

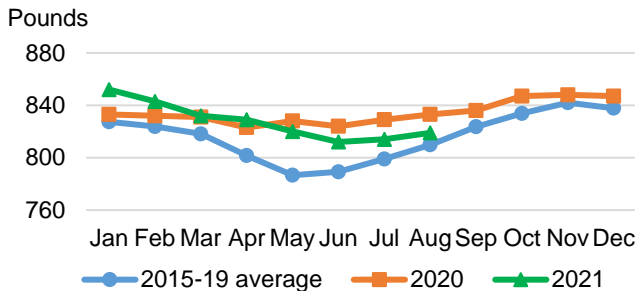


# Livestock, Dairy, and Poultry Outlook: October 2021

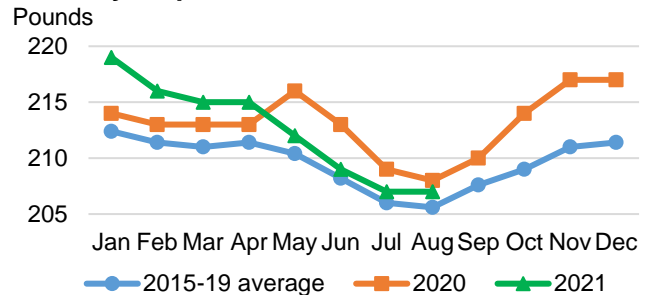
## Average Livestock Slaughter Weights and Milk per Cow

In August, dressed weights for steers and for animals in the barrows and gilts category were lower than August 2020 but above the 2015–19 average. In August 2020, supply-chain bottlenecks likely contributed to higher dressed weights for these animals. Live weights of broilers in August were slightly higher than August 2020 and considerably higher than the 5-year average; broiler weights have been relatively stable in 2021 compared to the volatility of 2020. Average milk per cow in August was about the same as August 2020 but substantially higher than the 2015–19 average.

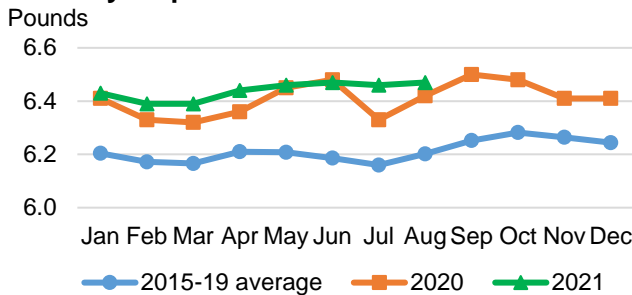
### Steers, average dressed weights, federally inspected



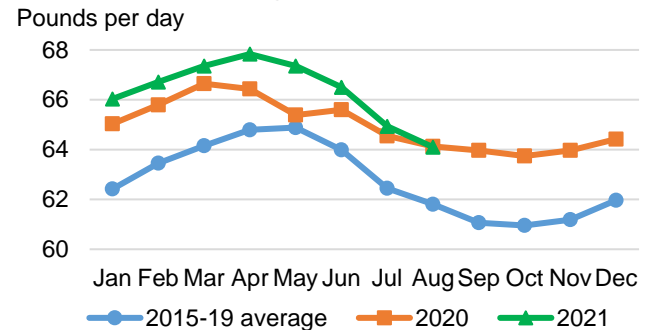
### Barrows and gilts, average dressed weights, federally inspected



### Broilers, live weights at slaughter, federally inspected



### Milk per cow, average



Source for all charts above: USDA, National Agricultural Statistics Service.

**Beef/Cattle:** The forecast for 2021 commercial beef production was raised fractionally from last month to 27.832 billion pounds on robust cow slaughter and heavier carcass weights. Fed and feeder steer prices were lowered in 2021 fourth quarter. August's beef imports totaled 332 million pounds, down 5.4 percent from a year ago. The 2021 annual forecast for beef imports was raised to 3.187 billion pounds from a month ago. August's beef exports set a new high of 325 million pounds, up 21 percent from the previous year. The 2021 annual forecast for beef exports was unchanged from last month at 3.414 billion pounds.

**Dairy:** Milk production forecasts have been lowered for 2021 and 2022 due to lower expected milk cow numbers and lower milk per cow. The number of dairy cows declined in June, July, and August. Year-over-year growth in average milk per cow decelerated in June and July; in August, average milk per cow was 1 pound less than August 2020. The all-milk price forecast for 2021 has been raised to \$18.45 per hundredweight (cwt), \$0.30 higher than last month's forecast. For 2022, the all-milk price forecast has been raised to \$19.20 per cwt, \$0.80 above last month's projection.

**Pork/Hogs:** Information in the September *Quarterly Hogs and Pigs* report suggests somewhat reduced supplies of animals for processing for much of 2022. Pork production in 2022 is expected to be 27.6 billion pounds, just slightly below forecast production this year. 2022 hog prices are forecast to decline almost 13 percent as moderating domestic demand offsets increasing second-half export demand. Per capita disappearance next year, forecast at 49.7 pounds, is almost 1 pound less than the 2021 forecast and the lowest per capita pork disappearance since 2014.

**Poultry/Eggs:** Total broiler production was adjusted down slightly in both 2021 and 2022, with 1-percent growth expected in 2022. Broiler exports were adjusted up in the third quarter on strong August shipments. Broiler prices were adjusted up on recent data. The third-quarter 2021 table egg production forecast was revised down due to lower-than-expected table egg layer flock inventory. Egg exports were up for the remainder of the year and the first half of 2022 based on robust foreign demand. Third-quarter egg and egg products imports were revised up based on stronger-than-expected imports year to date. Turkey production and ending stocks were adjusted down on recent data. Turkey exports were also adjusted down, while prices were adjusted up in both 2021 and 2022, reflecting lowered supply expectations.

# Beef/Cattle

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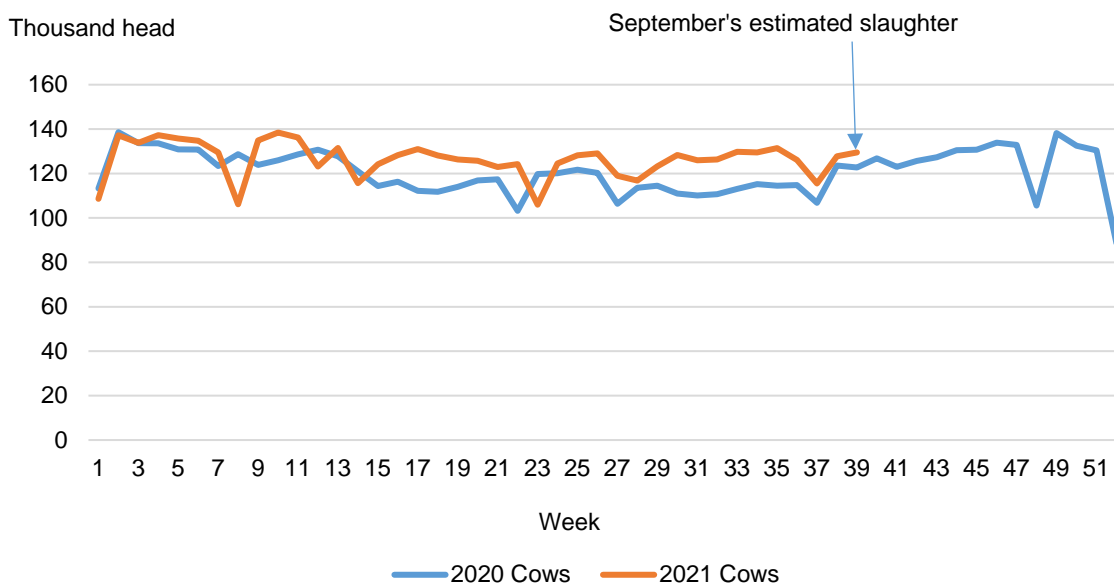
Christopher G. Davis and Hannah Taylor

## Higher Cow Slaughter and Carcass Weights Raise 2021 Beef Production Forecast

Total commercial beef production in 2021 was raised to 27.832 billion pounds from last month on anticipated heavier carcass weights and higher cow slaughter. Based on the average of the weekly weights reported in Agricultural Marketing Service (AMS) *Actual Slaughter Under Federal Inspection* reports through the week ending September 25, 2021, the estimated average cattle carcass weight for cattle was 829 pounds, 7 pounds above average carcass weights for the first 4 weeks of August 2021, but 14 pounds less than the similar period in September 2020. Dressed weights for steers and heifers were also heavier in September than the previous month.

