



Livestock, Dairy, and Poultry Outlook: 2022

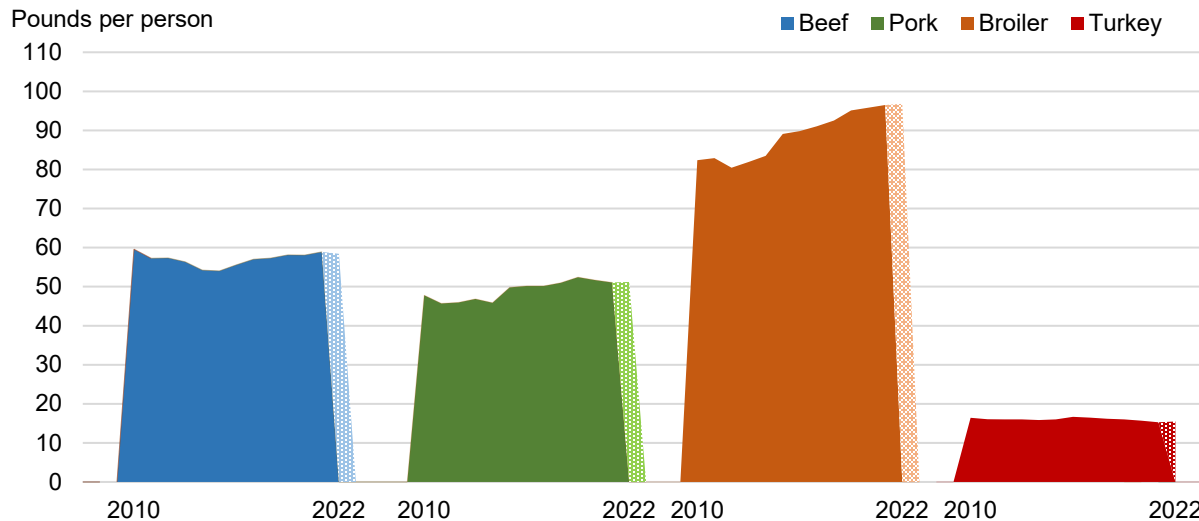
2022 Meat Disappearance Expected To Inch Upward

Per capita red meat and poultry disappearance—the amount available for use in domestic markets, including fresh and processed meat sold through grocery stores and used in restaurants—is expected to fractionally increase in 2022. This forecast is due to an increase in total poultry disappearance (+0.44 percent) that compensated for a decrease in total red meat disappearance (-0.31 percent).

USDA calculates per capita meat disappearance—a proxy measure of consumption—as a residual measure of supply (the sum of production, beginning stocks, and imports minus the sum of exports and ending stocks) divided by the total U.S. population. However, since it does not account for indirect consumer uses such as pet food and food waste, it overestimates the actual consumer consumption. The figure below shows the retail weight per capita disappearance for beef, pork, broilers, and turkey from 2010 to 2021, and 2022 forecast values, respectively.

2022 meat disappearance is forecast at 224.9 pounds per person, 0.1 pound higher than last year. Looking at the main protein species, per capita disappearance for beef is expected to decrease by 0.85 percent due to lower livestock inventory. Disappearance for pork, broiler, and turkey is expected to increase by 0.28, .0.30, and 1.40 percent, respectively. Despite lower expected production, the pork disappearance increase is due to lower expected exports. The increase in turkey disappearance marks the first year of increase since 2016. Sustained by a steady production growth trend, 2022 broiler disappearance adds to a decade-long stretch of year-over-year increases.

Retail weight per capita disappearance for beef, pork, broilers, and turkey 2010–2022*



*2022 represents forecast values.
Source : USDA, World Agricultural Outlook Board.

Summary

Beef/Cattle: The forecast for 2022 commercial beef production was raised by 195 million pounds from last month to 27.570 billion pounds on higher expected non-fed and fed cattle slaughter. The fed cattle price was raised for 2022, while the feeder cattle price was lowered. January's beef imports totaled 352 million pounds, up almost 57 percent from a year ago. The 2022 annual forecast for beef imports was increased by 50 million pounds from last month to 3.42 billion pounds. January's beef exports totaled 288 million pounds, up 17 percent over the previous year. The beef export forecast for 2022 was raised by 30 million pounds to 3.30 billion pounds.

Dairy: The all-milk price forecast for 2022 has been raised to a record high of \$25.05 per hundredweight, \$1.50 higher than last month's forecast. Dairy product price forecasts have been raised across the board due to strong prices in recent weeks and lower projected milk production. The milk production forecast for 2022 is 226.0 billion pounds, 1.2 billion lower than last month's forecast and a projected decrease of 0.3 billion pounds from 2021. This would be the first year-over-year decrease in milk production since 2009. Export forecasts have been lowered from last month's projections on both the milk-fat and skim-solids bases.

Pork/Hogs: The 2022 pork production forecast is reduced by 65 million pounds from last month on lower-than-expected February slaughter numbers, the likelihood of higher average carcass weights in the second half of the year, and evidence of elevated disease risks, also late in the year. Forecasts for U.S. pork exports in the first and second quarters of 2022 are reduced on weaker demand prospects in major importing regions. Total 2022 exports are expected to be 6.73 billion pounds, 4.3 percent below last year.

Poultry/Eggs: Broiler production is lowered on continued hatchability challenges and lower slaughter to date. Broiler exports are also decreased on lower production expectations. Broiler prices are increased on recent data and expectations for constrained supplies. First-half 2022 table egg production was revised down on higher expected production costs and slow expansion of the layer flock. Wholesale egg price forecasts (New York, Grade A, large) for all quarters were revised up due to current prices trending higher than expected and lower production growth. Egg and egg products exports were revised down due to lower-than-expected shipments in December and January. Turkey production and stocks forecasts were adjusted down, but 1-percent production growth is still expected in 2022. Exports were adjusted down due to decreased demand from key importers and highly pathogenic avian influenza (HPAI). Prices were raised for each quarter and are expected to gradually increase throughout the year.

Beef/Cattle

Christopher G. Davis, Russell Knight, and Hannah Taylor

Beef Production Continues To Be Down in 2022

For March 2022, the annual forecast for commercial beef production was raised 195 million pounds to 27.570 billion pounds from last month, on stronger expected non-fed and fed cattle slaughter. During February, based on actual and estimated figures, cow federally inspected slaughter was up 12.2 percent compared to the same time last year. Most of the increase was due to weather disruptions for the February 20th, 2021, weekly slaughter, which produced extremely low weekly slaughter for a non-holiday week. Compared with 2020 and 2019, monthly cow slaughter for February 2022 was down 9.5 and 12.4 percent, respectively.

Feeder cattle entering feedlots during January were below 2020 and placements for the quarter are expected to be below a year earlier, although deteriorating pasture conditions and wheat prices might encourage a more rapid placement rate than previously assumed. Fed cattle marketings are expected to be slightly higher in the second half of 2022 than last month, reflecting a larger number of placements in the first quarter as well as that higher feed prices will likely encourage feedlot operators to be as current as possible in cattle marketings.

2022 Forecast Prices: Fed Steers Up, Feeder Steer Prices Down

The average price for all grades of live steers sold in the 5-area marketing region in February 2022 was reported at \$141.32 per hundredweight (cwt), up 24.1 percent, or \$27.42, from February 2021. For the week ending March 6, the fed steer price was up from the week ending February 6 but down from February 27. The 2022 annual forecast for fed steer prices was increased by \$1.75 to \$139.25 per cwt from last month due to anticipated strong packer demand and tightening feedlot inventories moving forward. The fed steer forecasts for the first and second quarters were raised \$1 and \$3 to \$140.00 and \$139.00 per cwt, respectively. The third-quarter forecast was raised \$1.00 to \$136.00, while the fourth-quarter forecast was revised up \$2.00 to \$142.00 per cwt.

The feeder steers weighing 750–800 pounds sold at Oklahoma City National Stockyards in February had an average price of \$157.25 per cwt, up 19.3 percent, or \$25.43 per cwt from a year ago. On March 7, the feeder steer price averaged \$149.14 per cwt, \$13.52 above the price recorded in the same week last year. The first-quarter forecast was lowered \$2.00 from last month to \$156.00, but the second-quarter forecast was raised by \$1.00 to \$159.00 per cwt from last month on tightening feeder cattle supplies and higher forecast fed cattle prices. However, due to higher anticipated feed prices in the second half of 2022, the feeder steer forecasts for the third and fourth quarters were reduced by \$1.00 to \$161.00 and \$166.00 per cwt, respectively. The 2022 annual forecast for the feeder steer price was lowered from last month to \$160.50 per cwt.

Beef Exports Continue Record Pace in New Year

In January 2022, U.S. beef exports set a record for the month at 288 million pounds, about 17 percent above a year earlier and 21 percent above the 5-year average. Larger year-over-year shipments to China, South Korea, Taiwan, and a number of other markets more than offset reduced purchases from Mexico, Canada, Hong Kong, and Japan.

The table below shows that South Korea took an early lead in 2022 as the top destination for U.S. beef. Further, shipments to South Korea set a record for the month of January and the second-largest volume on record to May 2021. U.S. beef sales to Japan were even with a year ago at 59 million pounds but accounted for a smaller share of U.S. exports given the larger volumes to China and South Korea.

China, which bought over 48 million pounds in January, double the volume in 2021, was the third-largest destination for U.S. beef exports. After the meteoric rise in exports in mid-2020 due to tight supplies of pork in China and reduced competition from Australia, shipments to China leveled off. Over the last 11 months, U.S. beef exports to China have averaged just over 49 million pounds. The next-largest percentage gain year over year in January was in Taiwan purchases, which were a record for the month and the second-largest behind May 2020.

