

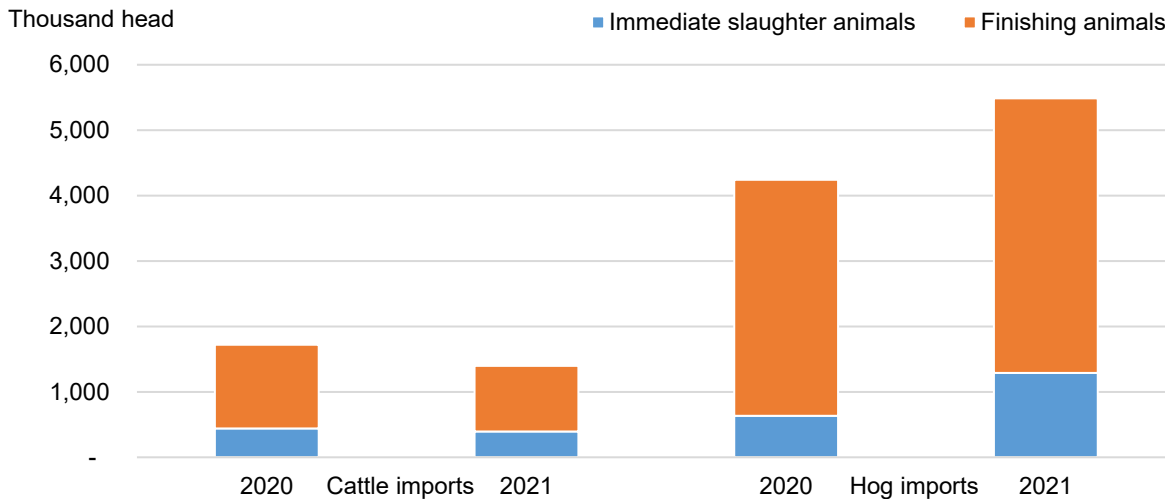


Livestock, Dairy, and Poultry Outlook: December 2021

U.S. Hog Imports Higher in 2021 While Cattle Imports Fall

U.S. live hog imports for 2021 are projected to exceed last year by 25 percent. Canada supplies nearly all imported hogs, most of them feeder hogs under 50 kilograms (110 pounds). However, recent increases in both feeder hogs and hogs for immediate slaughter have driven a spike in imports. As of October, year-to-date imports of hogs under 50 kilograms increased over last year by 591 thousand head, or 16 percent, and imports of hogs over 50 kilograms for immediate slaughter increased by 654 thousand head, or 103 percent. From January to October of this year, hogs for immediate slaughter accounted for 23 percent of imports, compared to an average of 14 percent over the last 5 years. A strike at a processing plant in Canada caused a temporary disruption in processing capacity, contributing to this irregular spike in imports of hogs for immediate slaughter. Conversely, U.S. live cattle imports from January through October are down 19 percent compared to the same period last year. Almost two-thirds of all cattle imported are feeder cattle from Mexico, currently down 23 percent on stronger year-over-year cattle prices.

U.S. imports of live cattle and hogs, January to September 2020 and 2021



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

Beef/Cattle: The forecast for 2021 commercial beef production was raised slightly from last month to 27.895 billion pounds on higher fed cattle slaughter and heavier carcass weights. Fed and feeder steer prices were raised in 2021 and 2022. October's beef imports totaled 293 million pounds, up 17 percent from a year ago. The 2021 annual forecast for beef imports was raised 55 million pounds from last month to 3.315 billion pounds. The 2022 beef import forecast was increased to 3.265 billion pounds. Beef exports in October were up 281 million pounds, 9 percent above last year. The annual forecasts for 2021 and 2022 beef exports were unchanged from last month at 3.455 and 3.270 billion pounds, respectively.

Dairy: The number of U.S. milk cows has continued to decline each month since June 2021. Year-over-year growth in milk supply was low in August and September and fell below the previous year in October. Based on recent data, U.S. milk production forecasts have been lowered for 2021 and 2022. With lower anticipated milk supplies, price forecasts are higher for 2021 and 2022. The all-milk price for the fourth quarter of 2021 is projected to average \$20.45 per hundredweight (cwt), an increase of \$0.45 from last month's forecast. For the year, the all-milk price forecast is \$18.60 per cwt, an increase of \$0.10 from the previous projection. The all-milk price forecast for 2021 is \$20.75 per cwt, an increase of \$0.50 from last month's projection.

Pork/Hogs: Fourth-quarter pork production is raised to 7.2 billion pounds on a faster-than-expected pace of hog slaughter in November. Hog prices—live equivalent 51-52-percent lean—are likely to average \$56 per hundredweight (cwt) in the last quarter of calendar year 2021. Pork exports in October were more than 8 percent lower than a year ago—attributable mostly to lower shipments to Asia—prompting a reduction in the fourth-quarter export forecast to 1.785 billion pounds, about 4 percent lower than a year ago. Total 2021 U.S. pork exports are expected to be 7.2 billion pounds, 1.6 percent lower than exports in 2020.

Poultry/Eggs: The broiler production forecast was lowered in the fourth quarter but was increased in 2022 on strong prices and recent hatchery data. The broiler export forecast was also increased for 2022. Broiler price forecasts were increased in the fourth quarter and in 2022 on recent price trends. The fourth-quarter table egg production forecast was revised down due to recent production data. Forecasts for New York wholesale egg prices (Grade A, Large) and egg exports were unchanged. Forecast turkey production was lowered in both the fourth quarter of 2021 and in 2022. Turkey export forecasts were decreased as well. The fourth-quarter turkey price forecast was adjusted down on recent weekly price trends. The 2022 forecast turkey price was adjusted up to 123 cents per pound.

Beef/Cattle

Christopher G. Davis, Russell Knight, and Hannah Taylor

Beef Production Raised Slightly on Higher Steer and Heifer Slaughter and Heavier Dressed Weights

In November, slaughter was higher year over year. While the increase in total cattle slaughter can be attributed to the 1 additional slaughter day in November 2021 relative to a year ago, the average pace of fed cattle slaughter was higher on a per weekday basis, with Saturday slaughter averaging lower. Likewise, the pace of non-fed cattle slaughter was higher on a weekday basis but lower on a Saturday basis. The preliminary estimated federally inspected (FI) cattle slaughter for November was up 5.4 percent from a year ago. According to the USDA Agricultural Marketing Service (AMS) Livestock Slaughter report, the actual slaughter for beef cows and dairy cows for the weeks of November 1 through November 27 were up 5.9 and 2.3 percent compared to a year ago. More noteworthy was the increase in heifer slaughter, which was also up 3.8 percent during the weeks of November 1 through November 27 compared to a year earlier. As a result, minor adjustments were made to the fed cattle slaughter estimate based on current slaughter data. However, both steer and heifer carcass weights increased during November and are approaching 2020 levels.

The forecast for 2021 beef production is raised on higher expected slaughter of fed cattle and slightly heavier carcass weights. December's beef production forecast totaled 27.895 billion pounds, up 10 million pounds from last month. The forecast for 2022 beef production is unchanged from a month ago at 27 billion pounds.

Fed Steer and Feeder Steer Prices Raised in Fourth-Quarter of 2021 and 2022

In November 2021, the average price for all grades of live steers sold in the 5-area marketing region was reported at \$133.39 per hundredweight (cwt), \$9.06 higher than last month's average price, and \$24.54 above November's 2020 average price per cwt. For the week ending December 12, the fed steer price averaged \$139.69 cwt, down \$0.75 from the previous week's price. The fourth-quarter price forecast for fed steer was raised \$5.00 to \$133.00 per cwt on continuing strength in beef demand and tight cattle supply. These conditions resulted in the 2021 annual forecast for fed steers being raised \$1.25 to \$122.56 from last month and the 2022 annual forecast raised \$5.00 to \$135.00 per cwt.

November's average price for feeder steers weighing 750-800 pounds sold in the Oklahoma City National Stockyards was \$159.74 per cwt, up \$6.22 from last month's average price and \$21.52 per cwt from November 2020. For the week of December 6, the average feeder steer price was \$168.52 per cwt, up \$4.47 from a week earlier. The 2021 fourth-quarter forecast was revised up \$5.00 to \$159.00 per cwt relative to last month on current price strength and improved prospects for winter grazing. The 2021 and 2022 annual forecasts were raised from a month earlier to \$146.80 and \$159.00 per cwt, respectively.

Beef Imports Up in October; 2021 and 2022 Import Forecasts Raised

Beef imports totaled 293 million pounds in October, up 17 percent year over year and 22 percent higher than the 5-year average. This was the second-largest import estimate for the month of October, behind 2004. Total year-to-date imports were 4 percent behind the same period last year but 5 percent above the 5-year average.

There were notable year-over-year increases in monthly imports from Mexico, Brazil, Canada, and New Zealand. Imports from Mexico were nearly 42 percent higher year over year at 60 million pounds, the largest shipment for the month and eighth-largest overall. Imports from Brazil had a year-over-year increase of over 21 percent, setting a record high of nearly 38 million pounds.

As the table shows, year-to-date imports from Canada and Brazil have increased by 16 and 55 percent, respectively. So far this year, Canada has supplied nearly 29 percent of beef imports compared to 24 percent last year. Brazil has increased its beef import share by 4 percentage points, accounting for 10 percent of U.S. beef imports this year. Year-to-date imports from Australia are nearly 41 percent behind last year, a share of only 12 percent of total year-to-date imports compared to 20 percent in 2020.