According to the NASS *Livestock Slaughter* report, the estimated pace of beef and dairy cow slaughter for August was 6 percent above a year ago and estimated cow slaughter in the first 4 weeks of September was almost 7 percent higher than 2020. Below is a chart displaying weekly cow slaughter in 2020 and 2021. As shown, cow slaughter in 2021 has been above 2020 slaughter levels from the week ending April 10 (week 15) through the week ending September 25 (week 39), with the exception of the week ending June 5 (week 23), when cow slaughter was about 14,000 head lower than a year ago. The increase in cow slaughter is likely the result of weaker margins in the dairy sector, which is affecting herd decisions and concerns about forage availability and continued drought in parts of the country. These conditions are expected to result in increased cow slaughter in the fourth quarter.

## Weekly federally inspected cow slaughter: 2020–2021



Note: September's cow slaughter is an estimate.

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

The 2022 annual beef production forecast was raised 120 million pounds from last month to 26.995 billion pounds on higher anticipated cattle slaughter. Dry conditions are expected to support relatively large placements in the second half of 2021, supporting a higher forecast of fed cattle slaughter in 2022. However, production in the second half of the year will reflect lower placements as a result of expected tighter supplies of cattle outside feedlots in 2022.

## Cattle Price Forecasts Lowered for Fourth Quarter, 2021 but Raised for 2022

Live steer prices in the 5-area marketing region for the first week of October were reported at \$122.56 per hundredweight (cwt), \$15 higher than the same week last year. The fourth-quarter price forecast was lowered by \$4 to \$127 per cwt on seasonal trends and large supplies of fed cattle. However, the fed cattle price forecast for the second half of 2022 was raised on anticipated firm demand and tighter fed cattle supplies.

Feeder steer prices for the week ending October 4, 2021, averaged \$152.55 per cwt for steers weighing 750-800 pounds in the Oklahoma City National Stockyards, over \$8 above the average price recorded the same week a year earlier. The fourth-quarter forecast was lowered by \$4.00 to \$151.00 per cwt as placements during the quarter are expected to be larger than previously expected. The 2021 annual forecast for the feeder steer price was reduced to \$144.80 per cwt, down about \$1.00 from last month. The annual forecast for 2022 was revised up to \$155.50 per cwt on tighter anticipated feeder cattle supplies in the second half of the year.

## Beef Import Forecasts Raised for 2021 and 2022

August beef imports totaled 332 million pounds, just over 5 percent lower year over year compared to last year's high number. Beef imports in August were 25 percent above 2019 levels and 16 percent over the 5-year average. These were the second-highest beef imports for the month of August, behind last year's record number.

Monthly imports from Canada, Brazil, and New Zealand were notably higher year over year. The 98.9 million pounds from Canada was a year-over-year increase of 20 percent, the highest monthly import since 2005. Brazil also contributed to the high monthly imports with 35 million pounds, a year-over-year increase of 6.5 million pounds or 23 percent. In August, Canada and Brazil had the greatest increase in year-to-date import shares compared to last year.

Imports from New Zealand increased year over year by 17 percent. These imports are typically very seasonal, decreasing from a peak in June or July to a low in November. Monthly imports from New Zealand increased from July to August for the first time in 20 years.

The third-quarter beef import forecast was increased by 45 million pounds to reflect recent trade data and strong domestic beef demand. The annual forecast for 2021 was raised to 3.187 billion pounds. Annual imports for 2022 were also raised by 15 million pounds to 3.165 pounds, based on continued strength in beef demand and lower expected cow slaughter.

U.S. year-over-year beef imports from major suppliers						
	August 2020	August 2021	Difference in volume	Year-over-year change	Import share August 2020 Year-to-date	Import share August 2021 Year-to-date
	- Million pounds-			--- Percent ---	--- Percent ---	--- Percent ---
<b>Canada</b>	82.4	98.9	16.5	20.0	23.2	28.5
<b>Australia</b>	71.5	41.3	-30.2	-42.2	20.1	11.8
<b>Mexico</b>	63.0	61.4	-1.6	-2.5	20.6	20.0
<b>New Zealand</b>	49.4	57.6	8.2	16.6	17.5	17.6
<b>Brazil</b>	28.9	35.4	6.5	22.5	5.3	9.3
<b>Nicaragua</b>	16.1	17.7	1.6	9.9	5.4	5.7
<b>Uruguay</b>	20.1	9.3	-10.8	-53.7	4.3	4.2
<b>Argentina</b>	12.3	5.6	-6.7	-54.5	1.5	1.4
<b>ROW</b>	7.1	4.7	-2.4	-33.8	2.0	1.6
<b>Total Imports</b>	350.7	331.7	-19.0	-5.4	100.0	100.0

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 Up in August on Robust Shipments to China and Japan

U.S. beef exports in August set a new record of 325 million pounds, an increase of 57 million pounds, or 21 percent, from a year ago. August's increase in beef exports was driven primarily by China's strong demand for U.S. beef. Gaining access to China's market in March 2020, coupled with China's low domestic pork supplies and Australia's limited exportable beef supplies, has worked in the U.S.

favor. Since July 2020, monthly exports to China have been record-large in 10 months. China is now the U.S. third-largest beef destination.

The U.S. largest beef exports in August went to Japan, totaling 77 million pounds, up 10 percent from the previous year. Beef exports to Japan from May to August were 13 percent higher compared to the same period a year ago partially due to the lowering of Japan's tariff rate from 38.5 percent to 25 percent on April 17. Mexico was another key trading partner that contributed to the increase in beef exports in August; U.S. beef exports to Mexico were up 9.2 million pounds, or 49 percent, from a year ago when exports were limited by economic weakness in Mexico and Covid-19-related constraints. Year-to-date, Mexico's share of U.S. beef exports has been relatively stable at 9 percent.

In contrast, lower year-over-year beef exports were shipped to four of the seven major U.S. beef destinations in August. Exports to South Korea, the second-largest U.S. beef destination, were 6.7 million pounds or 9 percent lower, accounting for the majority of the reduction among the major U.S. beef destinations. U.S. beef exports to Hong Kong were down 26 percent or 4.5 million pounds from a year ago, while key trading partners Taiwan and Canada were 2.9 and 1.6 million pounds lower year over year, respectively. The fourth-quarter forecast for beef exports was unchanged from last month. The annual beef export forecasts for 2021 and 2022 were also unchanged from last month at 3.414 and 3.270 billion pounds, respectively.

<b>U.S. year-over-year beef exports to major destinations</b>						
	<b>August 2020</b>	<b>August 2021</b>	<b>Difference in volume</b>	<b>Year-over-year change</b>	<b>Export share August 2020 Year to date</b>	<b>Export share August 2021 Year to date</b>
	<b>- Million pounds-</b>			<b>--- Percent ---</b>	<b>--- Percent ---</b>	<b>--- Percent ---</b>
<b>Japan</b>	69.9	77.2	7.3	10.4	30.4	24.5
<b>South Korea</b>	75.1	68.4	-6.7	-8.9	24.0	23.4
<b>China</b>	10.5	59.4	48.9	465.7	1.9	14.9
<b>Mexico</b>	18.7	27.9	9.2	49.2	9.2	9.2
<b>Canada</b>	25.3	23.6	-1.7	-6.7	10.4	8.0
<b>Taiwan</b>	22.9	20.0	-2.9	-12.7	7.0	5.7
<b>Hong Kong</b>	17.2	12.7	-4.5	-26.2	6.7	3.8
<b>ROW</b>	28.0	35.3	7.3	26.1	10.4	10.5
<b>Total Exports</b>	267.6	324.5	56.9	21.3	100.0	100.0

ROW = Rest of the World.

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

# Dairy

Jerry Cessna and Angel Teran

## Recent Wholesale Dairy Product Prices

From the week ending September 11 to the week ending October 9, price directions for wholesale dairy product prices reported in the USDA *National Dairy Products Sales Report* (NDPSR) were mixed. The price of 40-pound blocks of Cheddar cheese increased to \$1.7973 per pound (+3.2 cents), and the price of 500-pound barrels (adjusted to 38 percent moisture) rose to \$1.6507 per pound (+18.0 cents). The nonfat dry milk (NDM) price rose to \$1.3427 per pound (7.1 cents), but the prices of butter and dry whey decreased to \$1.7579 per pound (-0.3 cents) and \$0.5362 per pound (-0.1 cent), respectively.

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

	For the week ending		Change
	September 11	October 9	
Butter	1.7604	1.7579	-0.0025
Cheddar cheese			
40-pound blocks	1.7650	1.7973	0.0323
500-pound barrels*	1.4707	1.6507	0.1800
Nonfat dry milk	1.2720	1.3427	0.0707
Dry whey	0.5374	0.5362	-0.0012

\*Adjusted to 38-percent moisture.

Source: USDA, Agricultural Marketing Service, *National Dairy Products Sales Report*, October 14, 2021.

At the Chicago Mercantile Exchange (CME), weekly average prices for the trading week<sup>1</sup> ending October 8 were higher than NDPSR prices reported for the week ending October 9, except for the butter price. CME spot prices for 40-pound blocks and 500-pound barrels of Cheddar cheese averaged \$1.8065 and \$1.7855 per pound, respectively. CME prices for butter, NDM, and dry whey averaged \$1.6990, \$1.4300, and \$0.5915 per pound, respectively.