U.S. beef exports: Volume, January 2021 and 2022

Country	Exports year-to-date				Export share	
	2021	2022	Year-over-year change		2021	2022
	<i>Million pounds</i>	<i>Million pounds</i>	<i>Million pounds</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Top 5 largest foreign markets						
South Korea	59.8	82.9	23.0	38.5	24.3	28.8
Japan	58.9	58.8	-0.2	-0.3	24.0	20.4
China	22.5	48.3	25.8	114.3	9.2	16.8
Taiwan	12.0	21.3	9.3	78.0	4.9	7.4
Mexico	32.1	20.3	-11.8	-36.9	13.1	7.1
World	246.0	287.6	41.6	16.9	100.0	100.0
Additional foreign markets of note						
Canada	26.2	19.8	-6.4	-24.4	10.6	6.9
Hong Kong	10.0	5.1	-4.8	-48.6	4.0	1.8
Other markets	24.5	31.2	6.7	27.3	9.9	10.8

Notes: Largest markets are based on 2022 export volumes.

Other markets collectively refer to countries other than Japan, South Korea, China, Mexico, Canada, Taiwan, and Hong Kong.

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

U.S. exports to both Mexico and Canada in January were down 37 percent and 24 percent, respectively, from a year ago. Shipments to Mexico and Canada for the month of January were the lowest since 2004 and 2007, respectively.

With this record start to the new year, the beef export forecast for the first quarter was raised by 30 million pounds. However, beef exports are expected to moderate in the remaining quarters due to increased competition from Oceania in Asian markets and softer demand from North America. As a result, the rest of the year was left unchanged for an annual forecast of 3.300 billion pounds.

Record-High Beef Imports From Brazil

Beef imports in January totaled 352 million pounds, nearly 57 percent higher year over year and 47 percent above the 5-year average. This was a record for the month of January and the 4th largest monthly import overall. Driving this year-over-year increase were imports from Brazil, up over 500 percent from the previous year and accounting for two-thirds of the increase in total imports. Imports from Mexico, Australia, and Canada also increased 62, 17 and 14 percent year over year, respectively.

U.S. beef imports: Volume, January 2020 and 2021

Country	Imports year-to-date				Import share	
	2020	2021	Year-over-year change		2020	2021
	<i>Million pounds</i>	<i>Million pounds</i>	<i>Million pounds</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Top 5 largest suppliers						
Brazil	15.7	99.9	84.2	534.9	7.0	28.4
Canada	65.4	74.3	8.9	13.6	29.2	21.1
Mexico	40.4	65.5	25.1	62.1	18.0	18.6
Australia	35.1	41.2	6.2	17.6	15.6	11.7
New Zealand	41.5	32.5	-9.0	-21.6	18.5	9.2
World	224.4	351.9	127.5	56.8	100.0	100.0
Additional suppliers of note						
Nicaragua	10.0	16.9	6.9	69.2	4.4	4.8
Uruguay	10.7	11.2	0.5	5.1	4.7	3.2
Argentina	3.4	5.3	1.9	55.1	1.5	1.5

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

Imports from Brazil have been elevated in the last few months, driven by increases in imports of processing-grade beef. Historically, beef imports from Brazil have been primarily heat-treated beef products. In August 2016, USDA Food Safety and Inspection Service (FSIS) determined that fresh (chilled or frozen) beef could be safely imported from Brazil. In June 2017; however, fresh beef imports from Brazil were suspended due to concerns about food safety and animal health.

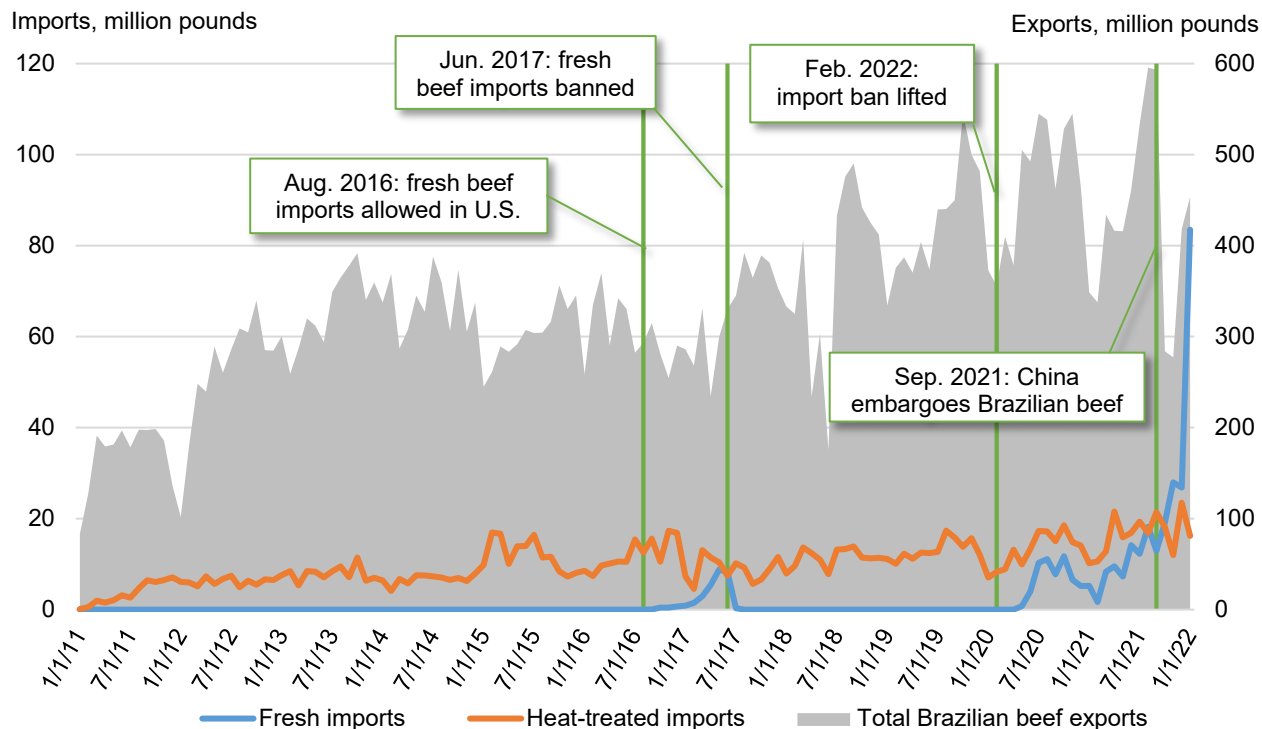
In February 2020, FSIS again determined that raw intact beef from Brazil was eligible for import into the United States. Imports have risen significantly since then. As the chart below shows, the majority of the increase is in fresh beef. Fresh beef imports from Brazil consist mostly of frozen boneless trimmings destined to be ground into hamburger. The volume of fresh beef imports has spiked rapidly since November 2021, in January accounting for 84 percent of U.S. beef imports from Brazil.

In September 2021, China embargoed beef imports from Brazil on animal health concerns. As China has been the major destination for Brazilian beef, the embargo caused a large reduction in Brazil's total exports. Some of Brazil's beef was redirected to other markets, including the United States; this may have accounted for some of the spike in U.S. imports in recent months. China lifted the embargo in December 2021.

Imports to the United States of fresh beef are subject to a tariff-rate quota. Brazil falls under the U.S. quota open to other countries that do not have a country-specific quota. This is set at 65,005 metric tons (or about 143 million pounds) for the calendar year 2022. It is possible that Brazil will fill the quota within the first quarter of this year. Once the quota is filled, imports of

fresh beef from Brazil and other countries under this quota will be subject to a higher tariff, increasing from \$4.4 cents per kilogram to 26.4 percent of the value of the imports.

Monthly U.S. beef imports from Brazil and total Brazilian beef exports



Notes: Imports and exports reported as carcass-weight equivalent. Fresh imports consist of boneless beef, fresh or chilled, and frozen. Heat-treated imports consist of prepared or preserved beef. Source: USDA, Economic Research Service calculations using data from Trade Data Monitor.

The first-quarter import forecast was increased 90 million pounds to 890 million, reflecting recent data. Forecasts for the outlying quarters were decreased slightly based on smaller shipments from South America. The annual import forecast was raised 50 million pounds to 3.420 billion.

Dairy

Jerry Cessna and Angel Teran

Recent Wholesale Dairy Product Prices

From the week ending February 5 to the week ending March 5, all wholesale dairy product prices reported in the USDA *National Dairy Products Sales Report* (NDPSR) increased. Prices for Cheddar cheese 40-pound blocks and 500-pound barrels (adjusted to 38-percent moisture) rose to \$1.9841 (+4.9 cents) and \$1.9645 per pound (+12.2 cents), respectively. Prices for butter, nonfat dry milk (NDM), and dry whey rose to \$2.6887 (+2.2 cents), \$1.7817 (+8.7 cents), and \$0.8014 (5.1 cents), respectively.

Dairy wholesale product prices from USDA *National Dairy Products Sales Report* (dollars per pound)

	For the week ending		Change
	February 5	March 5	
Butter	2.6663	2.6887	0.0224
Cheddar cheese			
40-pound blocks	1.9356	1.9841	0.0485
500-pound barrels*	1.8429	1.9645	0.1216
Nonfat dry milk	1.6947	1.7817	0.0870
Dry whey	0.7504	0.8014	0.0510

* Adjusted to 38-percent moisture.

Source: USDA, Agricultural Marketing Service, *National Dairy Products Sales Report*, March 9, 2022.