U.S. beef imports: Volume, January–October 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						
Canada	689	798	108	16	24	29
Mexico	582	558	-24	-4	20	20
New Zealand	465	450	-15	-3	16	16
Australia	578	342	-236	-41	20	12
Brazil	179	278	98	55	6	10
World	2899	2778	-122	-4	100	100
Additional suppliers of note						
Nicaragua	159	153	-7	-4	5	5
Uruguay	128	112	-16	-13	4	4
Argentina	61	42	-19	-31	2	2

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

The fourth-quarter beef import forecast was increased by 55 million pounds to 830 million due to stronger-than-expected October imports and continued strong domestic beef demand. Annual imports for 2021 were increased to 3.315 billion pounds. The beef import forecast for 2022 was increased to 3.265 billion pounds, reflecting stronger supply availability from Oceania that can enable a move closer to historic import levels from that region.

Asian Markets Extend Record Pace of U.S. Beef Exports

In October, U.S. beef exports were 281 million pounds, 9 percent above a year earlier and 11 percent above the 5-year average. Among major destinations, larger year-over-year shipments to China, South Korea, and Japan more than offset reduced exports to Hong Kong, Mexico, Canada, and Taiwan. As

the table below shows, cumulative exports for January to October reached 2.861 billion pounds, up almost 20 percent from a year ago and the 5-year average.

U.S. beef exports: Volume, January-October 2020 and 2021

Country	Exports year to date				Export 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 6 largest foreign markets						
Japan	698	693	-5	-1	29	24
South Korea	566	662	96	17	24	23
China	68	442	373	545	3	15
Mexico	224	259	35	16	9	9
Canada	241	225	-16	-7	10	8
World	2391	2861	471	20	100	100
Additional foreign markets of note						
Taiwan	168	161	-7	-4	7.0	5.6
Hong Kong	172	110	-61	-36	7.2	3.9
Indonesia	29	40	10	35	1.2	1.4

Note: Largest markets are based on 2021 export volumes.

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

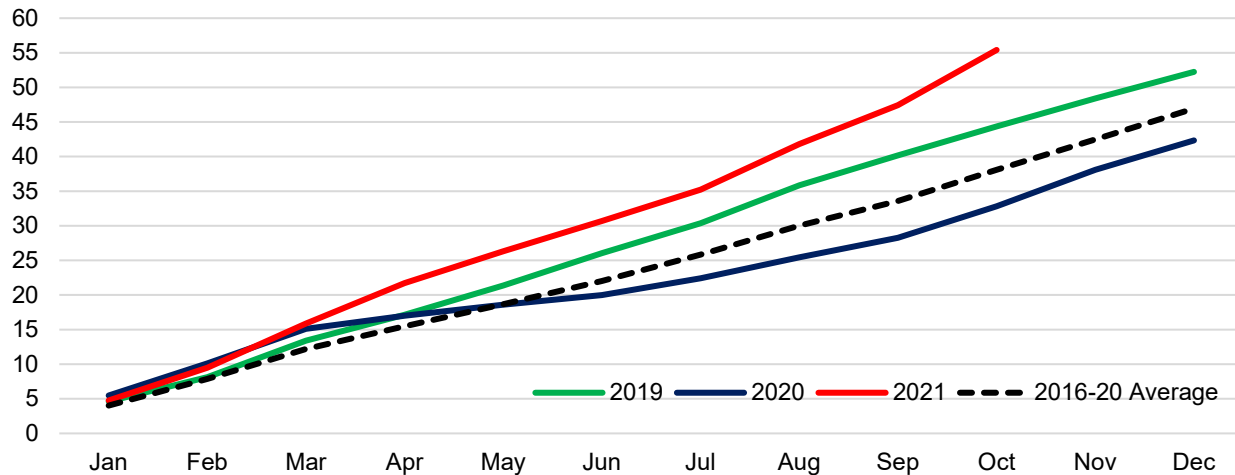
Exports to China reached over 47 million pounds in October, and 442 million pounds year-to-date, exhibiting the largest year-over-year and year-to-date volume increase. Compared to last year, shipments to China soared, moving it from the seventh- to the third-largest export destination and nearly surpassing combined shipments to Mexico and Canada. This is largely a function of several ongoing factors, including changes to U.S. market access that were implemented in March 2020. China's demand for animal protein is expected to continue to support beef imports.

U.S. beef shipments to South Korea set a record for October, and South Korea's aggregate beef imports from the world through October remain at their highest recorded levels. During the same period, U.S. beef sales to Japan were 5 percent higher in October from last year, bringing year-to-date shipments almost to 2020 levels.

U.S. beef exports to member countries of the Dominican Republic-Central America Free Trade Agreement (CAFTA-DR) are at a record pace. The members consist of Costa Rica, Guatemala, Honduras, Nicaragua, El Salvador, and the Dominican Republic (DR). Total beef exports year to date to these countries are up 69 percent, or 23 million pounds, from last year. Separately, exports achieved historic levels to Guatemala, Costa Rica, Honduras, and El Salvador. The DR is typically the largest destination for U.S. beef in the region, but this year Guatemala surpassed the DR by 22 percent, or almost 4 million pounds, despite the DR's return to beef import levels pre-COVID.

U.S. beef sales to CAFTA-DR climb in late 2021

Million pounds



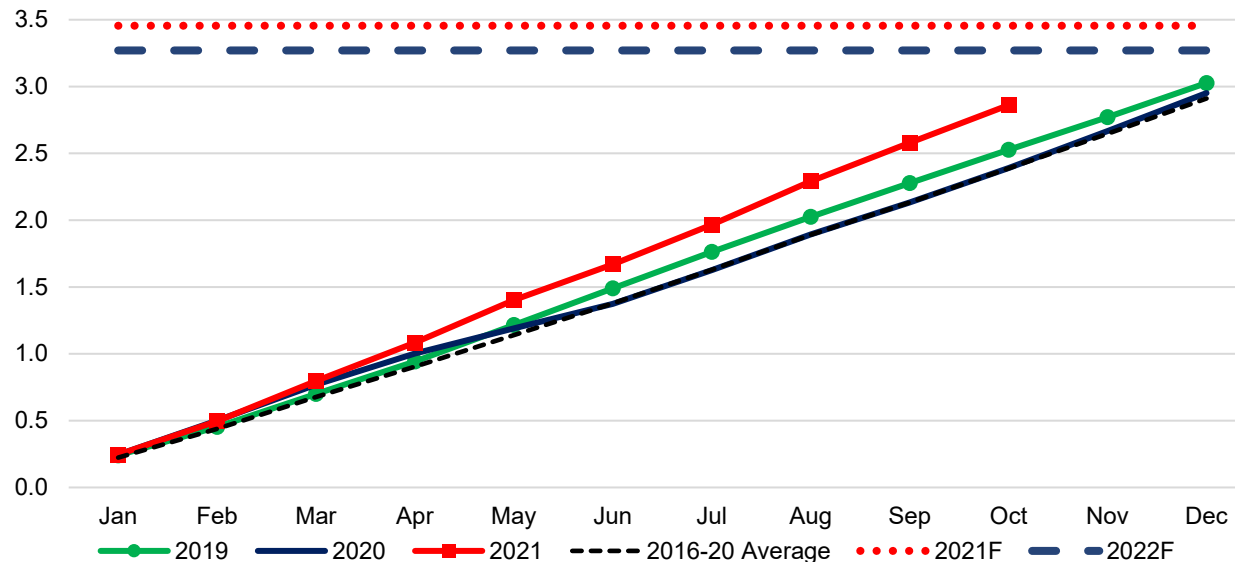
Source: USDA, Economic Research Service using data from the U.S. Department of Commerce, Bureau of the Census.

Although U.S. exports to Mexico in October were down 13 percent from a year ago, year-to-date shipments are up 16 percent.

Based primarily on continued strong shipments to Asia, the forecast for beef exports in 2021 was unchanged from last month for a total of 3.455 billion pounds, 17 percent over last year and 18 percent above the 5-year average. The 2022 beef export forecast was also unchanged at 3.270 billion pounds, a decline of about 5 percent into next year.

Cumulative monthly U.S. beef exports

Billion pounds



Note: 2021F = Annual forecast for 2021.

Note: 2022F = Annual forecast for 2022.

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

Dairy

Jerry Cessna and Angel Teran

Recent Wholesale Dairy Product Prices

According to the USDA National Dairy Products Sales Report (NDPSR), from the week ending November 6 to the week ending December 4, most wholesale dairy product prices increased. Prices for butter, nonfat dry milk (NDM), and dry whey increased to \$2.0378 (+16.2 cents), \$1.5109 (+7.5 cents), and \$0.6270 per pound (+5.3 cents), respectively. In contrast, the price of 40-pound blocks of Cheddar cheese decreased to \$1.7894 per pound (-0.7 cents), and the price of 500-pound barrels (adjusted to 38 percent moisture) declined to \$1.5739 per pound (-28.0 cents).

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

	For the week ending		Change
	November 6	December 4	
Butter	1.8754	2.0378	0.1624
Cheddar cheese			
40-pound blocks	1.7968	1.7894	-0.0074
500-pound barrels*	1.8536	1.5739	-0.2797
Nonfat dry milk	1.4363	1.5109	0.0746
Dry whey	0.5742	0.6270	0.0528

*Adjusted to 38-percent moisture.

Source: USDA, Agricultural Marketing Service, *National Dairy Products Sales Report*, December 8 2021.

The most recent weekly average dairy product spot prices reported by the Chicago Mercantile Exchange (CME) were higher than the NDPSR prices for the week ending December 4. For the trading week ending on December 10, Chicago Mercantile Exchange (CME) weekly average spot prices averaged \$2.0600 per pound for butter, \$1.8485 for 40-pound blocks Cheddar cheese, \$1.6745 for 500-pound barrels of Cheddar cheese, \$1.5840 for NDM, and \$0.7035 for dry whey.

