



Livestock, Dairy, and Poultry Outlook: March 2023

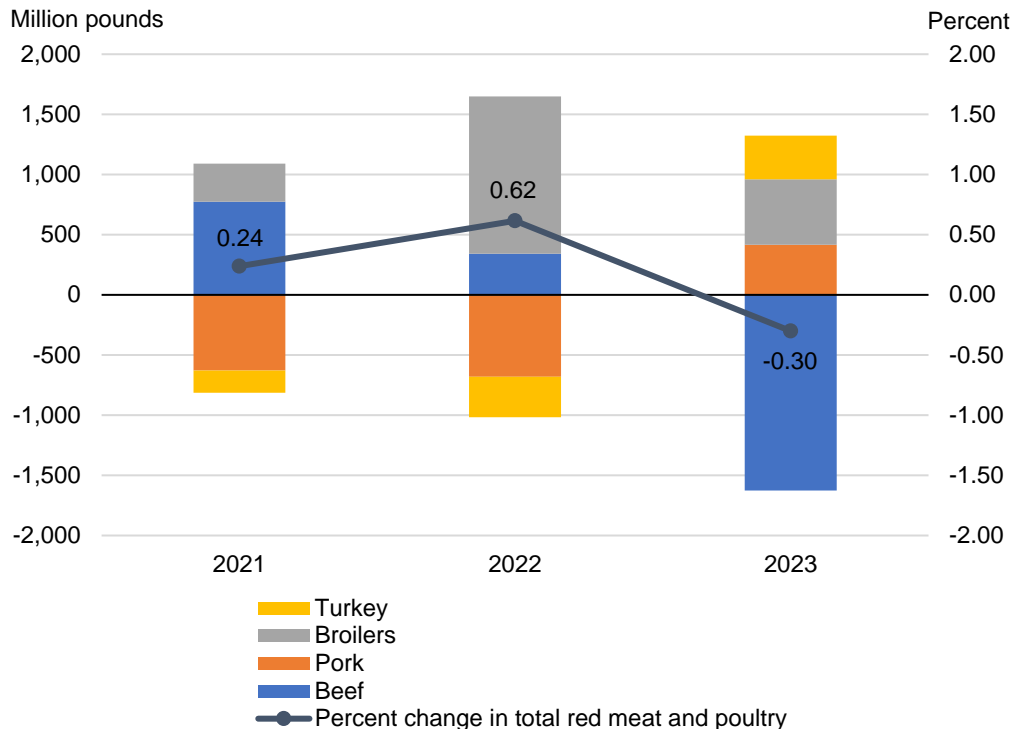
In this report:
“Drought Conditions Have Contributed to Lower U.S. Beef Cow Inventory”

[Special Article](#)

Lower Beef Production To Cause Decline in Total Red Meat and Poultry Production in 2023

Total red meat and poultry production in 2023 is forecast to decrease for the first time in nearly a decade. This is mostly due to the 6-percent decline in beef production that more than offsets forecast increases in pork (2 percent), broiler meat (1 percent), and turkey (7 percent) production. Tightening cattle supplies are expected to cause a significant year-over-year decrease in beef production, the first decline since 2015. After 2 consecutive years of decline, commercial pork production is forecast to increase in 2023 on higher slaughter and fractionally higher carcass weights. Broiler meat production is forecast to continue its longstanding upward trend into 2023, increasing marginally over last year’s record production. Turkey production is expected to increase throughout 2023, under the assumption that the sector recovers from Highly Pathogenic Avian Influenza outbreaks.

Year-over-year changes in red meat and poultry production



Source: USDA, *World Agricultural Supply and Demand Estimates*.

Summary

Beef/Cattle: Based on slaughter data through early March 2023 and the outlook for dairy and beef producers moving forward, the projection for cow slaughter is raised in 2023. In addition, an increase in expected placements in the first quarter raises anticipated marketings in the third quarter. A higher forecast for slaughter more than offsets a decline in expected dressed weights, resulting in projected beef production being raised 165 million pounds to 26.7 billion pounds. Fed cattle prices in 2023 are raised to \$162 per hundredweight (cwt) on firm demand. The trade forecast for 2023 is unchanged.

Dairy: Milk production forecast for 2023 is raised from last month based on recent revised data showing a higher number of cows for January 2023. In 2023, cheese prices are lowered on larger expected supplies and continued softness in demand. With lower prices expected for cheese, the Class III milk price forecast for 2023 has been lowered to \$17.55 per cwt, \$0.35 lower than last month's forecast. With slightly higher prices for butter and NDM, the Class IV price forecast has been raised to \$18.30 per cwt, up \$0.05 from the previous projection. With the changes in component prices, the all-milk price forecast for 2023 has been decreased to \$20.45 per cwt, \$0.25 lower than last month's forecast.

Pork/Hogs: First-quarter pork production is reduced 10 million pounds as slightly higher slaughter numbers are offset by lower average dressed weights. First-quarter pork production is expected to be 7 billion pounds, 1.4 percent higher than a year ago. January 2023 pork exports were 556 million pounds, about 9 percent greater than those of a year ago. Exports for 2023 are forecast at almost 6.4 billion pounds, about the same as in 2022.

Poultry/Eggs: Forecast broiler production is adjusted up on strong January production. Broiler import and export projections are unchanged. The projected first-quarter broiler price is adjusted up to 123 cents per pound on recent data. First-half 2023 forecasts for table-egg production and average wholesale egg prices (New York, Grade A, large) are revised downward and upward, respectively. The revisions are based on the most recent data on egg-laying flock indicators and overall price firmness. Egg import and export forecasts for 2023 are unchanged from the last report. First-quarter turkey production and 2023 ending stocks are adjusted up. Turkey exports are adjusted down in 2023 on expectations of weaker demand. Projected 2023 turkey prices are unchanged from last month.

Special Article: "Drought Conditions Have Contributed to Lower U.S. Beef Cow Inventory" On January 1, 2023, the U.S. beef cow inventory was 28.9 million head, down 3.6 percent from the previous year—the highest annual rate of decline since the cattle cycle peak on January 1, 2019. Recent declines in beef cow inventory have been in part due to drought, which has contributed to reduced pasture and range conditions and increased beef cow slaughter. Any changes to the current drought conditions will likely impact inventory numbers in the coming year. This special article relates changes in beef cow inventory to drought and pasture and range conditions.

Beef/Cattle

Russell Knight and Hannah Taylor

Beef Production Raised on Higher Slaughter

Based on the most recent *U.S. Drought Monitor* data, drought conditions have improved compared to a year ago. For the week ending February 28, 2023, 48 percent of the herd was in an area of drought compared to 62 percent on March 1, 2022. Despite moderating drought conditions, low hay stocks are likely contributing to stronger-than-expected beef cow slaughter. At the same time, during the week ending February 11, 2023, weekly Federally inspected dairy cow slaughter surpassed beef cow slaughter for the first time¹ since the week ending April 3, 2021.

Earlier winter weather conditions continue to play a role in lighter fed cattle carcass weights this year. For the week ending February 18, steer and heifer carcass weights were lower by 15 and 21 pounds, respectively, from the same period last year. Further, cow and bull carcass weights are down 10 and 30 pounds, respectively. The anticipated share of cows in the slaughter mix is raised in 2023, which will contribute to lighter expected average carcass weights. The results have lowered the outlook for cattle weights the rest of year.

The latest *Cattle on Feed* report, published by USDA, National Agricultural Statistics Service (NASS), showed a February 1 feedlot inventory of 11.704 million head, about 4 percent below 12.209 million head in the same month last year. Feedlot net placements² in January were almost 4 percent lower year over year at 1.869 million head. Marketings in January were 1.847 million head, up more than 4 percent year over year. On February 1, the number of cattle on feed over 150 days was up 2 percent above year-ago levels.

The forecast for first-quarter beef production was raised 15 million pounds, based on a faster expected pace of cow slaughter in the latter part of the quarter that will more than offset less bull slaughter and lower aggregate carcass weights. In the second quarter, an increase in cow slaughter more than offsets a lower outlook for weights. As a result, production is raised 40 million pounds from last month's forecast.

Third-quarter beef projection is raised 115 million pounds on higher fed cattle and cow slaughter numbers that more than offset lower expected carcass weights. The increase in fed cattle slaughter stems from higher expected marketings that were raised on higher forecast first-quarter placements. Despite reported lower year-over-year placements in January, they were higher than expected.

In the fourth quarter, production is forecast marginally down as lower weights more than offset a slight increase in cow slaughter. Thus, for the year, an increase in cow slaughter and an increase in fed cattle marketings in the third quarter more than offset the decrease in anticipated weights, raising the outlook for 2023 beef production by 165 million pounds to 26.7 billion pounds.

¹ Excluding holiday weeks.

² Net placements are placements minus other disappearance.

Fed Cattle Prices Raised on Firm Demand

In February, the weighted-average price for feeder steers, 750–800 pounds at the Oklahoma City National Stockyards, was recorded at \$184.42 per hundredweight (cwt), about \$27 above February 2022. The feeder steer price reported on March 6 reached \$188.76 per cwt, almost \$40 above the same week last year. As noted, there is an expectation of higher placements in the first quarter. The outlook for feeder calf prices is improved, given existing tight supplies of cattle, a projection for lower market-year average corn prices, and higher expected fed cattle prices, as well as recent price data. These factors support raising the forecast for the first two quarters by \$1 each for an annual 2023 feeder steer price of \$204.00 per cwt, surpassing the previous record set in 2014.

Fed steers in the 5-area marketing region³ averaged \$160.89 per cwt in February 2023, almost \$20 above last year. After January's strong pace of fed cattle slaughter relative to a year ago, the pace in February declined compared to last year. Carcass weights lower than a year ago have further decreased expected production in February. This has likely helped support the sharp rise in composite boxed beef values, which are at historic levels for this time of year. Reported prices for the week ending March 5 averaged \$165.02 per cwt, up over \$24 from the same week last year. Based on recent price data, tightening supplies of cattle, and lower forecast carcass weights for the entire year, fed steer prices are raised across the quarters for an annual projection of \$162.00 per cwt in 2023.

Monthly Beef Exports Continuing To Slow Since October

Monthly exports in January were 243 million pounds, a year-over-year decrease of 16 percent and 4 percent below the 5-year average. The largest year-over-year decrease was in exports to South Korea, down nearly 37 percent. Exports to China were also down over 25 percent, and exports to Taiwan were down 34 percent. Monthly exports to Japan and Mexico were higher year over year, up 7 and 31 percent, respectively. Exports have decreased month-over-month and year-over-year since October.

U.S. beef exports have been facing economic headwinds for months and are expected to continue to face challenges throughout 2023. The U.S. Nominal Broad Dollar Index for January was about 4 percent higher year over year, indicating a stronger U.S. dollar.⁴ Additionally, U.S. imports will likely face more competition from countries in Oceania as beef production there increases. The export forecast for 2023 is unchanged from last month at 3.090 billion pounds, a 13-percent decrease year over year.

³ The 5-area marketing region includes Colorado, Iowa, Kansas, Nebraska, New Mexico, Oklahoma, and Texas.

⁴ The Nominal Broad Dollar Index is a weighted average of the foreign exchange value of the U.S. dollar against the currencies of a broad group of major U.S. trading partners. Source: Board of Governors of the Federal Reserve System, *Foreign Exchange Rates - H.10*.

U.S. beef exports by volume, January 2022 and 2023

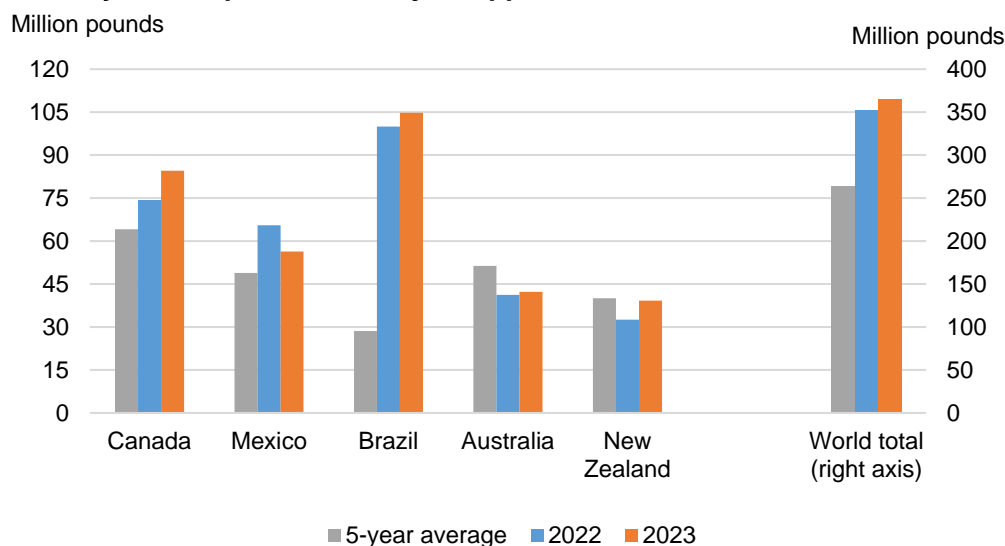
Country	January 2023 exports	Year-to-date exports				Share of YTD exports, percent	
		2022	2023	Year-over-year volume change	Year-over-year percent change	2022	2023
Japan	62.8	58.8	62.8	4.1	7	20	26
South Korea	52.3	82.9	52.3	-30.5	-37	29	22
China	36.1	48.3	36.1	-12.2	-25	17	15
Mexico	26.5	20.3	26.5	6.3	31	7	11
Canada	19.9	19.8	19.9	0.1	0	7	8
Taiwan	14.1	21.3	14.1	-7.3	-34	7	6
ROW	30.9	36.3	30.9	-5.4	-15	13	13
Total	242.6	287.6	242.6	-45.0	-16		

Note: Top six countries based on 2023 year-to-date exports; YTD = year-to-date; ROW = rest of world.
 Source: USDA, Economic Research Service calculations using data from U.S. Department of Commerce, Bureau of the Census.