Recent export prices of foreign suppliers have generally been higher than U.S. dairy product wholesale prices. All dairy export prices for Oceania and Western Europe reported by USDA *Dairy Market News* (DMN) increased from August to September.

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

### International dairy product export price averages (dollars per pound)

Product	Region	August	September	Change
Butter	Oceania	2.124	2.202	0.078
	Western Europe	2.128	2.212	0.084
Skim milk powder	Oceania	1.389	1.459	0.070
	Western Europe	1.343	1.398	0.055
Whole milk powder	Oceania	1.653	1.674	0.021
	Western Europe	1.699	1.757	0.058
Cheese	Oceania	1.887	1.945	0.058
Dry whey	Western Europe	0.543	0.552	0.009

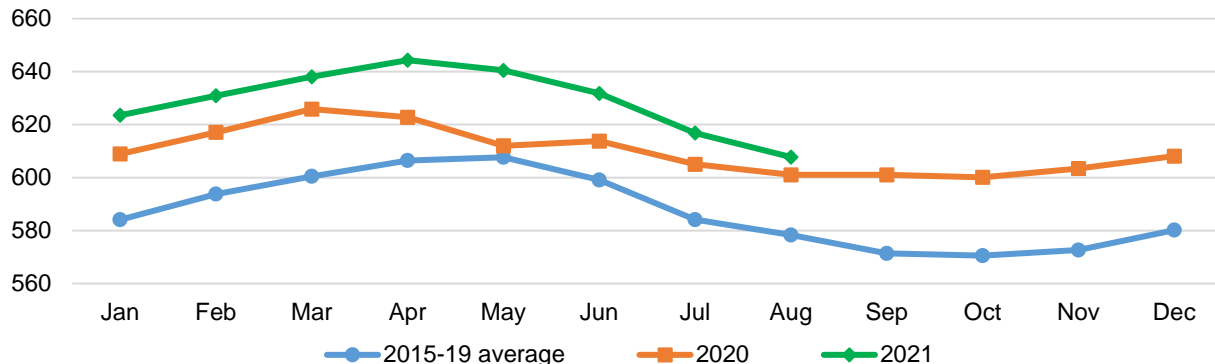
Source: USDA, Agricultural Marketing Service, *Dairy Market News*.

## Recent Dairy Supply and Use Data

U.S. milk production totaled 18.840 billion pounds (608 million pounds per day) in August, only 1.1 percent higher than August 2020. Milk cows averaged 9.480 million head in August, a decline of 19,000 from July. Substantial culling of milk cows has contributed to the decline in milk cow numbers. August was the third month that milk cows declined from the previous month. In recent weeks, federally inspected dairy cow slaughter has continued to be higher than corresponding weeks of 2020. Year-over-year growth in milk per cow decelerated in June and July; in August, average milk per cow was 1,987 pounds, 1 pound lower than August 2020.

### U.S. milk production

Million pounds



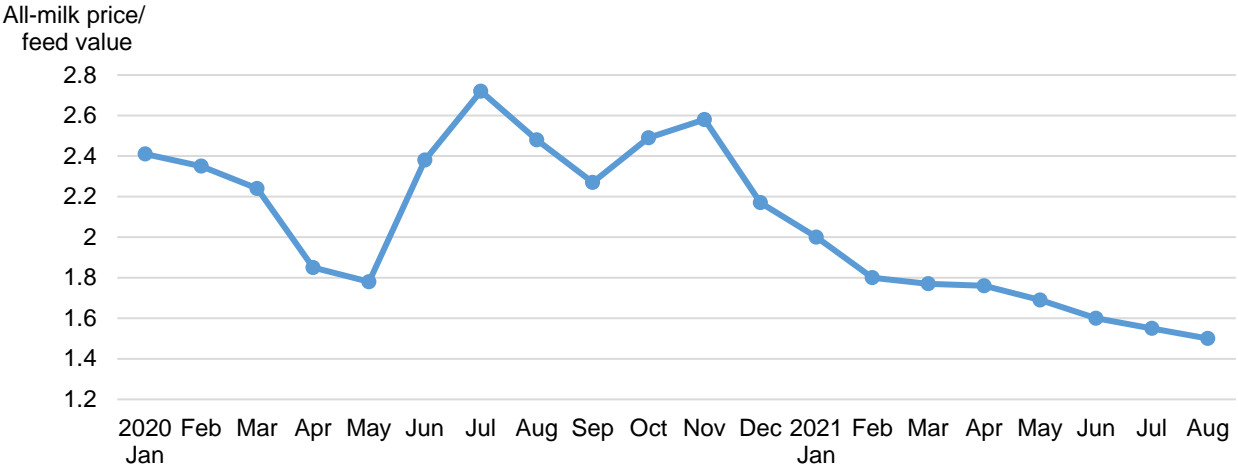
Source: USDA, Economic Research Service calculations using data from USDA, National Agricultural Statistics Service.

Climatic conditions and high costs of production have likely contributed to the recent deceleration in milk production growth. According to the U.S. drought monitor, the inventory of milk cows in areas of drought was estimated to be 63 percent for the weeks of June 15 and June 22. The percentage of milk cows in drought areas has declined since then to 40 percent for the week of October 5. More than 60 percent of alfalfa hay areas have been in drought since the middle of June. According to the National Oceanic and Atmospheric Administration, the summer of 2021 was the hottest on record for the 48 contiguous States. In the report of August 20, DMN reported that some areas of the Pacific Northwest had been unable to recoup heat-related drops in output. In the August 27 report, DMN reported that heat and humidity in the Upper Midwest were having negative effects on milk production.



Milk production usually responds to milk prices and input prices with a lag of several months. Feed prices have been relatively high compared to milk prices in recent months. The milk-feed ratio fell for 9 months, from 2.58 in November 2020 to 1.50 in August 2021.

**Milk-feed ratio**



Source: USDA, National Agricultural Statistics Service.

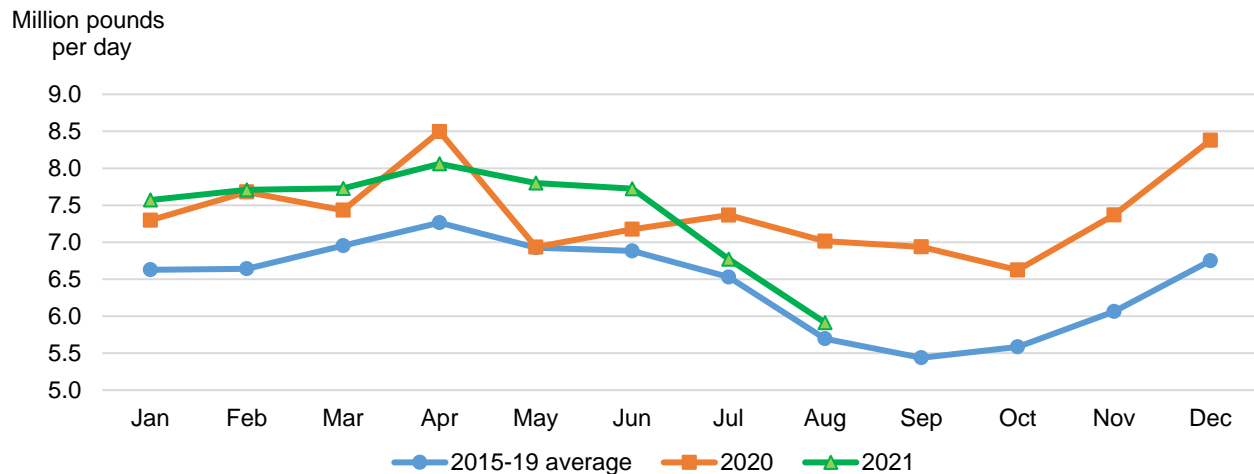
Labor and fuel costs have also been relatively high. In the semi-annual *Farm Labor* report published on May 26, USDA National Agricultural Service (NASS) reported that the average hourly rate for hired farm workers for the reference week in April 2021 was up 6 percent from the April 2020 reference week. Wages have likely remained relatively high since then. Although the U.S. Bureau of Labor Statistics does not report weekly wage statistics for farm workers, it reports weekly wage statistics for sectors that compete with agriculture for labor. For the 5 months from May through September, weekly wages for production and nonsupervisory employees in the transportation and warehousing sector averaged 7.0 percent above May through September 2020. For the construction sector, the year-over-year average increase for the same 5 months was 4.7 percent.<sup>2</sup> Recent fuel prices have also been relatively high. For the first half of 2021, the NASS index representing prices that farmers paid for fuels was below the first half of 2020; however, in July it was 3.1 above July 2020, and in August it was 7.7 above August 2020.