For the trading week¹ ending March 11, all average spot prices reported on the Chicago Mercantile Exchange (CME), except for the dry whey price, were higher than NDPSR prices for the week ending March 5. CME prices for Cheddar cheese 40-pound blocks and 500-pound barrels averaged \$2.2080 and \$2.0525 per pound, respectively. CME prices for butter, NDM, and dry whey averaged \$2.7335, \$1.8480, and \$0.7575 per pound, respectively.

All export prices reported by USDA *Dairy Market News* increased from January to February. Except for dry whey, recent export prices reported for foreign competitors have been higher than U.S. domestic prices reported in the NDPSR.

Average prices for all products traded in the Global Dairy Trade (GDT) auction event of March 1 increased substantially from the February 15 event. GDT prices, in dollars per pound, were \$3.214 for butter, \$2.900 for Cheddar cheese, \$2.033 for skim milk powder, and \$2.158 for whole milk powder.

¹ While the end of each week for NDPSR average prices falls on a Saturday, the trading week for CME usually ends on a Friday.

Dairy product export prices for Oceania and Western Europe

(dollars per pound)

Product	Region	January 2022	February 2022	Change
Butter	Oceania	2.752	2.984	0.232
	Western Europe	3.058	3.142	0.084
Cheddar cheese	Oceania	2.531	2.637	0.106
Skim milk powder	Oceania	1.783	1.932	0.150
	Western Europe	1.792	1.895	0.103
Dry whey	Western Europe	0.639	0.700	0.061
Whole milk powder	Oceania	1.838	2.019	0.181
	Western Europe	2.245	2.410	0.165

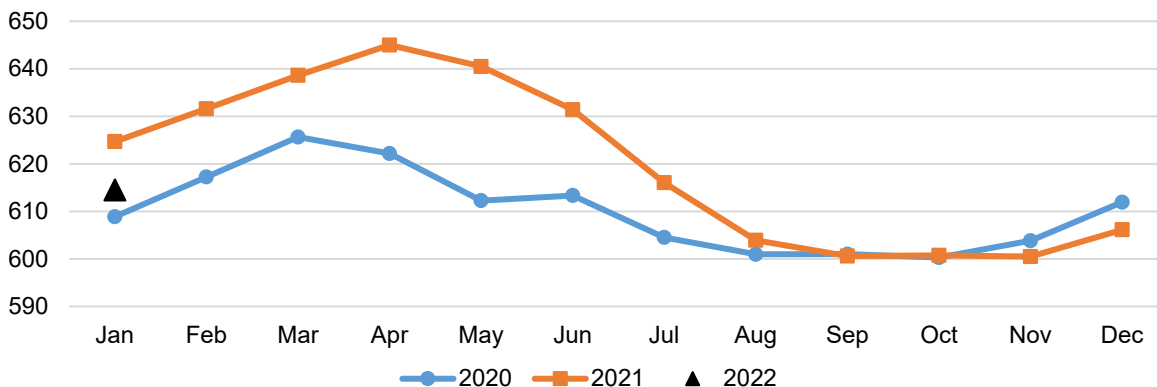
Source: USDA, Agricultural Marketing Service, *Dairy Market News*.

Recent Supply and Use Data

According to the most recent *Milk Production* report published by USDA, National Agricultural Statistics Service, the estimate for January U.S. milk production was 19.050 billion pounds (averaging 614.5 million pounds per day). This estimate was 1.6 percent below January 2021, the largest year-over-year percentage decline in average daily milk production for any month since March 2004.

U.S. milk production

Millions of pounds per day



Source: USDA, National Agricultural Statistics Service.

Milk cows numbered 9.368 million head in January, 5,000 below December and 82,000 lower than January 2021. Average milk per cow in January was 2,034 pounds per head, 15 pounds lower than January 2021. Relatively high costs of feed and other inputs probably dampened milk yields in January 2022, and corn-silage quality issues in the midwestern and eastern areas of the country may have also played a role. However, note that growth in milk per cow in January 2021 was quite strong, 1.7 percent higher than January 2020.

Dairy exports on a milk-fat milk-equivalent basis totaled 822 million pounds in January, 121 million higher than January 2021. On a skim-solids milk-equivalent basis, January exports totaled 3.408 billion pounds, 185 million below January 2021. There were several products in January with notable year-over-year declines from January 2021, including exports of 26.7 million pounds dry whey (-13.6 million), 21.5 million pounds of whey protein concentrate (-2.4

million), 131.0 million pounds of dry skim milk products (-7.6 million), and 4.4 million pounds of dry whole milk (-0.5 million).

Dairy imports on a milk-fat basis totaled 430 million pounds in January, 56 million higher than January 2021. On a skim-solids basis, January imports totaled 500 million pounds, 50 million higher than January 2021. Butter imports in January totaled 6.4 million pounds, 3.4 million higher than January 2021 but 3.6 million below December 2021. January cheese imports totaled 21.3 million pounds, 0.2 million higher than January 2021 but 3.8 million below December 2021. Imports of milk protein products² totaled 25.5 million pounds in January, 3.7 million higher than January 2021 and 9.1 million higher than December 2021.

For the 3 months from November 2021 to January 2022, domestic use on a milk-fat basis totaled 56.178 billion pounds, 2.9 percent higher than the 3 months from November 2020 to January 2021. On a skim solids basis, November 2021 to January 2022 domestic use totaled 45.435 billion pounds, 0.2 percent higher than the 3 months from November 2020 to January 2021.

Ending stocks at the end of January on a milk-fat basis totaled 14.780 billion pounds, 13.0 percent lower than the end of January 2021. On a skim-solids basis, ending stocks totaled 11.219 billion pounds, 0.6 percent lower than the end of January 2021. January ending stocks for butter, dry skim milk products, and dry whey were down from January 2021 by 33.3 percent, 15.1 percent, and 16.3 percent, respectively. January ending stocks for cheese were up 2.6 percent from January 2021.

Outlook for Feed Prices

The 2021/22 corn price projection is \$5.65 per bushel, \$0.20 higher than last month's projection. The 2021/22 price projection for soybean meal is \$420 per short ton, \$10 higher than last month's forecast.³ For more information, see *Feed Outlook*, published by USDA, Economic Research Service. The alfalfa hay price in January was \$211 per short ton, \$2 lower than December 2021 and \$43 higher than January 2021. The 5-State weighted-average price for premium alfalfa hay in January was \$262 per short ton, \$9 higher than December 2021 and \$56 higher than January 2021.

Added Uncertainty for Dairy Markets Due to Russian Invasion of Ukraine

The Russian invasion of Ukraine has added uncertainty to the global dairy outlook. For the U.S. dairy industry, the effects are mostly indirect.

U.S. dairy trade with both countries (both imports and exports) has been very small. Neither Russia nor Ukraine are major global dairy exporters. Russia imports substantial quantities of dairy products, mostly from Belarus. In 2021, Argentina and New Zealand were distant second and third suppliers of dairy products to Russia. Fonterra, the leading dairy supplier from New Zealand, has suspended shipments of dairy products (mostly butter) to Russia.

Ukraine is a major exporter of corn and wheat. Russia is a major exporter of oil, natural gas, wheat, and fertilizer. Disruptions in exports from these countries could contribute to higher costs

² Milk protein products include milk protein concentrate, milk protein isolate, and casein products.

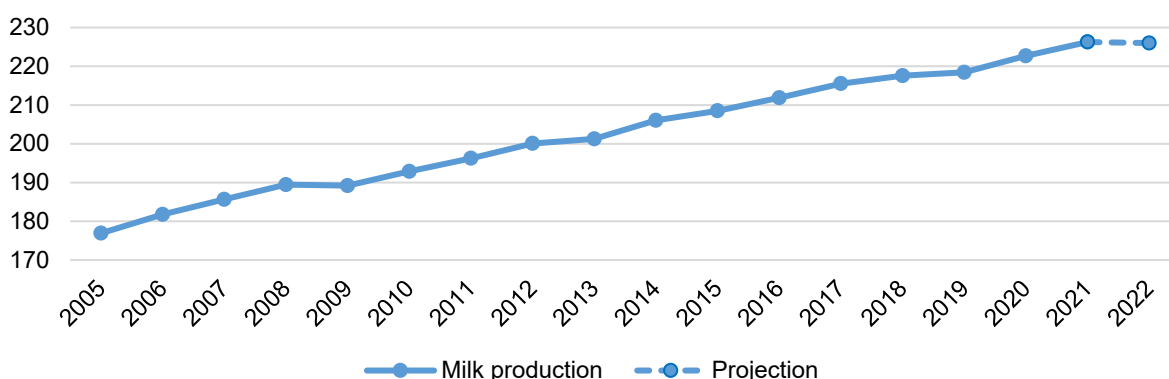
³ The marketing year begins September 1 for corn and October 1 for soybean meal.

of these commodities, with both supply and demand implications for the U.S. dairy industry. On the supply side, higher feed, fuel, energy, and fertilizer prices obviously increase costs of dairy production. Other input costs could also rise since virtually all sectors supplying the industry are affected by costs of fuel and energy. On the demand side (both domestic and foreign), to the extent that costs of dairy production are passed on to consumers in the form of higher dairy product prices, smaller quantities of dairy products may be consumed. Also, demand for dairy products could be reduced as inflation reduces consumer purchasing power. The gravity of these effects will depend upon the severity and duration of the crisis, global response to it, and many other factors that impact global dairy markets.

Dairy Forecasts for 2022

Milk production for 2022 is projected at 226.0 billion pounds, 1.2 billion lower than last month's forecast and a decrease of 0.3 billion pounds from 2021. This would be the first year-over-year decrease since 2009. Milk cows are projected to average 9.355 million head in 2022, 5,000 lower than last month's forecast and a year-over year decline of 93,000 head. Relatively low numbers of replacement heifers, higher expected cull-cow prices, and higher expected production costs will likely contribute to the reduction in milk cow numbers. Milk per cow is projected to average 24,160 pounds per head, 105 pounds down from the previous forecast and a year-over year increase of 212 pounds. This projected slowing in growth in milk per cow is associated with anticipated higher feed costs and an expected reduction in feed nutritive value early in the year due to corn silage quality issues.