Another Record January for Beef Imports

January beef imports were a record for the month at 365 million pounds, up 4 percent from last year and the third-largest monthly import level overall. Compared to the 5-year average, January imports were up 38 percent. The chart below shows how January 2023 imports from major suppliers compare to the previous year and the 5-year average. The only major supplier providing lower year-over-year imports was Mexico; however, it was still the second-highest import level for the month of January. Imports from Canada in January were also the second-highest for the month.

January beef imports from major suppliers



Source: USDA, Economic Research Service calculations using data from U.S. Department of Commerce, Bureau of the Census.

January imports from Brazil were an overall record from the country at nearly 105 million pounds, 5 percent higher than the previous year. Beef imports from Brazil fall under the tariff-rate quota for countries without a specific quota or free-trade agreement. This quota is set at just over 65 million kilograms, or 143 million pounds; once filled, imports face a larger out-of-quota tariff. Last year, imports from Brazil spiked in the first few months until the quota was filled and then tapered off throughout the rest of the year. A similar pattern could occur this year. The U.S. Customs and Border Protection *Quota Status Report* from March 6 shows the tariff-rate quota for “Other” countries is already more than 70-percent filled, about 8 percent behind the same period last year. The annual aggregate import forecast is unchanged from last month at 3.425 billion.

U.S. beef imports by volume, January 2022 and 2023

Country	January 2023 imports	Year-to-date imports				Share of YTD imports, percent	
		2022	2023	Year-over-year volume change	Year-over-year percent change	2022	2023
Brazil	104.8	99.9	104.8	4.8	5	28	29
Canada	84.6	74.3	84.6	10.2	14	21	23
Mexico	56.3	65.5	56.3	-9.2	-14	19	15
Australia	42.3	41.2	42.3	1.1	3	12	12
New Zealand	39.2	32.5	39.2	6.7	21	9	11
ROW	37.5	38.4	37.5	-0.9	-2	11	10
Total	364.7	351.9	364.7	12.7	4		

Note: Top six countries based on 2023 year-to-date imports; YTD = year-to-date; ROW = rest of world.
Source: USDA, Economic Research Service calculations using data from U.S. Department of Commerce, Bureau of the Census.

Dairy

Angel Terán

Recent Developments in U.S. Dairy Markets

From the week ending February 4, to the week ending March 4, 2023, except for butter, changes for most wholesale dairy product prices reported in the USDA *National Dairy Products Sales Report* (NDPSR) were down, as shown in the table below. The price for 40-pound blocks of Cheddar cheese decreased 11.99 cents, while the price for 500-pound barrels (adjusted to 38-percent moisture) decreased 8.61 cents. The price of nonfat dry milk (NDM) declined 10.53 cents, and the price for dry whey also declined by 0.79 cents per pound. Meanwhile, the price for butter increased by 6.21 cents per pound.

Dairy wholesale product prices, February 4 to March 4, 2023

Dollars per pound

	For the week ending		Change
	Feb 4	Mar 4	
Butter	2.3798	2.4419	0.0621
Cheddar cheese			
40-pound blocks	2.0623	1.9424	-0.1199
500-pound barrels *	1.7063	1.6202	-0.0861
Nonfat dry milk	1.3069	1.2016	-0.1053
Dry whey	0.4165	0.4086	-0.0079

* Adjusted to 38-percent moisture.

Sources: USDA, Agricultural Marketing Service, *National Dairy Products Sales Report*, March 8, 2023.

Recent Chicago Mercantile Exchange (CME) weekly average spot prices for dairy products were varied compared to NDPSR prices for the week ending March 4. For the trading week ending on March 10, the CME weekly spot prices averaged \$2.3370 per pound for butter, \$1.1715 for NDM, and \$1.8325 for 40-pound blocks of Cheddar cheese, all below NDPSR prices. However, the CME weekly spot price averaged \$0.4410 for dry whey and \$1.7015 for 500-pound barrels of Cheddar cheese, both above NDPSR prices for the week ending March 4.

In general, the U.S. has remained price-competitive in international markets. Most Oceania and Europe average dairy product export prices⁵ reported by USDA *Dairy Market News*, displayed in the table below, declined from January 2023 to February 2023. The exceptions were increases for Oceania Cheddar cheese and butter.

⁵ The source for Oceania and Western Europe prices is USDA, *Dairy Market News*. International prices are in U.S. dollars, free on board (F.O.B.) port. Prices listed in this report are at the midpoints of the ranges.

Dairy product export prices for Oceania and Europe, January–February, 2023

Dollars per pound

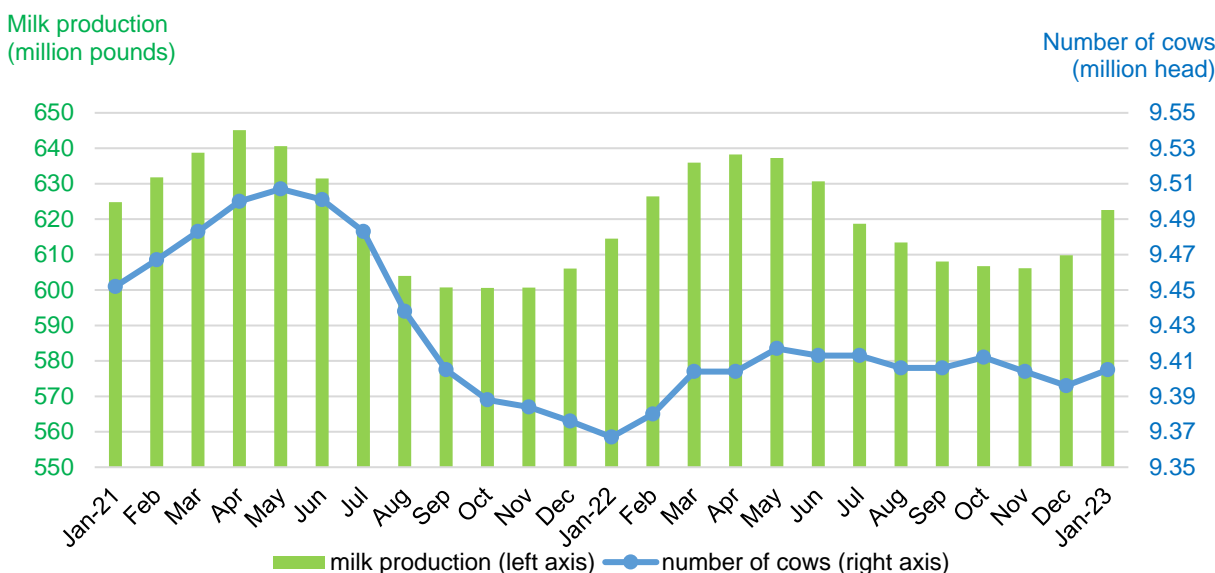
Product	Region	January 2022	February 2023	Change
Butter	Oceania	2.040	2.161	0.121
	Western Europe	2.633	2.377	-0.256
Cheddar cheese	Oceania	2.246	2.264	0.018
Skim milk powder	Oceania	1.310	1.292	-0.018
	Western Europe	1.325	1.250	-0.075
Dry whey	Western Europe	0.422	0.393	-0.029

Sources: USDA, Agricultural Marketing Service, *Dairy Market News*.

Recent Supply and Use Data

According to the most recent Milk Production report published by USDA, National Agricultural Statistics Service (NASS), the revised 2022 estimated annual production of milk for the United States is 226.462 billion pounds, 0.1 percent above the 2021 revised total. For 2022, the average number of milk cows was revised down 2,000 head to 9.402 million head. The estimate for January U.S. milk production is 19.300 billion pounds, 1.3 percent above January 2022. In January 2023, total cows averaged 9.405 million head, while milk per cow was 2,052 pounds, both measures above January 2022.

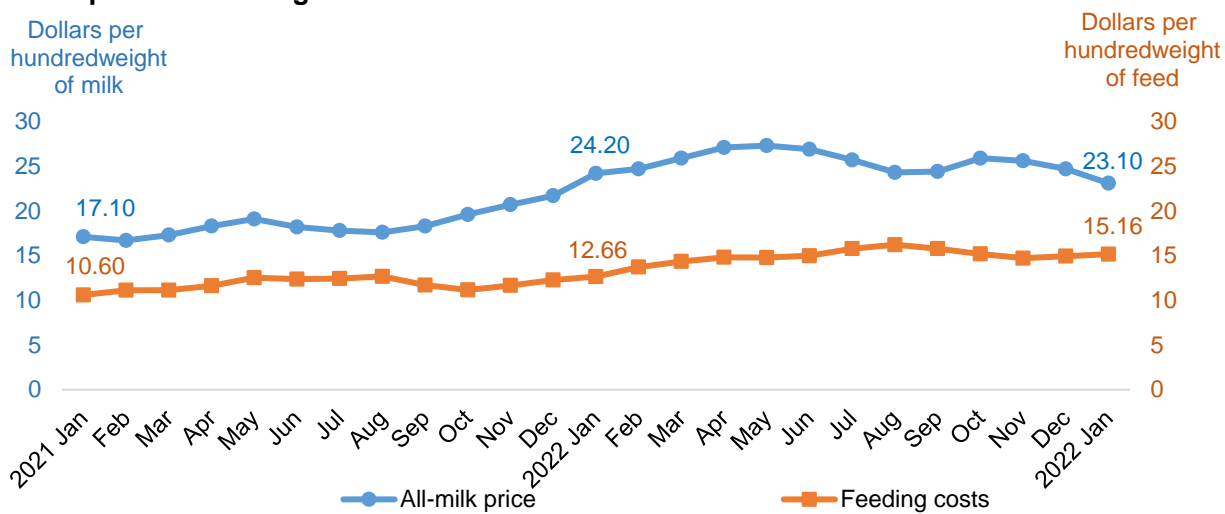
Milk production per day and number of dairy cows from January 2021 to January 2023



Source: USDA, Economic Research Service calculations using information from USDA, National Agricultural Statistics Service.

As reported by NASS in the *Agricultural Prices* report, the all-milk price in January 2023 was \$23.10 per cwt, down \$1.10 from January 2022. The January 2023 corn price was \$6.64 per bushel, up \$1.06 from January 2022. The price for alfalfa hay was \$263 per short ton, up \$48 from January 2022. The 5-State weighted-average price for premium alfalfa hay was \$328 per short ton, \$55 higher than January 2022. The soybean meal price (reported by USDA, Agricultural Marketing Service) was \$500.53 per short ton in February, up \$19.57 from February 2022. The milk-feed price ratio reported by NASS was 1.73 in January, down 0.43 points from January 2022. As shown in the graph below, based on recent prices reported on the USDA, Dairy Margin Program, in January 2023, the spread between milk prices and feed costs (\$7.94 per cwt), narrowed compared to January 2022 (\$11.54 per cwt).

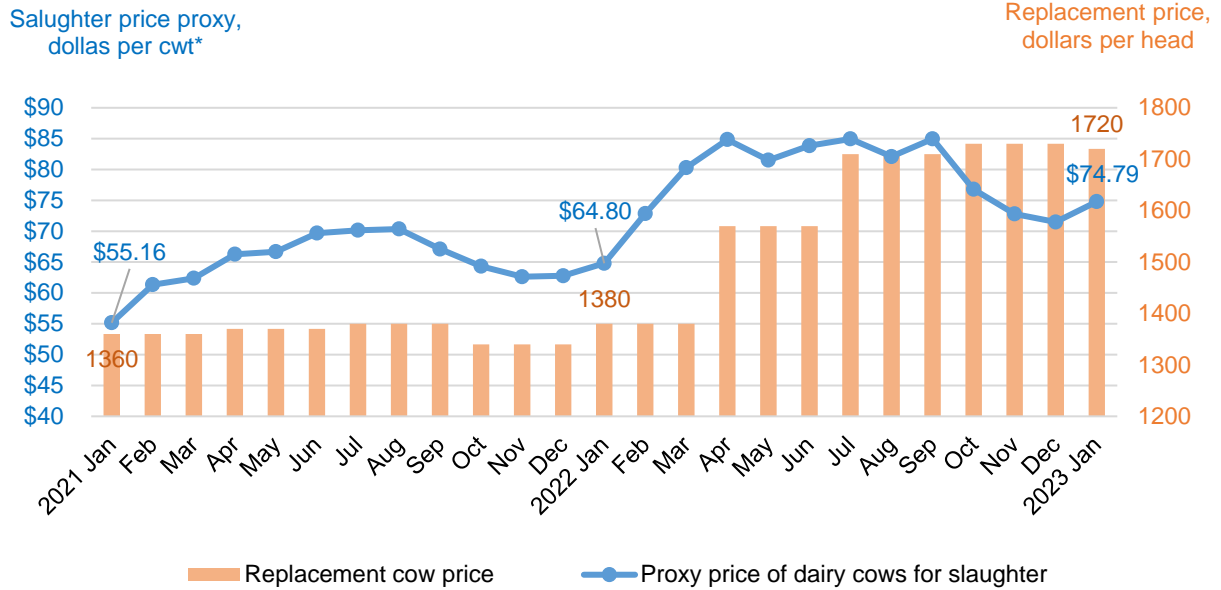
All-milk price vs. feeding costs



Source:USDA, Farm Service Agency, prices from the Dairy Margin Coverage Program.

In addition to high feed costs, dairy producers have other operational costs that have been ramping up in the past couple of months. According to the NASS *Agricultural Prices* report, in January 2023, the average price paid for a replacement milk cow was \$1,720, an increase of 25% from January 2022. Meanwhile, the ERS proxy price for slaughter cow per cwt recovered some ground in January 2023, after steadily declining since September 2022 (as shown in the graph below). Higher dairy cow prices, combined with higher culling prices, could be another key factor outside higher feed costs contributing to a slow decline in the dairy herd size through 2023.

