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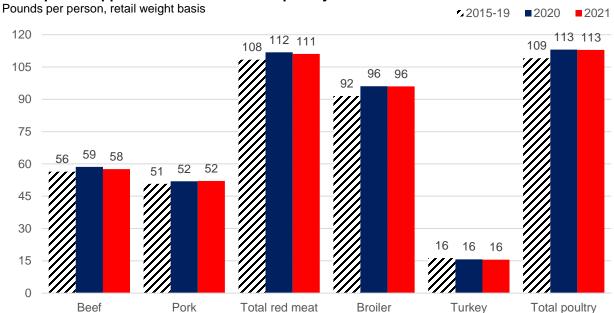
Livestock, Dairy, and Poultry Outlook

2021 Per Capita Red Meat and Poultry Disappearance Lower Despite Increase in Production

Production of red meat and poultry is anticipated to grow in 2021 compared with last year. However, trade dynamics will likely affect meat available to U.S. consumers next year. Availability is the disappearance on the domestic market of what remains after exports and ending stocks are subtracted from the sum of production, beginning stocks, and imports. Dividing this amount by the U.S. population yields per capita disappearance.

Per capita disappearance of red meat is forecast to be lower by almost 1 percent year over year in 2021 at 111 pounds. This decrease in availability stems largely from greater expected exports and fewer imports of beef, which more than offset greater availability of pork. Further, availability of poultry is expected to decrease from last year, largely reflecting greater exports and higher ending stocks of chicken meat and turkey. Total poultry disappearance is expected to decrease by less than 1 percent, to 113 pounds per person. In contrast, red meat and poultry disappearance in 2021 will likely exceed the 5-year average by more than 2 percent and almost 4 percent, respectively.

Per capita disappearance of red meat and poultry decreases in 2021



Source: USDA, Economic Research Service calculations using data from USDA, World Agricultural Outlook Board.

Beef/Cattle: The fourth-quarter 2020 forecast for beef production was revised down on lower-than-expected beef cattle slaughter, which was partly offset by higher-than-expected cattle carcass weights. Beef production for 2021 was forecast lower than last month on fewer fed cattle supplies expected. Fed steer prices are forecast to increase in the second half of 2021 on lower beef production. The 2021 forecast for feeder steer prices was lowered due to expected higher feed costs. Beef imports in November were down 4 percent from a year ago due to tighter exportable supplies in major exporting countries. November beef exports were up 13 percent year over year on strong shipments to China and Mexico. The import forecast for fourth-quarter 2020 and first-quarter 2021 was revised down, while exports in fourth-quarter 2020 and first-quarter 2021 were raised from last month.

Dairy: Based on recent data and higher expected milk prices, the milk production forecast for 2021 has been raised to 226.7 billion pounds, 0.4 billion higher than last month's forecast. Due to an improved economic outlook, enhanced by Federal Government actions to stimulate the economy, and USDA's announcements regarding purchases of dairy products, domestic demand expectations for dairy products have strengthened. Dairy product price forecasts for 2021 have been raised. The all-milk price forecast for 2021 is \$17.65 per cwt, \$1.05 higher than last month's forecast.

Pork/Hogs: Pork production in 2021 is expected to total almost 29 billion pounds, more than 1 percent ahead of production last year. The increase is largely attributable to a rebounded pork processing industry, slightly higher first-half 2021 farrowing intentions, and resumption of pre-2020 higher-trending litter rates. November exports were slightly ahead of year-earlier shipments, due in large part to demand from China\Hong Kong and Mexico. Exports in 2021 are expected to come in almost 2 percent below 2020 exports due to moderating demand from China\Hong Kong as the pork sector there rebounds from African Swine Fever.

Poultry/Eggs: The 2020 fourth-quarter broiler production forecast was decreased on recent slaughter data, while 2021 production was lowered on higher forecast feed costs. The fourth-quarter broiler export forecast was increased on recent trade data. The 2021 first-quarter price forecast was lowered on recent prices, while the second-half price forecast was increased on expectations for tighter supplies. The 2021 table egg production forecast was decreased on higher feed costs, while the 2020 fourth-quarter export forecast was lowered on recent trade data. The 2021 egg price forecast was increased on expectations for tighter supplies. Turkey production forecasts were revised down in the fourth quarter of 2020 and all quarters of 2021. The turkey export forecast was revised down to 165 million pounds in the fourth quarter on weaker November exports. Due to expectations of rising feed costs and stagnant production growth, turkey price forecasts were increased in 2021.

Beef/Cattle

Russell Knight and Christopher Davis

Lower 2021 Production on Reduced Slaughter and Weights

For the final quarter of 2020, beef production was lowered 80 million pounds on fewer-than-expected cattle slaughtered in December. This decline was particularly driven by fewer steers and heifers in the slaughter mix. As a result, 2020 beef production is forecast at 27.2 billion pounds, almost unchanged from 2019 production levels. Based on the USDA, National Agricultural Statistics Service (NASS) *Livestock Slaughter* report for November, data for January through November for 2019 and 2020 showed almost 3 percent fewer cattle slaughtered. However, carcass weights were up nearly 3 percent, which almost offset the reduction in cattle slaughter to bring beef production for the year within less than 1 percent of 2019 levels.

Similarly, the forecast for 2021 beef production was lowered by 70 million pounds from last month to 27.2 billion pounds. This adjustment was based in part on fewer fed cattle to be slaughtered in second-quarter 2021 as a result of lower expected placements in fourth-quarter 2020. Further, higher feed costs in 2021 are expected to negatively impact cattle carcass weights. NASS will release the semi-annual *Cattle* report on January 29, which will provide estimates of heifers held for breeding and an insight into the number of cattle that might be available for placement during 2021.

Fed Cattle Prices Forecast Higher on Lower Production

The 2020 annual price for live steers in the 5-area marketing region averaged \$108.51 per cwt, down 7 percent from 2019. This average largely reflects reduced packer demand because of packing facilities that had to reduce shifts or temporarily close in second-quarter 2020 due to COVID-19 issues. This resulted in an increase in fed cattle supplies that had backed up, which, in turn, pressured prices during the third quarter. Packers were able to work through the backlog of fed cattle supplies, which helped cattle prices recover in the fourth quarter and into the new year. However, prices continue to lag year-over-year levels. Live steer prices in the 5-area marketing region for the first week of January were reported at \$111.27 per hundredweight (cwt), more than \$13 below last year for the same week and the lowest January starting price since 2011. However, the annual price forecast for 2021 was raised \$0.50 to \$115.50 per cwt on lower expected production and expected improved packer demand in 2021.

Feeder cattle prices fared slightly better in 2020 when compared to 2019. In 2020, the average price was down almost 5 percent from 2019 at \$135.45 per cwt for feeder steers weighing 750-800 pounds that were sold in the Oklahoma City National Stockyards. Prices in the first 2 weeks of January 2021 averaged \$134.81 per cwt, about 7 percent below the monthly average for January 2020. To the extent that prices at the beginning of 2021 were higher than expected, the first-quarter 2021 forecast was raised \$1 to \$134 per cwt. However, higher expected feed costs lowered expectations for prices the rest of the year, and as a result the annual price forecast for feeder steers was lowered \$1 to \$137 per cwt.

November Imports Drop, Ending 5 Months of Consecutive Yearover-Year Increases

Beef imports in November totaled 233 million pounds, down 4 percent (9 million pounds), from a year ago. U.S. beef imports have been declining continuously since reaching their peak in July as stocks continue to build despite slowdown in beef imports. Shipments from major suppliers such as Mexico and Australia were among the largest declines in beef shipped to the United States. Lower imports from Australia reflect a smaller herd there. Smaller volumes were also imported from Nicaragua and Uruguay in November relative to a year ago.