While year-over-year farm milk production growth has decelerated in recent months, year-over-year cheese production growth has grown. In June, cheese production was about the same as June 2020, but in July and August it was above the previous year by 3.0 and 4.4 percent, respectively. This contrasts with production of butter and dry skim milk products. In June, butter production was 7.5 percent higher than June 2020, but in July and August, it was below the previous year by 1.5 percent and 1.7 percent, respectively. June production of dry skim milk products<sup>3</sup> was 7.6 percent above June 2020, but July and August production quantities were lower than the previous year by 8.1 percent and 15.7 percent, respectively.

<sup>2</sup> July and August statistics are preliminary for both the transportation and warehousing sector and the construction sector.

<sup>3</sup> Dry skim milk products include NDM, skim milk powder, and dry skim milk for animal use.

## Production of dry skim milk products



Source: USDA, National Agricultural Statistics Service.

Dairy exports continued to be robust in August. On a milk-fat milk-equivalent basis, they totaled 1.056 billion pounds, 265 million pounds higher than August 2020. On a skim-solids milk-equivalent basis, August dairy exports totaled 4.448 million pounds, 416 million higher than August 2020. Notably, exports of anhydrous milk fat and butter oil totaled 3.8 million pounds in August, 3.1 million higher than August 2020. Cheese exports were 80.6 million pounds in August, 12.3 million higher than August 2020. While exports of butterfat products and cheese in August were higher than August 2020, exports of dry whey totaled 38.8 million pounds, 8.1 million lower than August of the previous year.

August imports on a milk-fat basis totaled 580 million pounds, 8 million higher than August 2020. On a skim solids basis, August imports totaled 398 million pounds, 10 million below August 2020. Notably, imports of milk protein products (milk protein concentrate and casein products) totaled 12.8 million pounds in August, 9.1 million lower than July and 2.3 million lower than August 2020.

For the 3 months from June through August 2021, domestic use on a milk-fat basis was 2.0 percent above June through August of 2020, but on a skim-solids basis it was only 0.4 percent higher. Relatively high NDM prices in recent months have likely contributed to relatively low domestic use of dry skim milk products. For the 3 months from June through August 2021, domestic use of dry skim milk products was 26.8 percent below the previous year.

Dairy ending stocks at the end of August totaled 18.939 on a milk-fat basis, 103 million higher than August 2020. On a skim solids basis, ending stocks for August totaled 11.487 billion pounds, 372 million higher than August 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 \$325 per short ton, \$35 lower than last month's forecast.<sup>4</sup> For more information, see *Feed Outlook*, published by USDA, Economic Research Service. The alfalfa hay price in August was \$206 per short ton, \$5 higher than July and \$35 higher than August 2020. The

<sup>4</sup> The marketing year begins September 1 for corn and October 1 for soybean meal.

5-State weighted-average price for premium alfalfa hay in August was \$238 per short ton, \$6 higher than July and \$46 higher than August 2020.

## Dairy Forecasts for 2021

Based on recent information showing a decline in milk cow numbers, relatively high feed costs, and relatively high culling of dairy cows, the forecast for the average number of milk cows in 2021 has been lowered to 9.475 million head, 10,000 below the previous month's forecast. Based on the decline in milk per cow from July to August, lower yield per cow is projected for the third and fourth quarters of 2021. The projected average yield per cow in 2021 is 23,960 pounds per year, 50 pounds lower than last month's forecast. The milk production forecast for 2021 is 227.0 billion pounds, 0.8 billion less than last month's forecast.

The forecast for 2021 dairy exports on a milk-fat basis is 11.8 billion pounds, 0.4 billion higher than the previous month's projection due to higher expected exports of butterfat products. On a skim-solids basis, 2021 exports are forecast at 51.4 billion pounds, 0.3 billion lower than last month's projection due to lower expected exports of dry skim milk products and whey products. On a milk-fat basis, annual dairy import projections for 2021 are unchanged from the previous month's estimates, at 6.6 billion pounds. On a skim-solids basis, the dairy import projection is 5.6 billion pounds, 0.2 billion lower than the previous month's forecast due to lower expected imports of milk protein products.

The 2021 forecasts for domestic commercial use of dairy products are lower than projected last month, mainly due to higher anticipated wholesale prices and weaker domestic demand. On a milk-fat basis, the annual forecast for 2021 domestic commercial use is 220.8 billion pounds, 1.1 billion lower than last month's forecast. The domestic use forecast on a skim-solids basis for 2021 is 180.0 billion pounds, 0.7 billion lower than last month's projection.

Based on recent price data and lower expected milk production, the wholesale price forecasts for most dairy products have been adjusted higher for 2021. Price forecasts for cheese, NDM, and dry whey are \$1.680 (+4.0 cents), \$1.245 (+2.0 cents), \$0.565 (+1.0 cent) per pound, respectively. The 2021 wholesale price forecast for butter is \$1.685 per pound, 0.5 cents lower than last month's projection.

With a higher projected wholesale price for cheese, the Class III milk price forecast for 2021 is \$17.05 per hundredweight (cwt), \$0.40 higher than the previous month's forecast. The Class IV milk price projection is \$15.70 per cwt, \$0.15 higher than last month's forecast. The all-milk price forecast for 2021 is \$18.45 per cwt, an increase of \$0.30 from last month's projection.

## Dairy Forecasts for 2022

The average number of milk cows is expected to continue declining in the first quarter of 2022. As a result, the annual forecast has been lowered to 9.450 million head, 30,000 head below the last month's forecast. The projection for milk per cow is 24,305 pounds, 25 pounds lower than last month's forecast. The projection for 2022 milk production has been adjusted to 229.7 billion pounds, 0.9 billion pounds lower than last month's forecast but 2.7 billion pounds higher than 2021.

On a milk-fat basis, the export forecast for 2022 is 11.0 billion pounds, 0.1 billion higher than last month's projection due to an expected increase in butter exports. On a skim-solids basis, 2022 dairy exports are projected to total 51.8 billion pounds, unchanged from last month's forecast. Dairy imports

for 2022 remained steady from last month's forecast at 6.7 billion pounds on a milk-fat basis and 5.5 billion pounds on a skim-solids basis.

In 2022, domestic use is projected to be lower than the previous month's forecast as wholesale prices are projected higher and milk production is projected down. On a milk-fat basis, the domestic use forecast for 2022 is 224.5 billion pounds, 1.0 billion lower than the previous forecast. On a skim-solids basis, the forecast for domestic use is 182.2 billion pounds, 0.7 billion lower than last month's forecast.

With lower projected milk production, ending stock forecasts for 2022 have been lowered. On a milk-fat basis, the forecast for ending stocks has been decreased to 15.3 billion pounds (-0.1 billion). On a skim-solids basis, the forecast has been lowered to 11.1 billion pounds (-0.2 billion).

Dairy product price forecasts for 2022 have been adjusted higher. Wholesale price forecasts for Cheddar cheese, butter, NDM, and dry whey are raised from last month's projections to \$1.715 (+6.0 cents), \$1.755 (+2.5 cents), \$1.380 (+11.0 cents), and \$0.510 (+1.0 cent) per pound, respectively.

With higher projected wholesale prices for cheese and dry whey, the Class III milk price forecast for 2022 is \$17.10 per cwt, \$0.65 higher than the previous month's forecast. Due to higher butter and NDM price forecasts, the Class IV milk price projection for 2022 is \$17.15 per cwt, \$1.10 higher than last month's forecast. The all-milk price forecast for 2022 is \$19.20 per cwt, an increase of \$0.80 from last month's projection.

# Pork/Hogs

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Mildred Haley

## September *Quarterly Hogs and Pigs* Signals Reduced Animal Numbers for 2022 Processing

The data in the *Quarterly Hogs and Pigs* report released by USDA on September 24 suggest that the U.S. pork sector is likely to supply fewer hogs for slaughter in 2022, implying slightly lower pork production next year. The contributing factors in the report include a decline in the breeding inventory—a reduction of 143,000 head, or 2.26 percent from a year ago; a smaller June-August pig crop, a 6-percent decline from a year ago; and 4 percent lower producers' farrowing intentions for the September-November quarter compared with a year ago.

On the other hand, the September report contains what may be the first indications that continued industry contraction—apparent in recent reductions in key industry metrics—may be starting to lose steam. Past *Quarterly Hogs and Pigs* reports have documented six consecutive quarterly reductions in the breeding inventory since June 2020, five consecutive reductions in the inventory of all hogs and pigs since September 2020, and largely negative year-over-year farrowings since September 2019. The September report indicates, however, that producers intend to farrow 2.962 million sows in the December 2021–February 2022 quarter, more than 1 percent greater than farrowings a year earlier. This is the first set of higher year-over-year intentions stated by producers since December 2020. It is also notable that the June-August litter rate, at 11.13 pigs per litter, was record high. Moreover, at 0.6 percent higher than the litter rate of a year earlier, it broke a string of four consecutive year-over-year lower litter rates, stretching from June to August 2020 through March–May 2021. While it is highly likely that the lower rates of last year reflect COVID-related market turbulence and that weaker litter rates earlier this year were a function of the new PRRS variant<sup>5</sup> in upper Midwest hog-producing States, the stronger June-August litter rate may be an indicator that the industry is adapting its biosecurity practices to minimize virus access to hog operations. It is also possible that the June–August litter rate represents a return to a more normal production environment.