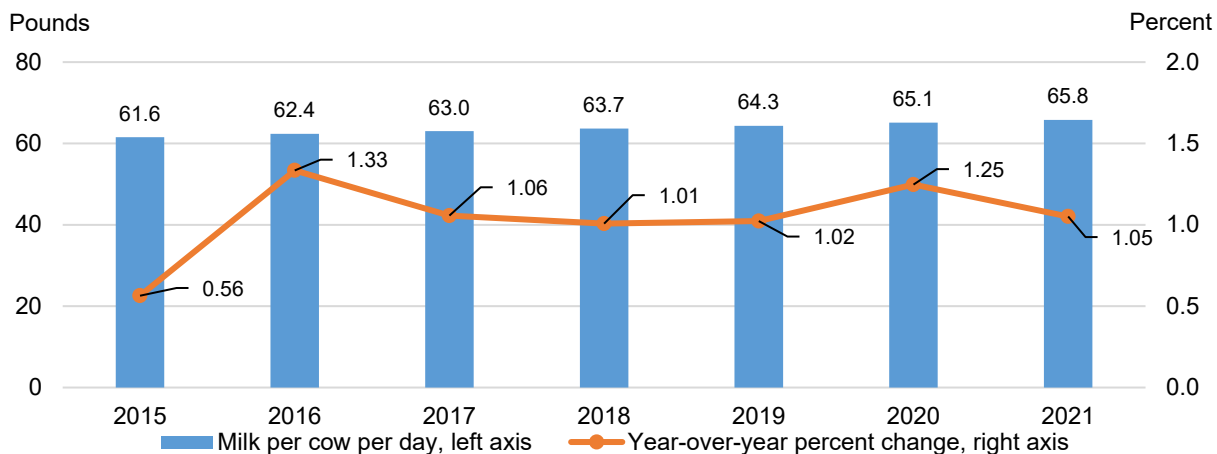
The Global Dairy Trade (GDT) Price Index for the trading event of December 7 was up 1.4 percent from the GDT event of November 16. Notably, the average GDT price for butter increased by 4.6 percent, closing at \$2.63 per pound for all contracts in the most recent event.

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.

Recent Dairy Supply and Use Data

In the Milk Production report published on November 18, USDA, National Agricultural Statistics Service (NASS) estimated that milk production in October totaled 18.515 billion pounds, 0.5 percent lower than October 2020. The estimated number of milk cows in October was 9.400 million head, 14,000 fewer than the previous month and 14,000 below the previous year. Milk production per cow in October was 1,970 pounds per head, 6 pounds below October 2020. From January to October, average milk production per cow per day was 65.8 pounds, an increase of 0.7 pounds (+ 1.1 percent) from the same period in 2020. NASS revised September numbers downward for milk cows at 9,414 thousand head (-8,000), milk per cow at 1,916 pounds (-2), and milk production at 18,038 million pounds (-37 million).

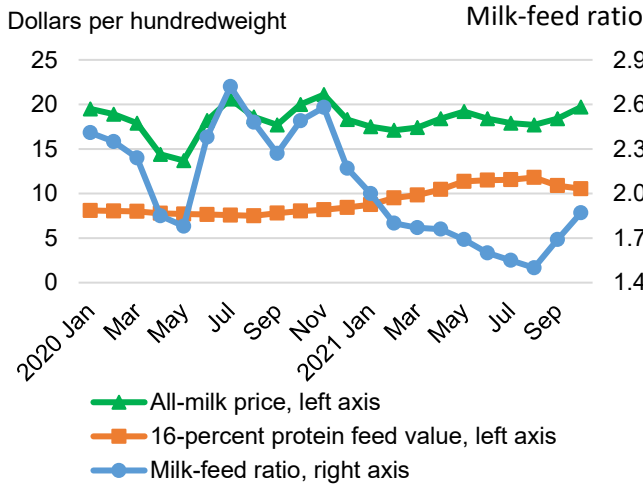
Average daily milk per cow from January through October, 2015-2021



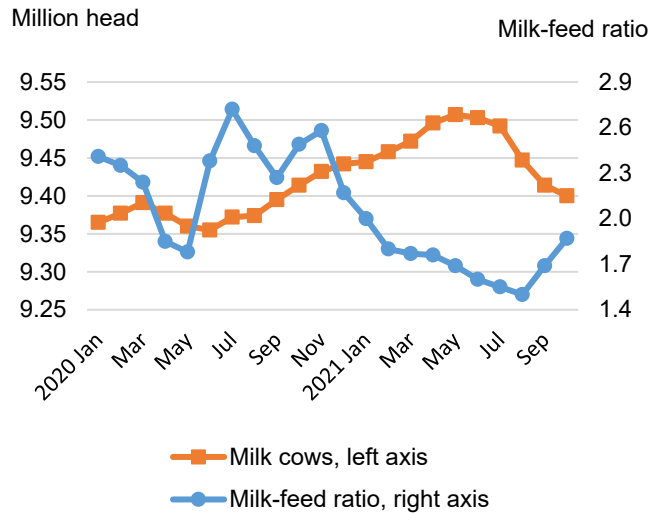
Source: USDA, National Agricultural Statistics Service and Economic Research Service calculations.

The milk-feed ratio, reported by NASS in the monthly Agricultural Prices report, declined from 2.58 in November 2020 to 1.50 in August 2021 (the lowest level since March 2013). The decline in the milk-feed ratio was mostly due to an increase in feed prices over that time. In September and October 2021, the milk-feed ratio increased to 1.69 and 1.87, respectively, as the all-milk price increased and the 16-percent protein feed value estimate decreased. The U.S. milk supply usually responds to changes in prices and input costs with a lag of several months. Note that while the milk-feed ratio began 9-month decline in December 2020, milk cow numbers did not begin to fall until June of 2021, and they have continued to fall since then. In addition, changes in administrative and operational costs for many dairy farms have likely had effects on the U.S. milk supply.

All-milk price, 16-percent protein feed value, and milk-feed ratio *



Milk cows and milk-feed ratio

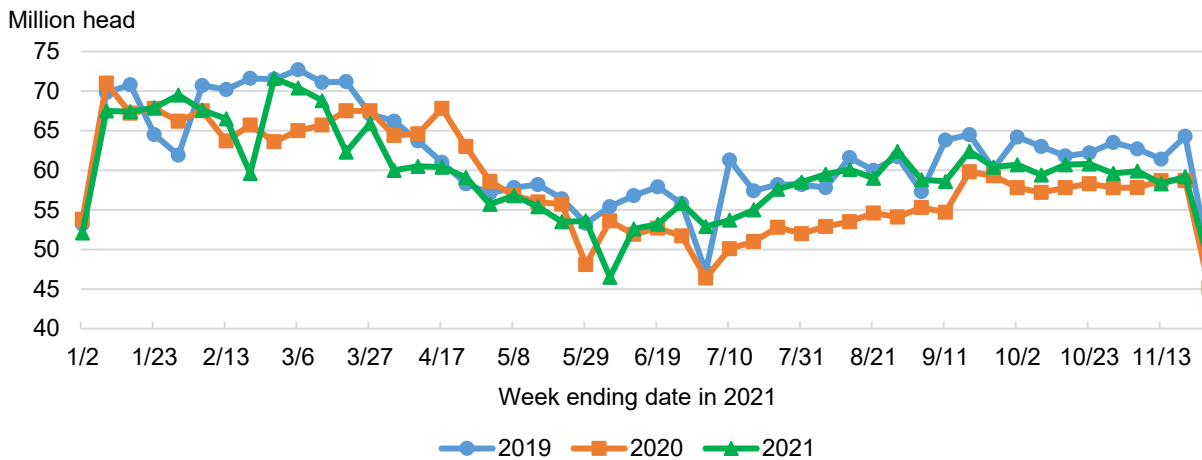


* The milk-feed ratio is an estimate of the number of pounds of 16-percent protein mixed dairy feed equal in value to 1 pound of whole milk from the farm.

Source: USDA, National Agricultural Statistics Service.

From the week ending June 12, 2021, to the week ending on November 6, federally inspected dairy cow slaughter activity has been above the corresponding weeks in 2020. For the week ending November 13, it was slightly below the corresponding week of the previous year, and for the following weeks, it was slightly above the corresponding weeks of 2020. In most recent weeks, federally inspected milk cow slaughter has been below corresponding weeks in 2019.

Weekly federally inspected milk cow slaughter



Source: USDA, Agricultural Marketing Service.

In October, dairy product exports were robust, particularly for cheese, lactose, and butter. Exports of cheese totaled 78.5 million pounds, an increase of 23.9 million pounds from October 2020, with Mexico as the main destination. Exports of lactose totaled 77.6 million pounds, 9.1 million higher than October 2020. Butter exports in October were 9.8 million pounds, 4.7 million above October 2020, with Canada as the main destination. Total exports in millions of pounds in October 2021 and their change from October 2020 were as follows: dry skim milk products, 147.4 (-20.7); dry whey, 41.7 (-11.4); and whey protein concentrate, 24.6 (-6.3). On a milk-fat milk-equivalent basis, dairy product exports totaled 980 million pounds, 90 million below September but 273 million higher than October 2020 (an increase of 38.6 percent). On a skim-solids milk-equivalent basis, October exports totaled 4.096 billion pounds, 4 million lower than September and 170 million below October 2020 (a decline of 4.0 percent).

In October, imports totaled 548 million pounds on a milk-fat basis, 53 million less than September but 19 million pounds higher than October 2020. On a skim-solids basis, October imports totaled 459 million pounds, 33 million lower than September but 91 million above October 2020.