In contrast, there were year-over-year increases in shipments from a few major beef suppliers. The greatest increase in imported beef came from New Zealand. The United States also imported sizeable volumes of beef year over year from Brazil, which had not surpassed 22 million pounds since November 2008. Imports from Canada, the top beef supplier of U.S. beef, were up 7 percent above last year. The November increases from a few major suppliers were not enough to offset the substantial reduction in beef shipments from Australia and Mexico.

The forecast for the fourth-quarter beef imports was lowered 35 million pounds to 725 million pounds from last month. Changes in U.S. beef imports were adjusted based on November import data and the USDA Agricultural Marketing Service December WIMPE data. The 2020 annual forecast for beef imports totals 3.375 billion pounds. The forecast for first-quarter 2021 was lowered by 20 million pounds to 780 million pounds on weaker expected demand for lean trimmings used in producing ground beef.

U.S. year-over-year beef imports from major suppliers

	November 2019	November 2020	Difference in volume	Year-over-year change
		Million pounds		Percent
Canada	72.6	78.0	5.4	7.4
Australia	58.6	44.8	-13.8	-23.6
Mexico	49.3	34.4	-14.9	-30.2
New Zealand	11.3	20.2	8.9	78.8
Brazil	16.3	21.8	5.5	33.7
Nicaragua	19.6	17.7	-1.9	-9.7
Uruguay	10.0	9.0	-1.0	-10.0
Argentina	0.9	1.2	0.3	33.0
ROW	3.8	5.8	2.0	52.6
Total Imports	242.0	232.9	-9.1	-3.8

ROW = Rest of the World.

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

Bureau of the Census.

Beef Exports Remain Robust in November as Sales to China Continue Trending Upward

November beef exports were up 13 percent or 32 million pounds year over year, totaling 277 million pounds. The last time U.S. beef exports equaled or exceeded that total was in August 2018. The November increase was mostly driven by a global economy that is recovering at a moderate pace. While exports to the top two destinations, Japan and South Korea, increased by 1 and 5 percent year over year, respectively, their volumes accounted for 42 percent of November's total exports. Mexico, the third-largest destination, purchased more beef in November than it had since December 2013.

However, the largest year-over-year increase in volume of beef was in exports to China, where the United States exported record-breaking amounts of beef from July to November as the country continued to expand its demand for animal proteins.

Beef shipments to Canada and Hong Kong, two of the top seven U.S. beef destinations, were down in November year over year. The greatest reduction in exports was to Hong Kong, down 20 percent or 7 million pounds from a year earlier. U.S. beef exports to Canada were also lower than volumes recorded last November.

The fourth-quarter forecast for beef exports was raised by 30 million pounds from last month to 800 million pounds on October and November export data and USDA, Foreign Agricultural Service export sales report data for December. The annual forecast for 2020 totals 2.935 billion pounds. This demand strength was carried over into first-quarter 2021, and the forecast was revised up 10 million pounds to 725 million pounds.

U.S. year-over-year beef exports to major destinations

	November 2019	November 2020	Difference in volume	Year-over- year change
		Million pounds		
		•		Percent
Japan	62.0	63.1	1.1	1.8
South Korea	49.9	52.3	2.4	4.8
Mexico	30.1	44.7	14.6	48.5
Canada	21.1	18.3	-2.8	-13.3
Hong Kong	33.4	26.8	-6.6	-19.8
Taiwan	15.1	16.3	1.2	7.9
China	3.2	23.5	20.3	634.4
ROW	29.9	32.0	2.1	7.0
Total Exports	244.7	277.0	32.3	13.2

ROW = Rest of the World.

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

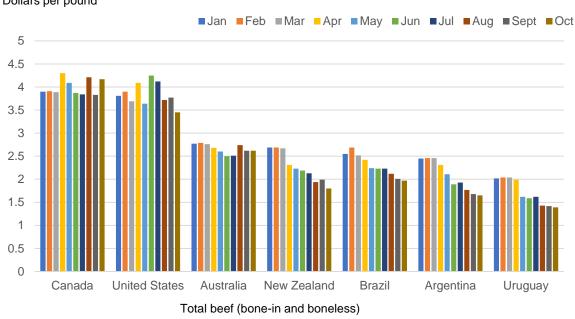
Bureau of the Census.

How Expensive Is U.S. Beef in China Relative to Other Competing Suppliers?

Despite record-breaking volumes of U.S. beef shipped to China from July to November 2020, the United States has supplied less than 1 percent of China's total beef imports. Beef-exporting competitors of the United States—Brazil, Argentina, Australia, Nicaragua, Uruguay, and New Zealand—account for the vast majority (94 percent) of China's beef imports. In part, this may be because the U.S. value per pound of total (bone-in and boneless) beef shipped to China is higher than that of most of its competitors in the China beef market. As illustrated in the first chart, Canada and the United States have the highest value per pound of beef imported by China relative to other beef suppliers. A higher U.S. beef price reflects a better quality, grain-fed fresh/chilled product, which is different from what China typically imports from other countries. In order to make a more accurate comparison of beef imported by China and evaluate the competitiveness of U.S. beef to other suppliers, the unit values of China's frozen boneless beef imports are presented in the second chart below. From January through November, the U.S. unit value per pound of beef averaged \$3.23. Canada's unit value for beef imported by China exceeded that of the United States at \$4.01 per pound, while among U.S. competitors Argentina, Uruquay, Brazil, New Zealand, and Australia, unit values ranged from \$1.90 to \$2.79. China's demand for animal proteins will continue to grow as its economy and population expand. Despite a higher unit price of U.S. beef and certain barriers that limit trade, China's commitment to

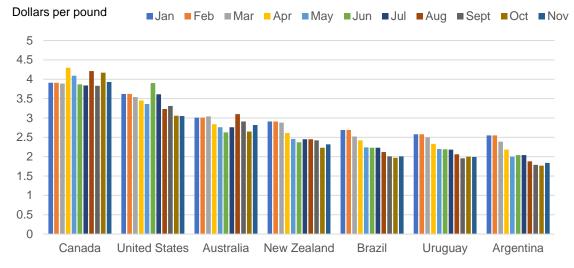
purchase an additional \$200 billion of American-made goods and services over 2020 and 2021 under the U.S. China Phase 1 trade deal could lead to continued growth of U.S. beef exports.

Beef suppliers: Competing unit values for China's market share in 2020 Dollars per pound



Source: Trade Data Monitor (TDM). 2020. Trade Data Monitor, Inc.

Frozen boneless beef suppliers: Competing unit values for China's market share in 2020



Source: Trade Data Monitor (TDM). 2020. Trade Data Monitor, Inc.

Dairy

Jerry Cessna

Recent Developments in Dairy Markets

Most wholesale dairy product prices reported in the USDA *National Dairy Products Sales Report* rose from the week ending December 12 to the week ending January 9. The exception was the price of 40-pound blocks of Cheddar cheese, which fell 8.5 cents to \$1.6671 per pound. The price for 500-pound barrels of Cheddar cheese (adjusted to 38-percent moisture) rose 4.9 cents to \$1.5260 per pound. Prices for butter, nonfat dry milk (NDM), and dry whey increased to \$1.4905 (+5.1 cents), \$1.1238 (+2.3 cents), and \$0.4404 (+3.2 cents), respectively.

Dairy wholesale product prices

from USDA National Dairy Products Sales Report (dollars per pound)

	For the weel	k ending	
	December 12	January 9	Change
Butter	1.4391	1.4905	0.0514
Cheddar cheese			
40-pound blocks	1.7524	1.6671	-0.0853
500-pound barrels 1	1.4773	1.5260	0.0487
Nonfat dry milk	1.1011	1.1238	0.0227
Dry whey	0.4088	0.4404	0.0316

¹ Adjusted to 38-percent moisture.