Pork production in 2022 is expected to total about 27.6 billion pounds. That's slightly below expected production this year—27.7 billion pounds—and about 560 million pounds below September's pre-report forecast for 2022 production. Pork production in the first quarter of 2022 is largely a function of the June–August 2021 pig crop, which at 33.9 million head was about 6 percent below 2020's June–August crop. With assumptions of slightly faster litter rate growth than last year and slightly heavier dressed weights, first-quarter 2022 pork production is likely to come in at just under 7 billion pounds, or more than 4 percent below the first quarter of 2021. The fall pig crop of 2021 is the primary contributor to second-quarter 2022 pork production. With September-November producer farrowing intentions about 4 percent below a year earlier, second-quarter 2022 pork production is expected to be about 6.5 billion pounds, almost 3 percent lower than production in the second quarter this year. With producers' first set of farrowing intentions for the first quarter of 2022 (December 2021–February 2022) more than 1 percent higher than a year earlier, following through on those stated intentions would yield a third-quarter 2022 production volume of about 6.8 billion pounds, more than 4 percent higher than a year earlier.

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<sup>5</sup> PRRS 144; PRRS= Porcine Reproductive and Respiratory Syndrome.

With 2022 production just slightly below expected production this year, prices of live equivalent 51–52 percent lean hogs are expected to be lower next year, due largely to lower demand than that which drove hog prices in 2021. Hog prices in 2022 are expected to average \$61 per cwt, almost 13 percent below average prices in 2021. First-quarter hog prices are expected to average \$63 per cwt, about 13 percent higher than same-quarter prices in 2021. Lower pork production (-4.2 percent year-over-year) is likely to be the factor driving hog prices above year earlier-levels. Second-quarter prices are expected to average \$64 per cwt, almost 21 percent below a year earlier. Second-quarter prices are forecast lower—despite lower second-quarter production due to expectations of moderating domestic pork demand and more seasonal pork export demand—unlike second-quarter 2021 when exports to all regions were particularly strong. In the third-quarter (July–September 2022), increased production and moderating domestic demand are expected to offset year-over-year-stronger export demand, accelerating shipments to China in particular. Third-quarter hog prices are expected to average \$60 per cwt, more than 21 percent below a year ago.

## Exports Lowered for 2021, Raised for 2022

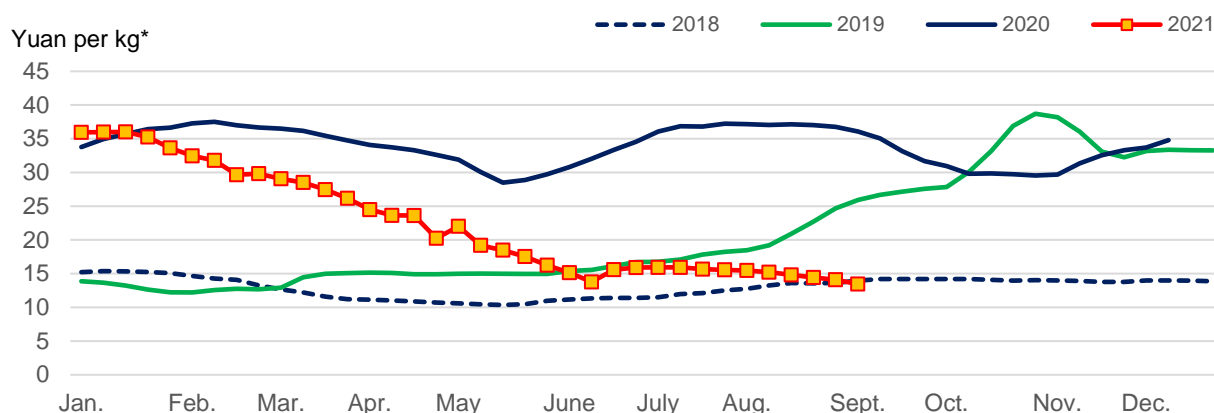
U.S. exports were 526 million pounds in August, down just slightly from a year ago. Mexico and Japan together accounted for over half of August’s shipments. Major export destinations in August are listed below.

<b>U.S. pork exports: Volumes and export shares of the 10 largest foreign destinations in August 2020 and 2021</b>					
Country	Exports	Exports	Percent change	Export share	Export share
	August 2020	August 2021	(2021/2020)	August 2020	August 2021
	(Million pounds)	(Million pounds)		Percent	Percent
World	527	526	-0.25		
Mexico	125	188	50	24	36
Japan	93	101	9	18	19
China/Hong Kong	117	60	-49	22	11
Canada	52	43	-16	10	8
South Korea	28	30	5	5	6
Colombia	13	25	89	2	5
Dominican Republic	8	15	90	1	3
Honduras	10	12	17	2	2
Australia	18	11	-40	3	2
Philippines	14	9	-34	3	2

Source: USDA, Economic Research Service.

It is notable that China\Hong Kong's share of August exports declined from 22 percent in 2020 to 11 percent this year. The China Ministry of Agriculture's live hog price series show that prices declined to 13.45 yuan per kilogram in the third week of September this year—significantly below production costs and roughly equivalent to where prices were in 2018, shortly after African Swine Fever had been identified in Northern China.

### China live hog prices, weekly



\*kg= kilogram.

Source: China Ministry of Agriculture.

Based on expectations that 2021 China pork supplies will reflect increased domestic production and reduced imports, U.S. export forecasts for the third and fourth quarters of 2021 are reduced by 25 and 110 million pounds, respectively. Total U.S. pork exports are forecast at 7.2 billion pounds, about 1.1 percent below exports in 2020.

In recently released production, supply, and distribution data for China<sup>6</sup> in 2022, USDA, Foreign Agricultural Service shows a 5-percent decline in pork production to 43.75 million metric tons (MT). To partially offset the decline, China's pork imports next year are expected to increase by more than 5 percent, to almost 4.8 million MT. Coupled with expected import growth in several other important markets, including Mexico and South Korea, U.S. pork exports are raised 105 million pounds next year to 7.4 billion pounds, almost 3 percent above shipments in 2021. Most of the 2022 increase is expected to occur in the second half of the year.

## Lower Pork Production and Increased Exports Reduces Per Capita Disappearance in 2022

Pork exports in July were 508 million pounds, 8.5 percent lower than those of a year ago. Higher exports to most major markets were unable to offset significantly lower shipments to China\Hong Kong. Canada was the only other major market to which shipments were lower in July. Higher Canadian pork production and lower exports are likely reducing demand for imported pork. Canadian pork production was up almost about 1 percent according to Agriculture Canada, through the first week of September. Exports were 1.8 percent below a year ago through the end of July, and down 46 percent to China. Canadian imports from all sources were down more than 6 percent year over year, through the first week of September.

<sup>6</sup> *Livestock and Poultry: World Markets and Trade*. USDA, Foreign Agricultural Service. October 12, 2021.

For 2022, forecasts for lower production and higher exports are likely to reduce total U.S. pork disappearance next year. Increased export forecasts to Asia and Western Hemisphere countries and reduced pork production are factors that contribute to a 1.5-percent decrease in 2022 total pork disappearance. On a per capita retail weight basis, the 2022 disappearance forecast of 49.7 pounds is 0.9 pounds lower than the per capita disappearance forecast for 2021, the lowest per capita pork disappearance since 2014.

