



Livestock, Dairy, and Poultry Outlook

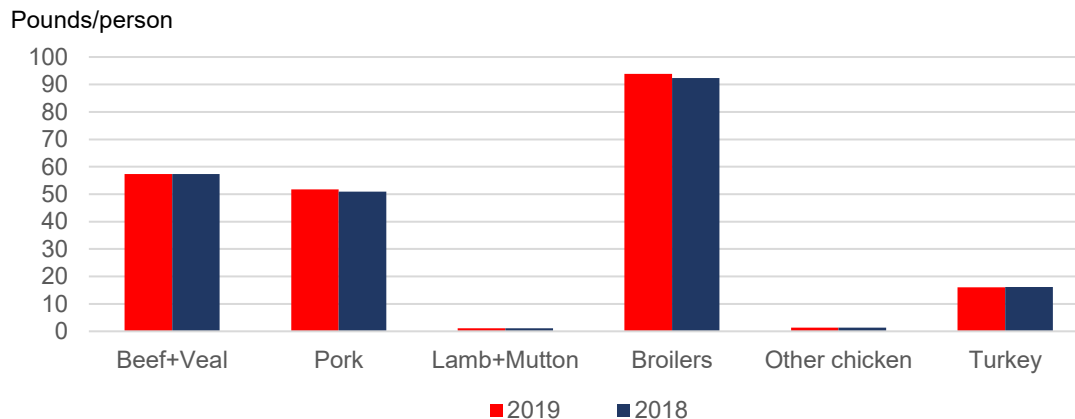
2019 Per Capita Red Meat and Poultry Disappearance Forecast Is Up Almost 1 Percent in September

Production increases in the U.S. beef, pork, and broiler industries are pointing to larger quantities of red meat and poultry available to U.S. consumers. Red meat and poultry disappearance is calculated as the volume of meat and poultry production that remains for domestic use after subtracting net trade and changes in cold storage volumes. Dividing this residual by the U.S. population yields the per capita quantity for use in the domestic market. For 2019, retail basis per capita disappearance is projected to be the equivalent of 221.4 pounds, the highest since 2007.

The most important factors driving per capita disappearance this year are forecast increases in year-over-year production of beef (+0.3 percent), pork (+4.8 percent), and boiler meat (+2.0 percent).

Although per capita disappearance factors in export demand, it is largely a supply statistic. It does not take account of waste or nonfood uses of livestock meat products. It imparts no information about prices, tastes and preferences, and other demand factors that ultimately determine how much red meat and poultry individual consumers will choose to buy and consume.

Per capita disappearance of red meats and poultry, retail basis



Source: USDA, World Agricultural Outlook Board.

Beef/Cattle: Following the August 9th fire at a Tyson Foods beef plant in Holcomb, Kansas, capacity constraints are expected to slow the pace of fed cattle slaughter in fourth-quarter 2019. Carcass weights are also expected lower in the fourth quarter, further reducing the 2019 beef production forecast from the previous month. However, the beef production forecast for 2020 was raised from last month on higher expected fed cattle slaughter and an increase in carcass weights in the first half of the year, in part as a higher proportion of fed cattle enter the slaughter mix. Cattle prices through 2019 were lowered on expected pressure from demand constraints, with residual effects pulling prices lower into 2020.

Dairy: The all-milk price forecast for 2019 is \$18.35 per cwt, 5 cents higher than last month's forecast, and the all-milk price forecast for 2020 has been raised to \$18.85, also 5 cents higher than last month's forecast. The milk production forecast for 2019 has been raised 0.1 billion pounds to 218.0 billion, but the 2020 milk production forecast has been lowered 0.2 billion pounds to 221.2 billion.

Pork/Hogs: Third-quarter pork production is reduced slightly to 6.7 billion pounds due to a slower than anticipated pace of slaughter in August. July pork exports were almost 27 percent higher than a year earlier, raised in particular by shipments to Mexico and China/Hong Kong. The 2019 pork export forecast is revised higher to 6.5 billion pounds, more than 11 percent higher than a year ago.