U.S. milk production (with leap-year adjustments*)



* Leap-year quantities have been adjusted by multiplying by 365/366.
Source: USDA, National Agricultural Statistics Service.

Dairy export projections for 2022 are adjusted lower due to relatively low exports in January and higher expected U.S. dairy prices. Lower exports are expected for several dairy categories including whey products, dry skim milk products, lactose, and dry whole milk. The forecast for 2022 dairy exports on a milk-fat basis has been adjusted to 10.9 billion pounds, 0.1 billion lower than last month's forecast. On a skim-solids basis, the 2022 dairy export forecast has been adjusted to 49.8 billion pounds, 1.4 billion lower than last month's projection.

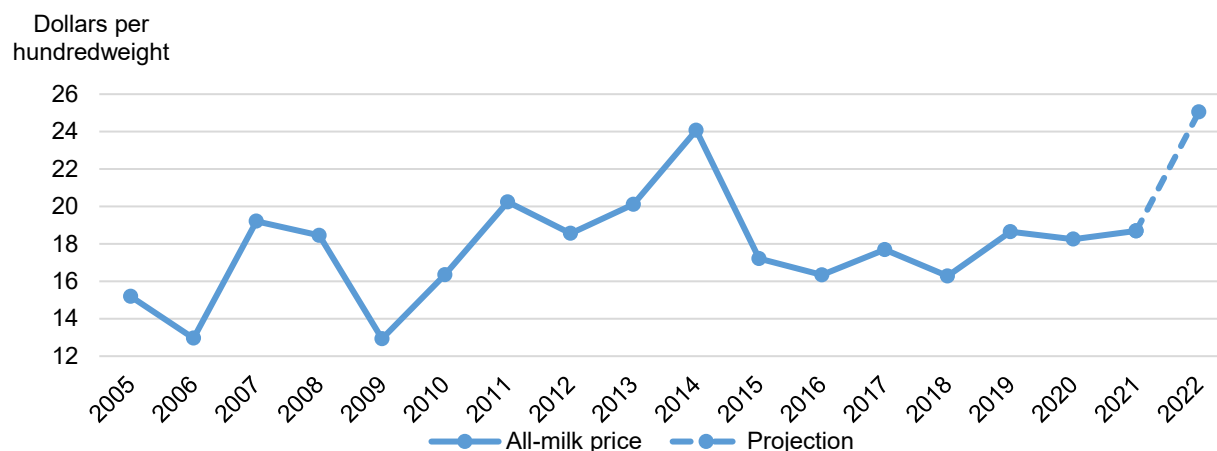
Based on recent import data, lower imports of cheese, butter, fluid milk, and cream are expected. However, recent data indicate that imports of milk protein products, condensed and evaporated milk, and other miscellaneous dairy products may be higher than previously expected. On a milk-fat basis, dairy import projections for 2022 have been lowered to 6.8 billion

pounds (-0.1 billion). On a skim-solids basis, dairy imports have been increased to 5.8 billion pounds (+0.1 billion pounds).

The projections for 2022 domestic use are unchanged from the previous month’s forecast, at 222.2 billion pounds on a milk-fat basis and 180.8 billion pounds on a skim-solids basis. The effects of higher expected prices on domestic use may be offset by continued strength in demand, as foodservice and retail sectors continue to recover from the pandemic.

Due to relatively high domestic and international dairy product prices in recent weeks and lower projected milk production, wholesale price forecasts have been raised for all major dairy products. For 2022, price forecasts for Cheddar cheese, dry whey, butter, and NDM are \$2.030 (+13.0 cents), \$0.710 (+0.5 cents), \$2.575 (+18.5 cents), and \$1.740 (+7.5 cents) per pound, respectively. With higher dairy product prices expected across the board, the Class III milk price forecast for 2022 has been raised to \$21.65 per hundredweight (cwt), \$1.35 higher than last month’s forecast, and the Class IV price forecast has been increased to \$23.70 per cwt, up \$1.40 from the previous projection. The all-milk price forecast for 2022 has been raised to a record high of \$25.05 per cwt, \$1.50 higher than last month’s forecast.

All-milk price



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

Pork/Hogs

Mildred Haley

February Replays January: Reduced Animal Numbers, Strong Prices of Hogs and Wholesale Pork

Hog prices and federally inspected hog slaughter numbers in February were largely a replay of the January scenario: hog prices shot up on lower availability of slaughter-ready hogs. February prices of live equivalent 51-52 percent lean hogs averaged \$67.01 per cwt, more than 24 percent higher than a year ago. Estimated federally inspected (FI) hog slaughter numbers last month were 9.9 million head, 4.6 percent lower than in February 2021. Also similar to the picture in January, the lower February FI slaughter numbers are partly attributable to the smaller summer 2021 pig crop. However, February slaughter numbers were significantly below those suggested by the 120–79 pound weight category published in the December *Quarterly Hogs and Pigs* report.

While the inelastic nature of hog demand could account in part for the sharp price response to already lower hog numbers available in February, there is some evidence that Porcine Reproductive and Respiratory Syndrome (PRRS) infections in aged wean-to-finish animals that increased in December 2021 may have further diminished these numbers for February. The Swine Health Information Center reported⁴ that for the wean-to-finish category, the PRRS infection rate in December 2021 was 42.64 percent of animals tested, the highest since the previous December's rate of 45.64 percent. High mortality rates of currently circulating PRRS variants may have reduced available slaughter-ready hogs in February,⁵ intensifying the price response from the year-over-year lower summer 2021 pig crop.

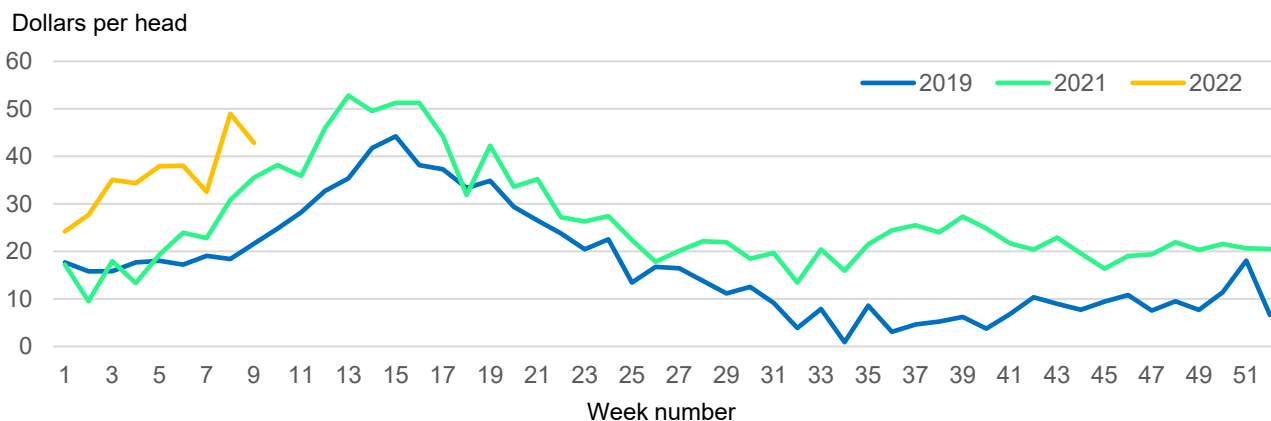
There is also evidence that the market has bid up prices of 40-pound feeder pigs, suggesting ongoing supply deficits and excess demand for feeder pigs compared to year-ago prices and valuations. The figure below shows the price spread between the estimated per head price of 40-pound feeder pigs and the estimated total composite (weighted cash and formula) per head price of early weaned pigs (10-12 pounds), both reported in the National Direct Feeder Pig Report.⁶ The spread approximates the weekly market valuation of feeding an early-weaned pig to 40 pounds. Through the week ending March 11, 2022, that spread averaged more than \$37 per head, about 63 percent greater than over the same period a year ago. The increased year-over-year spread suggests increased demand for 40-pound feeder pigs, which may reflect demand created by recent surges in PRRS mortality rates in wean-to-finish pigs. Elevated demand for feeder pigs also likely indicates continued-strong consumer demand for pork.

⁴ Swine Health Information Center, Domestic Disease Monitoring Reports, Report No. 47, January 4, 2022; Report No. 35, January 5, 2021.

⁵ Swine Health Information Center, "Highly Pathogenic Porcine Reproductive and Respiratory Syndrome Virus". October 2016. Updated July 2021.

⁶ USDA, Agricultural Marketing Service.