Source: USDA, Agricultural Marketing Service, National Dairy Products Sales Report, January 13, 2021.

For the trading week ending January 8, Chicago Mercantile Exchange (CME) spot prices for 40-pound blocks and 500-pound barrels of Cheddar cheese were significantly higher than the most recent NDPSR prices, averaging \$1.7790 and \$1.5965 per pound, respectively. CME spot prices for NDM and dry whey were also higher than the most recent NDPSR prices, averaging \$1.1795 and \$0.4860 per pound, respectively. The CME weekly average spot price for butter was lower than the most recent NDPSR price, averaging \$1.4095 per pound.

Recent U.S. dairy product prices have been competitive with foreign export prices.¹ For the 2 weeks ending January 8, skim milk powder (SMP) export prices for Oceania and Western Europe were \$1.40 and \$1.25 per pound, respectively. Oceania and Western Europe export prices for butter were \$2.04 and \$1.87 per pound, respectively. The Oceania Cheddar cheese export price was \$1.85 per pound, and the Western Europe dry whey price was \$0.46 per pound.

U.S. milk production during November totaled 18.025 billion pounds (averaging 600.8 million pounds per day), up 3.0 percent from November 2019. This follows year-over-year milk production growth of 1.8 percent in August and 2.3 percent in September and October. Milk cows numbered 9.407 million head, 62,000 head more than November 2019 and 12,000 head more than October 2020. Milk per cow averaged 1,916 pounds in November, 43 pounds above November 2019.

¹ The source for Oceania and Western Europe prices is USDA *Dairy Market News*. Prices listed in this report are at the midpoints of the ranges.

U.S. milk production

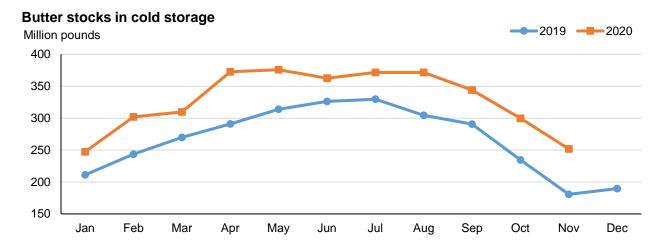


Source: USDA, National Agricultural Statistics Service.

Dairy exports on a milk-fat milk-equivalent basis totaled 643 million pounds in November, 63 million lower than October and 55 million lower than November 2019. On a skim-solids milk-equivalent basis, November exports totaled 3.670 billion pounds, 607 million lower than October but 1 million higher than November 2019. Exports of dry skim milk products were 137.1 million pounds in November, 32.2 million less than October. Exports of whey products (dry whey, whey protein concentrate, modified whey, and milk albumin) totaled 187.1 million pounds in November, 15.6 million less than October.

Dairy imports on a milk-fat basis totaled 472 million pounds in November, 56 million lower than October and 24 million pounds lower than November 2019. Notably, imports of butter were 4.0 million pounds in November, 2.7 million less than October. Imports of anhydrous milk-fat and butteroil totaled 3.1 million pounds in November, 0.6 million less than October. On a skim-solids basis, November imports totaled 431 million pounds. 60 million higher than October but 53 million lower than November 2019.

Ending stocks on a milk-fat basis totaled 14.939 billion pounds at the end of November, 1.513 billion higher than November 2019. Butter ending stocks in November totaled 251.8 million pounds, up 71.2 million (39.4 percent) from November 2019. On a skim-solids basis, ending stocks totaled 10.240 billion pounds at the end of November, 113 million higher than November 2019. For the 3 months from September through November, domestic use on a milk-fat basis was 1.7 percent above the same 3 months of 2019. On a skim-solids basis, September through November domestic use was 1.3 percent higher than the same 3 months of 2019.



Source: USDA, National Agricultural Statistics Service.

Recent Federal Government Actions Affecting Dairy Markets

On December 21, Congress passed the Consolidated Appropriations Act (CAA) of 2021 (H.R. 133 of the 116th Congress), and the President signed it into law on December 27. The CAA includes \$900 billion for COVID-19 relief in the form of direct payments to households, jobless aid, support for small businesses, and many other financial stimulus measures. The relief provisions include about \$13 billion specifically designated for the agricultural sector.

For the dairy industry specifically, the CAA includes supplemental Dairy Margin Coverage (DMC) payments based on the difference between each participant's actual milk production in 2019 and the operation's historical production base previously established through the program. The CAA establishes a dairy donation program to provide \$400 million to pay for milk to be processed into dairy products and donated to nonprofit entities. Also, the Secretary of Agriculture is authorized to make recourse loans available to dairy processors, packagers, or merchandisers impacted by COVID-19.

On January 4, USDA announced continuation of the Farmers to Families Food Box Program using additional funding from the CAA. Under this fifth round of the program, USDA will purchase an additional \$1.5 billion worth of food for distribution to Americans in need. Contract awards are expected to be made by January 19. Deliveries will begin shortly thereafter and will continue through the end of April. USDA will purchase combination boxes that include fresh produce, dairy products, fluid milk, meat products, and seafood products. For more information, see the USDA Farmers to Families Food Box website.

USDA has also solicited purchases of significant quantities of dairy products under the authority of Section 32 of the Act of August 24, 1935. For more information, see the USDA, Agricultural Marketing Service website.

Outlook for Feed Prices

The 2020/21 corn price forecast is \$4.20 per bushel, \$0.20 higher than last month's forecast. The 2020/21 forecast for soybean meal has been raised to \$390 per short ton, \$20 higher than the last

forecast. The alfalfa hay price in November was \$167 per short ton, \$4 lower than October and \$2 lower than November 2019. The 5-State weighted-average price for premium alfalfa hay in November was \$200 per short ton, \$6 higher than October but \$9 lower than November 2019. For more information, see *Feed Outlook*, published by USDA, Economic Research Service.

Milk Production Outlook for Major Global Dairy Exporters

For 2020, combined milk production growth of the 5 largest world dairy exporters (Argentina, Australia, EU-28,² New Zealand, and the United States) is estimated at 1.9 percent. For 2021, combined milk production of these exporters is expected to grow at a modest rate of 1.0 percent. Milk production growth for the EU-28 is expected to slow from 1.5 percent in 2020 to 0.4 percent in 2021. New Zealand milk production is expected to grow 0.9 percent in 2021; although there is currently dryness in the North Island, the projection assumes normal weather in 2021. Australia milk production growth is projected to grow 3.3 percent in 2021 as favorable conditions of 2020 are expected to continue into next year. In Argentina, milk production is projected to grow 1.8 percent in 2021 as efficiency gains from consolidation of the dairy industry will contribute to the growth. For further information, see *Dairy: World Markets and Trade*, published by USDA, Foreign Agricultural Service.

Milk production of major global dairy exporters

	2019	2020 estimate	2019-2020	2021	2020-2021
Exporter	Billion pounds	Billion pounds	Percent change	Billion pounds	Percent change
Argentina	23.4	25.1	7.5	25.6	1.8
Australia	19.4	20.1	3.4	20.7	3.3
EU-28 ¹	342.2	347.2	1.5	348.6	0.4
New Zealand	48.3	48.5	0.5	48.9	0.9
United States	218.4	222.9	2.1	226.7	1.7
Major exporter					
total	651.6	663.8	1.9	670.5	1.0

¹ EU-28 includes current European Union countries and the United Kingdom.