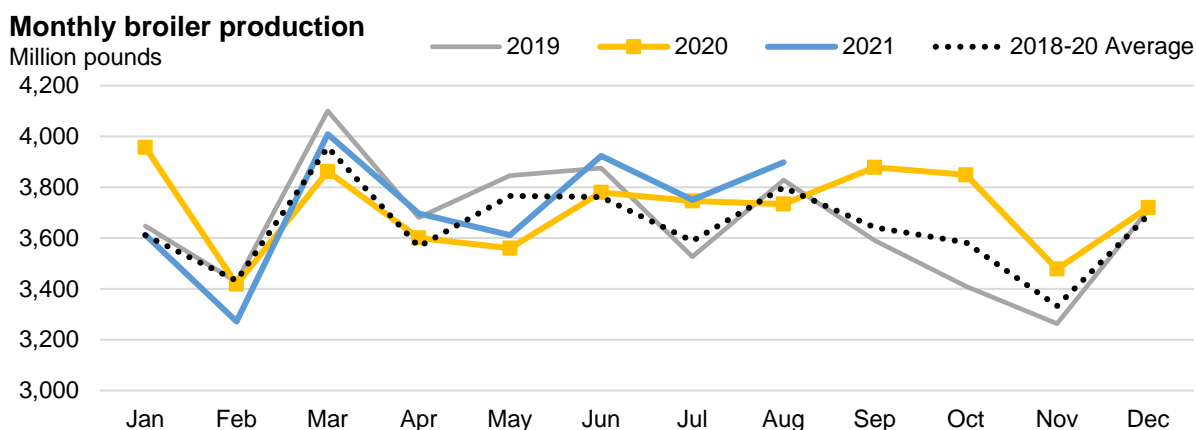


# Poultry

Grace Grossen and Adriana Valcu-Lisman

## Broiler Production Stronger Than Last Year in August

August broiler production totaled 3.898 billion pounds. Both slaughter numbers and average live weights were higher than August of last year, although the slaughter increase reflected an additional slaughter day in 2021. Based on strong August production, the third-quarter production forecast was adjusted up by 50 million pounds to 11.5 billion pounds. However, as weekly chick placements remain below last year's levels, forecast fourth-quarter production was decreased to 11.1 billion pounds. These adjustments bring the 2021 annual forecast to 44.724 billion pounds, a fractional increase from 2020. The 2022 forecast was adjusted down slightly to 45.24 billion pounds, representing 1-percent growth over 2021.



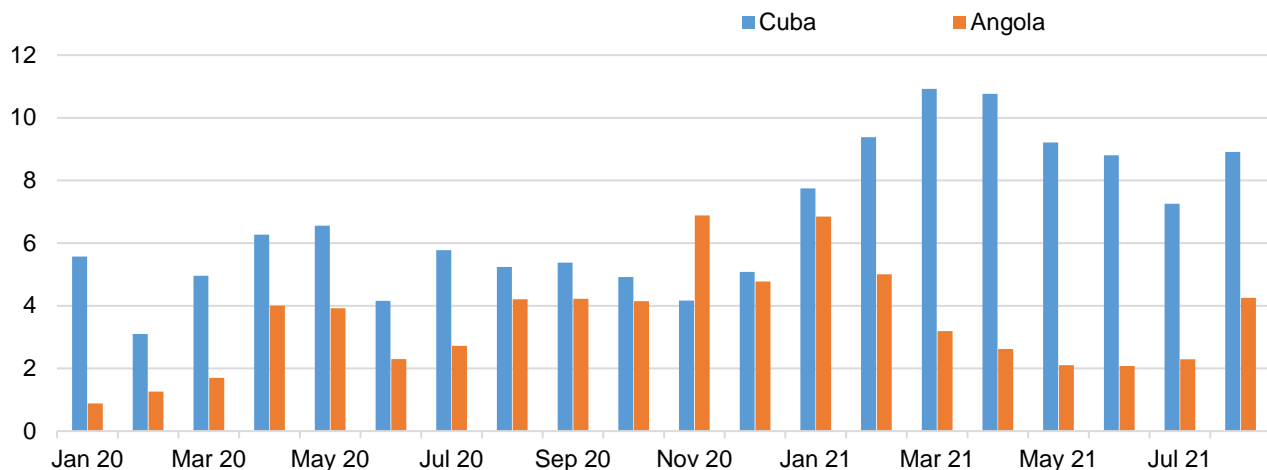
Source: USDA, National Agricultural Statistics Service.

## Broiler Exports Adjusted Up in Third Quarter

August broiler exports totaled 650.4 million pounds, an increase of 6 percent over last August and more than 50 million pounds more than exported in the previous month. The increase was accounted for by strong shipments to Mexico and several extremely variable markets, including Cuba and Angola. Combined, these two countries accounted for 8.5 percent of U.S. broiler exports in 2020. In January through August 2021, they have accounted for a 12.7-percent share of broiler exports.

Forecast third-quarter exports were adjusted up to 1.84 billion pounds on strong August shipments. The export forecast for the fourth quarter is unchanged, as is the forecast for 2022. The annual broiler import forecasts were adjusted up to 150 million pounds in 2021 and 145 million pounds in 2022.

## Share of monthly U.S. broiler exports to Cuba and Angola, January 2020 to August 2021



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

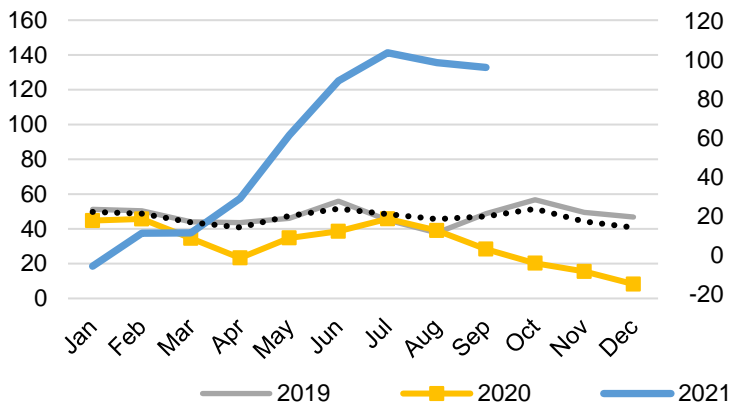
## Broiler Prices Adjusted Up

September national composite whole broiler prices averaged 105.75 cents per pound, bringing the third-quarter average price to 105.4 cents per pound. Weekly prices have held steady at close to 105 cents per pound since mid-May, bypassing the seasonally typical decline in prices through the second and third quarters. The fourth-quarter broiler price forecast was adjusted up to 100 cents per pound on continued firm demand and slower growth in production. This would make the 2021 annual average price 98 cents per pound. Price forecasts for 2022 were also adjusted up, making the annual average price forecast 98 cents per pound.

Wholesale prices for many chicken cuts remain elevated. However, boneless skinless cuts are even higher, as they require additional labor to process. When more thighs and breasts with skins and bones are available relative to those without, the spread between the prices increases. The spread between wholesale prices for thighs and boneless skinless thighs began to climb in April of this year, and by July it was nearly triple the 3-year average. For chicken breasts, the spread between the line-run price and the boneless/skinless price jumped to 55 cents in May of 2020 when poultry plants were facing major disruptions due to the pandemic. The spread fell through much of 2020, but climbed again in 2021; in September it is about 6 times the average spread in 2020.

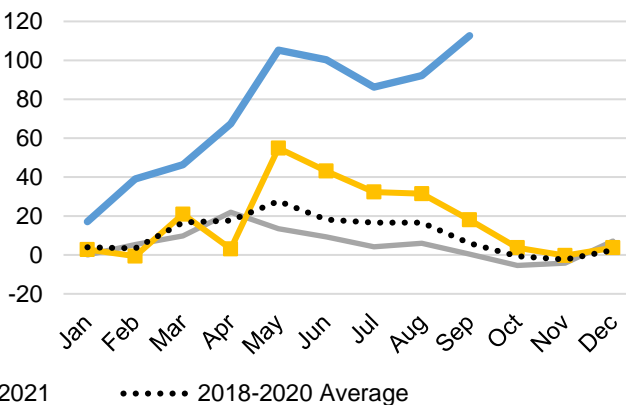
### Wholesale price spread between thighs and boneless/skinless thighs

Cents per pound



### Wholesale price spread between line-run breasts and boneless skinless breasts

Cents per pound



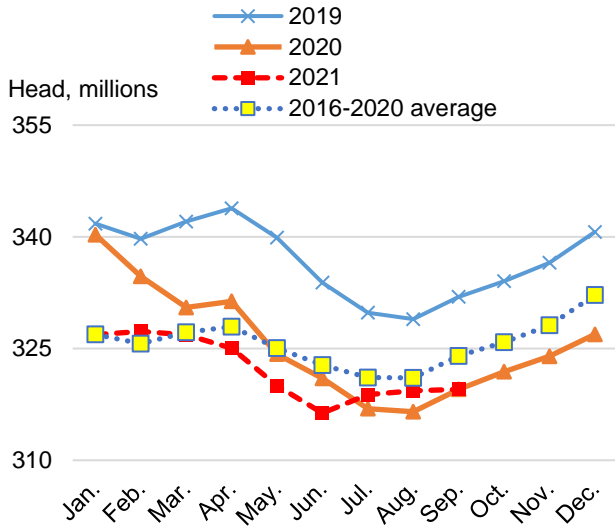
Source: USDA, Agricultural Marketing Service.