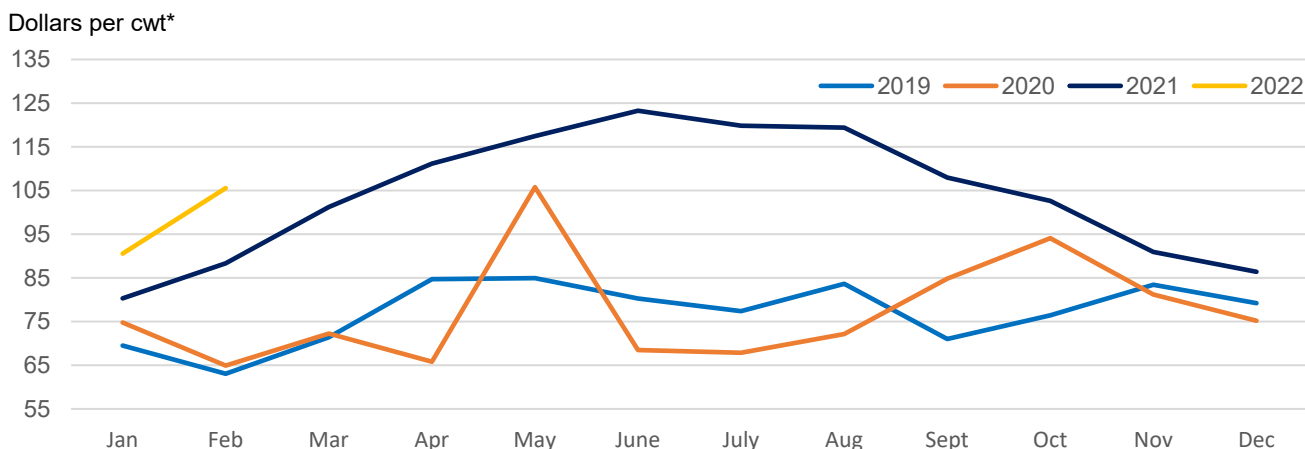
Price spread: (per-head price, 40 lb. feeder pig) – (per-head price, 10-12 lb. early-weaned pig)



Source: USDA, Economic Research Service calculations with USDA, Agricultural Marketing Service data.

Another source of feeder pig demand derives from consumer demand for pork. Robust pork demand continued through February. This is evident in higher wholesale pork carcass values compared to both this past January and to February 2021. The pork cutout averaged \$105.56 per cwt in February compared to \$90.56 per cwt in January, a 17-percent increase that derived mostly from higher values of loins and bellies. The February 2022 wholesale value was almost 20 percent higher than the average \$88.34 per cwt value in February 2021.

Wholesale value of pork carcass



*cwt= hundredweight.

Source: USDA, Agricultural Marketing Service.

Quarterly Hog Prices Raised on Strong Pork Demand and Reduced Slaughter Hog Availability

Forecasts for 2022 quarterly hog prices are raised as strong pork demand drives hog prices higher for reduced animal numbers. Prices for first-quarter 51-52 percent live equivalent hogs are expected to average \$66 per cwt, about 19 percent higher than a year ago. Second- and third-quarter prices are raised to \$78 and \$75 per cwt, respectively. Both second- and third-quarter prices remain below a year ago—by 3.6 percent and by 2 percent, respectively—when wholesale pork prices were record-high. Fourth-quarter prices are expected to be \$65 per cwt, more than 15 percent above a year ago. For 2022, quarterly forecasts for live equivalent prices of 51-52 percent lean hogs average \$71 per cwt, 5.5 percent higher than in 2021.

Revised quarterly pork production forecasts for 2022 sum to 27.3 billion pounds, about 64 million pounds lower than last month and 1.3 percent lower than production in 2021. Pork production in the first quarter is expected to be about 6.9 billion pounds, more than 5 percent lower than a year ago. The second-quarter forecast, at about 6.6 billion pounds, is down almost 2 percent from a year earlier, unchanged from last month. Second-half pork production is lowered marginally—by 55 million pounds—to account for elevated first-quarter disease risk indicated by data from the Swine Health Information Center,⁷ as well as for lower average dressed weights that may result from incentives for producers to market hogs in as timely a fashion as possible. Third-quarter pork production is expected to be almost 6.7 billion pounds, 2.4 percent higher than a year ago. Fourth-quarter production is forecast at 7.2 billion pounds, fractionally lower than the same period last year.

USDA will release the *Quarterly Hogs and Pigs* report on March 30. The report will contain new information relating to March 1 inventories, and December-February farrowings, litter rates, and pig crops. The report will also publish producers' second farrowing intentions for the March-May quarter and first producer intentions for the summer June-August 2022 quarter.

January Pork Exports Year-Over-Year Lower

January pork exports were 510 million pounds, 16 percent below those of a year ago. Despite the largely negative bottom line for January, it is notable that shipments to Mexico were record-large at more than 218 million pounds, or, about 49 percent greater than a year ago. Since bone-in hams are a favored U.S. pork cut for Mexican buyers, it is likely that low bone-in ham prices—one of the few pork cuts whose prices are below a year ago—contributed to increased Mexican purchases in January. On the other hand, it is possible that relatively high U.S. pork prices from lower production and robust domestic demand are reducing the attractiveness of U.S. pork to foreign buyers. A listing of the 10 largest foreign markets for U.S. pork in January is shown below.

The first-quarter U.S. pork export forecast is adjusted lower to 1.58 billion pounds, based on generally weak demand conditions in major pork importing regions. The second-quarter forecast is also reduced, to 1.63 billion pounds, as expected-higher U.S. prices are likely to dampen foreign demand for U.S. pork. Total 2022 U.S. pork exports are expected to be 6.73 billion pounds, 4.3 percent lower than shipments in 2021.

⁷ Swine Health Information Center, Domestic Disease Monitoring Reports, Report No. 49, March 1, 2022.

U.S. pork exports: Volumes and export shares of the 10 largest foreign destinations in January 2021 and 2022					
Country	Exports	Exports	Percent change	Export share	Export share
	Jan. 2020	Jan. 2021	(2021/2020)	Jan. 2020	Jan. 2021
	(Million pounds)	(Million pounds)		Percent	Percent
World	606	510	-16		
Mexico	147	218	49	24	43
Japan	101	80	-21	17	16
South Korea	50	49	-3	8	10
China\Hong Kong	145	44	-70	24	9
Canada	45	38	-15	8	8
Dominican Republic	16	18	15	3	4
Colombia	19	17	-8	3	3
Honduras	11	9	-11	2	2
Australia	21	6	-71	3	1
Guatemala	7	5	-24	1	1

Source: U.S. Department of Agriculture, Economic Research Service.

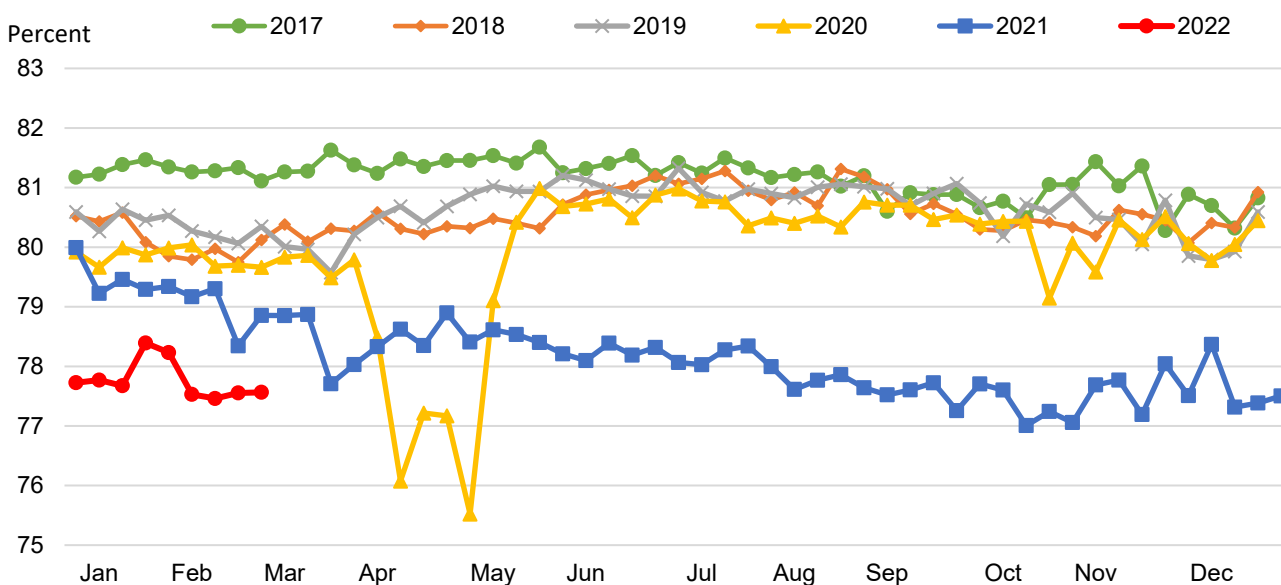
Poultry

Grace Grossen, Adriana Valcu-Lisman, and Margaret Cornelius

Broiler Production Adjusted Down in 2022

Broiler production totaled 3.688 billion pounds in January, 2-percent above last year. This increase was a result of both stronger average weights (0.6 percent higher than last January) and an extra slaughter day compared to last year. Per day slaughter was below January 2020 and 2021 levels by 3.5 percent.

Weekly placements as a share of eggs set 3 weeks earlier, 2017–2022

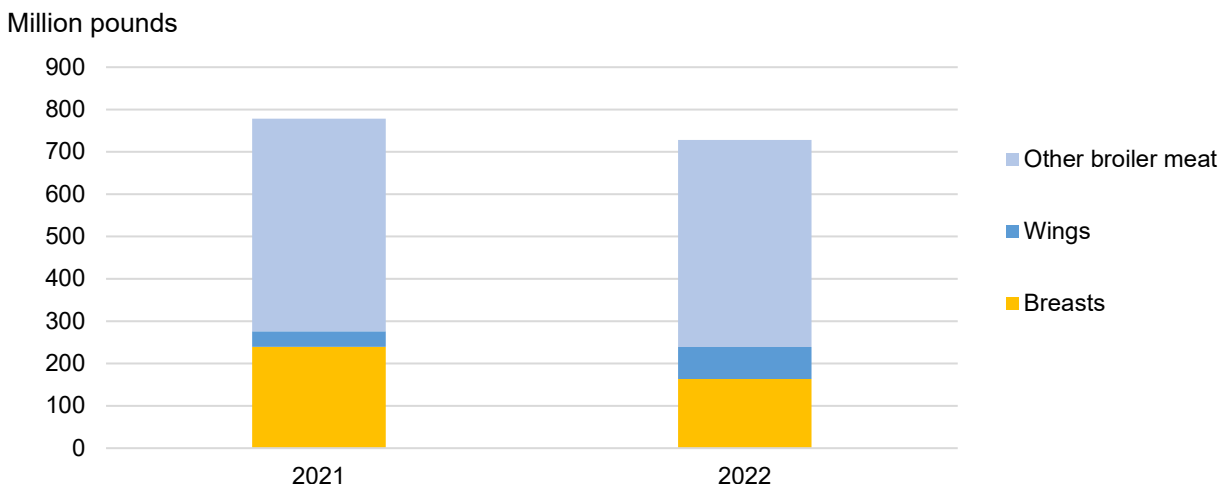


Source: USDA, National Agricultural Statistics Service.