Poultry/Eggs: The 2019 broiler production forecast is revised up on expectations of more, heavier-weight bird slaughter. The benchmark broiler price is raised on recent prices. The 2019 export and import forecasts are adjusted higher, reflecting recent trade data. Egg prices are increased on recent price movements and expectations for increasing supply-demand equilibrium in the market. The table egg production forecast is revised up based on higher lay rates. Trade forecasts remain unchanged for 2019.

Beef/Cattle

Russell Knight and Lekhnath Chalise

Beef Production Reduced for 2019 on Decreased Slaughter

On August 9th, a fire damaged the Tyson Foods' Holcomb, Kansas beef processing plant, rendering it inoperable through 2019 according to Tyson Foods. This plant was estimated to have a capacity equivalent to about 5 to 6 percent of fed cattle slaughtered weekly. To offset the loss in slaughter capacity from the plant closure, Tyson Foods redirected those fed cattle scheduled for the Holcomb plant to other Tyson facilities. Further, beef plants would need to increase their Saturday slaughter levels to accommodate the additional supply volume.

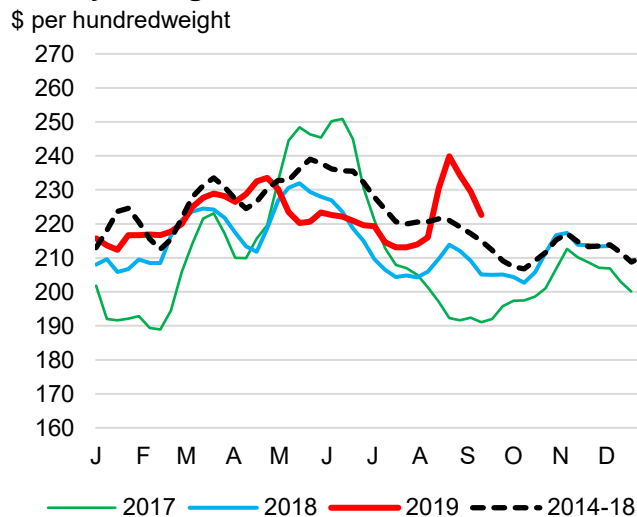
In response to concerns about the impact of the fire on beef supplies ahead of the Labor Day holiday, buyers reacted by bidding up boxed-beef prices. At the same time, negotiated prices for fed cattle declined (see chart below) as the market adjusted to the reduction in slaughter capacity, and packers' margins climbed sharply to record levels.

Reflecting concerns over the ability of the industry to maintain pre-fire levels of fed cattle slaughter, futures prices for live cattle have reacted negatively to the situation. The implications of sharply lower nearby futures contracts relative to cash prices likely motivated feedlot operators to maintain a strong pace of marketings despite lower prices and a Choice-Select beef price spread, which typically would have encouraged feedlots to keep cattle on feed longer. For cattle feeders who were hedged, the sharp decline in the nearby contract implied they could buy back those contracts sold at the time of placement at a lower price than previously expected and likely encouraged them to market cattle at lower cash prices. However, as the cash premiums to the futures contracts diminish, feedlots may be less willing to market cattle at a loss.

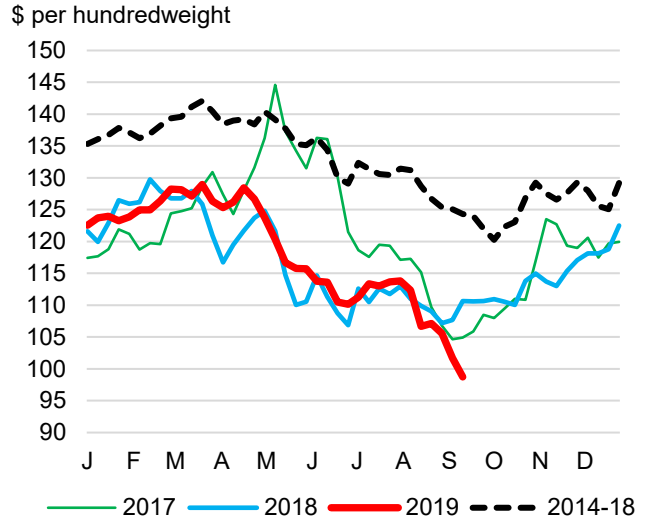
Although the industry has thus far maintained slaughter levels at a pace close to that before the fire, the temporary loss of the Holcomb plant may reduce the sector's ability to maintain fourth-quarter slaughter at previously anticipated levels. As a result, the 2019 beef production forecast was lowered by 90 million pounds from last month to 27.0 billion pounds, based primarily on a slower expected pace of fed cattle slaughter and lighter expected dressed weights in the fourth quarter. The reduction was partially offset by greater anticipated cow slaughter through 2019.

