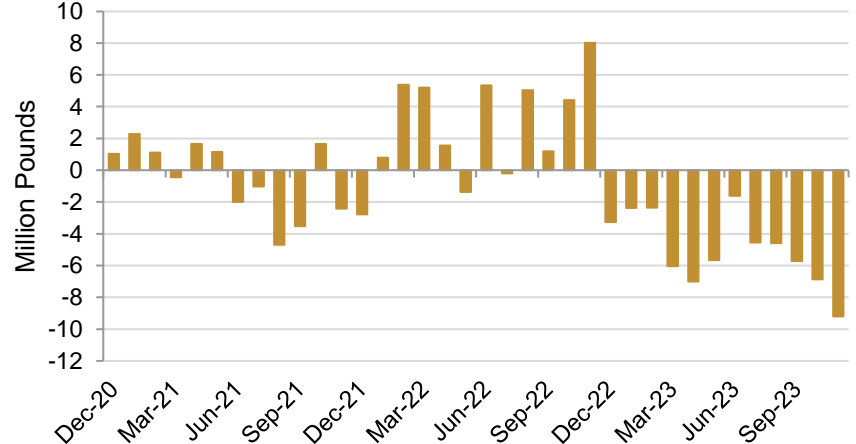
30-day Corrected Values Source: USDA

U.S. NDM and SMP Exports



30-day Corrected Values Source: USDA

U.S. Net Butter Exports



30-day Corrected Values Source: USDA

Year-Over-Year Volumes: Nov-23

| | Total Cheese | | | Dry Whey | | | Butter | | | Dry Skim Milk Products | | |
|-------------------------------|--------------|---------|------|-------------|--------|--------|-------------|--------|--------|------------------------|--------|--------|
| | Nov-22 | Nov-23 | YOY | Nov-22 | Nov-23 | YOY | Nov-22 | Nov-23 | YOY | Nov-22 | Nov-23 | YOY |
| | million lbs | | % | million lbs | | % | million lbs | | % | million lbs | | % |
| Supply | | | | | | | | | | | | |
| <i>Beginning Stocks</i> | 1,448.1 | 1,458.7 | 0.7% | 68.4 | 75.4 | 10.2% | 239.7 | 240.2 | 0.2% | 258.3 | 228.3 | -11.6% |
| <i>Production</i> | 1,156.2 | 1,163.7 | 0.6% | 72.0 | 67.5 | -6.3% | 171.5 | 165.2 | -3.7% | 210.5 | 174.1 | -17.3% |
| <i>Imports</i> | 30.0 | 31.2 | 4.0% | 0.1 | 0.0 | - | 9.2 | 10.7 | 16.3% | 0.2 | 0.2 | 0.0% |
| <i>Total Supply</i> | 2,634.3 | 2,653.6 | 0.7% | 140.5 | 142.9 | 1.7% | 420.4 | 416.1 | -1.0% | 469.0 | 402.6 | -14.2% |
| Utilization | | | | | | | | | | | | |
| <i>Domestic Disappearance</i> | 1,121.6 | 1,134.7 | 1.2% | 23.7 | 39.1 | 65.0% | 202.0 | 197.2 | -2.4% | 54.1 | 36.8 | -32.0% |
| <i>Exports</i> | 81.8 | 85.1 | 4.0% | 43.9 | 32.7 | -25.5% | 18.6 | 3.4 | -81.7% | 156.1 | 148.8 | -4.7% |
| <i>Total Utilization</i> | 1,203.4 | 1,219.8 | 1.4% | 67.6 | 71.8 | 6.2% | 220.6 | 200.6 | -9.1% | 210.2 | 185.6 | -11.7% |
| Stocks | | | | | | | | | | | | |
| <i>Ending Stocks</i> | 1,431.0 | 1,433.7 | 0.2% | 73.0 | 71.0 | -2.7% | 199.8 | 215.5 | 7.9% | 258.8 | 217.0 | -16.2% |

Year-To-Date Volumes

| | Total Cheese | | | Dry Whey | | | Butter | | | Dry Skim Milk Products | | |
|-------------------------------|--------------|----------|-------|-------------|-------|--------|-------------|---------|--------|------------------------|---------|-------|
| | 2022 | 2023 | YOY | 2022 | 2023 | YOY | 2022 | 2023 | YOY | 2022 | 2023 | YOY |
| | million lbs | | % | million lbs | | % | million lbs | | % | million lbs | | % |
| Supply | | | | | | | | | | | | |
| <i>Production</i> | 12,864.2 | 12,901.2 | 0.3% | 840.3 | 856.2 | 1.9% | 1,870.8 | 1,916.6 | 2.4% | 2,403.1 | 2,241.4 | -6.7% |
| <i>Imports</i> | 291.0 | 285.2 | -2.0% | 0.4 | 1.3 | 225.0% | 97.1 | 107.1 | 10.3% | 1.5 | 1.8 | 20.0% |
| <i>Total Supply</i> | 13,155.2 | 13,186.4 | 0.2% | 840.7 | 857.5 | 2.0% | 1,967.9 | 2,023.7 | 2.8% | 2,404.6 | 2,243.2 | -6.7% |
| Utilization | | | | | | | | | | | | |
| <i>Domestic Disappearance</i> | 12,252.1 | 12,318.2 | 0.5% | 365.3 | 492.5 | 34.8% | 1,830.7 | 1,962.1 | 7.2% | 709.3 | 650.3 | -8.3% |
| <i>Exports</i> | 914.0 | 879.5 | -3.8% | 458.6 | 363.5 | -20.7% | 136.0 | 62.4 | -54.1% | 1,695.0 | 1,639.6 | -3.3% |
| <i>Total Utilization</i> | 13,166.1 | 13,197.7 | 0.2% | 823.9 | 856.0 | 3.9% | 1,966.7 | 2,024.5 | 2.9% | 2,404.3 | 2,289.9 | -4.8% |

Dry Skim Milk Products includes NDM, SMP, and dry skim milk for animal use. USDA NASS does not report manufacturers' stocks of SMP.

Source: USDA

Key Takeaways

- While butter prices have maintained a decent value, cheese has not been so lucky. Lower cheese values are hindering Class III prices with futures as of January 16, 2024, averaging just \$15.69/cwt in the first quarter of 2024. Producers cannot sustain prices at these levels, making the start of 2024 likely to be difficult for farmers paid on Class III values.
- Milk production in the U.S. and abroad continues to lag prior year levels. Fewer cows in the national herd along with limited heifer inventories may make it difficult for milk volumes to grow substantially during 2024. Combine that with unfavorable Class III prices in the near term and producers will likely be slow to expand. That said, there is room for increases as new manufacturing facilities come online. Cheaper feed will also take some pressure off farmers' margins, improving yields on better-quality feedstuffs.
- Despite lower total milk production as well as lower production of key dairy products, prices have not jumped upward, indicating a lack of demand. As inflation and other macroeconomic factors take a toll on consumers around the world, demand may remain subdued.

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If you have questions or comments about our market analysis, have interest in signing up to receive our reports directly or have interest in trading dairy futures and options, please call or email below.

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