Sources: USDA, Foreign Agricultural Service, *Dairy: World Markets and Trade;* and USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates.*

Dairy Estimates for 2020

Based on recent milk production data, the milk production estimate for 2020 has been raised to 222.9 billion pounds, 0.2 billion higher than last month's forecast. The estimate for the average number of milk cows for 2020 has been raised to 9.380 million head, 5,000 more than last month's forecast. Milk per cow for 2020 is expected to average 23,765 pounds per head, 10 pounds more than the previous forecast.

The estimate for the annual total of dairy exports on a milk-fat basis in 2020 is 9.2 billion pounds, unchanged from last month's forecast. On a skim-solids basis the 2020 estimate for exports has been lowered to 47.3 billion pounds, 0.3 billion less than last month's forecast, due to lower expected exports of dry skim milk products and whey products.

Totals may not add precisely due to rounding.

² EU-28 includes current European Union countries and the United Kingdom.

The estimate for 2020 dairy imports on a milk-fat basis has been lowered to 6.8 billion pounds (-0.1 billion) due to lower expected imports of butterfat products. On a skim-solids basis, the import estimate for 2020 is unchanged at 5.6 billion pounds.

The estimate for 2020 ending stocks on a milk-fat basis has been raised by 0.7 billion pounds to 15.2 billion pounds. On a skim-solids basis, the estimate for ending stocks is 10.3 billion pounds, 0.1 billion lower than last month's forecast. The estimate for 2020 domestic use on a milk-fat basis is 217.7 billion pounds, 0.5 billion lower than last month's forecast. On a skim-solids basis, the estimate for 2020 domestic use is 179.9 billion pounds, 0.5 billion higher than the previous forecast.

While dairy supply and use data are not yet available for December, complete 2020 price data are available, with the exception of the all-milk price. For the year, average prices for Cheddar cheese, dry whey, butter, and NDM were \$1.9236, \$0.3621, \$1.5808, and \$1.0417 per pound, respectively. The Class III and IV milk prices averaged \$18.16 and \$13.49 per hundredweight (cwt), respectively. The all-milk price estimate for 2020 is \$18.30 per cwt, \$0.05 higher than last month's forecast.

Dairy Forecasts for 2021

Based on recent data and higher expected milk prices, the milk production forecast for 2021 has been raised to 226.7 billion pounds, 0.4 billion higher than last month's forecast. Milk cows are projected to average 9.410 million head, 15,000 higher than last month's forecast. Milk per cow is projected to average 24,095 per head, 5 pounds more than the previous forecast.

The forecast for 2021 dairy exports on a milk-fat basis has been raised to 9.7 billion pounds, 0.1 billion higher than last month. Expectations for butter exports are greater than last month due to U.S. price competitiveness. On a skim-solids basis, the 2021 dairy export forecast is unchanged at 48.7 billion pounds. Dairy import forecasts have been lowered on both the milk-fat and skim-solids bases to 6.6 billion pounds (-0.2 billion) and 5.5 billion pounds (-0.1 billion), respectively, due to lower expected imports of butterfat products and milk protein concentrate.

Due to an improved economic outlook, enhanced by Federal Government actions to stimulate the economy and USDA's announcements regarding purchases of dairy products, domestic demand expectations for dairy products have strengthened. The forecast for 2021 domestic use on a milk-fat basis is 222.6 billion pounds, 0.1 billion higher than last month's forecast. On a skim-solids basis, the forecast for domestic use has been raised by 0.1 billion pounds to 182.4 billion pounds. Ending stock forecasts for 2021 have been raised to 15.2 billion pounds on a milk-fat basis (+0.7 billion) and 10.3 billion pounds on a skim-solids basis (+0.1 billion).

Due to stronger expected demand, price forecasts for 2021 have been raised for Cheddar cheese, dry whey, butter, and NDM to \$1.740 (+10.5 cents), \$0.450 (+4.5 cents), \$1.605 (+3.5 cents), and \$1.100 (+3.5 cents), respectively. With higher dairy product prices expected across the board, Class III and IV milk price forecasts for 2021 are \$16.90 per cwt (+\$1.30) and \$14.10 per cwt (+\$0.50), respectively. The all-milk price forecast for 2021 is \$17.65 per cwt, \$1.05 higher than last month's forecast.

Pork/Hogs

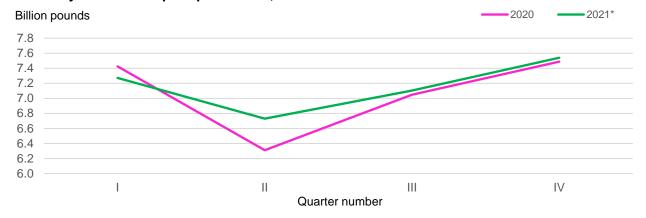
Mildred Haley

Higher Pork Production Forecast for 2021 Despite Lower December 1 Breeding Inventory

USDA released its *Quarterly Hogs and Pigs* report on December 23, 2020. Among the data contained in the report were revised 2020 inventory numbers, as well as new inventory data for December 1, 2020, the start of the swine "crop" year. The report's revised inventory and farrowing data largely reconcile 2020 hog and pig numbers with USDA slaughter numbers to date. For 2021, the report showed beginning-year December 1 inventories of both all hogs and pigs and market hogs down 1 percent from a year earlier. Further, the report indicated that breeding animal numbers were 3 percent lower than on December 1, 2019. While first-half 2021 pork production is impacted primarily by hog production decisions implemented in the second half of 2020, lower December 1, 2020, breeding animal inventories have second-half 2021 pork production implications.

Pork production in 2021—forecast at almost 29 billion pounds—is expected to be about 1.3 percent higher than production in 2020. Higher expected first-half 2021 pork production derives largely from a rebounded processing industry, compared with COVID-19-related industry slowdowns of a year earlier. While information in the report indicates that first-half numbers of slaughter-ready animals are likely smaller than in the same period last year, a fully functioning U.S. processing industry is capable of handling larger numbers than in the first half of last year. In the second half of 2021, higher year-over-year pork production results from expectations that slightly higher farrowings—as indicated by the December report's first- and second-quarter 2021 producer-stated farrowing intentions—and a resumption of higher litter rate trends are likely to combine to offset lower breeding inventory numbers.

Quarterly commercial pork production, 2020 and 2021 forecasts



Source: USDA, World Agricultural Outlook Board, World Agricultural Demand and Supply Estimates.

The lower December 1 breeding inventory, reported at 6.275 million head, down 3 percent from a year earlier, is the third consecutive quarterly year-over-year reduction in the breeding inventory total. From June 2020 through December 1, 2020, the U.S. breeding inventory averaged 125,000 fewer animals, almost 2 percent below the average of the same period a year earlier. Lower breeding inventories since June of last year follow from the higher sow and boar slaughter numbers reported by USDA between

January and November 2020. Lower breeding inventories are also generally supported by the lower producer returns reported by Iowa State University's calculated monthly returns for Iowa farrow-to-finish operations.³ Through November, the series reported a cumulative per-head loss of \$21.59. It is notable, however, that returns reversed direction during the fourth quarter of calendar year 2020; Iowa State calculated producer returns for October and November (the latest data available) summed to \$39.36 per head. It is also notable that a longer perspective on the breeding inventory series suggests that breeding numbers peaked on December 1, 2019, at 6.47 million head. Expectations for continued technical improvements in sow productivity are likely to add to downside risk for breeding inventory numbers.

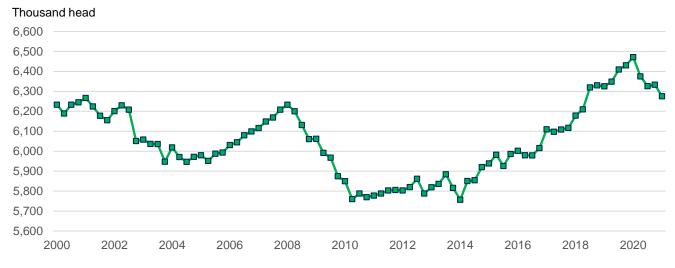
Federally inspected slaughter of sows and boars*



^{*}Net of imported Canadian sows and boars.