The share of eggs in incubators that is successfully hatched and placed in grow-out flocks has been declining since late 2020. Except for the initial pandemic shock in the spring of 2020, about 79.5 to 81.5 percent of eggs set in recent years were typically placed 3 weeks later. In the week ending February 26, 77.6 percent of the eggs set 3 weeks before were hatched and placed, down from a high of 78.4 percent earlier in the year.

Due to slow production at the beginning of the year, slow recovery in hatchability rates, and expectations of higher feed costs in the rest of 2022, broiler production was adjusted down by 260 million pounds from last month's projection to 45.225 billion pounds. This would still represent 1-percent growth over 2021 production.

Broiler meat in cold storage at the end of January, 2021–2022



Source: USDA, National Agricultural Statistics Service.

Broilers in cold storage remained historically low, ending January at 728 million pounds. This is 6.5 percent below last-January levels and 12.9 percent below the 2019-21 average January levels. Chicken wings in cold storage climbed from 36.7 million pounds at the end of January 2021 to 75.6 million pounds at the end of January 2022, accounting for 10.4 percent of total broiler meat in cold storage. Breast meat in cold storage declined from 239.3 million pounds in 2021 to 163.5 million pounds at the end of January 2022, making up 22.5 percent of frozen broiler meat. Projected broiler ending stocks were adjusted down by 10 million pounds to 745 million pounds.

Highly pathogenic avian influenza (HPAI) has returned to the United States. USDA's Animal and Plant Health Inspection Service (APHIS) has reported cases in commercial broiler flocks in several broiler-producing States. However, HPAI has not been reported in broiler flocks in the major broiler producing southeastern States. The last major U.S. outbreak of HPAI was in 2015.

Broiler Exports Revised Down in 2022

January broiler meat exports totaled 557.9 million pounds, a 10-percent decrease from last January. About 20 percent of the total volume of exports went to Mexico. Increased shipments to some markets (including Taiwan, Qatar, Guatemala, Turkey, and Haiti) were not enough to offset decreases in shipments to larger markets including Mexico, Angola, Vietnam, and Colombia. Since HPAI has not impacted major broiler-producing U.S. States, current State-level import bans from trading partners are not yet expected to have a large impact on broiler exports.

Based on low January exports as well as decreased production expectations and higher forecast prices, 2022 broiler exports were adjusted down by 70 million pounds to 7.305 billion pounds, a year-over-year decrease of about 1 percent. This would represent about 16 percent of projected 2022 production.

U.S. broiler exports: Volumes and export shares of largest markets, January 2021 and 2022

Country	Volume (million pounds)			Export share (percent)	
	January 2021	January 2022	Change in volume	January 2021	January 2022
Mexico	131.485	113.978	-17.507	21.2	20.4
Cuba	48.088	41.756	-6.332	7.7	7.5
China	41.659	41.666	0.007	6.7	7.5
Taiwan	30.183	43.568	13.385	4.9	7.8
Philippines	30.120	21.617	-8.502	4.9	3.9
Angola	42.507	26.287	-16.220	6.8	4.7
Canada	24.030	22.117	-1.912	3.9	4.0
Guatemala	23.339	25.483	2.144	3.8	4.6
Vietnam	28.074	8.755	-19.318	4.5	1.6
Colombia	17.677	7.481	-10.196	2.8	1.3
Haiti	15.259	16.320	1.061	2.5	2.9
ROW	188.236	188.891	-88	30.3	33.8
World	620.655	557.920	-62.736		

Note: Largest markets are based on 2021 total export volumes. ROW = Rest of World.

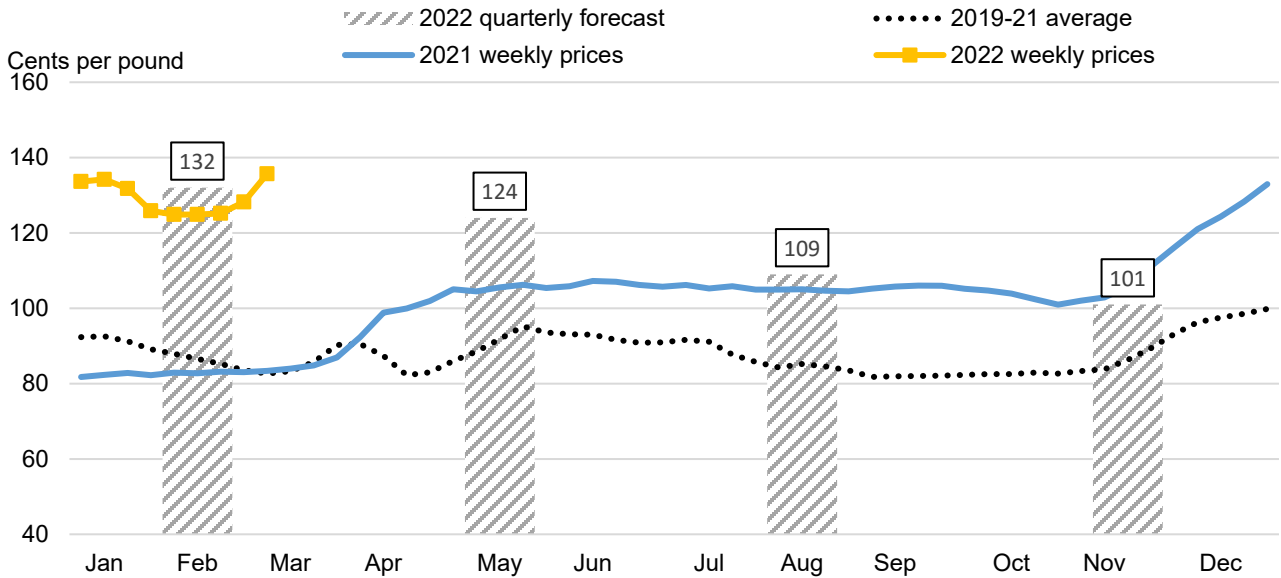
Source: USDA, Economic Research Service using data from the U.S. Department of Commerce, Bureau of the Census.

Chicken Prices Increased in 2022

The national composite broiler price averaged 125.79 cents per pound in February, about 43 cents above last February. Weekly prices have begun a seasonally-typical swing upwards, averaging 135.67 cents per pound in the week ending March 4th. The first-quarter forecast price is increased by 5 cents to 132 cents per pound on this upswing, and the prices in the outlying quarters were increased on tighter supply expectations. This brings the 2022 average price forecast to 116.5 cents per pound, 15 cents over the 2021 average.

Wholesale prices for boneless chicken parts remain high. While boneless/skinless thigh prices have declined from the 2021 peak, they averaged 162.01 cents per pound in February, 78 cents above the same month a year ago. The average boneless/skinless breast prices reached a record high 264.45 cents per pound for February, nearly double the year-ago price.

National composite wholesale broiler price

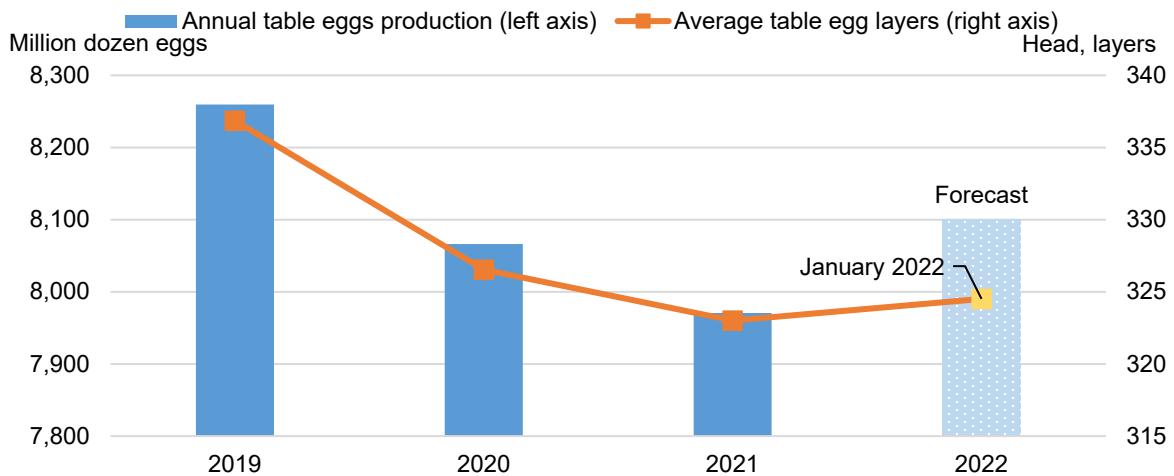


Source: USDA, Agricultural Marketing Service and USDA, *World Agricultural Supply and Demand Estimates*.