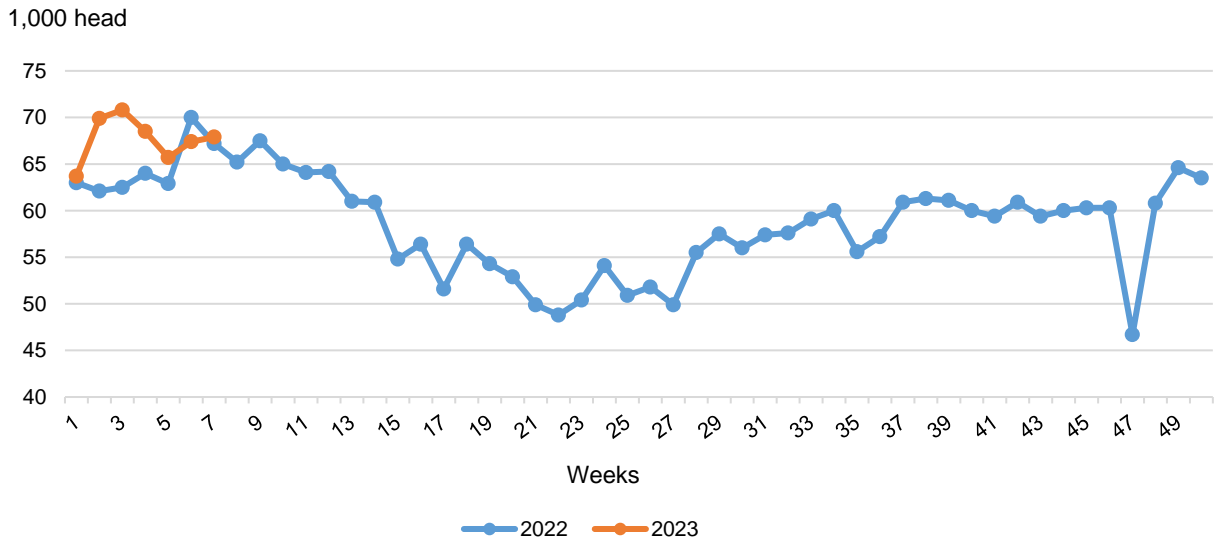
Replacement price and slaughter proxy price for dairy cows



*The national price for dressed domestic cutter cows (90 percent lean, 500 pounds and up) is multiplied by 49.5 percent to estimate a live equivalent price, used as a proxy price for dairy cow slaughter.
Sources: USDA, Economic Research Service calculations, and USDA, National Agricultural Statistics Service.

During the first weeks of 2023, the culling of dairy cows remained very active and generally above the comparable 7 weeks of 2022, as the graph below shows.

Weekly federally inspected milk cow slaughter



Source: USDA, National Agricultural Statistics Service, *Cow Slaughter Under Federal Inspection Report*.

In January 2023, dairy export volumes grew compared to same month in 2022, as prices were still competitive in international markets. On a milk-equivalent milk-fat basis, exports totaled 860 million pounds in January, 38 million higher than January 2022. On a milk-equivalent skim-solids basis, January exports totaled 3.995 billion pounds, 587 million above January 2022. There were some products in January with notable year-over-year increases in exports from January 2022, including 150.4 million pounds of dry skim milk products (+19.4 million), 84.3 million pounds of lactose (+19.4 million), and 622.2 million pounds of other-than-American type cheese (+5.8 million).

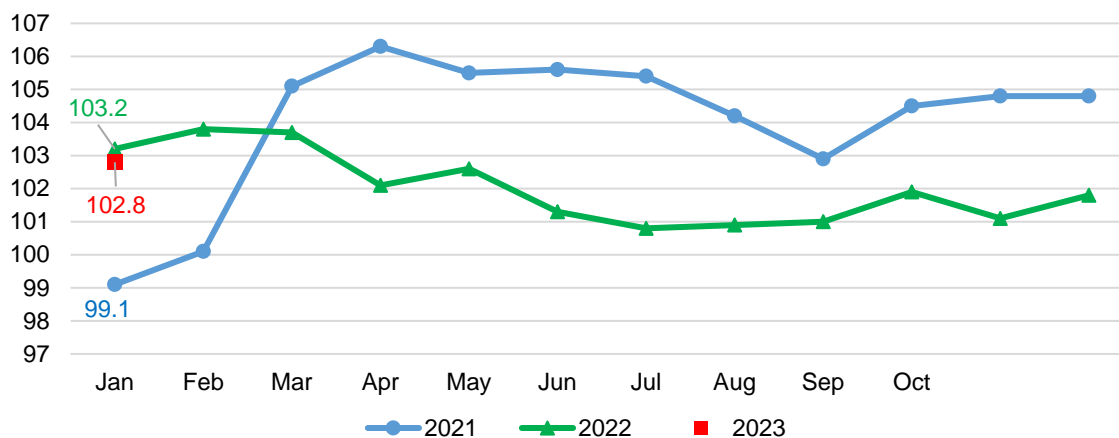
Dairy import volumes also grew in January 2023 compared to January 2022. On a milk-equivalent milk-fat basis, dairy imports were 591 million pounds in January 2023, 162 million higher than January 2022. On a milk-equivalent skim-solids basis, January imports totaled 679 million pounds, 178 million higher than January 2022. Imports in January were up year over year for some major products including 8.7 million pounds of butter (+2.4 million) and 22.2 million pounds of cheese (+0.9 million). Although the import tariffs for infant formula were put back in place in January 2023, import volumes of dairy-based preparations for infant use (which include infant formula) totaled 3.7 million pounds in January, up 1.1 million from January 2022.

In January 2023, domestic use for dairy products was lower than January 2022. On a milk-equivalent milk-fat basis, domestic use totaled 17.915 billion pounds, 1.4 percent lower than January 2022. On a skim-solids basis, January 2023 domestic use totaled 15.685 billion pounds, 1.6 percent lower than January 2022.

Although the domestic use for dairy products was lower in January 2023 year over year, restaurant sales activity has been strong, with expanded performance in January 2023. This may be indicative of potential improvements in food sector demand for some dairy products during 2023, as projected in the forecast section. According to the National Restaurant Association, the Restaurant Performance Index (RPI) registered an increase in January 2023. The RPI, which is a monthly composite index that tracks the health of the U.S. restaurant industry, stood at 102.8 in January 2023, up 0.9 percent from December 2022, the strongest monthly increase in the past 15 months. According to the National Restaurant Association, restaurant operators are increasingly optimistic about sales growth in the months ahead as 58 percent of operators expect their sales volume in the next 6 months to be higher than it was during the same period in 2022. The expected expansion in restaurant performance in the next 6 months of 2023 may help reduce the expected large supplies of cheese.

The restaurant performance index

Values greater than 100 = expansion; values less than 100 = contraction



Source: National Restaurant Association.

Dairy Forecasts for 2023

Milk production for 2023 is projected at 228.5 billion pounds, 0.20 billion pounds higher than last month's forecast. Milk cows are projected to average 9.390 million head in 2023, 10,000 head higher than last month's forecast. However, cow numbers are expected to decline through the year as lower numbers of replacement heifers and higher expected cull-cow prices will likely contribute on the decline of the dairy herd. The milk-per-cow projection is unchanged from last month at an average 24,345 pounds per head.

Dairy export projections for 2023 are adjusted lower. The forecast for 2023 dairy exports on a milk-fat basis has been adjusted to 13.0 billion pounds, 0.10 billion pounds lower than last month's forecast. On a skim-solids basis, the 2023 dairy export forecast has been adjusted to 51.9 billion pounds, 0.30 billion pounds lower than last month's projection.

Dairy import projections for 2023 are adjusted higher. On a milk-fat basis, dairy import projections for 2023 have been increased to 7.40 billion pounds (+0.10 billion pounds). On a skim-solids basis dairy imports have been increased to 6.50 billion pounds (+0.10 billion pounds).

The domestic use forecasts for have been raised for 2023. The projections for 2023 domestic use are raised from the previous month's forecast, to 221.6 billion pounds (+0.4 billion pounds) on a milk-fat basis and 180.5 billion pounds (+0.4 billion pounds) on a skim-solids basis.

For 2023, the price forecast for Cheddar cheese has been adjusted 5.0 cents lower from last month's projection to \$1.810 per pound, as supplies are expected be relatively large compared to demand. The wholesale prices of dry whey, butter, and NDM were adjusted higher from last month's forecast at \$0.390 (+2.5 cents), \$2.335 (+0.50 cents), and \$1.230 (+0.50 cents) per pound, respectively. With a lower average price expected for cheese, the Class III milk price forecast for 2023 has been lowered to \$17.56 per cwt, \$0.32 lower than last month's forecast. With higher projected prices for butter and NDM, the Class IV price forecast has been raised to \$18.30 per cwt, up \$0.05 from the previous month's projection. The all-milk price forecast for 2023 has been lowered to \$20.45 per cwt, \$0.25 lower than last month's forecast.

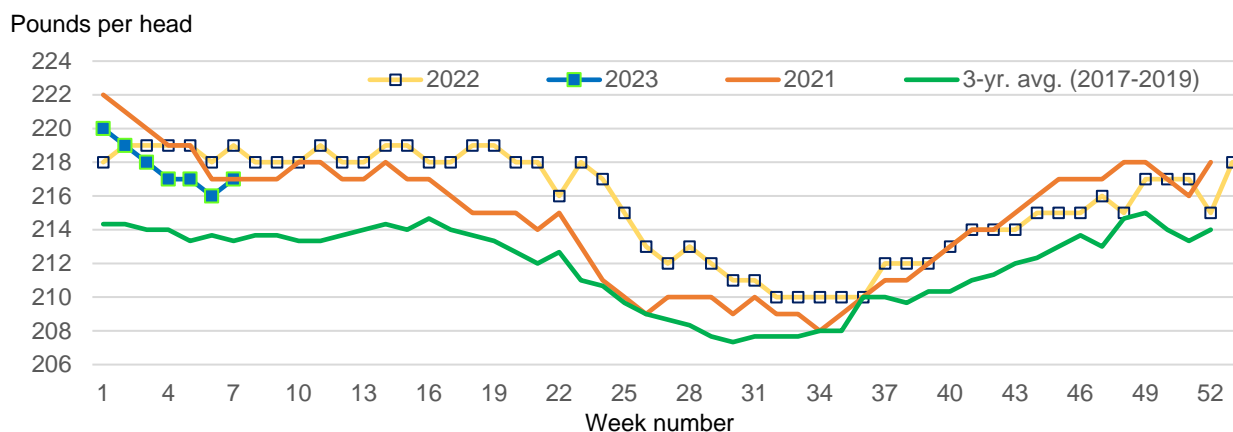
Pork/Hogs

Mildred Haley

The U.S. pork processing industry slaughtered fractionally more hogs in February this year than in February 2022 but ended up producing fractionally less pork. Federally inspected (FI) hog slaughter for the month is estimated at slightly more than 9.9 million head, 0.4 percent higher than numbers a year ago.⁶ Estimated FI pork production for February was about 2.16 billion pounds, down 0.2 percent from a year earlier. The variable that made the difference in February was dressed weights. At an estimated average of about 216.75 pounds per head, February weights were almost 1.4 pounds lighter than a year ago. While average dressed weights began 2023 at above year-earlier weights, they have trended lower since. Among the most important variables driving producers to market animals earlier are feed costs, disease losses, and uncertainty about the continued strength of consumer pork demand.

The figure below shows 4 series of weekly dressed hog weights: a 3-year pre-covid period, 2017–2019 (averaged), 2021, 2022, and the first 7 weeks of 2023.⁷

Weekly average dressed weights: (2017–2019) average, 2021, 2022, 2023 (weeks 1–7)



Source: USDA, National Agricultural Statistics Service and Agricultural Marketing Service.

In the pre-covid 2017–2019 period, feed costs—which typically account for more than half of hog production costs and whose principal components are corn and high-protein soybean meal—were relatively moderate, with (farm) corn prices averaging \$3.53 per bushel, and (decatur) high protein soybean meal averaging \$322.33 per ton. Hog dressed weights for the 2017–2019 period averaged 212 pounds per head. In 2021, as the U.S. economy re-opened after covid-related shutdowns, demand for pork increased significantly. Factors such as continuing Government income transfers, and enhanced consumer awareness of how to prepare and incorporate pork into at-home meals—learned during lockdown periods—contributed to increased pork demand beyond 2020. Hog prices in 2021 increased dramatically, reflecting recovery of the processing sector as well as lower production and increased consumer demand for pork. Dressed weights responded to increased higher hog prices in 2021, averaging almost 214.7 pounds, despite higher feed costs. Corn prices averaged \$5.40 per

⁶ There were 20 slaughter weekdays in both February 2022 and February 2023.

⁷ The dressed weight series for 2020 is excluded due to distortions introduced by covid-induced processing industry interruptions and shutdowns.

bushel in calendar year 2021—more than 53 percent higher compared with the 2017–2019 pre-covid period. Soybean meal prices increased about 20 percent in 2021, to \$387 per ton. Last year was something of a repeat of 2021: in 2022 lower production combined with strong consumer demand to drive hog prices to year-over-year higher levels, largely compensating producers for increased costs of adding weight to hogs. Corn prices in 2022 averaged \$6.76 per bushel, more than 25 percent higher than prices a year earlier. High protein soybean meal prices averaged \$464 per ton, almost 20 percent higher than a year earlier. It is notable, however, that 2022 average dressed weights dropped below year-earlier levels toward the end of the year. Factors such as inflation, high interest rates, general economic uncertainty, and negative producer returns in November and December⁸ may have had a cumulative effect on producers, inducing them to market hogs as fast as possible. December 2022 FI hog weights—217 pounds per head—averaged about 1 pound less than those of a year earlier, while fourth-quarter 2022 FI dressed weights dropped to 215.7 pounds, down about 0.2 percent from 216 pounds per head a year earlier. For the year, dressed weights in 2022 averaged 215.6 pounds per head compared with 214.7 in 2021.

A further contributor to recent lower dressed weights may also have been the prevalence of disease in several major pork producing States.⁹ In particular, a new strain of porcine reproductive and respiratory syndrome (PRRS) became more widespread in 2022. The new strain—1-2-4—has been detected in six Midwestern pork producing States.¹⁰ The Swine Health Information Center notes that there is no treatment for PRRS, that biosecurity remains the only known means to prevent entry of the virus into a swine herd, and that “...PRRS is economically devastating for swine producers...and new PRRSV¹¹ variants—causing high morbidity and mortality continue to emerge...”.¹² Although the outbreaks of the disease tend to be more frequent in the winter, it is present year around. Moreover, PRRS affects swine of all ages: sows and piglets, as well animals weighing over 40 pounds, i.e., finishing animals. It is possible that a contributing factor to continuing lower-trending dressed weights that became more evident last year was producers who—under contract to deliver hogs to processors—were forced to pull forward and deliver lighter-weight hogs after having lost heavier finishing animals to PRRS.