October ending stocks on a milk-fat basis totaled 16.479 billion pounds, 368 million higher than October 2020. On a skim-solids basis, ending stocks totaled 10.574 billion pounds at the end of October, 588 million higher than October 2020.

In October, domestic use on a milk-fat basis totaled 19.447 billion pounds, a reduction of 377 million pounds from October 2020. On a skim-solids basis, October domestic use was 15.490 billion pounds, 514 million above October 2020.

Outlook for Feed Prices

The 2021/22 corn price projection is \$5.45 per bushel, unchanged from last month's forecast. The 2021/22 price projection for soybean meal is \$330 per short ton, up \$5 from last month's forecast. For more information, see Feed Outlook, published by USDA, Economic Research Service. The alfalfa hay price in October was \$213 per short ton, \$4 higher than September and \$44 higher than September 2020. The 5-State weighted-average price for premium alfalfa hay in October was \$247 per short ton, \$3 higher than September and \$53 higher than October 2020.

Dairy Forecasts for the Remainder of 2021

Based on recent milk production data for October and revised for September, milk cows for the third quarter of 2021 (2021-Q3) and 2021-Q4 were adjusted downward. The estimate for milk cows in 2021-Q3 is 9.451 million head, about 5,000 head lower than last month's estimate. For 2021-Q4, the number of dairy cows is projected to average 9.395 million head, 5,000 head below last month's projection. Average milk production per cow in 2021-Q4 is projected at 5,900 pounds per head, 10 pounds less than last month's forecast. The milk production forecast for 2021 is 226.2 billion pounds, 0.2 billion pounds lower than last month's forecast.

The 2021-Q4 forecast for exports on a milk-fat basis was adjusted down slightly to 2.9 billion pounds (-0.1 billion pounds) on a milk-fat basis. On a skim-solids basis, the 2021-Q4 forecast is unchanged at 12.1 billion pounds. For the year, the export forecast is 11.8 billion pounds on a milk-fat basis (-0.1 billion pounds). On a skim-solids basis, the export forecast for 2021 is 51.5 billion pounds (+0.1 billion

² Dry skim milk products include NDM, skim milk powder, and dry skim milk for animal use.

pounds). Compared to 2020, the 2021 export projections are substantially higher, by 2.5 billion pounds on a milk-fat basis and 4.3 billion pounds on a skim-solid basis. Exports of cheese, butter, dry skim milk products, whey products, and lactose are expected to remain strong through the remainder of the year.

On a milk-fat basis, the 2021-Q4 projection for dairy product imports has been raised to 1.7 billion pounds (+0.1 billion) due higher expected imports of cheese and butterfat products. On a skim-solids basis, the 2021-Q4 import forecast is unchanged at 1.4 billion pounds. The annual forecast for 2021 imports on a milk-fat basis has been raised to 6.5 billion pounds (+0.1 billion) and is unchanged at 5.7 billion pounds on a skim-solids basis.

Based on recent data for the end of October, the 2021 forecast for ending stocks has been lowered by 0.2 billion pounds to 14.7 billion pounds on a milk-fat basis. On a skim-solids basis, the forecast for ending stocks is 10.9 billion pounds, down 0.1 billion pounds from last month's forecast. The forecast for 2021-Q4 domestic use on a milk-fat basis is 57.2 billion pounds, 0.2 billion higher than last month's projection. On a skim-solids basis, the forecast for domestic use for 2021-Q4 is 44.8 billion pounds, 0.2 billion above the previous forecast. Annual forecasts for 2021 domestic use are 220.9 billion pounds on a milk-fat basis (+0.3 billion) and 179.3 billion pounds on a skim-solids basis (-0.2 billion).

Based on recent data, 2021-Q4 price forecasts for cheese, butter, and dry whey are raised to \$1.750 (+2.0 cents), \$1.910 (+4.0 cents), and \$0.590 (+2.0 cents) per pound, respectively. The 2021-Q4 price forecast for NDM is lowered to \$1.455 per pound, 0.5 cents lower than the previous forecast.

With higher projected wholesale prices for Cheddar cheese and dry whey price, the Class III milk price forecast for 2021-Q4 is \$17.95 per cwt, \$0.30 above the previous month's forecast. The Class IV milk price projection for 2021-Q4 is \$18.45 per cwt, \$0.15 higher than last month's forecast. The all-milk price forecast for 2021-Q4 has been raised to \$20.45 per cwt, up \$0.45 from the previous forecast. The all-milk price forecast for 2021 has been raised to \$18.60 per cwt, up \$0.10 from last month's projection.

Dairy Forecasts for 2022

The number of dairy cows is expected to continue declining in 2022-Q1 and Q2. Accordingly, the annual 2022 forecast has been lowered to 9.385 million head, 10,000 head below the last month's forecast and 65,000 less than the forecast for 2021. The 2022 forecast for milk per cow is 24,265 pounds, 15 pounds lower than last month's forecast. The projection for 2022 milk production has been lowered to 227.7 billion pounds, 0.4 billion pounds below last month's forecast but 1.5 billion pounds above 2021.

On a milk-fat basis, the export forecast for 2022 is 11.5 billion pounds, 0.1 billion higher than last month's projection due to higher expected exports of cheese and butterfat products. On a skim-solids basis, 2022 dairy exports are projected to total 52.0 billion pounds, 0.2 billion above last month's forecast due to the strong international demand for lactose. The 2022 dairy products imports forecast remain unchanged from last month at 6.5 billion pounds on a milk-fat basis and 5.5 billion pounds on a skim-solids basis. Although domestic dairy product prices are forecast to rise from 2021 to 2022, most are expected to remain competitive in the international markets.

Due to higher expected prices and recent softness in domestic use, forecasts for domestic use have been lowered from the previous month's forecast. On a milk-fat basis, the domestic use forecast for 2022 is 221.8 billion pounds, 0.5 billion below the previous forecast, due to expected weakness in

demand for butter and anhydrous milk fat (AMF). On a skim-solids basis, the forecast for domestic use is 180.1 billion pounds, 0.7 billion lower than last month's forecast.

Ending stocks on a milk-fat basis for 2022 have been lowered to 14.5 billion pounds (-0.2 billion), as lower expected total supply and higher exports more than offset lower expected domestic use. On a skim-solids basis, the forecast for ending stocks is 10.9 billion pounds, unchanged from the previous month's projection.

Considering the lower projected milk supply, dairy product price forecasts for 2022 have been raised from last month's projections. Wholesale price forecasts for Cheddar cheese, butter, NDM, and dry whey are \$1.775 (+1.0 cent), \$1.940 (+3.0 cents), \$1.510 (+2.5 cents), and \$0.575 (+4.5 cents) per pound, respectively.

With higher projected wholesale prices for cheese and dry whey, the Class III milk price forecast for 2022 is \$18.15 per cwt, \$0.40 higher than last month's forecast. Due to higher butter and NDM price forecasts, the Class IV milk price projection for 2022 is \$19.00 per cwt, \$0.30 above last month's forecast. The all-milk price forecast for 2022 is \$20.75 per cwt, an increase of \$0.50 from last month's projection.

Pork/Hogs

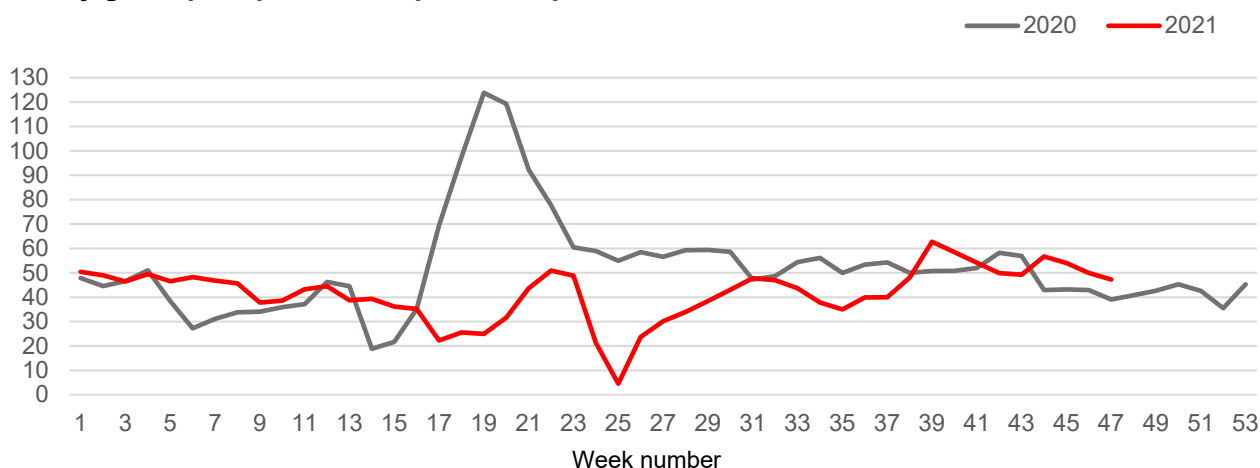
Mildred Haley

Fourth-Quarter Pork Production Forecast Increased on Faster Hog Slaughter Pace

The fourth-quarter forecast for pork production is raised about 55 million pounds to 7.2 billion pounds due to a quicker-than-expected pace of hog slaughter since early November. Consecutive weeks in November where estimated federally inspected (FI) hog slaughter numbers exceeded 2.6 million head—suggesting that the U.S. pork processing industry is working around operational constraints—largely prompted the raised production estimate. Even so, estimated FI slaughter numbers for November, at almost 11.1 million head, are about 3.7 percent lower than FI numbers for November 2020.³ Lower FI slaughter numbers for both November and October are mostly accounted for in the last *Quarterly Hogs and Pigs* report: the March-May 2021 pig crop, mainly processed in the September-November quarter, was reported 3 percent lower than a year earlier.