The forecast for 2020 beef production was raised by 105 million pounds from last month's forecast to 27.7 billion pounds. The Holcomb plant's expected return to operation by 2020 will support greater expected fed cattle slaughter in first-half 2020. Average carcass weights are forecast higher, in part as a result of more fed cattle in the slaughter mix.

Weekly average Choice cutout value



Weekly average 5-area fed steer price



Source: USDA, Agricultural Marketing Service.

Cattle Prices React Negatively to Market Changes

Although much of the lost capacity has been mitigated in the weeks following the fire at the Holcomb plant, negotiated cash prices for fed cattle turned substantially lower. In the week before the fire, the weekly average fed steer price in the 5-area marketing region was \$113.82 per hundred weight. Five weeks after the fire, the weekly average price dropped almost 11 percent to \$100.07 per cwt for the week ending September 15. The price forecast for third-quarter 2019 was lowered \$3 to \$107 per cwt.

Despite a financial incentive for packers to sustain slaughter levels, there will likely be constraints that will limit the expected pace of fed cattle slaughter in fourth-quarter 2019. With weaker-than-previously expected packer demand, the price forecast for fourth-quarter 2019 was lowered by \$9 to \$103 per cwt.

With the expected return of the Holcomb plant in first-quarter 2020, the additional capacity would suggest some price support for fed cattle in early 2020. However, to the extent feedlots may have held cattle over from fourth-quarter 2019 into early 2020, increased availability of cattle may mitigate some of the upward pressure on prices from increased packer demand. Accordingly, the first and second-quarter price forecasts for 2020 were reduced by \$5 to \$119 and \$117 per cwt, respectively. As a result, the 2020 annual price forecast for fed steers was lower by \$4 to \$115 per cwt.

Further up the value chain, the shift in demand for fed cattle has put considerable pressure on feeder steer prices. Weakness in fed cattle prices will likely affect feedlots' pricing of feeder cattle. On September 9 at the Oklahoma City National stockyards, sales of feeder steers weighing 750 to 800 pounds were reported at \$134.80 per cwt, down about \$6 from the week before the fire. Based on recent price data, the third-quarter 2019 feeder steer price was lowered by \$4 to \$138 per cwt. Because of the expected continuation of weaker fed cattle prices and a slower pace of marketing, the 2019 fourth-quarter feeder steer price forecast was lowered \$5 from the prior month to \$133 per cwt. The impacts of lower fed cattle prices is likely to carry into 2020. The price forecasts for first- and second-quarter 2020 feeder steer prices were reduced by \$5 to \$135 and \$140 per cwt, respectively. As a result, the 2020 annual price forecast for feeder steers was \$140.50 per cwt.

Beef Exports Lower in July

U.S. beef exports in July were 273 million pounds, down 2 percent from year-earlier levels. The largest year-over-year volume declines were to Japan, Canada, and Mexico. Despite tariffs on U.S. beef, however, exports to China nearly doubled year-earlier levels in July.

In the first 7 months of 2019, the United States exported 3 percent less beef (-53 million pounds) compared with the same period of 2018. Notably lower year-to-date shipments to major destinations were to Hong Kong (-57 million pounds), followed by Japan (-33 million pounds) and Canada (-26 million pounds). However, sales to South Korea were 11 percent (41 million pounds) higher.