Subdued consumer demand for pork thus far in 2023 due to inflationary pressure is likely an additional disincentive for producers to add weight to hogs. Figures below show that the Food CPI for all urban consumers increased more than 10 percent—from 289.8 in January 2022 to 319.136 one year later. The ERS pork retail composite has stabilized in 2023 at about \$4.80. The series increased significantly in 2021 on reduced pork production and increased consumer demand. With increased food inflation consumers are reallocating food budgets, sometimes to the detriment of more expensive animal proteins. Lower retail pork demand translates into lower wholesale pork carcass values. In early 2023 the value of the wholesale pork carcass declined year over year in both January and February. In January the cutout was \$81.03 per cwt, 10.5 percent below a year earlier. In February the wholesale value of the pork carcass ticked up to \$82.28 per cwt, but that value was more than 22 percent lower than in February 2022. Lower wholesale pork carcass values, coupled with lower hog prices, signal to producers that the market is not willing to compensate the producer for the cost of adding as much weight to hogs as in the recent past.

⁸ Iowa State University, Estimated Livestock Returns.

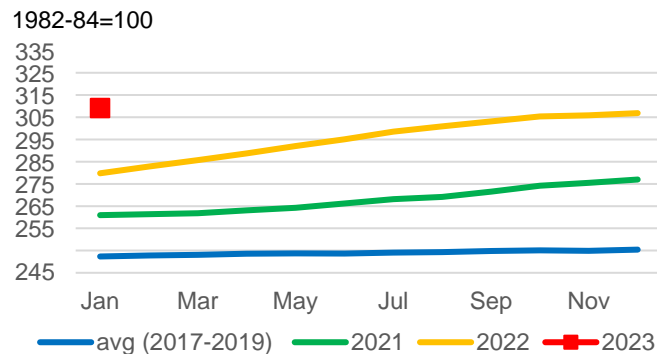
⁹ Swine Health Information Center. SHIC Domestic Disease Monitoring Reports, monthly.

¹⁰ Swine Health Information Center. “SHIC Reports New PRRS Strain Has Spread to Six U.S. States,” January 16, 2023.

¹¹ PRRSV=porcine reproductive and respiratory syndrome virus.

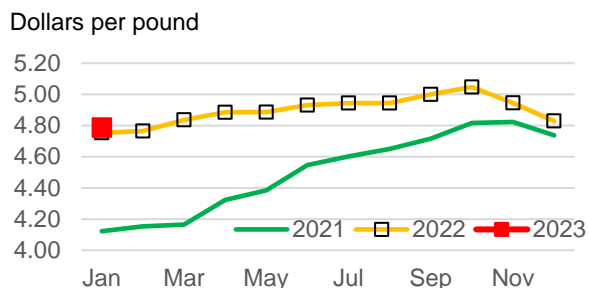
¹² Swine Health Information Center. Fact Sheet: “PRRS-Highly Pathogenic.”

Food CPI* for all urban consumers



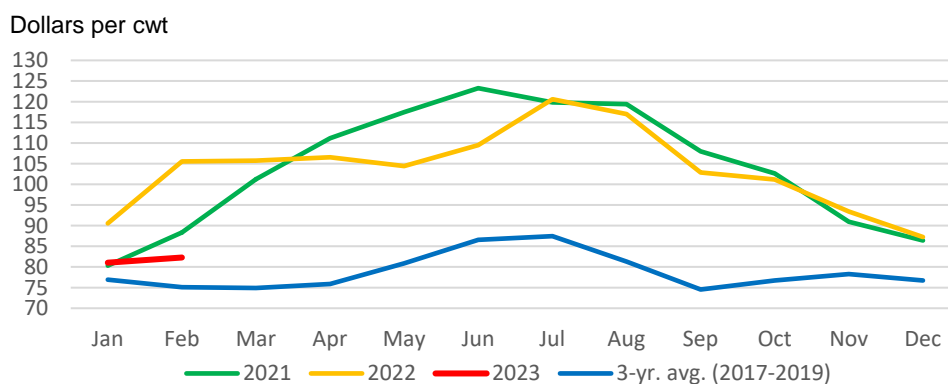
Source: Bureau of Labor Statistics.
*Consumer Price Index

ERS pork retail composite prices



Source: USDA, Economic Research Service.

Wholesale pork carcass cutout



Source: USDA, Agricultural Marketing Service.

First-Quarter Production Trimmed on Lower Estimated Average Dressed Weights

First-quarter pork production is reduced by about 10 million pounds, as higher-than-expected slaughter numbers in February were more than offset by lower-than-expected dressed weights, which are likely to persist at least through mid-year. Although projected pork production in the first quarter has been reduced, it is 1.4 percent higher than a year ago at 7 billion pounds. Production for 2023 is expected to total 27.4 billion pounds, about 1.5 percent higher than production last year. Prices of live equivalent 51-52 percent lean hogs are expected to average \$56 per cwt in the first quarter, almost 15 percent lower than prices over the same period last year.

The U.S. Department of Agriculture will release the *Quarterly Hogs and Pigs* report on March 30. The report will contain March 1 inventory data and weight category numbers, as well as farrowing, pig crop, and litter rate information for pigs born in the December–February quarter. Producer farrowing intentions for the March–May and the June–August quarters will also be reported.

January Exports Begin 2023 on a Positive Note

Pork exports in January totaled 556 million pounds, almost 9 percent above shipments a year ago. Shipments to Mexico accounted for a 41-percent share of January exports and were likely helped along by the peso's 7.5-percent appreciation against the U.S. dollar compared to the year-earlier peso-dollar rate. The 10 largest foreign destinations in January (listed below) accounted for 95 percent of the month's exports, and it is notable that most large buyers of U.S. pork have formal trade agreements negotiated with the United States Government.¹³

U.S. pork exports: Volumes and export shares of the 10 largest foreign destinations in January 2022 and 2023					
Country	Exports Jan. 2022 (Million pounds)	Exports Jan. 2023 (Million pounds)	Percent change (2023/2022)	Export share Jan. 2022 Percent	Export share Jan. 2023 Percent
World	510	556	8.9		
Mexico	218	229	4.7	43	41
Japan	80	87	9.8	16	16
China\Hong Kong	44	59	34.9	9	11
Canada	38	47	21.1	8	8
South Korea	49	42	-13.7	10	8
Dominican Republic	18	23	24.5	4	4
Colombia	17	19	11.6	3	4
Honduras	9	13	40.1	2	2
Guatemala	5	6	16.1	1	1
Australia	6	6	-7.3	1	1

Source: USDA, Economic Research Service.

For the first quarter of 2023, the export forecast of about 1.6 billion pounds is unchanged, as is the forecast for total exports for the year of about 6.4 billion pounds.

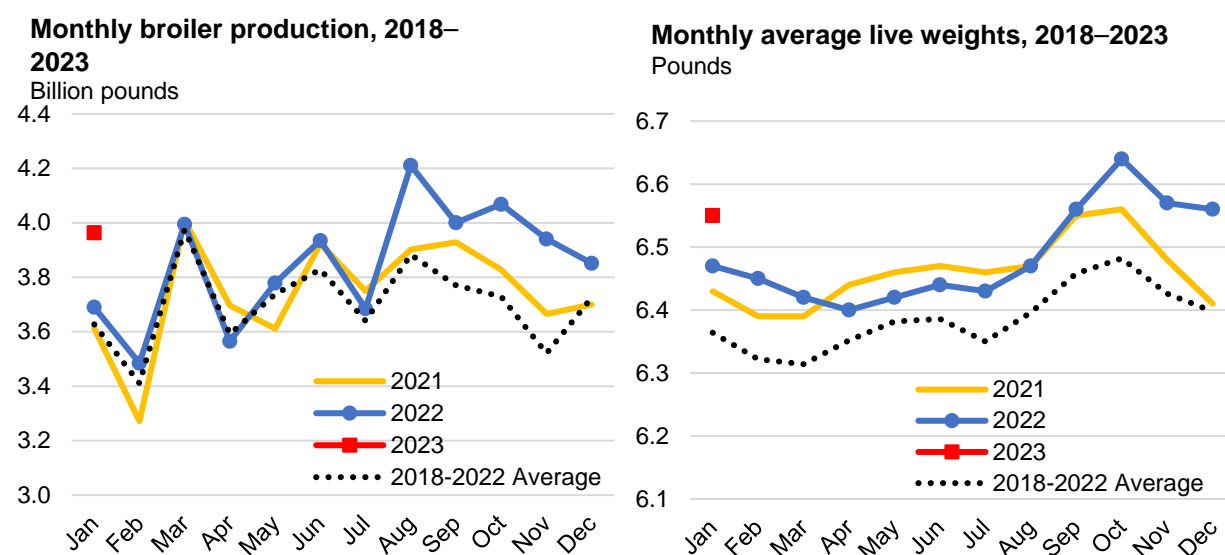
¹³ The U.S.-Mexico-Canada Agreement (USMCA) (2020), The U.S.-Japan Trade Agreement (2020), The Central American-Dominican Republic Free Trade Agreement (2006–09), The U.S.-Korea Free Trade Agreement (renegotiated in 2018), and The U.S.-Columbia Trade Promotion Agreement (2012). With respect to Australia, the U.S. Meat Export Federation's website notes, "...Access for U.S. pork entering Australia is currently limited to processed products and fresh/frozen pork shipped directly to an approved cooking facility for further processing."

Poultry

Grace Grossen and Adriana Valcu-Lisman

Broiler Production Forecast Adjusted Up in 2023

January 2023 broiler production totaled 3.963 billion pounds, an increase of 7.4 percent over January 2022. This is a result of both higher slaughter (6.1 percent over January 2022) and an average weight of 6.55 pounds, the highest ever for January. A revision to December data brought the 2022 total up by 5 million pounds to 46.206 billion pounds. The first-quarter broiler production projection was adjusted up to 11.4 billion pounds on the strength of January production. This would be 2 percent higher than the first quarter of 2022. The annual production forecast for 2023 is 46.750 billion pounds, an increase of 1.2 percent over the 2022 total.

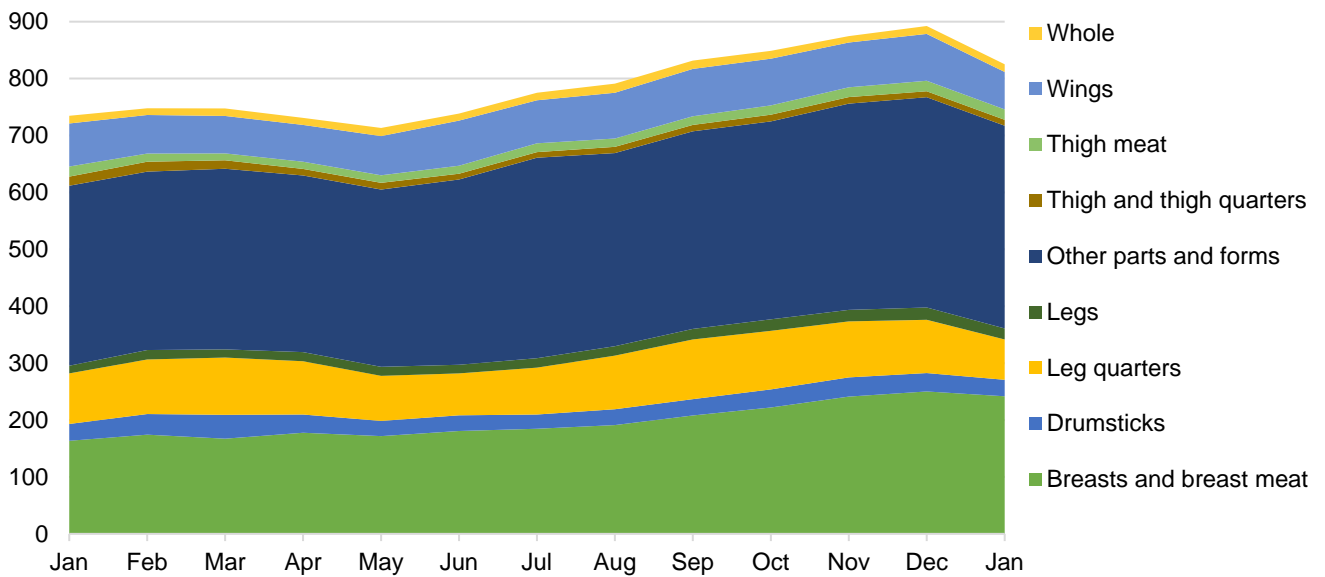


Source: USDA, National Agricultural Statistics Service.

Broiler meat in cold storage fell seasonally from the end of December to the end of January, but it was still 12.3 percent higher than last January's levels. The category of "other parts and forms" still makes up the largest portion of the broiler meat in cold storage. Leg quarters in cold storage had the largest absolute decrease, falling 17.8 million pounds from last January. Breasts and breast meat increased the most from last January, adding 78.1 million pounds. Based on the overall strength in stocks, the 2023 ending stocks projection was adjusted up to 860 million pounds.

Broiler meat in cold storage at the end of the month by parts, January 2022–January 2023

Million pounds



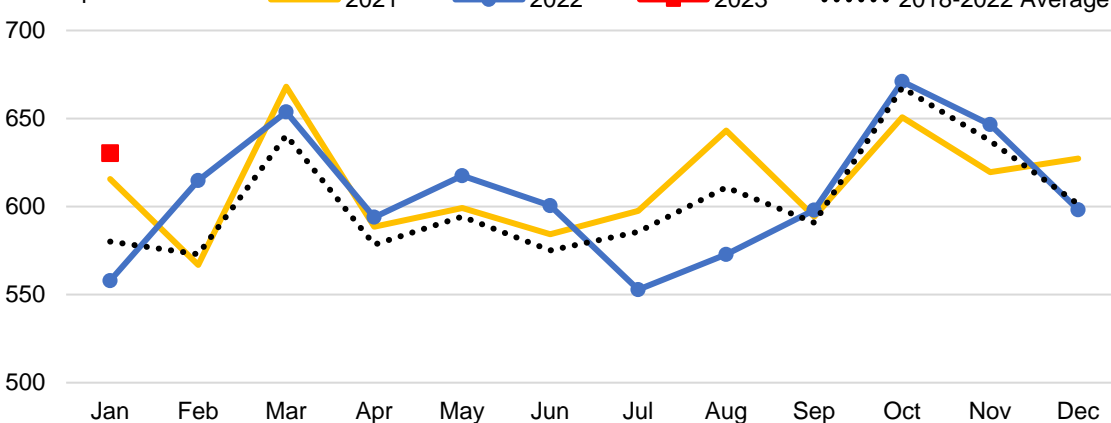
Source: USDA, National Agricultural Statistics Service.