## Third-Quarter Table Egg Production Revised Down

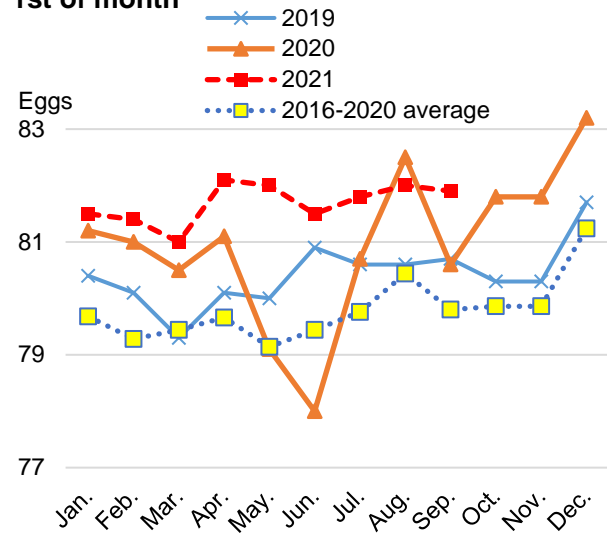
Table egg production was 676.3 million dozen in August, only fractionally higher from year-earlier levels. This increase was due to a 0.4-percent increase in the size of the layer flock that more than compensated for a 0.2 -percent year-over-year decrease in the lay rate.

Historically, the September 1 inventory of table egg layers increases relative to the prior month inventory (see chart). The early September 1 inventory increase reflects seasonal patterns associated with higher consumption demand in anticipation of the holiday baking season. This year, however, the September 1 inventory of table egg layers was 319.5 million, almost unchanged from last month. Furthermore, the September 1 table egg lay rate suggests that the average rate will be lower than in August (see chart). Given the near-term production expectation, the forecast for third-quarter table egg production was decreased by 20 million dozen to 2,000 million dozen. This revision brings 2021 total expected table egg production to 8,053 million dozen, a fractional year-over-year decrease.

**Table egg layer flock, 1st of month**



**Rate of lay, eggs per 100 layers per day, 1st of month**

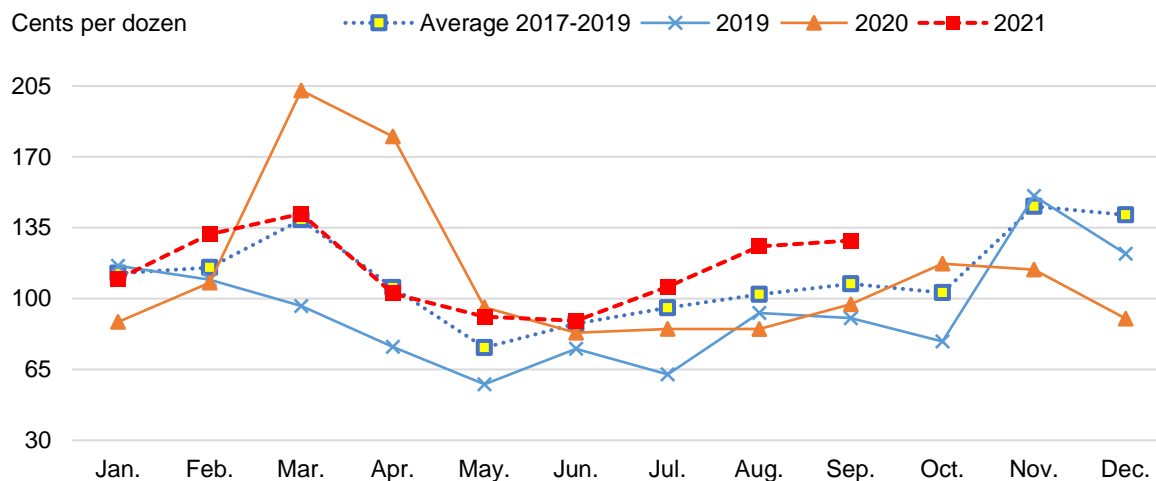


Source: USDA, National Agricultural Statistics Service.

## Wholesale Table Egg Prices Steady

Wholesale egg prices (New York, Grade A Large) averaged 128.7 cents per dozen in September. This represents a 32.4-percent year-over-year increase. The third-quarter average egg price—the average of wholesale egg prices for July, August, and September—was 120.1 cents per dozen, 34.9 percent higher than year-ago levels. September daily wholesale egg prices started at 143 cents per dozen, declined steadily in the first half of the month, and remained flat at 120 cents per dozen for the second half of the month. In the first week of October, prices declined steadily and are expected to keep this pattern in the next couple of weeks. However, during the last quarter of the year, wholesale egg prices are expected to increase in line with higher demand stemming from the holiday baking season. The wholesale egg price forecasts remain unchanged.

## Monthly average midpoint prices for New York eggs (wholesale, Grade A Large)



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

## Shell Egg Exports Continued To Strengthen in August

Exports of eggs and egg products continued well above year-earlier levels. Shipments in August totaled 35.2 shell-egg-equivalent basis, 17.8 percent higher than last year. The year-over-year increase was the result of higher shipments of both shell eggs (22.5 percent) and egg products (7.5 percent). Increased strength in exports of eggs and egg products to Asian markets—South Korea (+9,124 thousand dozen), Japan (+1,252 thousand dozen) and Hong Kong (+1,271 thousand dozen)—more than offset shipment declines in North American markets—Canada (-2,031 thousand dozen) and Mexico (-1,567 thousand dozen)—and other traditional markets such as UAE (-1,116 thousand dozen). Based on higher-than-expected export volumes in August and expectations for robust demand of U.S. egg and egg products for the remainder of the year, the third-quarter forecast was revised up to 104 million dozen. The fourth-quarter forecast was revised up to 103 million dozen. This strength is expected to continue into the first half of 2022, which was the basis for increasing the 2022 export forecast to 374 million dozen.

August U.S. imports of egg and egg products were 1.5 million dozen shell-egg-equivalent. This represents almost a 25-percent year-over-year increase. Imports from Canada, China, Taiwan, Thailand, and Vietnam accounted for most of the U.S. egg and egg products imports, mainly egg products. The third-quarter U.S. egg and egg product imports were revised up to 4.4 million dozen shell-egg-equivalent.

## U.S. egg and egg products exports: Volume and export share, August of 2020 and 2021

Country	Volume (thousand dozen)			Export share (percent)	
	2020	2021	Change in volume	2020	2021
Mexico	9,035	7,468	-1,567	30	21
Canada	7,561	5,530	-2,031	25	16
Hong Kong	3,658	4,929	1,271	12	14
Japan	1,715	2,967	1,252	6	8
South Korea	441	9,565	9,124	1	27
Jamaica	671	668	-3	2	2
United Arab Emirates	1,607	441	-1,166	5	1
Trinidad and Tobago	588	471	-117	2	1
Bahamas	423	311	-112	1	1
<b>World</b>	<b>29,884</b>	<b>35,202</b>	<b>5,318</b>	<b>100</b>	<b>100</b>

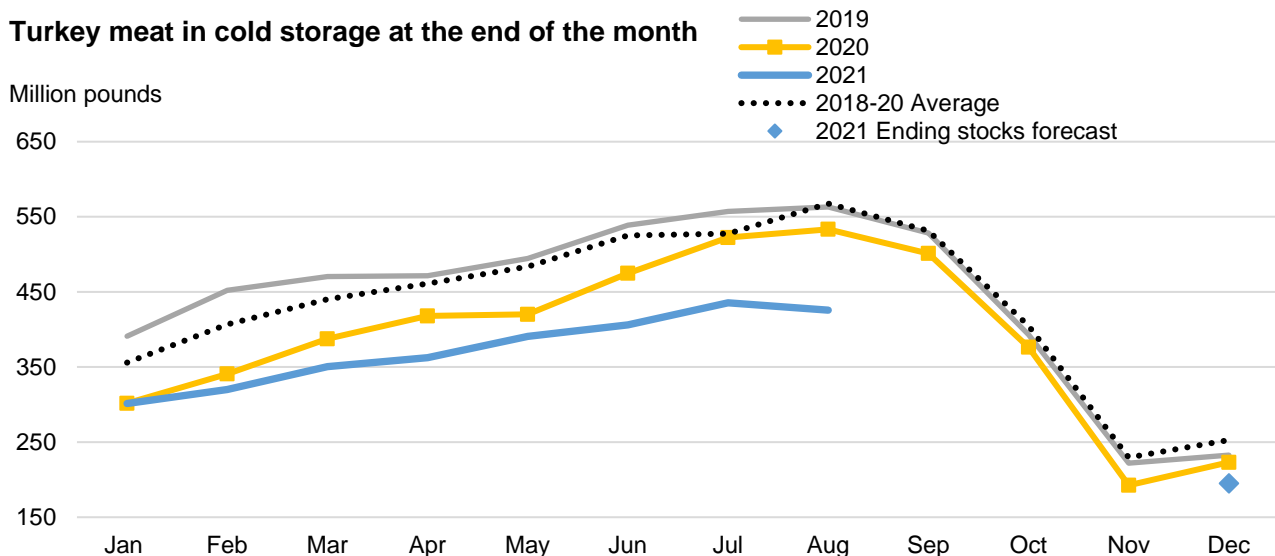
Note: Largest markets are based on 2021 year-to-date export volumes.