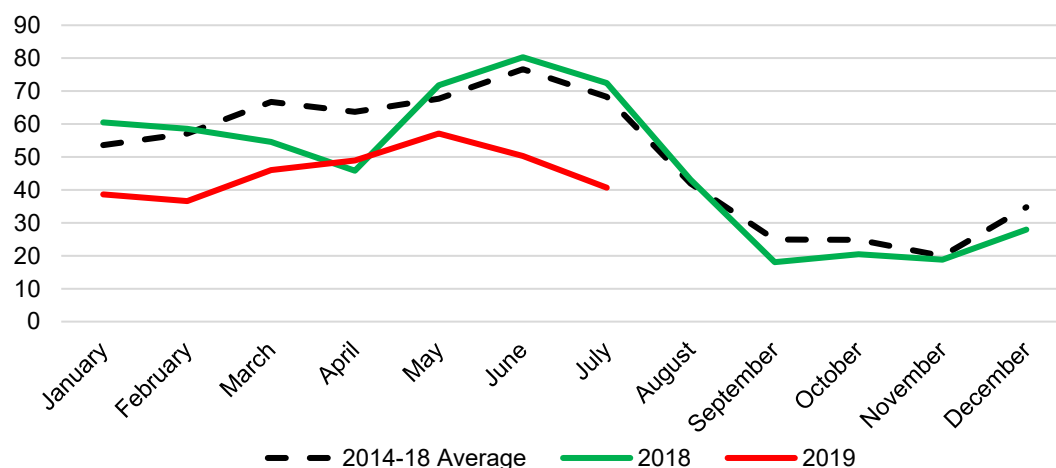
Based on continued price competition with other major beef exporting countries in Japan, lower July exports, and August Export Sales Reporting data, the third-quarter 2019 export forecast was revised down by 10 million pounds to 825 million pounds. Total exports in 2019 are expected to be 3.1 billion pounds, almost 1 percent below a year earlier. The 2020 forecast were left unchanged at 3.2 billion pounds.

Beef Imports Down on Lower Shipments From New Zealand

U.S. beef imports in July were down 10 percent from a year earlier to 267 million pounds. The decline was driven largely by 44 percent fewer imports from New Zealand. In July, New Zealand reported slightly lower total exports, but significantly larger shipments to China. U.S. imports from New Zealand in 2019 are well below 5-year average volumes. USDA/AMS weekly reports also suggest lower year-over-year imports in August. Based on lower July imports and weaker weekly estimates for August, the third-quarter 2019 beef import forecast was revised downward by 15 million pounds from year-earlier levels to 780 million pounds. Beef imports for 2019 are expected to total about 3 billion pounds. The 2020 beef import forecast—also about 3 billion pounds—is unchanged from last month.

Imports from New Zealand are historically lower

Million pounds, CWE



Source: USDA, Economic Research Service.

Dairy

Jerry Cessna and Jonathan Law

Recent Developments in Dairy Markets

Price movements for dairy products, as reported in the *National Dairy Product Sales Report* (NDPSR) from the week ending August 3 to the week ending September 7, were mixed. The butter price fell 9.1 cents to \$2.2748 per pound. The block-barrel price spread for Cheddar cheese widened as the price for 40-pound blocks rose 7.8 cents to \$1.9167 per pound, while the price for 500-pound barrels (adjusted to 38-percent moisture) fell 2.7 cents to \$1.7333 per pound. The nonfat dry milk (NDM) price rose 2.6 cents to \$1.0494 per pound, and the dry whey price rose slightly to 0.3681 per pound.

Dairy wholesale product prices (dollars per pound)

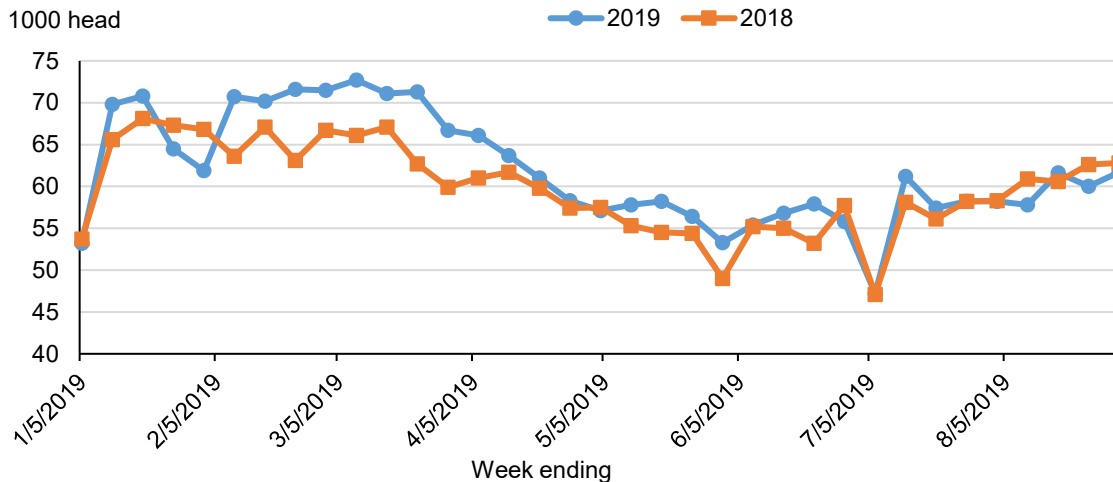
	For the week ending		Change
	Aug. 3	Sept. 7	
Butter	2.3655	2.2748	-0.0907
Cheddar cheese			
40-pound blocks	1.8386	1.9167	0.0781
500-pound barrels ¹	1.7602	1.7333	-0.0269
Nonfat dry milk	1.0239	1.0494	0.0255
Dry whey	0.3674	0.3681	0.0007