Processors are paying higher prices for reduced numbers of slaughter-ready hogs. Prices of live equivalent 51-52 percent lean hogs averaged \$62.80 per cwt in October, 12.3 percent above a year earlier. In November, hog prices averaged \$54.53 per cwt, 8.32 percent above a year earlier. Through much of the fourth quarter, higher fourth-quarter hog prices have been offset by higher wholesale values of pork primals plus the pork drop credit. Since the beginning of the fourth quarter, the wholesale value of the pork carcass has averaged \$95.66 per cwt, 10 percent above the same period last year. Processors' gross margins in October-November averaged about \$52 per head, about 10 percent higher than the per head average for the same period last year.

Weekly gross pork processor spread, drop-value included



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

³ After taking account of the unequal numbers of November slaughter days in 2020 and 2021.

The fourth-quarter pork production forecast of 7.25 billion pounds (3.6 percent below fourth quarter of 2020) implies a 2021 total of about 27.7 billion pounds, about 2 percent below production in 2020. Production in 2022 is expected to be about 27.6 billion pounds, less than 1 percent below this year's forecast production. Fourth-quarter 2021 prices for live equivalent 51-52 percent hogs are expected to average \$56 per cwt, more than 10 percent higher than prices a year ago.

Lower-Than-Expected October Exports Prompt Fourth-Quarter Forecast Reduction

Lower-than-expected October pork exports—at about 541 million pounds—prompted a reduction of 30 million pounds to the fourth-quarter export forecast. The revised forecast is 1.8 billion pounds. Strong October exports to Mexico and other Latin American nations only partially offset weak shipments to Asia. Data from the Government of Japan indicate that North American pork—exported from the United States, Canada, and Mexico—all lost market share to the European Union (i.e., Spain and Denmark) in October. Total 2021 U.S. exports, incorporating the new fourth-quarter forecast, are expected to be about 7.2 billion pounds, almost 2 percent below shipments in 2020. The listing of the 10 largest export destinations in October in the table below account for a 93-percent share of the month's shipments.

U.S. pork exports: Volumes and export shares of the 10 largest foreign destinations in October 2020 and 2021					
Country	Exports October 2020 (Million pounds)	Exports October 2021 (Million pounds)	Percent change (2021/2020)	Export share October 2020 Percent	Export share October 2021 Percent
World	590	541	-8.4		
Mexico	135	204	50.6	23	38
Japan	108	87	-19.9	18	16
China\Hong Kong	141	52	-62.7	24	10
Canada	52	48	-7.5	9	9
Colombia	18	34	89.4	3	6
South Korea	31	30	-3.5	5	6
Dominican Republic	9	15	68.3	2	3
Australia	16	12	-26.8	3	2
Honduras	8	11	25.9	1	2
Guatemala	5	8	84.2	1	2

Source: USDA, Economic Research Service.

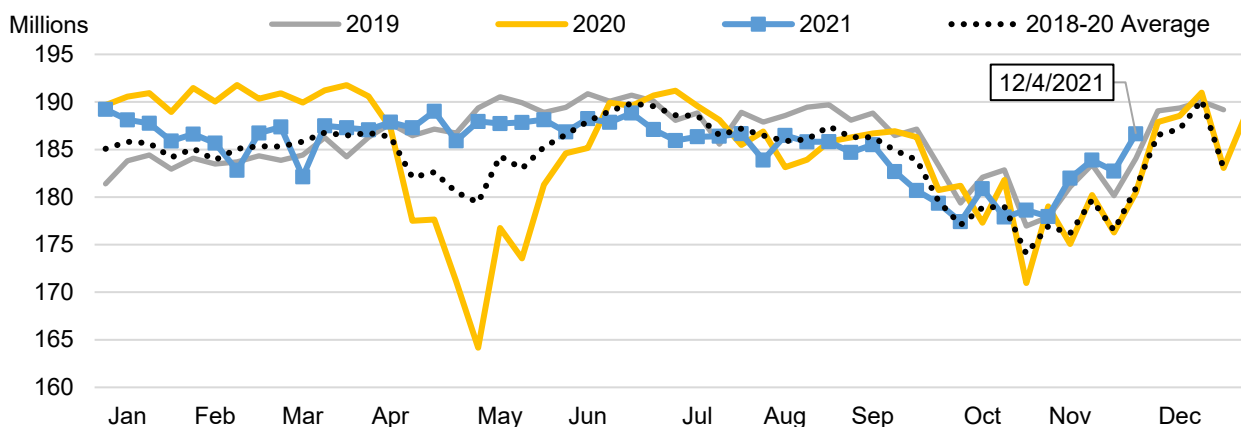
Poultry

Grace Grossen and Adriana Valcu-Lisman

Broiler Production Forecasts Adjusted Up in 2022

Broiler production in October totaled 3.826 billion pounds, a 1-percent year-over-year decrease and 4 percent higher when adjusted for the extra slaughter day in 2020. While average weights increased over last October by 1.2 percent, slaughter was down 2.1 percent year over year, unadjusted for the additional day. Preliminary weekly slaughter data also indicate that November production was lower year over year. Based on these indicators, the fourth-quarter production forecast was revised down to 11.025 billion pounds. This brings the 2021 total forecast to 44.73 billion pounds, an increase of less than half a percent from 2020.

Weekly broiler chick placements



Source: USDA, National Agricultural Statistics Service.

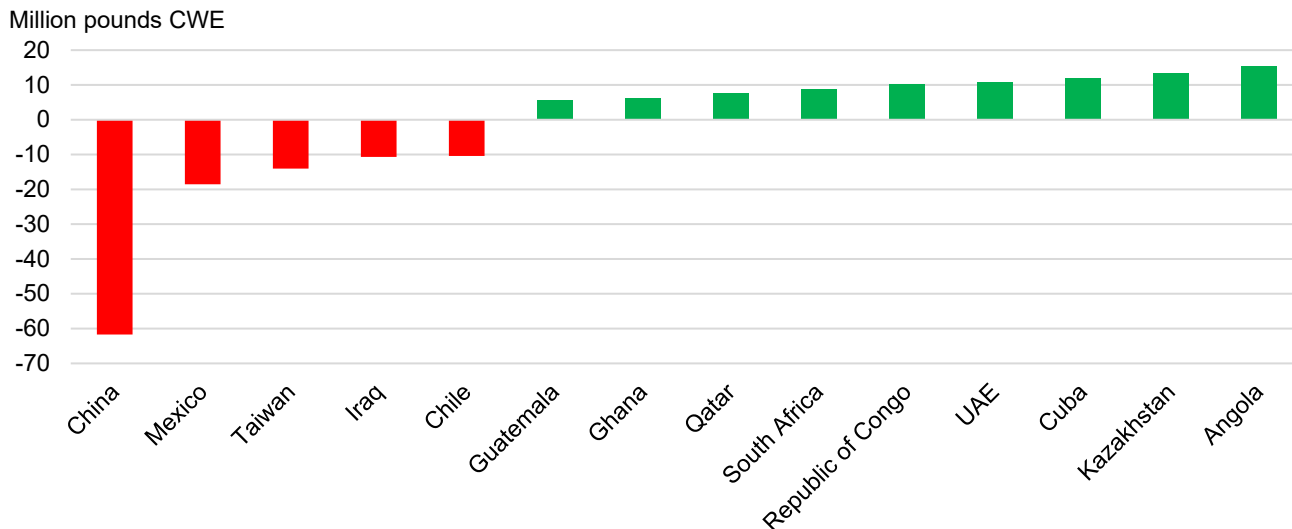
Weekly chick placement data from NASS has averaged 3 percent above year-ago levels for the 4 weeks ending December 4th. This may indicate that the broiler industry is attempting to offset fertility challenges that have impacted production growth during 2021. Combined with strong price trends, there is reason to expect expansion in production in 2022. The first-quarter production forecast was revised up to 11.15 billion pounds, the second-quarter forecast up to 11.40 billion pounds, and the third-quarter up to 11.69 billion pounds. In total, the total broiler production forecast for 2022 was adjusted up by 260 million pounds to 45.5 billion pounds, 2-percent growth from the 2021 forecast.

Broiler Exports Adjusted Up in 2022

Broiler exports in October totaled 654 million pounds, a year-over-year decrease of 6.3 percent. Large decreases in shipments to a few countries, including China (-61.7 million pounds), Mexico (-18.6 million pounds), Taiwan (-14.0 million pounds), Iraq (-10.7 million pounds), and Chile (-10.4 million pounds) were only partially offset by many smaller increases in shipments to markets including Angola (+15.3 million pounds), Kazakhstan (+13.3 million pounds), and Cuba (12.0 million pounds), among others. This imbalance is illustrated in the chart below. The fourth-quarter export forecast is unchanged at 1.9 billion pounds, about 17 percent of forecast production in the fourth quarter. For 2022, the total export

forecast was adjusted up to 7.5 billion pounds reflecting increases in production expectations. This is a year-over-year increase of about 1 percent and about 16 percent of forecast production in 2022.