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

## Turkey in Cold Storage Fell in August

Stocks of turkey meat in cold storage, reported by the USDA, National Agricultural Statistics Service (NASS), typically follow a seasonal pattern: frozen stocks build up throughout the year until the fall, when retailers begin preparing for the holidays. In 2021, this buildup has been slower than usual and appears to have peaked early. At the end of August, NASS reported 425.6 million pounds of turkey meat in cold storage. This is a 20-percent decrease from the same month last year, and also a decline of about 10 million pounds from the end of July. Projected stocks for the end of the year were adjusted down to 195 million pounds.

### Turkey meat in cold storage at the end of the month



Source: USDA, National Agricultural Statistics Service.

Turkey production also declined year-over-year in August, totaling 469.6 million pounds. The turkey production forecasts were adjusted down by 10 million pounds in each of the last two quarters of 2021, bringing the 2021 total forecast to 5.609 billion pounds, a decrease of 2 percent from 2020. In 2022, the total production forecast was adjusted down by 20 million pounds to 5.695 billion pounds, representing over 1-percent year-over-year growth from the 2021 forecast.

Because turkey hens take 14-16 weeks to mature, the placements of turkey poults in August are a key indicator of fresh turkey availability for Thanksgiving. Turkey-poult placements in August 2021 totaled 21.4 million head. This is a slight increase over August of 2020 but still about 4 percent below the 3-year average for August.

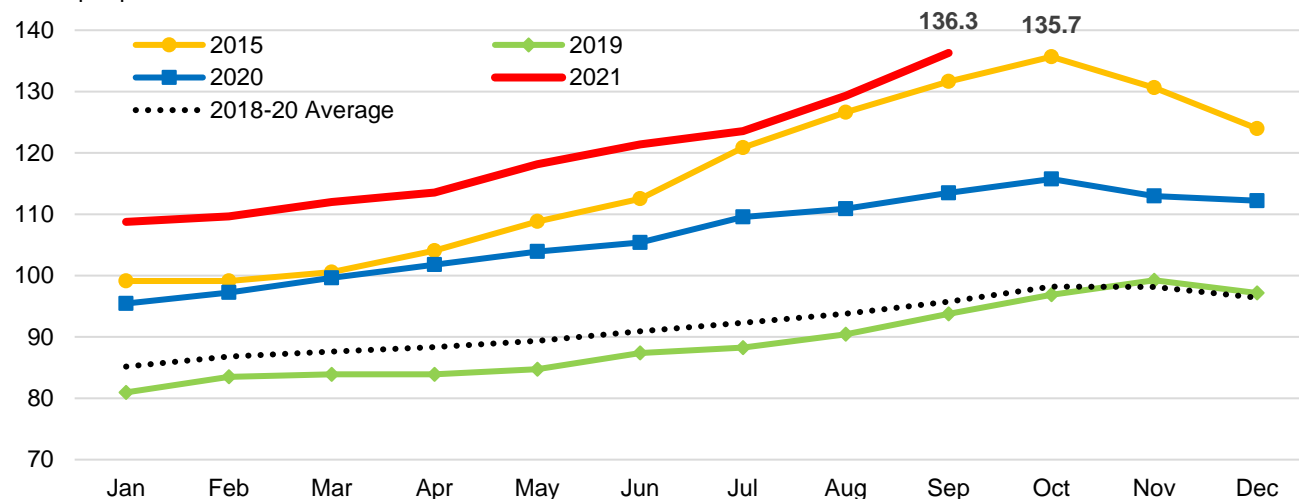
Turkey meat exports totaled 45.3 million pounds in August, a 5-percent year-over-year decrease. As a share of production, this was similar to last August at about 10 percent. Based on lowered production expectations, the turkey meat export forecasts were adjusted down to 558 million pounds in 2021 and 560 million pounds in 2022.

## Turkey Prices Revised Up

September wholesale prices for frozen whole-hen turkeys averaged 136.3 cents per pound. This is the highest monthly price since the series began in 2006. The previous record-high price was 135.7 cents per pound in October 2015. Weekly prices peaked at 144.29 cents per pound in the week ending September 17th. Prices have fallen since then to 129.7 cents per pound for the week ending October 8th, but are still some of the highest prices of the year. The third-quarter average price is 129.7 cents per pound, and the fourth-quarter projected price was increased to 130 cents per pound on recent prices and expectations for lower production. Quarterly prices in 2022 were also adjusted up for an average 2022 price of 121 cents, only 1 cent less than the 2021 average price.

### Monthly wholesale whole-hen frozen turkey prices

Cents per pound



Source: USDA, Agricultural Marketing Service.

# Suggested Citation

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## Dairy forecasts

			2021					2022			
	IV	Annual	I	II	III	IV	Annual	I	II	III	Annual
Milk cows (thousands)	9,429	9,388	9,458	9,503	9,480	9,460	9,475	9,450	9,450	9,450	9,450
Milk per cow (pounds)	5,892	23,778	6,003	6,118	5,920	5,920	23,960	6,060	6,200	6,035	24,305
<b>Milk production (billion pounds)</b>	<b>55.6</b>	<b>223.2</b>	<b>56.8</b>	<b>58.1</b>	<b>56.1</b>	<b>56.0</b>	<b>227.0</b>	<b>57.3</b>	<b>58.6</b>	<b>57.0</b>	<b>229.7</b>
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	55.9	55.7	226.0	57.0	58.3	56.8	228.6
<b>Milk-fat (billion pounds milk equiv.)</b>											
Milk marketings	55.3	222.1	56.5	57.9	55.9	55.7	226.0	57.0	58.3	56.8	228.6
Beginning commercial stocks	17.7	13.6	15.6	18.1	20.0	18.2	15.6	15.5	18.0	19.9	15.5
Imports	1.6	6.8	1.3	1.8	1.8	1.7	6.6	1.4	1.7	1.8	6.7
Total supply	74.5	242.5	73.4	77.8	77.7	75.6	248.2	73.9	78.0	78.5	250.8
Commercial exports	2.1	9.3	2.6	3.1	3.3	2.9	11.8	2.6	3.0	2.8	11.0
Ending commercial stocks	15.6	15.6	18.1	20.0	18.2	15.5	15.5	18.0	19.9	18.2	15.3
Commodity Credit Corporation donations <sup>1</sup>	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 <sup>2</sup>	56.7	217.4	52.7	54.6	56.2	57.3	220.8	53.3	55.1	57.4	224.5
<b>Skim solids (billion pounds milk equiv.)</b>											
Milk marketings	55.3	222.1	56.5	57.9	55.9	55.7	226.0	57.0	58.3	56.8	228.6
Beginning commercial stocks	10.4	10.2	10.9	11.6	12.0	11.0	10.9	11.0	11.4	11.8	11.0
Imports	1.3	5.6	1.4	1.5	1.4	1.4	5.6	1.3	1.4	1.4	5.5
Total supply	66.9	237.9	68.8	71.0	69.2	68.1	242.5	69.3	71.1	70.0	245.1
Commercial exports	11.6	47.2	12.4	14.1	13.0	12.0	51.4	12.6	14.1	13.1	51.8
Ending commercial stocks	10.9	10.9	11.6	12.0	11.0	11.0	11.0	11.4	11.8	10.9	11.1
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 <sup>2</sup>	44.5	179.7	44.8	44.9	45.2	45.2	180.0	45.3	45.3	46.0	182.2
<b>Milk prices (dollars/hundredweight) <sup>3</sup></b>											
All milk	19.80	18.24	17.33	18.67	17.95	19.80	18.45	19.30	19.00	18.85	19.20
Class III	20.22	18.16	15.98	17.95	16.30	17.90	17.05	17.00	16.80	17.30	17.10
Class IV	13.38	13.49	13.71	15.98	16.10	16.95	15.70	17.00	17.20	17.40	17.15
<b>Product prices (dollars/pound) <sup>4</sup></b>											
Cheddar cheese	2.1296	1.9236	1.6146	1.7250	1.600	1.775	1.680	1.700	1.680	1.740	1.715
Dry whey	0.3827	0.3621	0.5064	0.6358	0.565	0.550	0.565	0.520	0.520	0.500	0.510
Butter	1.4746	1.5808	1.4677	1.7952	1.735	1.735	1.685	1.720	1.750	1.800	1.755
Nonfat dry milk	1.0812	1.0417	1.1226	1.2256	1.270	1.370	1.245	1.380	1.390	1.390	1.380

Totals may not add due to rounding.

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

<sup>2</sup> Domestic use for 2020 includes additional milk marketed but not processed.

<sup>3</sup> Simple averages of monthly prices. May not match reported annual averages.

<sup>4</sup> Simple averages of monthly prices calculated by the USDA, Agricultural Marketing Service, for use in class price formulas. Based on weekly USDA *National Dairy Products Sales Report*.

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

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

Updated 10/16/2021.