¹ Adjusted to 38-percent moisture.

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

USDA, National Agricultural Statistics Service (NASS) estimated July U.S. milk production at 18.330 billion pounds, about the same as July 2018. Milk cow numbers fell to 9.310 million head, 9,000 less than June and the lowest since January 2016. Milk production per cow was 1,969 pounds in July, 17 pounds higher than July 2018. For the 5 weeks from the week ending August 3 to the week ending August 31, federally inspected dairy cow slaughter averaged 1.9 percent below the corresponding weeks of the previous year. This contrasts with most of the earlier weeks in the year when federally inspected dairy cow slaughter was considerably higher than corresponding weeks of the previous year.

Federally-inspected dairy cow slaughter



Sources: USDA, Agricultural Market Service and National Agricultural Statistics Service.

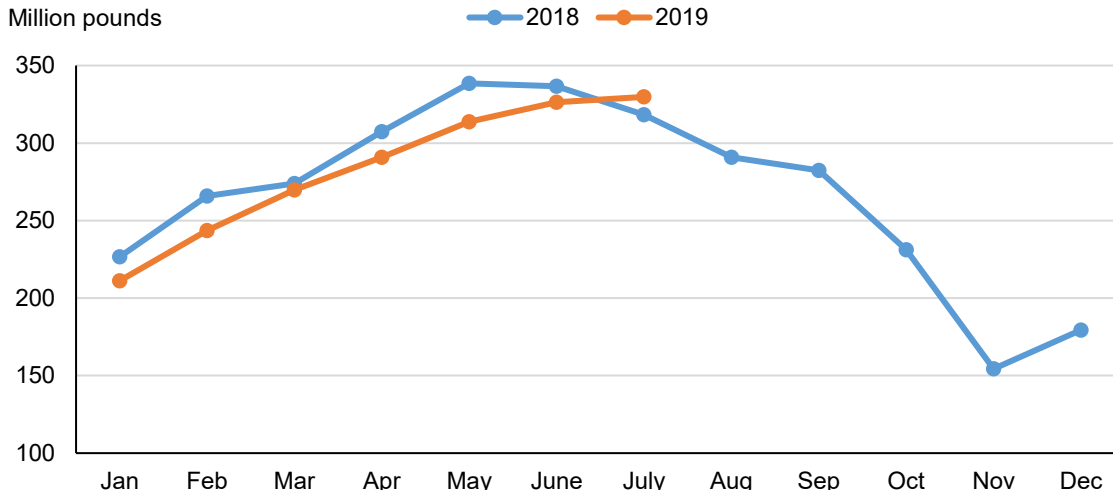
In July, dairy exports on a milk-fat milk-equivalent basis totaled 711 million pounds, 105 million lower than June and 162 million lower than July 2018. July exports on a skim-solids milk-equivalent basis were 3.348 billion pounds, 81 million higher than June but 165 million lower than July 2018. From June to July, exports of cheese, butterfat products, and whey products fell by 5 million, 2 million, and 14 million pounds, respectively.¹ From June to July, exports of nonfat dry milk/skim milk powder and lactose increased by 15 million and 5 million pounds, respectively.