Projected Imports and Exports of Broiler Meat Unchanged for 2023

Broiler exports in January totaled 630.3 million pounds. This is an increase of 13 percent over last January. Of that total, 22 percent was shipped to Mexico. Shipments to Cuba accounted for 10 percent, to Taiwan for 6 percent, to China for 5 percent, and the Philippines accounted for 3 percent. Forecast 2023 broiler exports are unchanged at 7.315 billion pounds. January's shipments represent 8.6 percent of the projected annual total. Broiler imports totaled 11.7 million pounds in January. This is 17.7 percent less than last January, due primarily to lower shipments from Chile. Projected 2023 imports are unchanged at 160 million pounds, which would be a decrease of 16 million pounds from last year. January's imports represent 7.3 percent of projected annual imports.

Monthly broiler meat exports, 2018–2023

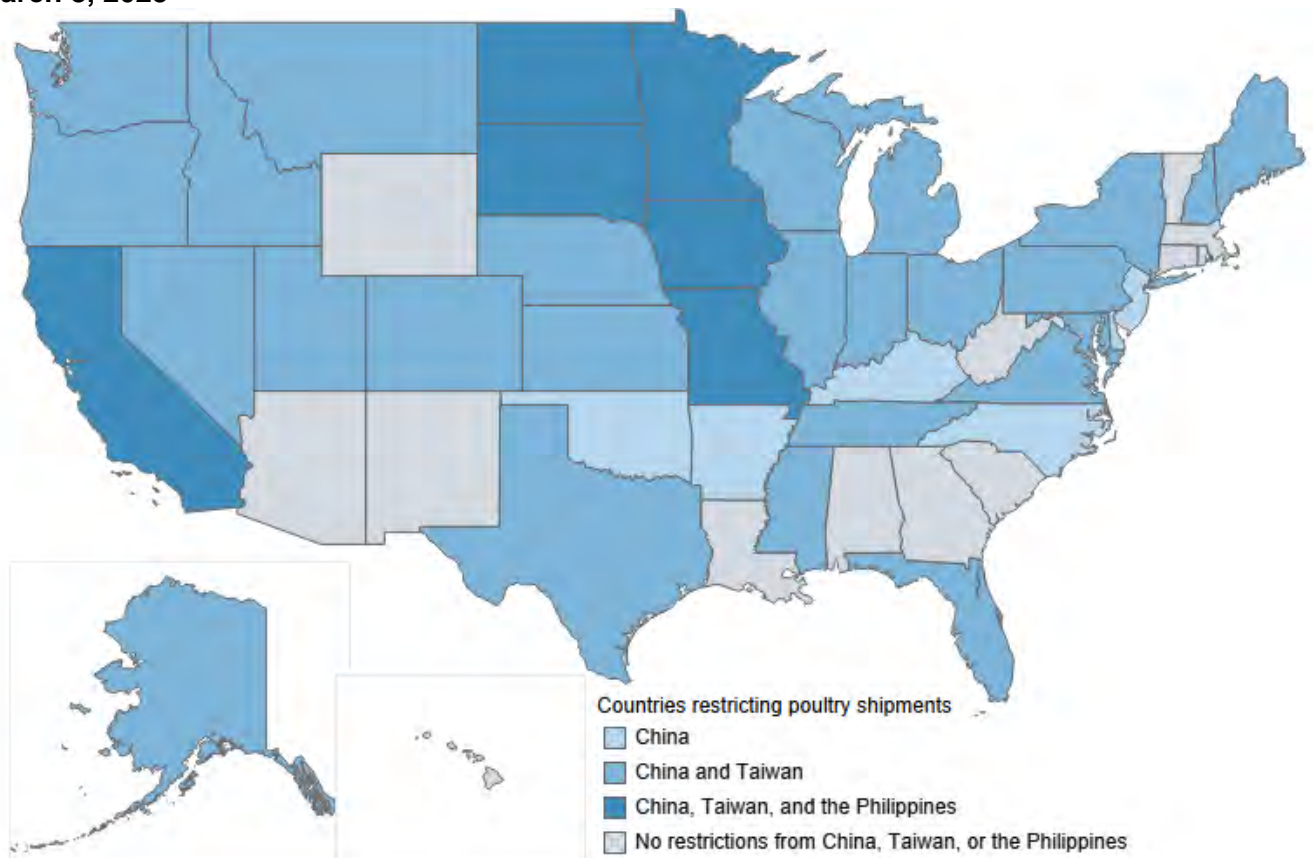
Million pounds



Source: USDA, Economic Research Service using data from the U.S. Department of Commerce, Bureau of the Census.

Broiler exports from some regions of the country are still impacted by restrictions on shipments to certain partner countries. The maps below illustrate information from the USDA Food Safety and Inspection Service (FSIS) Import Export Library. They show the geographic distribution of highly pathogenic avian influenza (HPAI)-related restrictions on shipments of poultry products to China, Taiwan, the Philippines, Mexico, and Cuba. These maps show only restrictions on poultry production as of March 8th. Many importing partners still restrict poultry produced during prior periods, some of which may still be in cold storage. China, Taiwan, and the Philippines have restricted shipments on a State-level basis. China's current restrictions were last updated on January 23rd, and the Philippines' current restrictions were published on November 29th. Taiwan's restrictions were updated in the FSIS Import Export Library on March 7th, closing the restricted production windows for Arkansas, Delaware, Kentucky, and New Jersey on the 7th. The most recent commercial outbreaks of HPAI in Arkansas and Kentucky were in October. Delaware and New Jersey's most recent outbreaks were in noncommercial birds in September and November, respectively.

State-level restrictions on poultry shipments to China, Taiwan, and the Philippines as of March 8, 2023

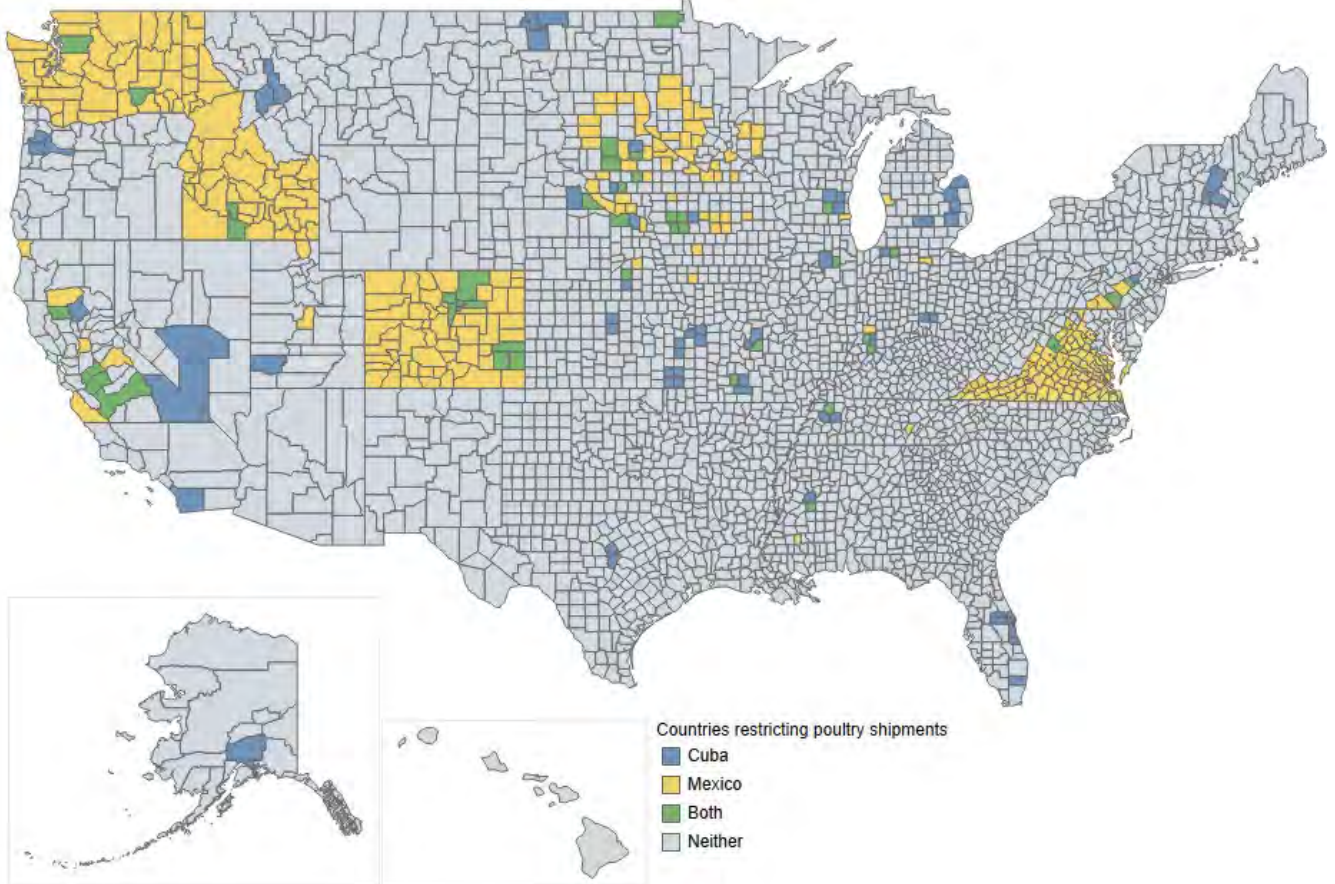


Source: USDA Food Safety and Inspection Service Import Export Library.

Mexico has restrictions on poultry shipments on the State and county level. As of March 8th, imports from the entire States of Virginia, Colorado, Idaho, and Washington remain restricted by Mexico and have not been narrowed down to counties. Colorado reported a case in commercial egg-layers in December, and in multiple noncommercial flocks since then. Washington and Idaho's most recent outbreaks were in noncommercial birds in February and March, respectively. Virginia's most recent case of HPAI was in late February. Cuba's restrictions are also on a county level and often overlap with Mexico's restrictions (the green counties on the

map below). Mexico's restrictions were last updated on March 1st, and Cuba's restrictions were last updated February 17th.

County-level restrictions on poultry shipments to Mexico and Cuba as of March 8, 2023

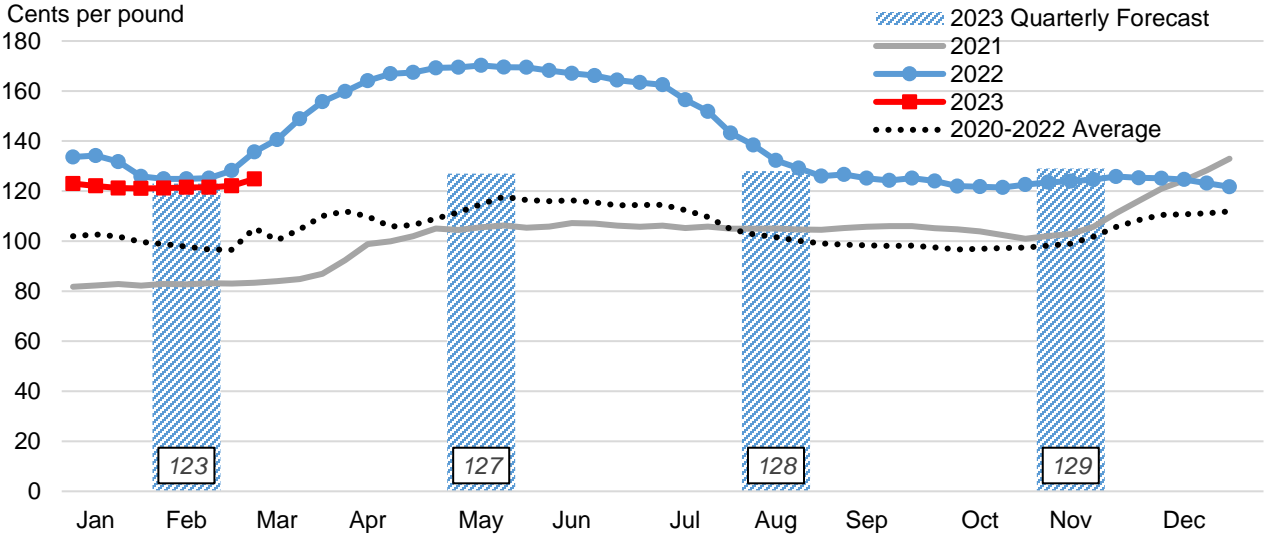


Source: USDA Food Safety and Inspection Service Import Export Library.

Broiler Prices Adjusted Up Slightly in 2023

The national composite wholesale broiler price averaged 121.68 cents per pound in February, nearly level with January's price. The average price in the week ending March 3rd was 124.85 cents per pound. Based on this information, the projected average price for the first quarter was adjusted up to 123 cents per pound. The outlying quarters are unchanged at 127 cents per pound in the second quarter, 128 cents in the third, and 129 cents in the fourth quarter, yielding an annual average price of 127 cents per pound.