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

Quarterly U.S. breeding inventory from 2000 to first-quarter 2021



Source: USDA, National Agricultural Statistics Service.

^{**}December 2020 is a forecast.

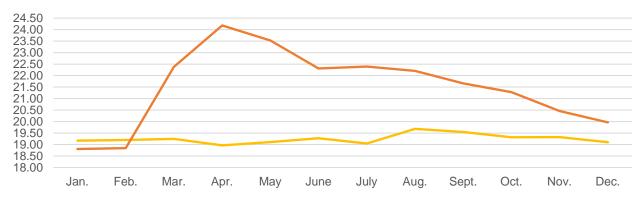
³ "Estimated Returns to Farrow to Finish, Iowa". Department of Economics, Iowa State University.

November Pork Exports Continue To Trend Higher

U.S. pork exports in November were almost 633 million pounds, about 1.5 percent larger than a year ago. Although China\Hong Kong was the largest buyer in November—171 million pounds, 3.6 percent higher than a year earlier, accounting for 27 percent of November exports—expansion of shipments to China\Hong Kong have been slowing since the summer months. Exports to Mexico, at 151 million pounds, increased 17 percent above a year earlier. Lower U.S. ham prices in November, particularly late in the month—as well as the peso-dollar exchange rate, which continued its appreciation against the U.S. dollar in November—likely enhanced Mexican buying interest. Fourth-quarter exports are expected to total about 1.9 billion pounds, about 4 percent above a year earlier. November exports to major destinations are summarized below. Shipments to these 10 major pork-importing countries accounted for 93 percent of export volume in November.

Exchange rate, pesos/U.S. dollar





Source: Federal Reserve Bank of Kansas Citv.

U.S. pork exports: Volumes and export shares of the 10 largest foreign destinations, November 2019 and 2020

	Country	Exports November 2019 (Million pounds)	Exports November 2020 (Million pounds)	Percent change (2020/2019)	Export share November 2019 Percent	Export share November 2020 Percent
	World	623.5	632.7	1.5		
1	China\Hong Kong	165	171	3.6	26.5	27.0
2	Mexico	129	151	17.0	20.6	23.8
3	Japan	102	107	5.5	16.3	16.9
4	Canada	53	51	-3.6	8.5	8.1
5	South Korea	56	35	-37.8	9.0	5.5
6	Colombia	29	20	-30.3	4.7	3.2
7	Australia	29	18	-36.9	4.6	2.9
8	Honduras	10	13	21.7	1.7	2.0
9	Chile	6	11	102.7	0.9	1.8
10	Dominican Republic	6	11	75.7	1.0	1.7

Source: USDA, Economic Research Service.

The annual 2021 pork export forecast is reduced from last month and is now expected to fall below the forecast 2020 total. This conclusion is based on expectations for continued slowing of demand for imported pork in China\Hong Kong as the Chinese pork sector adjusts to African Swine Fever and rebuilds production capacity losses sustained by the sector since the 2018 discovery of the disease in Northern China. First-quarter 2021 exports are expected to be 1.8 billion pounds, 11 percent lower than first-quarter 2020 shipments. Second-quarter exports are anticipated to be 1.75 billion pounds, more than 1 percent below the same period a year ago. Third-quarter exports are forecast at 1.675 billion pounds, about 3 percent greater than the third-quarter of 2020, when exportable supplies were impacted by COVID-19-related processing sector disruptions. Fourth-quarter exports are expected to be about 1.95 billion pounds, more than 3 percent higher than a year earlier, based on seasonal holiday demand in major pork-importing markets abroad. For 2021 in total, exports are forecast at 7.175 billion pounds, off by almost 2 percent compared with the current 2020 export forecast of 7.3 billion pounds.

Poultry

Kim Ha and Grace Grossen

2020 and 2021 Broiler Production Forecasts Decreased

November broiler production is estimated at 3.5 billion pounds, a year-over-year increase of 1.2 percent. This increase was comprised of a 0.8-percent increase in slaughter and a 0.3-percent increase in average live weights. Preliminary weekly slaughter data suggests that December slaughter will be down year over year, while weights will hover around year-earlier levels. Based on recent slaughter data, the fourth-quarter production forecast was revised down to 11.015 billion pounds. Production for 2020 is forecast to total 44.550 billion pounds, up more than 1 percent when compared to 2019.

For the 2020/2021 crop year, corn prices are forecast to be 18 percent higher than 2020, and soybean meal is forecast 30 percent higher. This is expected to dampen broiler production growth—the basis for lowering the 2021 production forecast to 44.870 billion pounds, an increase of less than 1 percent relative to the 2020 forecast.

Fourth-Quarter Export Forecast Increased

November broiler exports totaled 650 million pounds, virtually unchanged from last year (0.2 percent decrease year over year). Shipment volumes were slightly down year over year to several key markets, including Vietnam (-21 million pounds), the Philippines (-17 million pounds), and Hong Kong (-15 million pounds), among others (see table). Higher volumes to China (+85 million pounds) and Mexico (+14 million pounds) helped to offset the lower volumes. Despite the fractional year-over-year decrease in November overseas broiler shipments, higher-than-year-ago volumes are expected to flow in December, which was the basis for increasing the fourth-quarter export forecast to 1.990 billion pounds. Broiler exports for 2020 are forecast to total 7.399 billion pounds, an increase of more than 4 percent over 2019 volumes. The forecast for 2021 exports remains unchanged.

U.S. broiler exports: Volume and export share, November 2019 and 2020

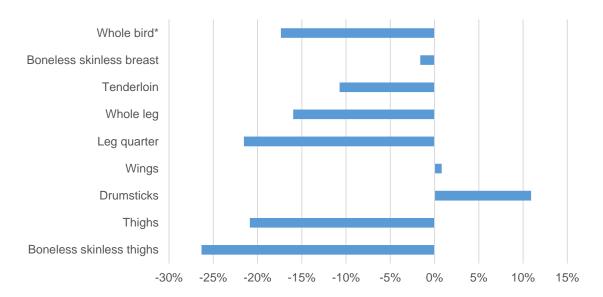
		Volume	Export	share	
Country	November 2019	November 2020	Change in volume	November 2019	November 2020
	Million pounds	Million pounds	Million pounds	Percent	Percent
Top 10 largest foreign marke	ts (per year-to-da	te 2020 export vo	lumes)		
Mexico	128	142	14	20	22
China	3	88	85	0	14
Taiwan	37	38	1	6	6
Cuba	18	27	9	3	4
Vietnam	33	12	-21	5	2
Canada	23	24	1	4	4
Guatemala	24	28	4	4	4
Angola	38	46	8	6	7
Georgia	10	6	-5	2	1
Colombia	22	15	-7	3	2
World	651	650	-1	100	100
Additional foreign markets of	note				
South Africa	16	11	-5	3	2
Philippines	31	14	-17	5	2
Hong Kong	21	6	-15	3	1

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

2021 First-Quarter Price Forecast Decreased on Recent Prices; Second-Half Forecast Increased on Tighter Supplies

Wholesale broiler prices (National Composite Weighted Average) averaged 82.5 cents per pound in December, down 2.6 percent year over year. After year-over-year gains at the end of November and beginning of December—the first gains since January 2019—prices have since softened, falling below year-earlier levels. The firmer prices during those 3 weeks can be potentially attributed to increased Thanksgiving demand as some consumers likely switched out larger turkeys for smaller chickens at their holiday tables due to smaller gatherings. Based on softer-than-expected prices in December, which are expected to carry into early 2021, the first-quarter price forecast was revised down to 81.0 cents per pound. However, in 2021, expectations for tighter supplies will likely support higher prices, which was the basis for increasing the second-half price forecast to 78.5 cents per pound. The benchmark broiler price is forecast to average 81.0 cents per pound in 2021, an increase of nearly 11 percent year over year.