2021 and 2022 Table Egg Production Revised Down

The *Annual Chickens and Eggs* report released by USDA-NASS in February brought significant revisions to the total egg production and the chicken inventory for December 2020–November 2021. According to these changes and the January *Chickens and Eggs* report, 2021 total table egg production was estimated at 7,970.6 million dozen eggs—1.2-percent year-over-year lower; hatching egg productions was estimated at 1,267.2 million dozen eggs—3.4-percent year-over-year higher; and the monthly average size of the table egg laying flock was 323 million—about 1-percent year-over-year lower.

Annual table egg production¹ and average table egg layers inventory,² 2019–2022



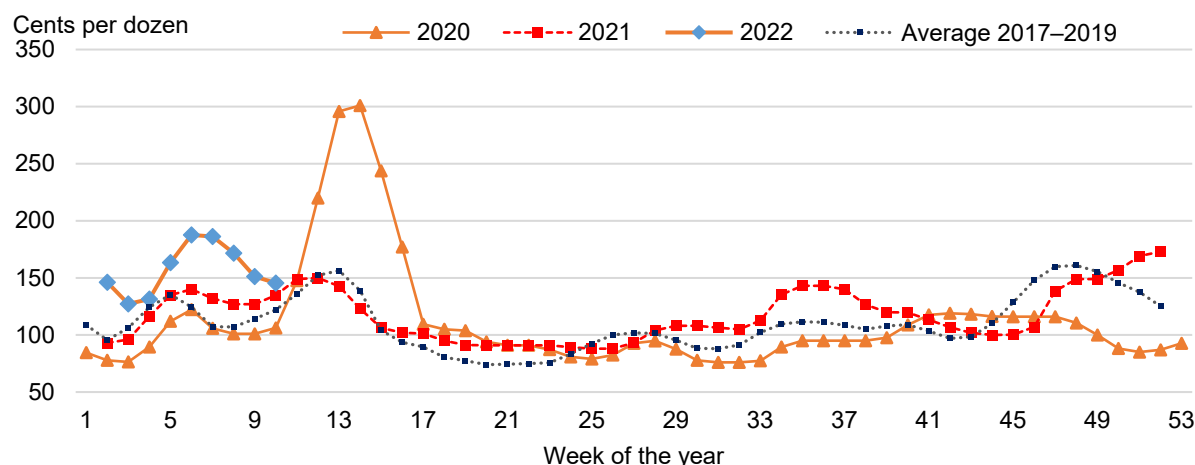
¹2022 table egg production forecast value. ²2022 table egg layers inventory represents estimated value for January. Source: USDA, Economic Research Service calculations using USDA, National Agricultural Statistics Service data.

January table egg production was estimated at 690.6 million dozen eggs, a 0.8-percent year-over-year increase. This increase was due to a 1.8-percent increase in the average rate of lay that more than compensated for a 0.9-percent decrease in the average size of laying flock. Going forward, the prospect of higher production costs will likely constrain the expansion of the layer flock and thus the table egg production. Table egg production forecasts for the first two quarters were revised down to 2,000 and 1,970 million dozen, respectively. Consequently, 2022 total table egg production is forecast at 8,100 million dozen, a 1.6-percent year-over-year increase.

February Wholesale Egg Prices Trending Seasonally Higher

February wholesale shell-egg prices (New York, Grade A Large) averaged 173.6 cents per dozen, a 31.8-percent year-over-year increase. February followed January's higher-than-expected seasonal trend; early February prices reached a high of 189 cents per dozen, but then gradually decreased through the rest of the month. The average price plateaued at 150 cents per dozen in late February and trended down in early March. Going forward, prices are expected to increase in the anticipation of the Easter holiday. Reflecting stronger-than-expected January and February prices and lower production growth, the first-quarter price forecast was increased to 157 cents per dozen. Each subsequent quarter was increased as follows: second quarter to 132 cents per dozen, third quarter to 120 cents per dozen, and fourth quarter to 137 cents per dozen. These changes bring the wholesale egg price forecast for 2022 to 136.5 cents per dozen, a 15.2-percent year-over-year increase.

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, Forecasts Revised Down

January exports of eggs and egg products totaled 21.8 million dozen shell-egg equivalent, a 29.9-percent year-over-year decrease. Both shipments of shell eggs (-34.6 percent) and egg products (-23 percent) were significantly lower than January 2021. Modest increases in shipments to secondary markets (Jamaica, Trinidad and Tobago, Bahamas, and China) were not sufficient to offset significant decreases in shipments to the top four markets (Mexico,

Canada, Hong Kong, and Japan). South Korea, a top-five market in 2021, was the only major market with higher year-over-year shipments.

January marked the second consecutive month when egg exports shipments fell below year-earlier levels. Given the current trend in egg exports, the expectations of higher domestic wholesale egg prices, and lower table egg production, the forecast for 2022 exports was revised down to 330 million dozen shell-egg equivalent—a 15.9-percent year-over-year decrease.

U.S. egg and egg products exports: Volume and export share, January 2021–2022

Country	Volume			Export share	
	2021	2022	Change in volume	2021	2022
	thousand dozen			Percentage	
Mexico	10,749	5,526	-5,223	34	25
Canada	6,119	4,497	-1,622	20	21
Hong Kong	4,469	3,486	-983	14	16
Japan	2,888	1,686	-1,202	9	8
South Korea	1,841	1,911	70	6	9
Jamaica	570	651	81	2	3
United Arab Emirates	961	290	-671	3	1
Trinidad and Tobago	340	518	179	1	2
Bahamas	254	409	155	1	2
China	4	317	313	0	1
World	31,158	21,850	-9,308.56	100	100

Note: Largest markets are based on 2022 year-to-date export volumes.

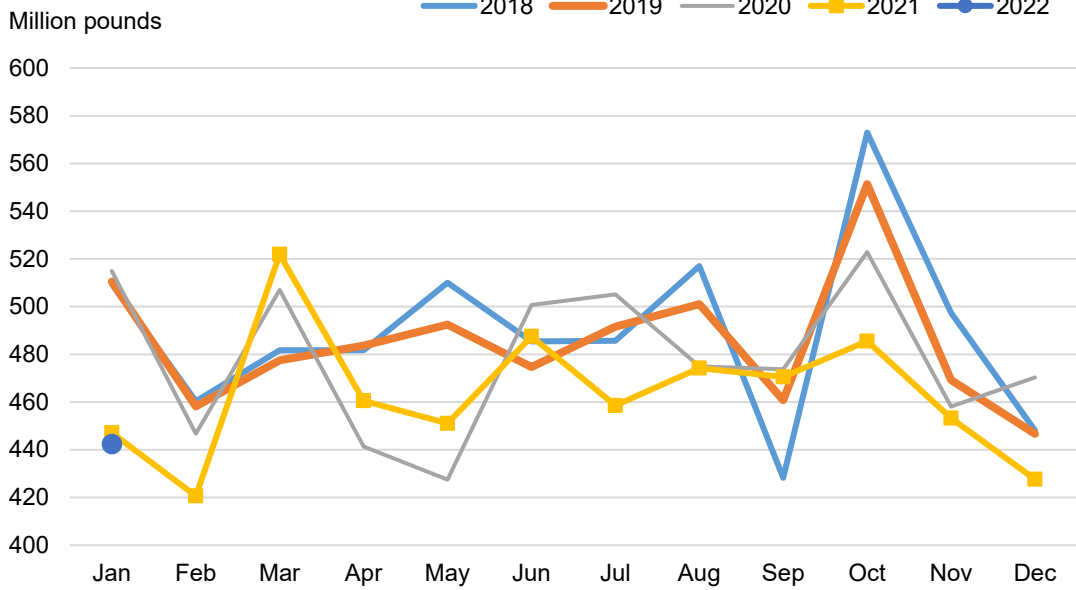
Source: USDA, Economic Research Service using data from the U.S. Department of Commerce, Bureau of the Census

First-Quarter Turkey Production Lowered

Turkey production in January totaled 442.4 million pounds, just over a 1-percent decrease from last year. Live weights averaged 33.17 pounds per head, nearly a 1-percent decrease year-over-year. January poult placements were up 5.01 percent year-over-year and up 2.12 percent from December. Despite the detection of HPAI in commercial turkey flocks in Indiana and Kentucky in early February, there were no observable changes to the preliminary weekly slaughter numbers in February reported by the Agricultural Marketing Service. As of 2020, Indiana was the fourth-largest turkey producer in the United States, contributing nearly 9 percent of total national production. Kentucky does not rank as a major turkey-producing State.