Largest year-over-year increases and decreases in broiler exports, October 2021



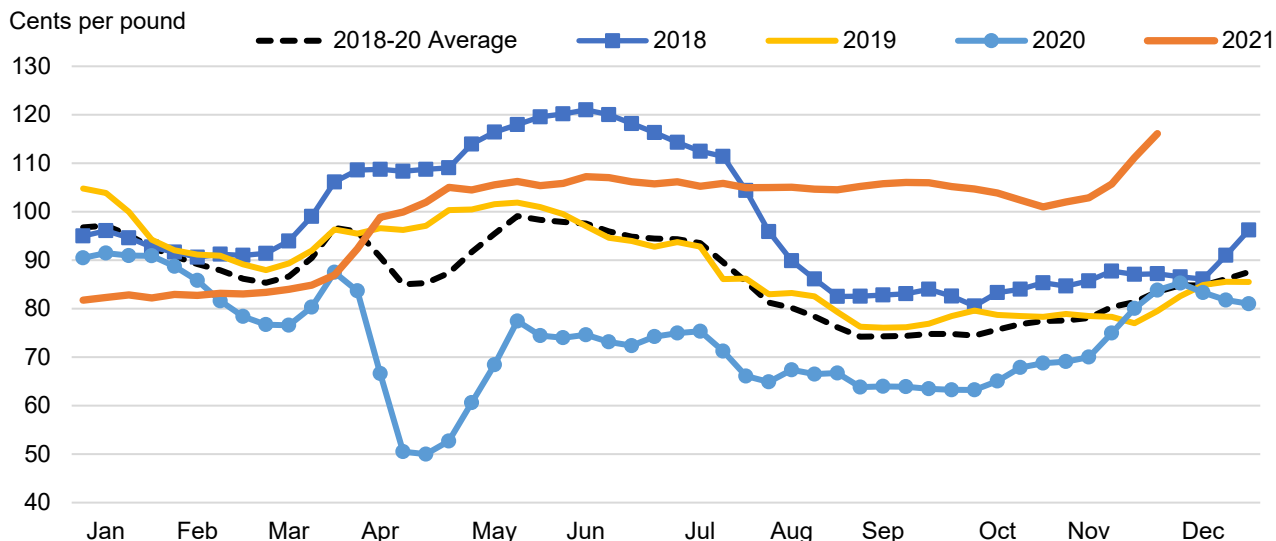
Notes: CWE = Carcass weight equivalent, UAE = United Arab Emirates.

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

Broiler Prices Adjusted Up

National composite wholesale broiler prices averaged 105.47 cents per pound in November, 28.7 cents above last November's price. Weekly prices in November climbed steeply and averaged 116.11 cents per pound in the week ending December 4th. The fourth-quarter price forecast is adjusted up 3 cents to 108 cents per pound. Based on recent trends and expectations for strong demand in the coming year, the 2022 price forecasts were also adjusted up, bringing the 2022 average price to 102 cents per pound, a cent higher than the 2021 forecast average of 100.4 cents per pound.

Weekly national composite wholesale broiler price



Source: USDA, Agricultural Marketing Service.

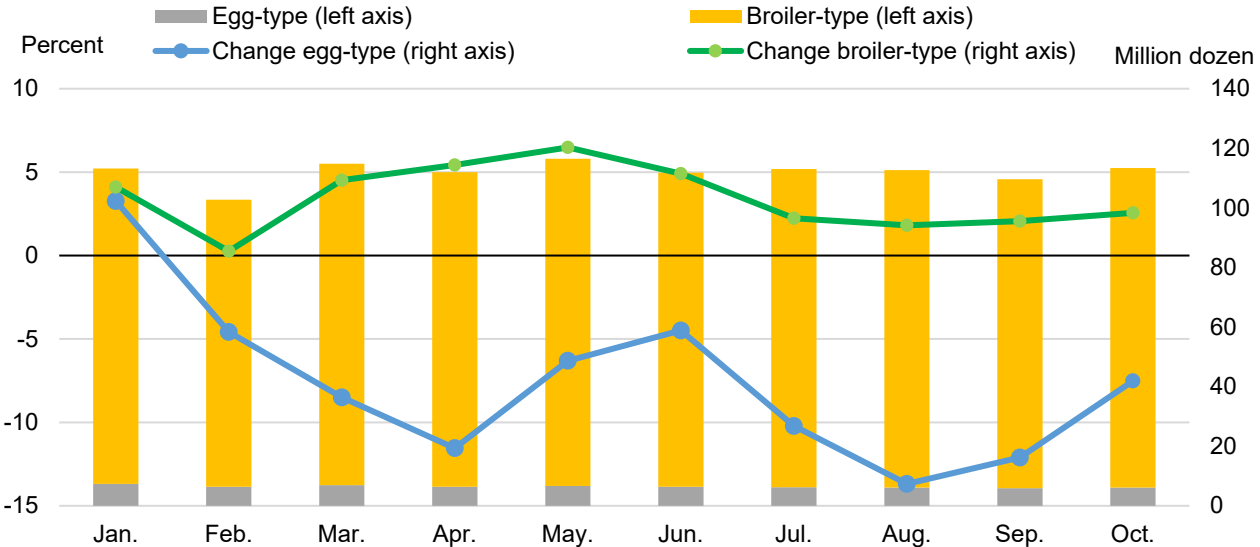
Fourth-Quarter Table Egg Production Revised Down

The table egg laying flock in October was 324.9 million hens, 0.6 percent above the last year. The rate of lay per 100 layers was 82.7 eggs per day, only fractionally higher than last year. Table egg production for October was estimated at 693.6 million eggs, a fractional year-over-year increase. Based on data for November 1, the estimated table egg flock was above 2020 while the rate of lay was below year-ago levels.

Based on recent production data, the fourth-quarter 2021 forecast for table egg production was revised down to 2,080 million dozen eggs. The second-half 2021 table egg production is expected to be about 4,095 million dozen, just under 1 percent year-over-year higher. The fractional increase in table egg production in the second half of 2021 is expected to be large enough to compensate for the production decrease in the first half of the year. Total table egg production for 2021 is expected to be just above year-ago levels.

Hatching-eggs production—fertilized eggs used to produce either table-egg type chickens or broiler-type chickens for breeding purposes—has been year-over-year higher throughout 2021. More than 90 percent of hatching eggs are of broiler-type chickens bred for producing meat. Over the first 10 months of 2021, hatching egg production has totaled 1,055.2 million dozen, 3.4 percent higher than the same period in 2020. The increase was due to higher production of broiler-type eggs (+4.3 percent) that compensated for a lower production of table-eggs (-7.6 percent). With both broiler and table egg production expected to increase in 2021 and next year, production of hatching eggs is expected to increase by 3.4 percent this year and another 2.1 percent in 2022.

2021 Hatching egg production: Monthly production and year-over-year changes by egg type

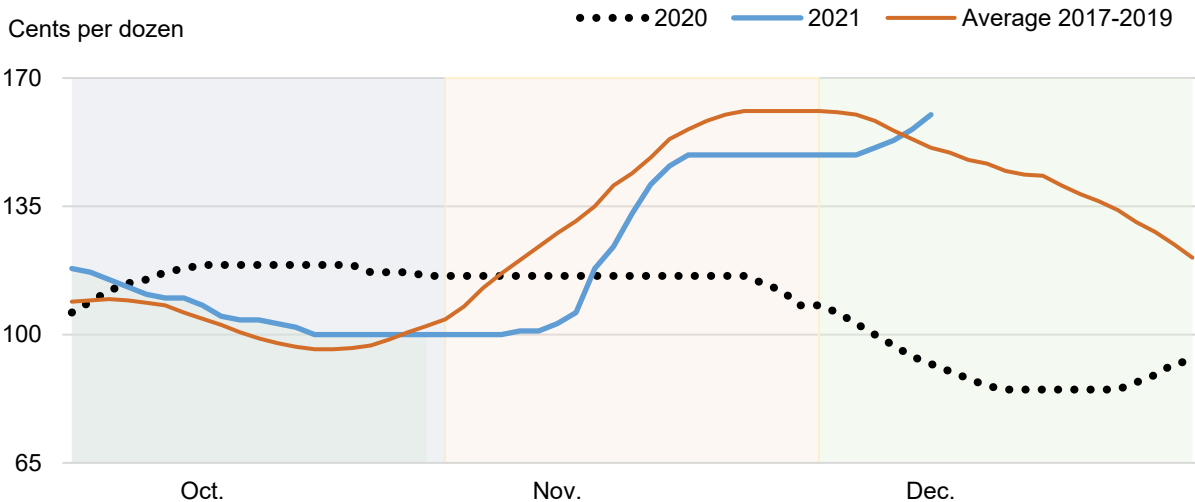


Source: USDA, National Agricultural Statistics Service.

Wholesale Egg Prices Rally in Early December

Following declining prices in October, November wholesale egg prices (New York, Grade A, Large) were up 10.0 percent from last year, averaging 125 cents per dozen. The typical increase in prices associated with the holiday season happened later than expected. The spike in prices during the week before Thanksgiving flattened for the remainder of the month and the week going into December. However, counter-seasonally, prices started rallying in the second week of December, reaching 160 cents per dozen on December 9th, the highest value in 2021. For 2021 and 2022, there are no changes to egg price forecasts.