Imports for most major dairy products strengthened in July. On a milk-fat basis, dairy imports totaled 656 million pounds, 15 million higher than June and 86 million higher than July 2018. Dairy imports were 597 million pounds on a skim-solids basis, 83 million higher than June and 92 million higher than July 2018. Notably, from June to July imports of butterfat (anhydrous milkfat and butteroil) decreased 2 million pounds, while imports of milk protein products (milk protein concentrate and casein) increased 5 million pounds.

July ending stocks, for the most part, reflect tightening markets for dairy products. On a milk-fat basis, July ending stocks totaled 18.386 billion pounds, 361 million lower than July 2018. On a skim-solids basis, July ending stocks totaled 11.119 billion pounds, 523 million lower than July 2018. While July ending stocks were down for most products compared to July 2018, butter was an exception with a year-over-year increase of 11.4 million pounds. Total ending stocks for cheese usually rise from June to July, while ending stocks for butter usually fall. Both products moved counterseasonally, with ending cheese stocks falling 49.0 million pounds and ending stocks for butter rising 3.5 million pounds.

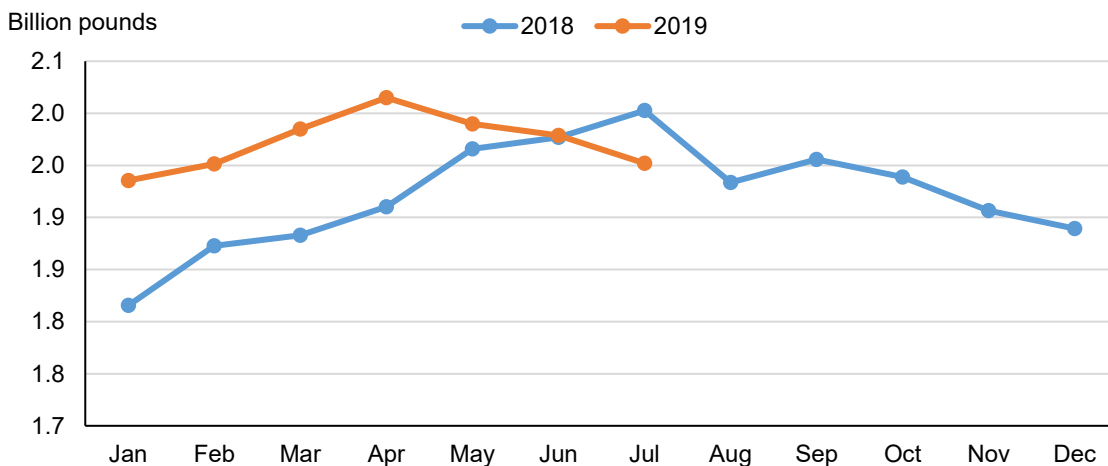
¹ Butterfat products include butter, anhydrous milkfat, butteroil, and high-fat dairy spreads. Whey products include dry whey, modified whey, whey protein concentrated, and milk albumin.

Butter stocks in cold storage



Source: USDA, National Agricultural Statistics Service.

Cheese stocks in cold storage



Source: USDA, National Agricultural Statistics Service.

For the 3 months from May to July, domestic use on a milk-fat basis was 1.5 percent higher than the same 3 months of 2018. On a skim-solids basis, domestic use remained relatively strong, with May through June 4.5 percent higher than the same months of 2018.

Outlook for Feed Prices

The 2019/20 corn price forecast is unchanged from last month's forecast of \$3.60 per bushel. The soybean meal forecast for 2019/20 is \$305 per short ton, \$5 higher than last month's forecast. The July alfalfa hay price was \$183 per short ton, a decrease of \$10 from June and \$4 less than July 2018. The 5-State weighted average price for premium alfalfa hay in July was \$209 per short ton, \$8 less than the June price. For more information, see *Feed Outlook*, published by USDA, Economic Research Service.