Year-over-year percent change in wholesale broiler prices by product, 2020/2019



Note: Northeast broiler/fryer parts unless otherwise noted.

* Whole-bird wholesale broiler price (national composite weighted average).

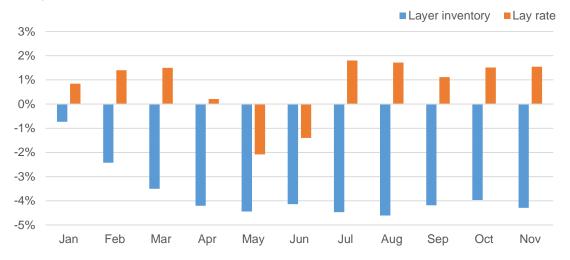
Source: USDA, Economic Research Service using data from USDA, Agricultural Marketing Service.

With 2020 wholesale prices closed out, it is worth seeing how broiler prices performed. The chart above illustrates how 2020 wholesale broiler prices compared to 2019 by individual products. With the exception of wings and drumsticks (which increased year over year by 0.8 percent and 10.9 percent (Northeast), respectively), wholesale prices were down across the board (see chart). These weaker prices were driven largely by the market disruptions stemming from COVID-19. Whole bird prices (National Composite Weighted Average) averaged 73.2 cents per pound for the year, a year-over-year decline of 17.3 percent. Much of the dark meat segment fared the worst, with boneless skinless thighs, thighs, leg quarters, and whole legs decreasing year over year by 26.3 percent, 20.9 percent, 21.5 percent, and 16.0 percent, respectively (Northeast). Parts from the white meat segment fared less poorly, with boneless skinless breasts down only 1.6 percent and tenderloins down 10.7 percent—likely bolstered by the quick service industry.

2021 Table Egg Production Expectations Lowered on Higher Feed Costs

November table egg production is estimated at 674 million dozen, down year over year (2.8 percent) for the 10th consecutive month this year. Table egg production continues to trail year-earlier levels, driven largely by lower layer inventory levels, while year-over-year gains in lay rates have slightly offset smaller flocks for most months of the year (see chart). Since March, the table egg layer flock has averaged 4.3 percent smaller than 2019 levels; as of December 1, the flock is estimated at 325.2 million layers, 4.6 percent lower year over year. Since March, the sizeable reduction in the layer flock can largely be attributed to the decrease in demand for egg products from the hospitality, restaurant, and institution (HRI) industry caused by market disruptions stemming from COVID-19.

Year-over-year percent change in average table egg layer inventory and average lay rate, 2020/2019

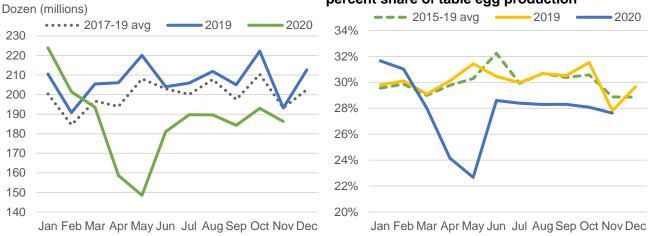


Note: Average table egg layer inventory and average lay rate. Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service.

In 2019, egg product volumes totaled 2,488 million dozen, or 30 percent of table egg production—consistent with recent historical averages (see chart). In the beginning of 2020, egg processing volumes exceeded year-earlier levels, but they decreased by 33.7 percent between January and May due to COVID-19 market disruptions shuttering large parts of the HRI industry. Egg processing shares as a percent of total table egg production fell from above 31.7 percent in January (or 223.9 million dozen) to 24.2 percent and 22.7 percent in April (158.6 million dozen) and May (148.5 million dozen), respectively (see chart). In June, egg processing volumes rebounded to 28.6 percent of table egg production (or 181.1 million dozen) and have since stabilized around 28.2 percent (or 188.6 million dozen). Despite the rebound in the second half of the year, egg processing market shares are still about 2 percentage points below historical averages, and year-to-date 2020 volumes are down 10 percent year over year.

Federally inspected shell eggs broken

Federally inspected shell eggs broken as percent share of table egg production



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

In 2021, the recovery of the breaking sector will largely depend on the rate at which the HRI industry returns to pre-COVID operations. The table egg industry as a whole, however, will continue to be bolstered by strong retail demand, as demonstrated through much of 2020. The 2021 first-half table egg production forecast was increased to 4,000 million dozen based on current layer inventory levels, while the second half production forecast was lowered to 4,150 million dozen, based on expectations that higher expected feed costs will dampen production growth. 2021 table egg production is forecast to total 8,150 million dozen, an increase of more than 1 percent over the 2020 forecast, but still about 1 percent below 2019 production.

Fourth-Quarter Export Forecast Lowered Slightly on November Data

Exports of eggs and egg products totaled 24,854 thousand dozen in November, a year-over-year decrease of 17.3 percent. This decrease was driven by a 32.0-percent decline in egg product volumes and a 4.8-percent reduction in shell-egg shipments. Shipments were lower year over year to Canada (-2,277 thousand dozen), Mexico (-1,278 thousand dozen), and Denmark (-475 thousand dozen), as well as several other key markets (see table). These decreases were slightly offset by higher shipments to the Philippines (+317 thousand dozen), South Korea (+78 thousand dozen), and the United Arab Emirates (+84 thousand dozen), among others. Based on lower-than-expected November shipments, the fourth-quarter export forecast was decreased to 80 million dozen. 2020 exports are forecast to total 338.6 million dozen, an increase of 1 percent relative to 2019. The 2021 forecast remains unchanged.

U.S. egg and egg product exports: Volumes and export shares of largest markets, November 2019 and 2020

	Volume							
Country	November 2019	November 2020	Change in volume	November 2019	November 2020			
	Thousand dozen	Thousand dozen	Thousand dozen	Percent	Percent			
Mexico	8,495	7,216	-1,278	28	29			
Canada	6,911	4,634	-2,277	23	19			
Hong Kong	4,362	4,198	-163	15	17			
Japan	2,373	2,301	-72	8	9			
South Korea	850	928	78	3	4			
United Arab Emirates	172	256	84	1	1			
Jamaica	704	540	-165	2	2			
Trinidad and Tobago	467	432	-35	2	2			
Denmark	611	136	-475	2	1			
Philippines	411	727	317	1	3			
World	30,064	24,854	-5,210	100	100			

Note: Largest markets are based on year-to-date 2020 export volumes.