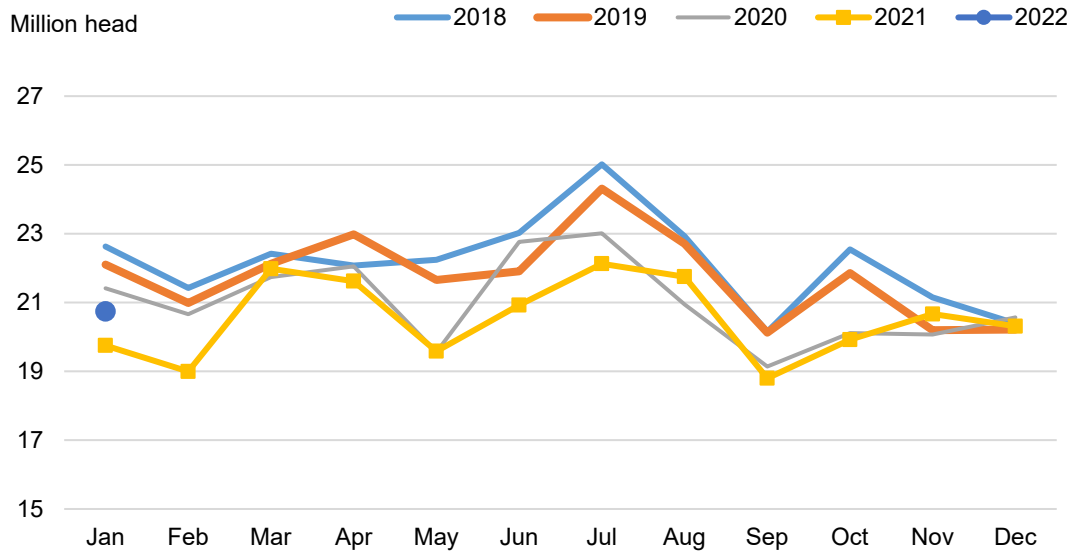
Finalized fourth-quarter production for 2021 was reported at 1.366 billion pounds. This takes total 2021 production to 5.558 billion pounds. First-quarter production for 2022 was revised down to 1.375 billion pounds based on slaughter information to date. Second-quarter production for 2022 was revised up by 10 million pounds to 1.41 billion pounds on strong poult placements. Forecast production for the third and fourth quarters was unchanged, and the annual production projection was revised up 5 million to 5.62 billion pounds.

Monthly turkey production



Source: USDA, National Agricultural Statistics Service.

Monthly poult placements



Source: USDA, National Agricultural Statistics Service.

The finalized 2022 beginning stocks were 165.8 million pounds, the lowest for turkey in over 30 years. End-of-January stocks were 19.1 percent lower year-over-year, but they also were 47.1 percent higher than December stocks, consistent with the annual pattern of turkey stocks climbing after the holidays. Ending stocks for 2022 were revised down 5 million to 175 million pounds due to constricted first-quarter production and lower-than-expected stocks at the beginning of the year.

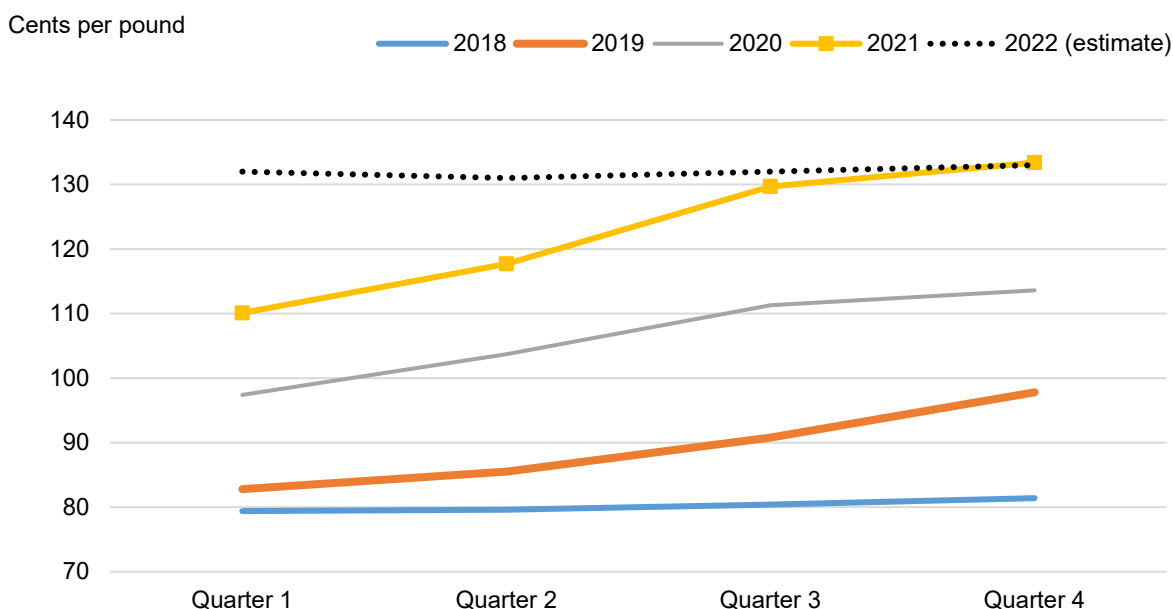
Major Drop in Turkey Exports

January exports totaled 36.3 million pounds, a year-over-year decrease of 4.22 percent. There were year-over-year declines for January turkey exports from key importers such as Canada, Hong Kong, Japan, Dominican Republic, Haiti, and South Africa. The 2022 projection for total U.S. turkey exports was lowered by 85 million pounds to 460 million pounds. This drop can be attributed to rising prices and State-specific import bans on turkey due to HPAI.

Turkey Prices Expected To Climb in 2022

The January frozen whole-hen price was 129.47 cents per pound. This is more than a 19-percent increase year-over-year and is the highest ever recorded turkey price for January. The February frozen whole hen price was 129.84, also a record price for February. With further gains in prices the first week of March, first-quarter prices were raised 3 cents to 132 cents per pound. The second-quarter price was raised 5 cents to 131 cents per pound. The third-quarter price was raised 7 cents to 132 cents per pound, and the fourth-quarter price was raised 8 cents to 133 cents per pound. These adjustments were made with the expectation that 2022 prices will peak in the fall. Tight turkey supply combined with firm demand contributed to these historically high prices.

Quarterly whole-hen frozen turkey price



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

Suggested Citation

Livestock, Dairy, and Poultry Outlook: 2022, LDP-M-333, U.S. Department of Agriculture, Economic Research Service, March 15, 2022.

Use of commercial and trade names does not imply approval or constitute endorsement by USDA.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint](#) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.

Dairy forecasts

	2020	2021					2022				
	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual
Milk cows (thousands)	9,392	9,466	9,503	9,442	9,381	9,448	9,365	9,355	9,350	9,350	9,355
Milk per cow (pounds)	23,777	6,005	6,119	5,914	5,909	23,948	6,000	6,170	6,000	5,990	24,160
Milk production (billion pounds)	223.3	56.8	58.1	55.8	55.4	226.3	56.2	57.7	56.1	56.0	226.0
Farm use	1.1	0.3	0.3	0.3	0.3	1.1	0.3	0.3	0.3	0.3	1.1
Milk marketings	222.2	56.6	57.9	55.6	55.2	225.2	55.9	57.5	55.8	55.7	225.0
Milk-fat (billion pounds milk equiv.)											
Milk marketings	222.2	56.6	57.9	55.6	55.2	225.2	55.9	57.5	55.8	55.7	225.0
Beginning commercial stocks	13.6	15.6	18.1	20.0	17.9	15.6	14.3	16.4	17.8	16.1	14.3
Imports	6.8	1.3	1.8	1.8	1.7	6.5	1.4	1.7	1.8	1.9	6.8
Total supply	242.6	73.5	77.8	77.4	74.8	247.4	71.7	75.6	75.5	73.7	246.1
Commercial exports	9.3	2.6	3.1	3.2	2.7	11.6	2.6	3.0	2.8	2.5	10.9
Ending commercial stocks	15.6	18.1	20.0	17.9	14.3	14.3	16.4	17.8	16.1	13.0	13.0
Commodity Credit Corporation donations ¹	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Domestic commercial use ²	217.5	52.8	54.6	56.3	57.7	221.4	52.7	54.8	56.6	58.2	222.2
Skim solids (billion pounds milk equiv.)											
Milk marketings	222.2	56.6	57.9	55.6	55.2	225.2	55.9	57.5	55.8	55.7	225.0
Beginning commercial stocks	10.2	10.9	11.6	12.0	11.3	10.9	11.0	11.6	11.7	11.0	11.0
Imports	5.6	1.4	1.5	1.4	1.5	5.8	1.4	1.4	1.5	1.5	5.8
Total supply	238.0	68.8	71.0	69.0	67.9	241.8	68.3	70.5	69.0	68.2	241.7
Commercial exports	47.2	12.4	14.1	12.9	11.8	51.1	11.6	13.5	12.9	11.8	49.8
Ending commercial stocks	10.9	11.6	12.0	11.3	11.0	11.0	11.6	11.7	11.0	11.2	11.2
Commodity Credit Corporation donations	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Domestic commercial use ²	179.8	44.9	44.9	44.8	45.1	179.7	45.1	45.3	45.1	45.3	180.8
Milk prices (dollars/hundredweight) ³											
All milk	18.24	17.33	18.67	18.00	20.77	18.69	24.75	25.90	24.45	25.20	25.05
Class III	18.16	15.98	17.95	16.32	18.07	17.08	21.20	22.05	21.90	21.45	21.65
Class IV	13.49	13.71	15.98	16.09	18.57	16.09	24.00	24.60	23.70	22.55	23.70
Product prices (dollars/pound) ⁴											
Cheddar cheese	1.9236	1.6146	1.7250	1.6016	1.7609	1.6755	1.950	2.050	2.070	2.050	2.030
Dry whey	0.3621	0.5064	0.6358	0.5668	0.5888	0.5744	0.760	0.740	0.690	0.650	0.710
Butter	1.5808	1.4677	1.7952	1.7375	1.9297	1.7325	2.665	2.645	2.550	2.450	2.575
Nonfat dry milk	1.0417	1.1226	1.2256	1.2676	1.4613	1.2693	1.730	1.810	1.750	1.670	1.740

Totals may not add due to rounding.

¹ Commodity Credit Corporation donations include purchases made through the USDA Trade Mitigation program. They do not include products purchased under other programs.

² Domestic use for 2020 includes additional milk marketed but not processed.

³ Simple averages of monthly prices. May not match reported annual averages.

⁴ Simple averages of monthly prices calculated by the USDA, Agricultural Marketing Service, for use in class price formulas. 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*.

Updated 3/15/2022.