Daily average midpoint prices for New York eggs (wholesale, Grade A, large): October–December

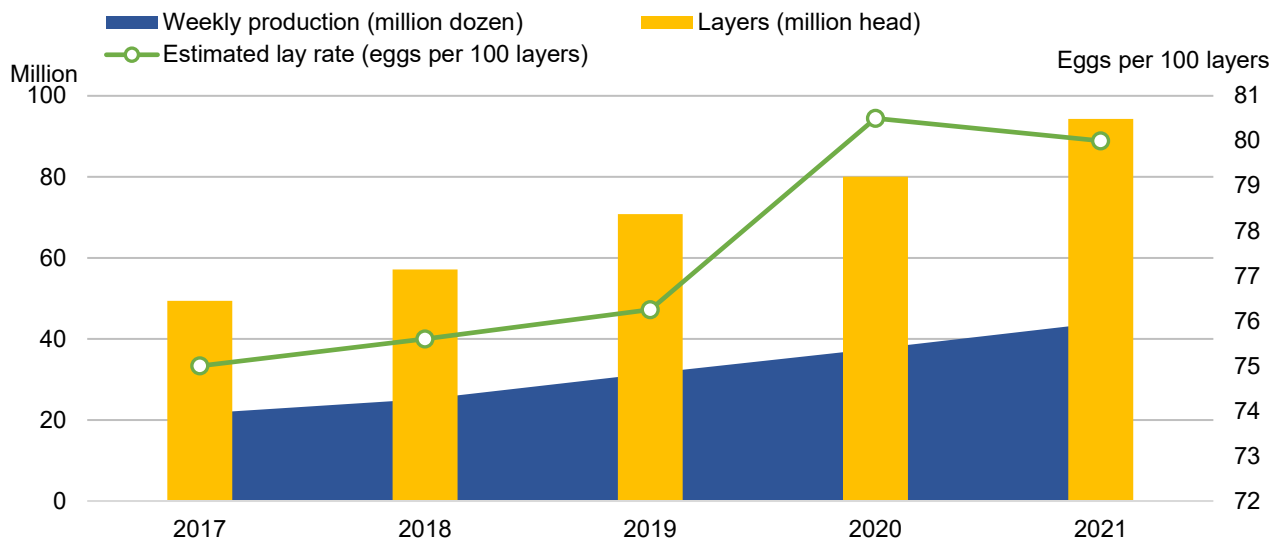


Source: USDA, Economic Research Service using data from USDA, Agricultural Marketing Service.

Recent Trends in Cage-Free Egg Production

Starting January 1, 2022, all eggs produced and sold in California are required to come from hens housed in cage-free systems. Over the last several years, the size of the cage-free laying flock increased at a steady pace to accommodate the increased demand for cage-free eggs. The December edition of the *Monthly USDA Cage-Free Shell Egg Report* estimated the November weekly size of all cage-free (organic and nonorganic) laying flock at 94.3 million hens, about 18 percent higher than last year. The same report estimates a 17-percent year-over-year increase in the November weekly cage-free egg production. The size of the cage-free flock is expected to increase in the future to meet California's demand, as well as customer stated buying intentions or State layer-housing initiatives, to support the production of cage-free eggs.

November weekly cage-free table egg production's estimates, 2017– 2021



Source: USDA, Economic Research Service using data from USDA, Agricultural Marketing Service, *Monthly USDA Cage-Free Shell Egg Report*.

October Egg Exports Maintain Year-Over-Year Trend

Monthly exports of eggs and egg products had been consistently higher this year on a year-over-year basis. October shipments maintained the trend, albeit at a slower pace. While year-over-year higher, October shipments were 25.3 percent below September volumes. October egg and shell egg-equivalent-product exports equaled 29.8 million dozen (20.2 million shell eggs and 9.6 million shell-egg-equivalent egg products), a 6.7 percent year-over-year increase. Exports of shell eggs were higher (+20.0 percent), but shipments of egg products were down (-13.6 percent). Among the major destinations, higher shipments to Mexico, Hong Kong, South Korea, Jamaica, and United Arab Emirates more than offset lower shipments to Canada, Japan, and Trinidad and Tobago. Despite month-over-month decreases in exports, no changes were made to the current forecast because of the expectation of higher shipments in the near term due to the HPAI outbreaks reported this fall in Europe, Asia, and Africa.

U.S. egg and egg products exports: Volume and export share, October 2020–2021

Country	Volume			Export share	
	2020	2021	Change in volume	2020	2021
	Thousand-dozen			Percent	
Mexico	6,109	7,721	1,612	22	26
Canada	10,089	8,880	-1,209	36	30
Hong Kong	3,377	5,199	1,822	12	17
Japan	2,984	1,819	-1,166	11	6
South Korea	230	1,329	1,099	1	4
Jamaica	752	890	138	3	3
United Arab Emirates	296	789	493	1	3
Trinidad and Tobago	577	508	-68	2	2
Denmark	292	-	-292	1	-
Bahamas	256	200	-56	1	1
World	27,951	29,813	1,862	100	100

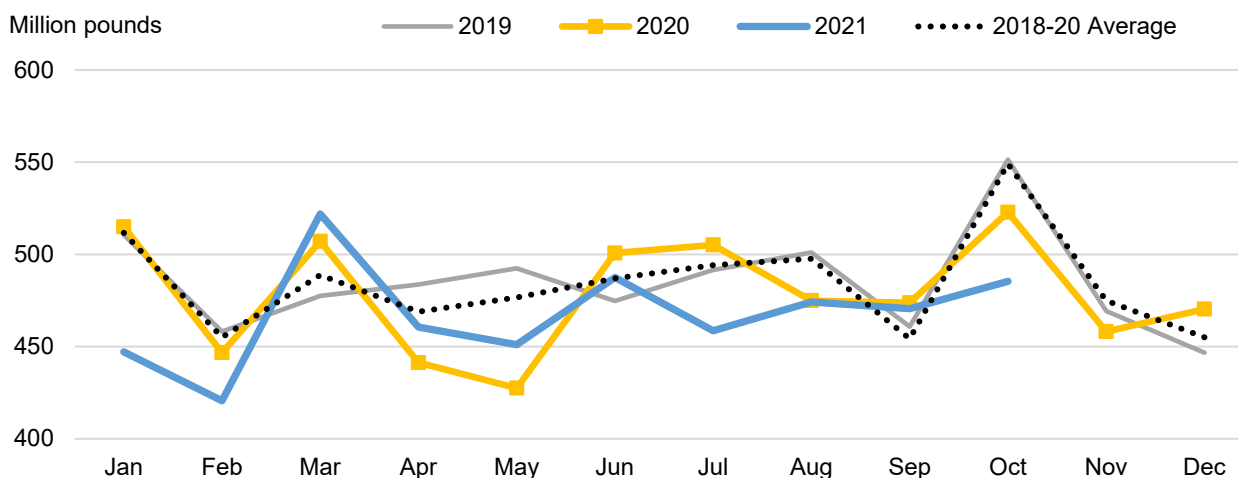
Note: Largest markets are based on 2021 year-to-date export volumes.

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

Both Turkey Production and Exports Adjusted Down in Outlying Quarters

October turkey production totaled 485.4 million pounds. This was 7 percent below last October's total and 2.7 percent lower on a per day basis. While the number of turkeys slaughtered on a per day basis was similar to last year, the average live weight was 30.22 pounds, down 2.4 percent year over year. Preliminary weekly slaughter data from USDA, Agricultural Marketing Service shows that just over half of the turkeys slaughtered in the 4 weeks ending October 30th were very light hen turkeys. Weekly preliminary data for November also indicates that weekly production during that month declined year over year. Due to these indicators and low October production, the fourth-quarter turkey production forecast was revised down to 1.4 billion pounds.

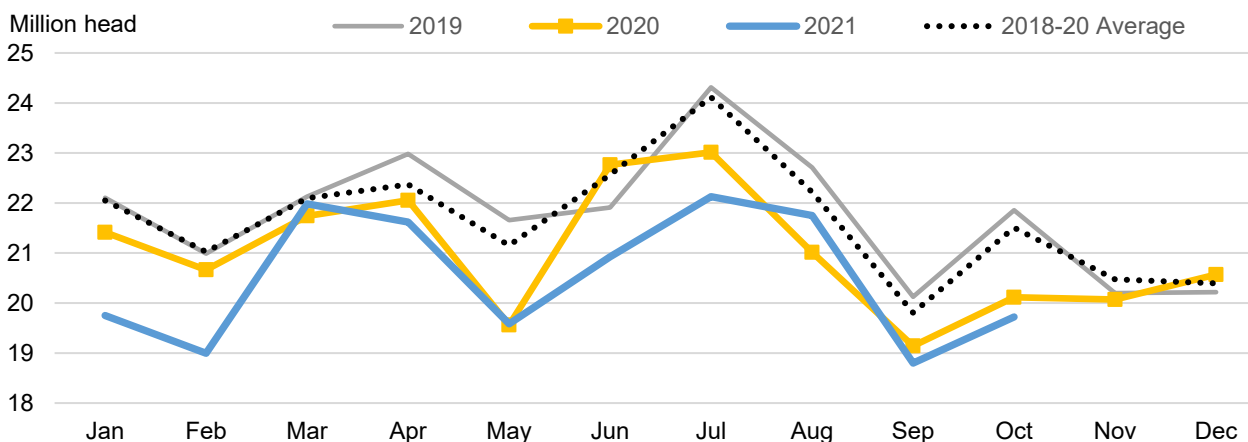
Monthly turkey production



Source: USDA, National Agricultural Statistics Service.

In the November *Turkey Hatchery* report from USDA, National Agricultural Statistics Service the September net placement figure was revised down to 18.8 million head, a decrease of 1.8 percent year over year. October placements totaled 19.7 million head, a year-over-year decline of 1.9 percent. The continuing trend of year-over-year lower poult placements may be an indication of a dampened production response, despite climbing prices. The 2022 total turkey production forecast was revised down to 5.64 billion pounds, an increase of less than 1 percent from 2021.