Weekly national composite broiler prices and quarterly price forecasts

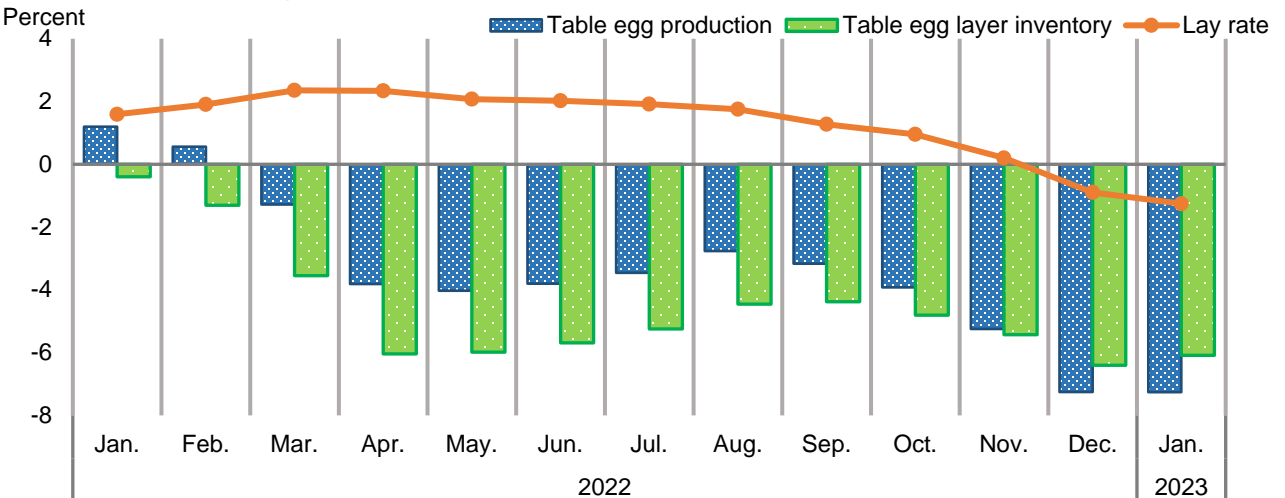


Source: USDA, Agricultural Marketing Service and USDA, *World Agricultural Supply and Demand Estimates*.

2023 Table-egg Production Revised Down

The *Chickens and Eggs Annual Summary* report released by USDA, NASS in February brought several upward revisions to the total egg production and the chicken inventory for December 2020–November 2022. According to these changes, 2022 total table egg production was estimated at 7,781.0 million dozen eggs—3.1-percent year-over-year lower, and hatching egg production was estimated at 1,293.8 million dozen eggs—2.0-percent year-over-year higher. Following the loss of more than 43 million layers to HPAI during 2022, the monthly average size of the table-egg laying flock was 310.9 million—about 4.5-percent year-over-year lower.

Year-over-year percent change in monthly table egg production, average table egg layer inventory, and average lay rate 2022–January 2023



Source: USDA, Economic Resource Service using data from USDA, National Agricultural Statistics Service.

January table-egg production was estimated at 646.9 million dozen eggs, a 7.3-percent year-over-year decrease. The year-over-year change was due to a 6.1-percent decrease in the average size of the laying flock and a 1.26-percent decrease in the layer flock productivity as

measured by the rate of lay. February 1 table-egg inventory was estimated at 309.4 million layers, slightly above the January 1 estimate but 5-percent lower than last year. The lay rate at the beginning of February was below year-ago levels, marking the third consecutive month of year-over-year decline.

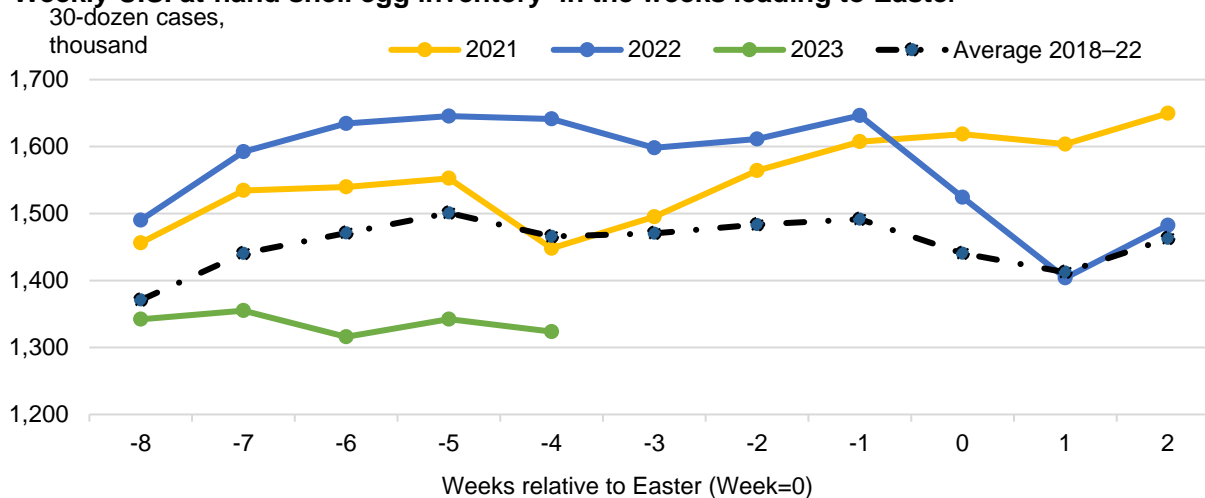
The January table-egg layer inventory fractionally contracted relative to December. While this contraction could be due to seasonal factors, February 1 production indicators (table-egg layer inventory and lay rate) and other upstream production indicators (eggs in incubators and egg-type chicks hatched) suggest a slower-than-expected growth of the egg-layer flock. As a reference, during and after the 2014–2015 HPAI outbreak, the average size of the egg-layer flock was year-over-year lower for 12 consecutive months, before showing signs of recovery to the pre-outbreak levels.

The 2023 table-egg production forecasts for the first two quarters are revised down to 1,900 and 1,980 million dozen, respectively. Consequently, 2023 total table egg production is forecast at 8,035 million dozen, 3.3-percent down from year ago.

Pre-Easter Wholesale Egg Prices Increasing at Steady Rate

February wholesale shell-egg prices (New York, Grade A Large) averaged almost 250 cents per dozen, a 44.0-percent year-over-year increase. Early February prices continued the decline that began at the end of December. They reached and maintained a low of 229 cents per dozen for several days—February 9 to February 14. Since then, daily prices gradually have been increasing in the anticipation of Easter demand. Lower-than-average shell-egg inventories ahead of the holiday will likely put additional pressure on wholesale prices in the upcoming weeks.

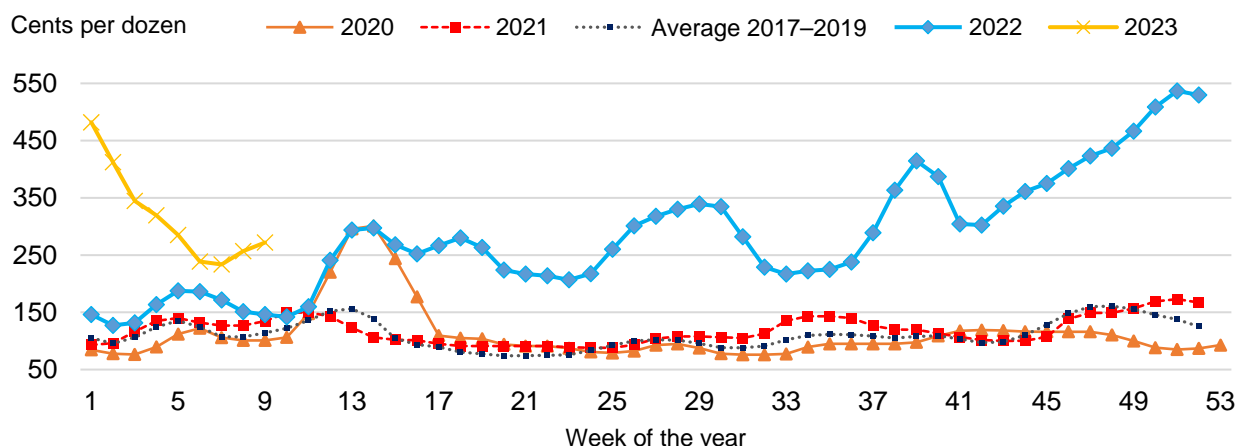
Weekly U.S. at-hand shell egg inventory in the weeks leading to Easter



Source: USDA, Economic Research Service using data from USDA, Agricultural Marketing Service.

Reflecting the steady growth in February and early March prices and lower production projections, the first-quarter price forecast is increased to 308 cents per dozen, while the second-quarter forecast is increased to 200 cents per dozen. These changes bring the wholesale egg price forecast for 2023 to 212.0 cents per dozen, which is still a 24.9-percent year-over-year decrease from 2022.

Weekly average midpoint prices for New York eggs (wholesale, large grade A)



Source: USDA, Economic Research Service using data from USDA, Agricultural Marketing Service.

Egg Exports Continue To Decline

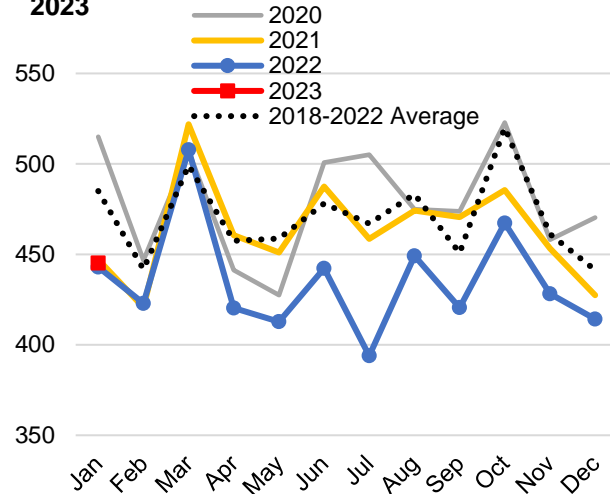
Driven by reduced domestic egg supplies and firm wholesale egg prices, the monthly exports continue to trend year-over-year lower. January exports of eggs and egg products totaled 15.6 million dozen shell-egg equivalent, a 28.6-percent year-over-year decrease. Shipments of both shell eggs (-8.1 percent) and egg products (-54.2 percent) fell below year-earlier levels. The destinations of most shipments (87 percent) were Canada (38.8 percent), Mexico (26.3 percent), the Caribbean (Jamaica, Bahamas, Trinidad and Tobago) (11.5 percent), and Japan (10.6 percent). Canada and Bahamas were the only major markets with shipments year-over-year higher. No changes are made to the current egg import forecast for 2023.

January 2023 egg imports were estimated at 2.2 million dozen shell-egg equivalent, 70.8 percent higher than last year. Shell-egg imports totaled 1.1 million dozen, with the remainder of the imports being egg products. The first five major partners—supplying more than 90 percent of U.S. egg imports—were Canada (26.4 percent), Turkey (33.5 percent), China (15.4 percent), Thailand (9.9 percent), and Brazil (5.9 percent). At 26.0 million dozen, the total egg import forecast for 2023 is unchanged from the last report.

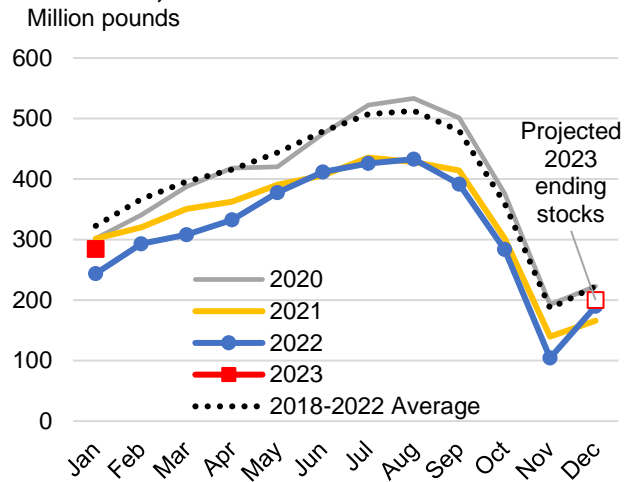
Turkey Production Projection Increased in Q1 2023

January turkey production totaled 445.2 million pounds, just slightly higher than last January. January 2023 had 2 percent more turkeys slaughtered, with an average weight of 32.71 pounds, 1.4 percent lower than last January. Projected first-quarter production is adjusted up by 25 million pounds to 1.360 billion pounds. This is still 1 percent lower than the first quarter of 2022. The remaining quarters' production forecasts are unchanged, making the annual total 5.585 billion pounds. Turkey meat in cold storage totaled 284.5 million pounds at the end of January. This is 11.8 percent below the 5-year average but is an increase of 16.7 percent from the same time last year. Based on this strength and a higher first-quarter production forecast, the forecast for 2023 ending stocks is adjusted up to 200 million pounds.

Monthly turkey meat production, 2018-2023



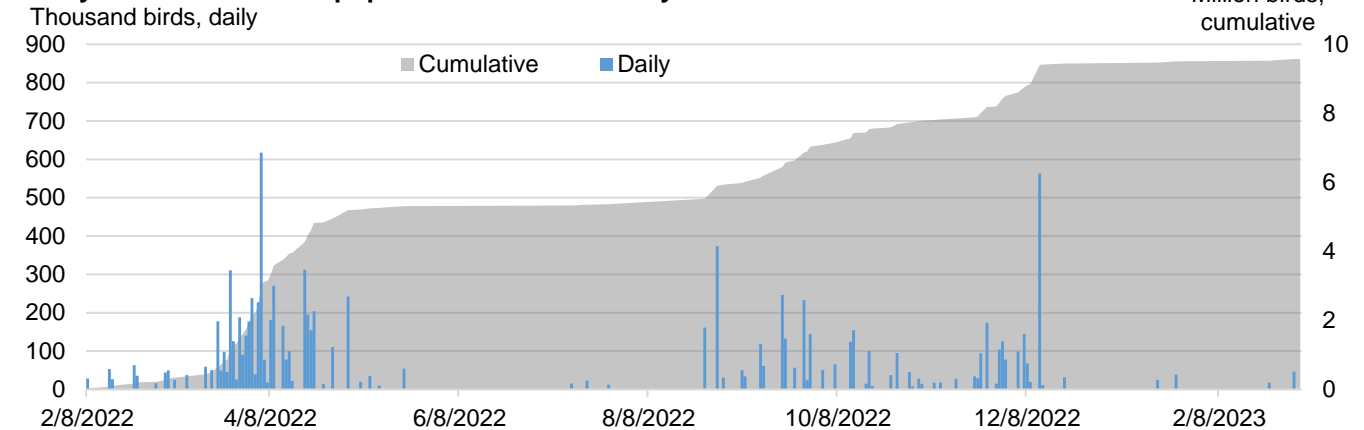
Turkey meat in cold storage at the end of the month, 2018-2023



Source: USDA, National Agricultural Statistics Service.