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

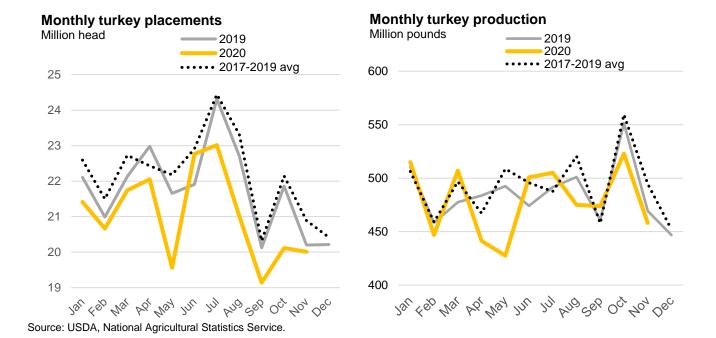
Despite Low Wholesale Prices During Holiday Season, 2020 Egg Prices Close Out Higher Year Over year; 2021 Price Forecast Increased Slightly

Wholesale shell-egg prices (New York, Grade A Large) averaged 90.1 cents per dozen in December, down 26.2 percent from the previous year. Wholesale prices declined during the first 3 weeks of the month—consistent with seasonal patterns—but unexpectedly increased slightly during the final 2 weeks of the month. The uptick at the end of the month was likely due to tighter shell-egg supplies (as indicated by shell-egg inventory data) and continued elevated demand at retail (as indicated by national retail purchase data). Nonetheless, 2020 wholesale prices, which averaged 112.2 cents per dozen for the year, were 19.3 percent higher than the 2019 average. This sizeable year-over-year percent increase is due in large part to the COVID-19-related price surges during Spring 2020, coupled with the depressed prices of 2019.

In 2021, producers will have to navigate the delicate balance of egg supply and demand. After excess supplies and depressed prices throughout much of 2019, 2020 was largely about the ability to match supply and demand for the industry. This ability will continue to be important in 2021, as demand will be affected by the slow and uncertain recovery of the egg industry. In addition, higher expected feed costs are likely to dampen expansion intentions, potentially tightening supplies further. The 2021 price forecast was increased slightly to 107.5 cents per dozen, a decrease of 4 percent relative to 2020.

Turkey Production Adjusted Down In Fourth Quarter

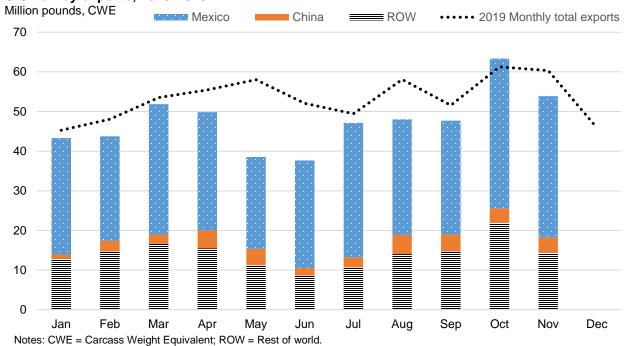
Turkey production in November totaled 458 million pounds, a 2-percent decrease from last November. Year to date, 2020 turkey production is 98 million pounds behind the first 11 months of 2019. While December is typically a slow production month with multiple short weeks due to the holidays, preliminary weekly data suggest that December 2020 production was another year-over-year decline. The fourth-quarter turkey production forecast was revised down 10 million pounds to 1.420 billion pounds. This would bring 2020 total production to 5.712 billion pounds, a 2-percent decrease from 2019. Placements of turkey chicks also remained low in November, decreasing by about 1 percent year over year. Due to continued year-over-year declines in monthly placements and expectations for rising feed costs, the 2021 production forecast was decreased by 30 million pounds to 5.725 billion pounds, only 13 million pounds more than the 2020 forecast. This would represent less than half a percent year-over-year growth from 2020.



Turkey Exports Adjusted Down In Fourth Quarter

U.S. turkey meat exports in November totaled 53.9 million pounds. After a year-over-year increase in October, November exports were 10.7 percent below a year ago. While a smaller volume was shipped to Mexico than in last November, exports to Mexico still accounted for 66 percent of U.S. turkey exports in November. In the first 11 months of 2020, the largest turkey export market after Mexico was China, which accounted for 7.3 percent of U.S. turkey exports in November and 6.9 percent year to date. China is represented by solid orange on the chart below. The fourth-quarter turkey export forecast was revised to 165 million pounds based on weaker November data. The total 2020 export forecast is 573 million pounds, 10 percent below 2019. The 2021 turkey export forecast remains unchanged at 590 million pounds, a 3-percent increase over the 2020 forecast. Turkey import forecasts remain unchanged.

U.S. turkey exports, 2019-2020



Source: USDA, Economic Research Service, Livestock and Meat International Trade Data.

Turkey Price Forecast Increased in 2021

The December average wholesale whole hen turkey price was 112.2 cents per pound, finishing the year stronger than expected. This brought the fourth-quarter average price to 113.6 cents per pound. Wholesale prices averaged 104 cents per pound in the week ending January 8th. The graph below shows weekly prices in 2019 and 2020 over a bar chart showing actual quarterly prices in 2020 and forecast quarterly prices in 2021. The 2021 price forecast was increased from last month based on expectations of higher feed prices and stagnant production growth in the new year. The 4 quarterly price forecasts for 2021 are 104, 106, 108, and 111 cents per pound, respectively.

Wholesale whole-hen frozen turkey prices



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

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U.S. red meat and poultry forecasts