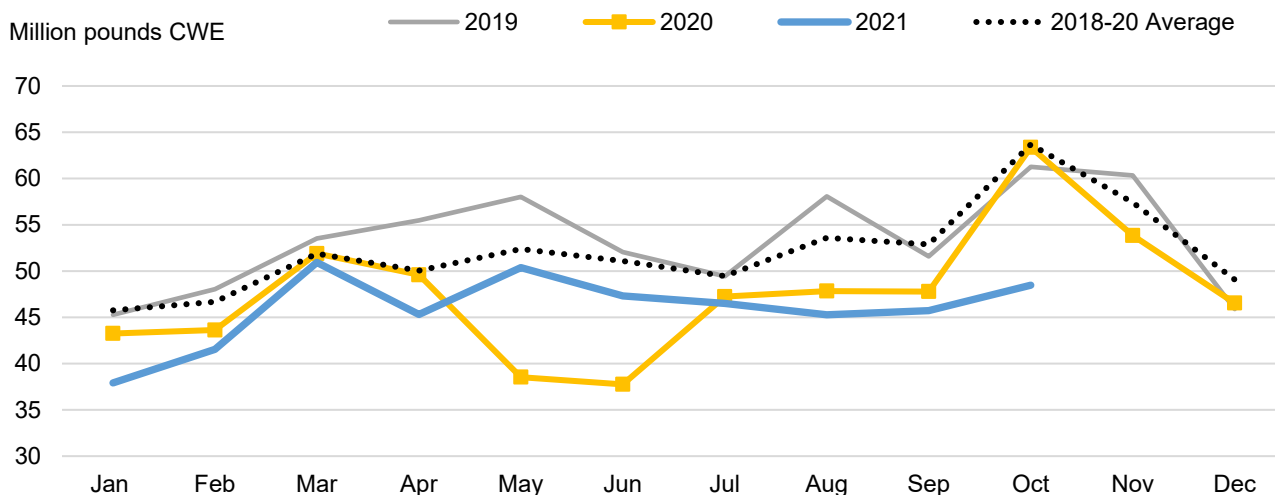
Monthly turkey placements



Source: USDA, National Agricultural Statistics Service.

Turkey exports in October totaled 48.47 million pounds, a year-over-year decrease of about 15 million pounds. However, exports as a share of production in the first 10 months of this year are about 10 percent, similar to the same period last year. Reflecting October data and lowered fourth-quarter production expectations, the fourth-quarter turkey export forecast was lowered to 150 million pounds, just under 11 percent of forecast production. The total 2022 export forecast was adjusted down to 565 million pounds, 10 percent of the 2022 production forecast.

Monthly turkey exports

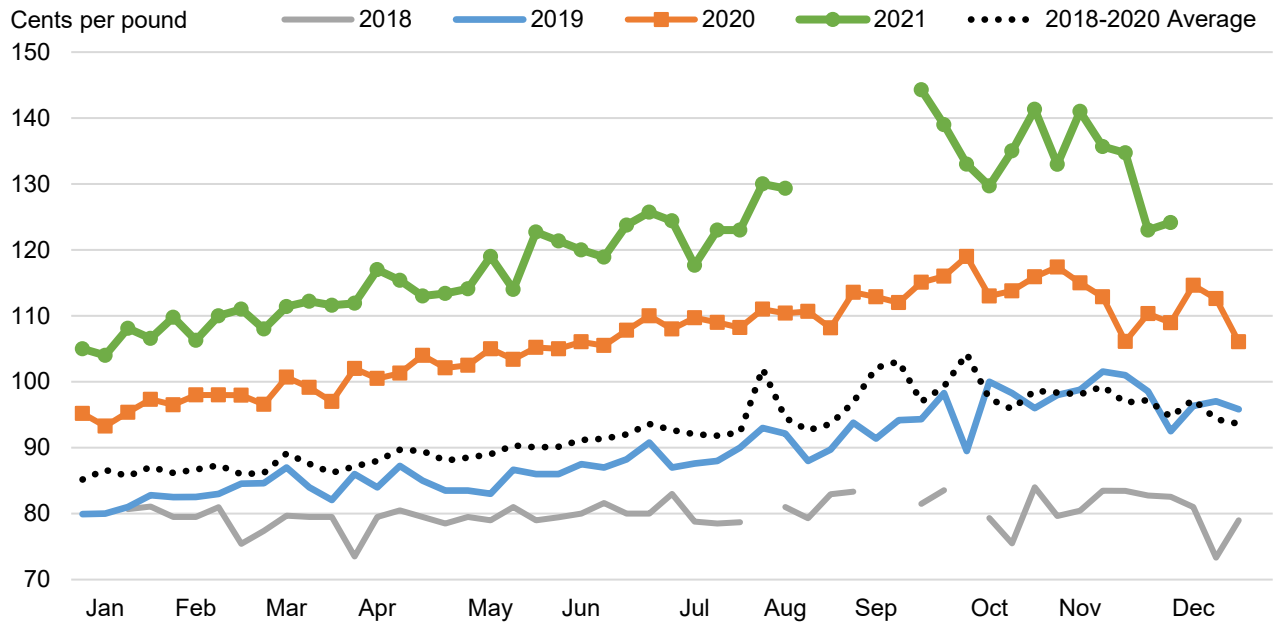


Note: CWE = Carcass Weight Equivalent
 Source: USDA, National Agricultural Statistics Service.

Turkey Prices Adjusted Down in Fourth Quarter, Up in 2022

November wholesale frozen whole-hen turkey prices averaged 135.32 cents per pound. This is fractionally higher than the October price and 22 cents above the prior November's average price. November weekly prices were more variable than in recent history, swinging from 141 cents per pound in the week ending November 5th to 123.01 cents per pound in the week of Thanksgiving. Wholesale prices averaged 124.15 cents per pound in the week ending December 3rd. Based on this recent decline in weekly prices and expectations that a typical seasonal decline is likely for the remainder of the quarter, the fourth-quarter forecast price was adjusted down to 131 cents per pound. Because production expectations were lowered in 2022, the forecast wholesale turkey prices were increased, bringing the annual average price forecast for 2022 to 123 cents per pound.

Weekly wholesale whole-hen frozen turkey prices



Source: USDA, Agricultural Marketing Service.

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Dairy forecasts

	2020		2021					2022			
	IV	Annual	I	II	III	IV	Annual	I	II	III	Annual
Milk cows (thousands)	9,429	9,388	9,458	9,502	9,450	9,395	9,450	9,385	9,380	9,380	9,385
Milk per cow (pounds)	5,892	23,777	6,003	6,119	5,915	5,900	23,935	6,050	6,200	6,015	24,265
Milk production (billion pounds)	55.6	223.2	56.8	58.1	55.9	55.4	226.2	56.8	58.2	56.4	227.7
Farm use	0.3	1.1	0.3	0.3	0.3	0.3	1.1	0.3	0.3	0.3	1.1
Milk marketings	55.3	222.1	56.5	57.9	55.6	55.2	225.2	56.5	57.9	56.2	226.6
Milk-fat (billion pounds milk equiv.)											
Milk marketings	55.3	222.1	56.5	57.9	55.6	55.2	225.2	56.5	57.9	56.2	226.6
Beginning commercial stocks	17.7	13.6	15.6	18.1	20.0	17.9	15.6	14.7	16.9	18.5	14.7
Imports	1.6	6.8	1.3	1.8	1.8	1.7	6.5	1.4	1.6	1.8	6.5
Total supply	74.5	242.5	73.4	77.8	77.5	74.8	247.3	72.6	76.4	76.5	247.9
Commercial exports	2.1	9.3	2.6	3.1	3.2	2.9	11.8	2.7	3.2	3.0	11.5
Ending commercial stocks	15.6	15.6	18.1	20.0	18.0	14.7	14.7	16.9	18.5	16.7	14.5
Commodity Credit Corporation donations ¹	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Domestic commercial use ²	56.7	217.4	52.7	54.6	56.2	57.2	220.9	53.0	54.8	56.8	221.8
Skim solids (billion pounds milk equiv.)											
Milk marketings	55.3	222.1	56.5	57.9	55.6	55.2	225.2	56.5	57.9	56.2	226.6
Beginning commercial stocks	10.4	10.2	10.9	11.6	12.0	11.3	10.9	10.9	11.2	11.2	10.9
Imports	1.3	5.6	1.4	1.5	1.4	1.4	5.7	1.3	1.4	1.4	5.5
Total supply	66.9	237.9	68.8	71.0	69.0	67.8	241.7	68.7	70.5	68.8	243.0
Commercial exports	11.6	47.2	12.4	14.1	12.9	12.1	51.5	12.6	14.1	13.2	52.0
Ending commercial stocks	10.9	10.9	11.6	12.0	11.3	10.9	10.9	11.2	11.2	10.5	10.9
Commodity Credit Corporation donations	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Domestic commercial use ²	44.5	179.7	44.8	44.9	44.8	44.8	179.3	44.9	45.2	45.1	180.1
Milk prices (dollars/hundredweight) ³											
All milk	19.80	18.24	17.33	18.67	18.00	20.45	18.60	21.20	20.65	20.05	20.75
Class III	20.22	18.16	15.98	17.95	16.32	17.95	17.05	18.20	18.00	18.15	18.15
Class IV	13.38	13.49	13.71	15.98	16.09	18.45	16.05	19.25	19.10	19.00	19.00
Product prices (dollars/pound) ⁴											
Cheddar cheese	2.1296	1.9236	1.6146	1.7250	1.6016	1.750	1.675	1.750	1.760	1.800	1.775
Dry whey	0.3827	0.3621	0.5064	0.6358	0.5668	0.590	0.575	0.630	0.580	0.540	0.575
Butter	1.4746	1.5808	1.4677	1.7952	1.7375	1.910	1.730	1.950	1.930	1.950	1.940
Nonfat dry milk	1.0812	1.0417	1.1226	1.2256	1.2676	1.455	1.270	1.530	1.520	1.500	1.510

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.

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