HPAI cases in commercial meat turkeys have slowed in recent months but have not stopped. The most recent cases were in Lancaster, Pennsylvania, and were reported on March 4th.

Daily and cumulative depopulations of meat turkeys due to HPAI

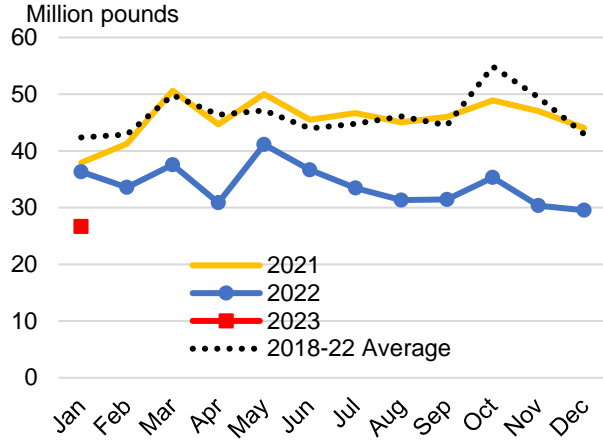


Source: USDA, Economic Research Service using data from USDA, Animal and Plant Health Inspection Service.

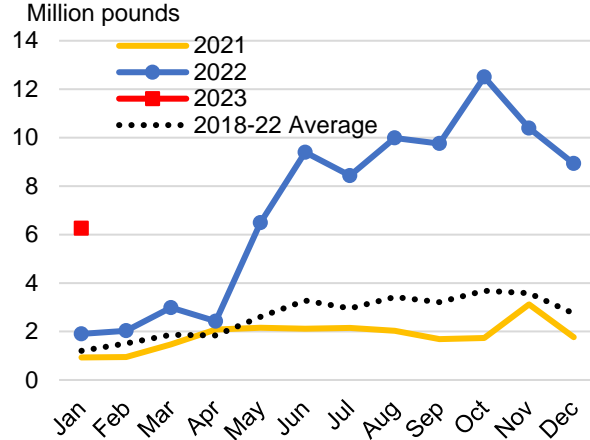
Turkey Export Projection Adjusted Down in 2023

Turkey exports totaled 26.7 million pounds in January, a decrease of 27 percent from last January. This is primarily due to lower shipments to Mexico, but shipments to other places, including China, Panama, and the Dominican Republic, also declined from last January. Projected 2023 exports were adjusted down to 360 million pounds. January shipments represent 7.6 percent of that total. Turkey imports totaled 6.3 million pounds in January. This is down 2.7 million pounds from December, but still over double last January. Total projected imports for 2023 are unchanged at 120 million pounds.

Monthly turkey meat exports, 2018–2023



Monthly turkey meat imports, 2018–2023

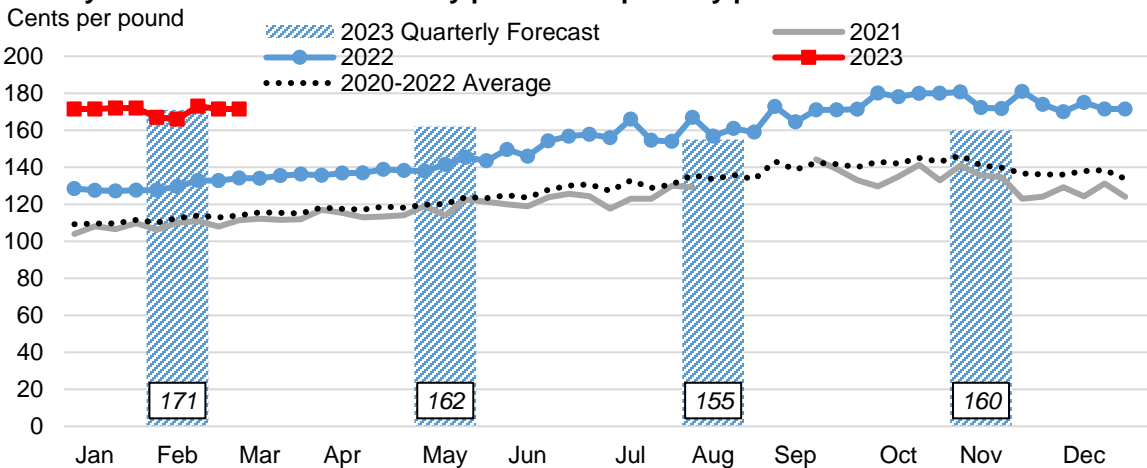


Source: USDA, Economic Research Service using data from the U.S. Department of Commerce, Bureau of the Census.

Turkey Prices Adjusted Up in 2023

Wholesale prices for frozen whole hen turkeys have been relatively steady in the first 2 months of the year, averaging 172 cents per pound in January and 168.92 cents per pound in February. Prices averaged 171.5 cents per pound in the week ending March 3rd. Quarterly forecast prices for 2023 are unchanged from last month.

Weekly wholesale frozen hen turkey prices and quarterly price forecasts



Source: USDA, Agricultural Marketing Service and USDA, *World Agricultural Supply and Demand Estimates*.

Special Article

Amber K. Oerly¹⁴ and LaPorchia A. Collins

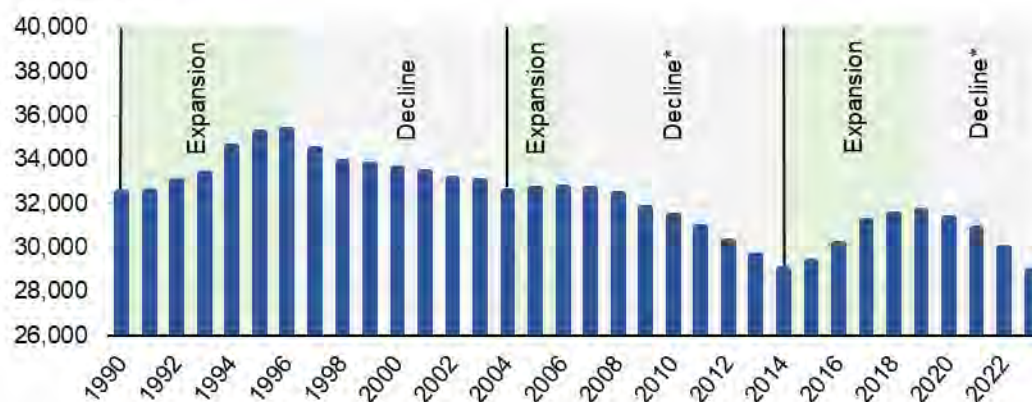
Drought Conditions Have Contributed to Lower U.S. Beef Cow Inventory

Changes in beef cow inventory are related to the current and future phases of the cattle cycle—the cyclical expansion (increase) and contraction (decrease) of the national beef cattle herd over time, which tends to span between 8 and 12 years.¹⁵ The cyclical pattern of inventory is due to the biological nature of beef cattle production and cattle producers' responses to changes in prices and climate conditions. The current cattle cycle began in 2014, and the beef cow herd is now in a contraction phase—a period of declining inventory.

According to the USDA, National Agricultural Statistics Service (NASS), the U.S. cow herd began to contract during 2019. The inventory of all cattle and calves on January 1, 2023, was 89.3 million head, 3.0 percent less than that on January 1, 2022 (92.1 million head). Similarly, on January 1, 2023, beef cow inventory was 28.9 million head, down 3.6 percent from the previous year—8.7 percent less than this cycle's peak of 31.7 million head in 2019. Since 2020, the year-over-year rate of inventory decline for beef cows has increased. In addition, beef cow inventory has peaked progressively lower since the 1990–2004 cattle cycle, consistent with the generally declining trend in cattle inventories observed since 1975.

U.S. beef cow inventory and cattle cycle phases from 1990 to 2023

Thousand head



Notes: Data reflect inventory on January 1 of each year. Black vertical lines show the start of a new cattle cycle. The current cattle cycle began in 2014. The last 2 cattle cycles occurred in 1990-2004 and 2004-14. *Drought conditions contributed to inventory decline.
Source: USDA, National Agricultural Statistics Service.

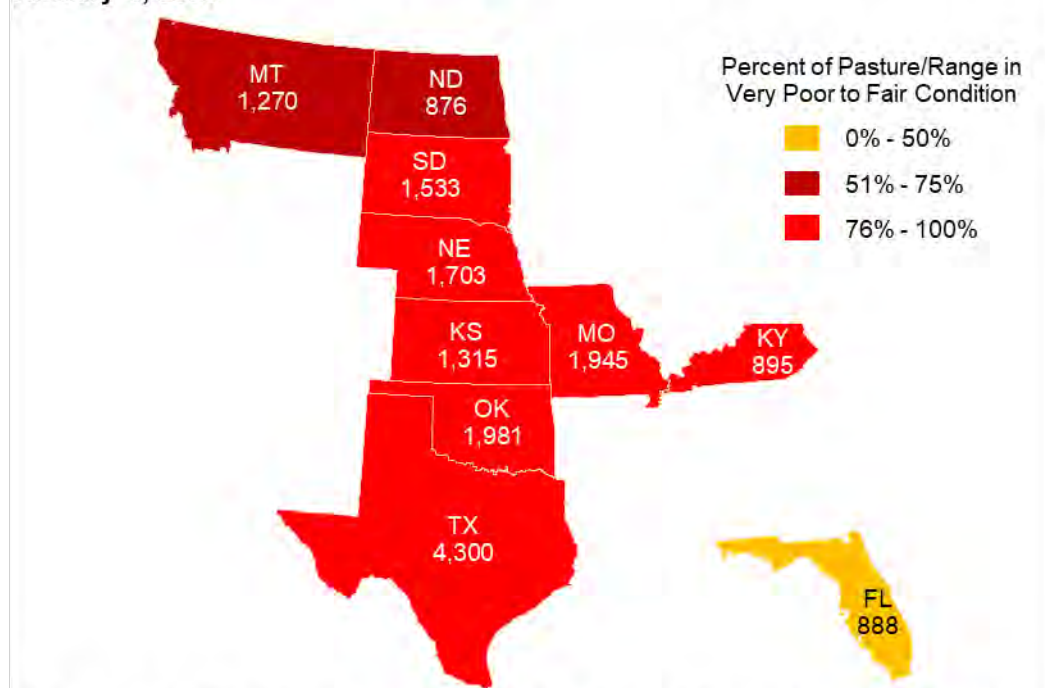
¹⁴ Amber Oerly contributed to this publication while a student at Kansas State University pursuing a Master of Science in Agricultural Economics. LaPorchia Collins served as a mentor to Ms. Oerly through the Farm Foundation Agricultural Scholars program. Dr. Collins is a Research Agricultural Economist with the USDA, Economic Research Service.

¹⁵ USDA, Economic Research Service. 2022. Sector at a Glance: U.S. Cattle Production – Cattle Cycle.

Drought is one factor contributing to recent declines in the beef cow inventory. While 2019 was the second-wettest year on record for the continental United States (CONUS) after 1973,¹⁶ dry conditions began to persist in 2020, mostly in the West and Plains farm production regions.¹⁷ Based on the U.S. Drought Monitor, 41.5 percent of CONUS was experiencing moderate to exceptional drought during the week of February 21, 2023, down from the same week in 2022 when 57.5 percent experienced drought. Yet, the 3-Month Drought Outlook released on February 16 suggests that drought is expected to remain or persist in 34.3 percent of CONUS, with drought development likely in 8.9 percent of CONUS.

Dry conditions impact forage availability for beef cattle that to a large extent rely on pasture and range as a food source. Pasture and range conditions are detailed in the NASS *Crop Progress* report and are classified as very poor, poor, fair, good, or excellent. Ratings from very poor to fair represent below-normal pasture conditions. At any given time during the growing season, pastures in very poor condition provide very little or no feed; those in poor condition provide only marginal feed; and those in fair condition provide generally adequate but less than normal feed.¹⁸

Pasture and range conditions in the top 10 States by beef cow inventory on January 1, 2023



Note: Numbers indicate beef cow inventory (in thousand head) for each State as of January 1, 2023, when total U.S. beef cow inventory was 28,918 thousand head. Pasture and range conditions are for the week ending October 30, 2022.

Source: USDA, National Agricultural Statistics Service.

Based on beef cow inventories at the start of 2023, 92.9 percent of U.S. beef cows were in States where most of the pasture and range were in very poor to fair condition the week ending October 30, 2022 (the last report of the 2022 season). Over half (57.8 percent) of U.S. beef

¹⁶ NOAA National Centers for Environmental Information. 2020. *Monthly National Climate Report for Annual 2019*.

¹⁷ NOAA National Centers for Environmental Information. 2021. *Monthly National Climate Report for Annual 2020*.