U.S. trade, million pounds, carcass-weight equivalent Bed and veal exports Bed and veal imports Bed and walk propris Bed exports Park exports Brother exports Brother exports Brother exports Brother exports Brother exports	Market prices Steers 5-and Direct, Total all grades, dellars/owt Feeder steers, Medium Frame No. 1, Ox Cty., dellars/owt Feeder steers, Medium Frame No. 1, Ox Cty., dellars/owt Coxes, Live equivalent, Cutter 90% lean, 500 lbs and up, National, dollars/owt Choice/Prime staughter lambs, National, dollars/owt Barrows and pills, National base cost, 51-52% lean, live equivalent, dollars/owt Bridlers, Wholesde, National composite, W eighted average, cents/lb Turkeys, National 6-16 ib hers, National, cents/lb Eggs, Grade A large, New York, volume buyers, cents/dozen	Total red meat and poultry Eggs, number	Per capita disappearance, retail pounds 1/ Beer Pork Lamb and multon Bridlers Turkeys	Total red meat and poultry Table eggs, million dozen	Production, million pounds Beet Pork Lamb and mutton Bridlens Turkeys		U.s. red meat and pountry forecasts
				23	-10 65		Ī
535 792 68 1,229 1,1585	134.81 127 155.83 146 73.50 75 136.76 138 44.63 53 84.6 9 114.7 11 121.5 6	53.0 5	13.6 12.6 0.3 222.5 3.6	23,834 24,119 1,812 1,846	5,938 6, 6,230 5, 38 10,039 10, 1,435 1,	=	
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11 2,859 18 2,993 17 252 14 5,632 1,116 1,116	121.52 145.08 145.08 145.08 154.90 154.90 159.48 179.50.48 179.50.48 179.50.48 179.50.48 179.50.48	.0 217.3 .0 280.3	.5 57.0 .5 50.2 .5 91.1 .5 91.1	14 100,169 17 7,811	22 26,187 36 25,584 37 145 37 41,662 38 5,981	Annual	
9 731 3 721 3 721 2 80 2 1,516 2 279 6 1,709	2 125.60 2 146.29 8 146.29 6 61.60 0 136.83 8 49.12 5 95.7 1 79.4	3 53.4	0 14.0 2 12.6 2 0.3 1 0.3 1 22.7 5 3.5	9 25,130	7 6,466 4 6,645 5 39 2 10,385 1 1,452	-	
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3,160 2,998 2,73 5,877 1,042 7,069	117.12 146.93 57.43 143.49 45.93 97.8 80.2	219.8 287.5	57.3 51.0 1.1 92.6	102,435 8,042	26,872 26,315 153 42,601	Annual	
700 739 80 1,445 259	125.27 140.76 53.34 136.23 40.67 94.0 82.8 107.3	53.7 73.1	14.0 13.1 0.3 22.5	25,264 2,046	6,414 6,838 37 10,384 1,446	-	
790 836 73 1,535 227 1,721	118.79 140.51 58.30 156.16 57.95 97.7 85.5 69.7	55.7 73.0	14.8 12.5 0.3 24.0 3.7	26,020 2,054	6,817 6,615 40 10,945 1,451	=	
788 771 53 1,515 231	108.16 140.19 60.42 154.93 50.08 82.0 90.8 81.9	56.8 72.9	14.5 12.9 0.2 24.7 4.0	26,675 2,049	6,923 6,706 36 11,402 1,453	= 8	2019
749 712 66 1,826 227 1,888	114.88 147.44 53.66 150.99 43.11 80.6 97.8	58.1 74.6	14.8 13.9 0.3 23.8 4.9	27,308 2,116	7,001 7,478 36 11,175 1,467	<	
3,026 3,058 272 6,321 945 7,103	116.78 142.23 56.43 149.58 47.95 88.6 89.2 94.0	224.4 293.6	58.1 52.4 1.1 95.1	105,266 8,265	27,155 27,638 149 43,905 5,818	Annual	
769 774 102 2,023 206 1,858	118.32 136.42 59.38 159.12 42.52 83.5 97.4 133.1	56.6 72.6	14.7 13.2 0.4 24.4 3.6	27,248 2,048	6,929 7,426 35 11,237	-	
607 848 67 1,774 220 1,728	105.79 126.37 63.14 N/A 38.96 67.0 103.7 119.6	53.2 69.2	13.6 11.6 0.3 23.9 3.5	24,863 1,945	6,054 6,311 36 10,940 1,369	=	
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800 725 72 1,890 1,990	108.18 137.57 54.93 164.31 50.75 75.7 113.6 107.2	57.2 73.3	14.7 13.9 0.3 23.3 4.6	27,187 2,050	7,065 7,510 33 11,015 1,420	<	
2,935 3,375 304 7,314 912 7,399 573	108.51 135.45 60.61 161.72 43.18 73.2 106.5 112.2	225.0 285.9	58.6 51.9 1.2 96.1 15.7	106,464 8,032	27,158 28,296 138 44,550 5,712	Annual	
725 780 90 1,800 230 1,830	113.00 134.00 61.00 165.00 50.00 81.0 104.0	55.6 70.8	14.8 13.2 0.3 23.5	26,691 2,000	6,855 7,300 35 10,940 1,415		
770 830 70 1,750 230 1,765	113.00 134.00 65.00 160.00 53.00 86.0 106.0 98.0	55.1 70.7	14.5 12.2 0.3 24.0 3.6	26,202 2,000	6,760 6,705 36 11,130 1,420	=	
800 790 60 1,675 240 1,850	115.00 139.00 64.00 160.00 50.00 79.0 108.0	56.5 72.7	14.3 13.0 0.2 24.6 3.9	27,001 2,050	6,825 7,050 34 11,495 1,435	= 1	2021
795 715 65 1,950 245 1,945	120.00 140.00 57.00 160.00 45.00 78.0 111.0	56.8 74.1	14.0 13.6 0.3 23.9 4.6	27,204 · 2,100	6,750 7,510 36 11,305 1,455	<	
3,090 3,115 285 7,175 945 7,390 590	115.25 136.75 61.75 161.25 49.50 81.0 107.3	224.0 288.2	57.6 52.1 1.1 96.0	107,098 8,150	27,190 28,565 141 44,870 5,725	Annual	

Note: Forecasts are in bold. ont=hundredweight.

"I Per capital met and egg desperance data are activated using the Resident Population Plus Armed Forces Overseas series from U.S. Department of Commerce, Bureau of the Census. Source: World Agricultural Supply and Demand Estimates and Supporting Materials.

For further information, contact: Kim Ha, Economic Research Service, USDA.

Updated 1/12/2/2/1

Dairy Forecasts

Daily 1 diodadio	2019		2020			2021					
	IV	Annual	I	II	III	IV	Annual	I	II	III	Annual
Milk cows (thousands)	9,345	9,336	9,374	9,362	9,365	9,410	9,380	9,415	9,415	9,400	9,410
Milk per cow (pounds)	5,779	23,391	5,988	5,981	5,907	5,890	23,765	6,005	6,150	5,985	24,095
Milk production (billion pounds)	54.0	218.4	56.1	56.0	55.3	55.4	222.9	56.5	57.9	56.3	226.7
Farm use	0.3	1.0	0.3	0.3	0.3	0.3	1.0	0.3	0.3	0.3	1.0
Milk marketings	53.7	217.4	55.9	55.7	55.1	55.2	221.9	56.3	57.6	56.0	225.7
Milk-fat (billion pounds milk equiv.)											
Milk marketings	53.7	217.4	55.9	55.7	55.1	55.2	221.9	56.3	57.6	56.0	225.7
Beginning commercial stocks	17.0	13.8	13.6	16.9	19.0	17.7	13.6	15.2	17.3	19.7	15.2
Imports	1.7	6.9	1.5	1.9	1.8	1.6	6.8	1.4	1.7	1.7	6.6
Total supply	72.4	238.1	71.0	74.5	75.9	74.5	242.3	72.9	76.6	77.4	247.5
Commercial exports	2.1	9.1	2.2	2.6	2.4	2.0	9.2	2.3	2.6	2.5	9.7
Ending commercial stocks	13.6	13.6	16.9	19.0	17.7	15.2	15.2	17.3	19.7	18.3	15.2
Commodity Credit Corporation donations ¹	0.0	0.2	0.1	0.1	0.1	0.0	0.3	0.0	0.0	0.0	0.0
Domestic commercial use ²	56.7	215.2	51.8	52.8	55.8	57.3	217.7	53.3	54.4	56.6	222.6
Skim solids (billion pounds milk equiv.)											
Milk marketings	53.7	217.4	55.9	55.7	55.1	55.2	221.9	56.3	57.6	56.0	225.7
Beginning commercial stocks	10.7	10.7	10.2	11.6	11.4	10.4	10.2	10.3	10.7	11.1	10.3
Imports	1.5	5.8	1.5	1.5	1.4	1.3	5.6	1.4	1.4	1.4	5.5
Total supply	66.0	233.9	67.5	68.8	67.8	66.8	237.6	67.9	69.7	68.5	241.5
Commercial exports	11.0	41.5	11.2	12.5	11.9	11.6	47.3	11.6	13.0	12.4	48.7
Ending commercial stocks	10.2	10.2	11.6	11.4	10.4	10.3	10.3	10.7	11.1	10.4	10.3
Commodity Credit Corporation donations	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Domestic commercial use ²	44.7	181.9	44.7	44.9	45.5	44.9	179.9	45.7	45.7	45.7	182.4
Milk prices (dollars/hundredweight) ³											
All milk	20.60	18.63	18.83	15.37	19.07	20.00	18.30	17.60	17.15	17.40	17.65
Class III	19.51	16.03	16.77	15.42	20.25	20.00	18.16	17.00	16.60	16.85	16.90
Class IV	16.56	16.30	15.91	11.66	13.01	13.38	13.49	13.80	14.00	14.10	14.10
Product prices (dollars/pound) 4											
	0.0040	4.7500	4 7000	4 0000	0.4574	0.4000	4 0000	4 705	4 740	4 700	4 740
Cheddar cheese	2.0642	1.7586	1.7689	1.6389	2.1571	2.1296	1.9236	1.765	1.710	1.730	1.740
Dry whey	0.3253	0.3799	0.3602	0.3729	0.3325	0.3827	0.3621	0.450	0.450	0.450	0.450
Butter	2.0757	2.2431	1.8260	1.4257	1.5970	1.4746	1.5808	1.495	1.580	1.650	1.605
Nonfat dry milk	1.1553	1.0419	1.2021	0.9050	0.9783	1.0812	1.0417	1.125	1.100	1.080	1.100

Totals may not add due to rounding.

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

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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* .