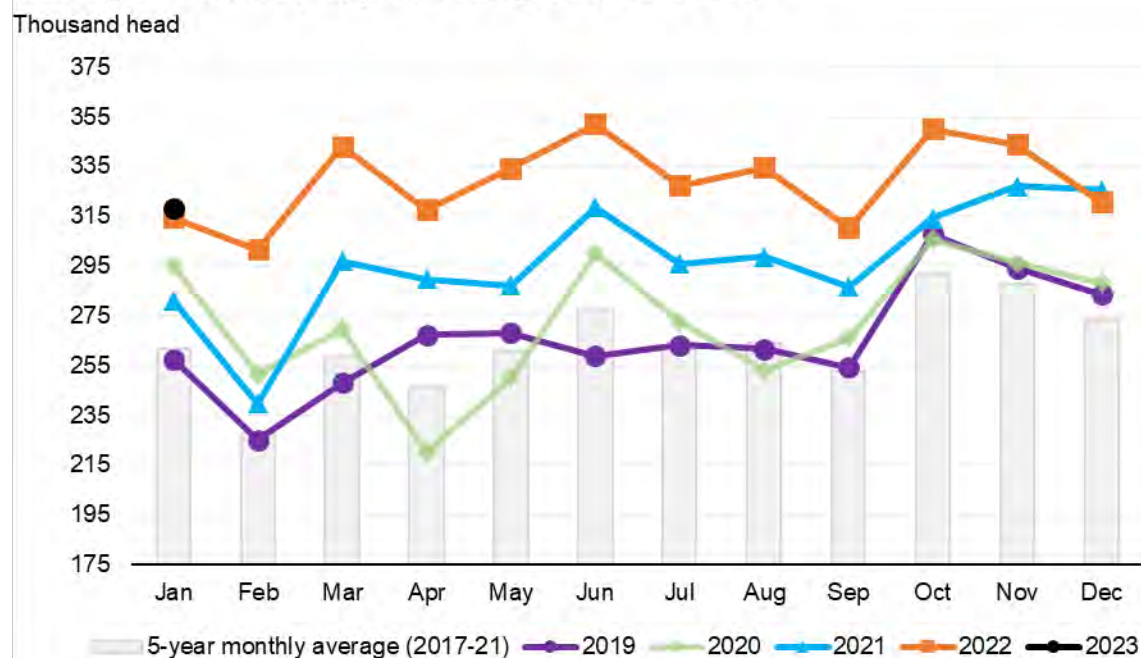
¹⁸ USDA, National Agricultural Statistics Service. 2016. *National Crop Progress/Crop Weather Terms and Definitions*.

cows were in the 10 States with the highest inventories—Texas, Oklahoma, Missouri, Nebraska, South Dakota, Kansas, Montana, Kentucky, Florida, and North Dakota. In each of these States, over 65 percent of the pasture and range land was in very poor to fair condition, except in Florida, where 47 percent was in below-normal condition. Between 2021 and 2022, pasture and range conditions worsened in all but 3 (Montana, North Dakota, and South Dakota) of the 10 States with the largest cattle inventories.

Cattle producers may respond to poor pasture conditions by providing supplemental feed to maintain animals. A cow’s nutritional requirements are greatest after calving, which traditionally occurs in the spring, followed by a summer breeding season. Prices reported by NASS of non-alfalfa (other) hay during the July–September and October–December quarters averaged at record levels. Prices of other hay in 2022 peaked in August at a record \$183 per ton compared to \$158 per ton in August 2021 and set record highs for each month through the beginning of 2023. For January 2023, the other hay price averaged \$175 per ton compared to \$153 in 2022. As the cost of retaining cattle increases, producers may remove cows from the herd. Thus, droughts in cattle-producing States can contribute to herd contraction.

Except in December 2022, when a winter storm may have impacted slaughter schedules, monthly beef cow slaughter has been higher year over year since March 2021. Per weekday beef cow slaughter in January 2023 was about 1 percent higher than in 2022 but about 24 percent higher than the 5-year average measured over 2017–21. In addition, monthly heifer slaughter was 4 percent higher in January 2023 relative to 2022, which suggests that some producers may have sold heifers originally intended as breeding stock.

Monthly, U.S. federally inspected slaughter of beef cows



Source: USDA, National Agricultural Statistics Service.

Overall, drought has contributed to reduced pasture and range conditions and increased beef cow slaughter. Any changes to the current drought conditions will likely impact inventory numbers in the coming year.

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U.S. red meat and poultry forecasts

	2020					2021					2022					2023					
	I	II	III	IV	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual	
Production, million pounds																					
Beef	6,931	6,059	7,115	7,069	27,174	6,900	6,963	6,979	7,106	27,948	7,022	7,069	7,147	7,053	28,290	6,845	6,635	6,645	6,540	26,665	
Pork	7,426	6,313	7,048	7,515	28,303	7,292	6,668	6,530	7,185	27,675	6,904	6,639	6,533	6,919	26,994	7,000	6,545	6,650	7,215	27,410	
Lamb and mutton	35	36	34	33	138	35	36	32	35	138	31	35	33	32	131	31	33	33	33	130	
Broilers	11,238	10,940	11,358	11,047	44,583	10,893	11,232	11,581	11,193	44,899	11,170	11,279	11,896	11,861	46,206	11,400	11,550	12,000	11,800	46,750	
Turkeys	1,469	1,369	1,454	1,451	5,743	1,390	1,399	1,403	1,366	5,558	1,374	1,275	1,264	1,310	5,222	1,360	1,380	1,420	1,425	5,585	
Total red meat and poultry	27,251	24,870	27,172	27,263	106,556	26,651	26,450	26,679	27,030	106,810	26,650	26,452	27,037	27,036	107,467	26,785	26,297	26,906	27,157	107,144	
Table eggs, million dozen	2,050	1,957	2,008	2,055	8,070	1,995	1,970	1,996	2,069	8,031	1,998	1,894	1,934	1,956	7,781	1,900	1,980	2,050	2,105	8,035	
Per capita disappearance, retail pounds 1/																					
Beef	14.6	13.5	15.5	14.5	58.1	14.5	14.9	14.6	14.8	58.9	15.0	14.7	14.8	14.6	59.1	14.9	14.2	14.0	13.6	56.7	
Pork	13.1	11.5	13.2	13.9	51.7	13.1	11.8	12.3	14.0	51.1	13.1	12.4	12.4	13.1	51.1	12.9	11.9	12.6	13.6	51.0	
Lamb and mutton	0.4	0.3	0.3	0.3	1.2	0.3	0.4	0.3	0.4	1.4	0.3	0.3	0.3	0.3	1.3	0.3	0.3	0.3	0.3	1.3	
Broilers	24.2	23.7	24.4	23.3	95.8	23.5	24.3	25.0	23.8	96.5	23.8	24.2	25.7	25.2	98.9	24.5	24.8	25.9	25.0	100.2	
Turkeys	3.6	3.5	3.9	4.7	15.7	3.4	3.6	3.8	4.5	15.3	3.4	3.2	3.6	4.3	14.6	3.5	3.7	4.0	4.6	15.9	
Total red meat and poultry	56.3	52.9	57.7	57.2	224.1	55.2	55.4	56.4	57.8	224.8	56.1	55.4	57.4	57.9	226.8	56.5	55.5	57.4	57.6	226.9	
Eggs, number	72.1	69.3	71.1	72.9	285.6	70.2	69.2	69.8	73.3	282.5	71.3	68.2	69.4	70.1	279.0	68.0	70.9	72.5	74.5	285.9	
Market prices																					
Steers 5-area Direct, Total all grades, dollars/cwt	118.32	105.79	101.74	108.18	108.51	112.98	120.75	123.51	132.36	122.40	139.25	141.93	143.42	152.99	144.40	161.00	163.00	159.00	164.00	161.75	
Feeder steers, Medium Frame No. 1, OK City, dollars/cwt	136.42	126.37	141.42	137.57	135.45	134.30	140.22	153.69	159.59	146.95	156.04	158.35	172.31	177.06	165.94	183.00	193.00	214.00	224.00	203.50	
Cows, Live equivalent, Cutter 90% lean, 500 lbs and up, National, dollars/cwt	59.38	63.14	64.97	54.93	60.61	59.63	67.54	69.21	63.24	64.91	72.65	83.41	84.01	73.69	78.44	82.00	90.00	105.00	105.00	95.50	
Choice/Prime slaughter lambs, National, dollars/cwt	159.12	N/A	N/A	164.31	161.72	165.42	211.79	256.86	233.61	216.92	225.00	210.33	138.69	124.26	174.57	130.00	135.00	140.00	140.00	136.25	
Barrows and gilts, National base cost, 51-52% lean, live equivalent, dollars/cwt	42.52	38.96	40.50	50.75	43.18	55.71	80.92	76.15	56.36	67.29	65.55	75.58	80.20	63.49	71.21	56.00	70.00	73.00	64.00	65.75	
Broilers, Wholesale, National composite, weighted average, cents/lb	83.5	67.0	66.7	75.7	73.2	84.0	104.4	105.4	110.9	101.2	135.1	167.5	136.1	123.5	140.5	123.0	127.0	128.0	129.0	126.8	
Turkeys, National 8-16 lb hens, National, cents/lb	97.4	103.7	111.3	113.6	106.5	110.1	117.7	129.7	133.4	122.8	131.4	143.9	165.4	177.5	154.5	171.0	162.0	155.0	160.0	162.0	
Eggs, Grade A large, New York, volume buyers, cents/dozen	133.1	119.6	89.0	107.2	112.2	127.8	94.2	120.1	131.8	118.5	170.8	251.6	295.6	411.7	282.4	308.0	200.0	165.0	175.0	212.0	
U.S. trade, million pounds, carcass-weight equivalent																					
Beef and veal exports	769	605	759	819	2,951	798	875	912	856	3,441	846	940	906	844	3,536	760	775	785	770	3,090	
Beef and veal imports	774	848	1,025	693	3,339	696	865	923	863	3,346	985	859	798	750	3,391	950	850	860	765	3,425	
Lamb and mutton imports	102	67	62	70	302	69	93	100	103	364	88	88	93	89	358	97	85	90	95	367	
Pork exports	2,021	1,773	1,627	1,858	7,279	1,922	1,903	1,550	1,652	7,026	1,541	1,609	1,509	1,679	6,338	1,605	1,600	1,480	1,665	6,350	
Pork imports	206	220	226	252	904	247	260	308	364	1,180	358	369	317	300	1,344	240	245	250	270	1,005	
Broiler exports	1,860	1,729	1,821	1,959	7,368	1,851	1,772	1,835	1,898	7,355	1,826	1,812	1,724	1,916	7,278	1,830	1,810	1,765	1,910	7,315	
Turkey exports	139	126	143	164	571	130	140	138	140	548	107	109	96	95	408	80	85	95	100	360	
Live swine imports (thousand head)	1,332	1,202	1,272	1,488	5,293	1,607	1,649	1,772	1,635	6,663	1,654	1,665	1,602	1,565	6,486	1,650	1,665	1,590	1,575	6,480	

Note: Forecasts are in bold. cwt=hundredweight.

1/ Per capita meat and egg disappearance data are calculated using the Resident Population plus Armed Forces Overseas series from U.S. Department of Commerce, Bureau of the Census.

Source: World Agricultural Supply and Demand Estimates and supporting materials.

For further information, contact: Mildred Haley, Economic Research Service, USDA.

Updated 3/8/2023

Dairy forecasts

Years Quarters	2021	2022					2023				
	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual
Milk cows (thousands)	9,449	9,384	9,411	9,408	9,405	9,400	9,400	9,395	9,385	9,370	9,390
Milk per cow (pounds)	23,950	6,000	6,144	5,999	5,945	24,085	6,060	6,210	6,055	6,020	24,345
Milk production (billion pounds)	226.3	56.3	57.8	56.4	55.9	226.5	57.0	58.3	56.8	56.4	228.5
Farm use	1.0	0.3	0.3	0.3	0.3	1.1	0.3	0.3	0.3	0.3	1.1
Milk marketings	225.3	56.0	57.6	56.2	55.6	225.4	56.7	58.1	56.6	56.1	227.5
Milk-fat (billion pounds milk equiv.)											
Milk marketings	225.3	56.0	57.6	56.2	55.6	225.4	56.7	58.1	56.6	56.1	227.5
Beginning stocks	15.6	14.3	16.4	18.4	16.6	14.3	14.4	17.1	19.6	17.5	14.4
Imports	6.5	1.3	1.9	1.9	1.9	7.1	1.5	1.9	2.0	2.0	7.4
Total supply	247.4	71.7	75.8	76.5	74.1	246.8	72.6	77.1	78.1	75.6	249.2
Exports	11.5	3.0	3.7	3.4	3.2	13.4	2.9	3.6	3.3	3.2	13.0
Ending stocks	14.3	16.4	18.4	16.6	14.4	14.4	17.1	19.6	17.5	14.6	14.6
Domestic use ¹	221.5	52.3	53.7	56.5	56.5	219.0	52.6	53.9	57.3	57.8	221.6
Skim solids (billion pounds milk equiv.)											
Milk marketings	225.3	56.0	57.6	56.2	55.6	225.4	56.7	58.1	56.6	56.1	227.5
Beginning stocks	10.9	11.1	11.8	12.5	11.9	11.1	11.7	12.6	13.0	12.1	11.7
Imports	5.8	1.5	1.6	1.6	2.0	6.7	1.6	1.6	1.6	1.7	6.5
Total supply	241.9	68.6	71.0	70.3	69.5	243.2	70.0	72.3	71.1	69.9	245.6
Exports	50.8	11.8	14.4	13.5	12.8	52.5	11.7	14.2	13.3	12.6	51.9
Ending stocks	11.1	11.8	12.5	11.9	11.7	11.7	12.6	13.0	12.1	12.2	12.2
Domestic use	180.1	44.9	44.1	44.9	45.1	179.0	45.6	45.0	45.7	45.1	181.5
Milk prices (dollars/hundredweight) ¹											
All milk	18.53	24.93	27.10	24.80	25.40	25.56	21.90	19.95	19.30	20.60	20.45
Class III	17.08	21.25	24.65	20.81	21.06	21.94	18.20	17.25	17.35	17.45	17.55
Class IV	16.09	23.97	25.38	25.08	23.46	24.47	19.10	18.30	17.75	18.05	18.30
Product prices (dollars/pound) ²											
Cheddar cheese	1.6755	1.9531	2.3523	2.0428	2.1004	2.1122	1.860	1.770	1.800	1.820	1.810
Dry whey	0.5744	0.7610	0.6754	0.5143	0.4633	0.6035	0.415	0.400	0.380	0.360	0.390
Butter	1.7325	2.6686	2.8095	3.0136	2.9743	2.8665	2.425	2.330	2.290	2.290	2.335
Nonfat dry milk	1.2693	1.7242	1.8188	1.6831	1.5141	1.6851	1.280	1.230	1.190	1.220	1.230

Totals may not add due to rounding.

¹ Simple averages of monthly prices. May not match reported annual averages.

² Simple averages of monthly prices calculated by the USDA, Agricultural Marketing Service, for use in class price formulas. Products prices are based on weekly USDA *National Dairy Products Sales Report*.

Sources: USDA, National Agricultural Statistics Service; USDA, Agricultural Marketing Service; USDA, Foreign Agricultural Service; and USDA, World Agricultural Outlook Board.

Published by USDA, Economic Research Service, in *Livestock, Dairy, and Poultry Outlook*.

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