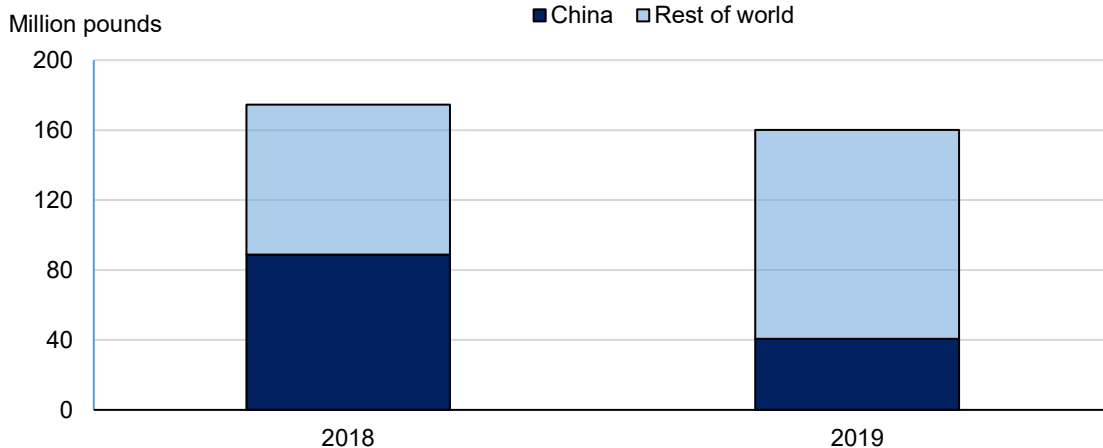
Chinese Tariffs for Dairy Products and Exemption for Whey Permeate

On August 23, China announced new tariffs on certain U.S. products, including additional tariffs of 5 percentage points on some dairy products. The tariffs were scheduled to be implemented on September 1. The increased tariffs are in addition to earlier retaliatory tariffs that had been added since last summer.

On September 11, China announced that 16 products would be exempt from retaliatory tariffs that had been added since April 2018. The exemption will last from September 17, 2019, to September 16, 2020. One dairy product is included on the list: modified whey for animal use with a protein content of 2-7 percent and a lactose content of 76-88 percent by weight. A product that clearly meets these criteria is whey permeate, a byproduct from the manufacture of whey protein concentrate. Whey permeate is often used for animal feed, especially for piglets.

While neither U.S. export data nor China import data are readily available for the exempted product, whey permeate falls within the broader category of modified whey as delineated in U.S. export data. Total U.S. exports of modified whey to China for the months of January through July 2019 were 41 million pounds, 54 percent lower than they were in January-July 2018. Retaliatory tariffs and the impact of African Swine Fever in China's pig herds contributed to the decline.

U.S. exports of modified whey to China and the rest of the world January through July, 2018 and 2019



Sources: U.S. Department of Commerce, Census Bureau; USDA, Foreign Agricultural Service.

Dairy Forecasts for 2019

With the milking herd continuing to shrink in July, the forecast for the size of the milking herd in 2019 has been lowered 10 thousand head to 9.325 million. However, continued growth in the milk yield in July and improved returns in the second half of 2019 have motivated an increase in the milk per cow forecast to 23,375 pounds for the year. With these changes, milk production is now forecast at 218.0 billion pounds for 2019, 0.1 billion pounds higher than the last forecast.

The import forecast on a milk-fat milk-equivalent basis for 2019 is 7.0 billion pounds, 0.2 billion less than the last forecast due to lower expected butterfat imports. The export forecast 2019 is also lowered slightly to 9.3 billion pounds, due to a weaker outlook for exports of butterfat products. Ending stocks on a milk-fat basis are forecast at 13.0 billion pounds, unchanged from the previous forecast. The forecast for domestic use for the year is also unchanged at 215.2 billion pounds.

On a skim-solids milk-equivalent basis, the import forecast for 2019 is raised 0.4 billion pounds to 5.9 billion, based on higher expected imports of milk protein products. The export forecast for the year is lowered 0.4 billion pounds to 40.2 billion, as exports of dry whey and whey products have continued to fall year over year. The forecast for ending stocks on a skim-solids basis is unchanged at 10.0 billion pounds. The domestic use forecast for 2019 has been raised 0.9 billion pounds to 183.2 billion, reflecting recent apparent relative strength in demand for products with high skim-solids content.

Dairy product price forecasts for 2019 are mostly higher than the previous forecasts. Due to recent price increases and lower ending stock levels for July, price forecasts for Cheddar cheese, NDM, and dry whey have been raised from last month's forecast to \$1.700 (+1.5 cents), \$1.015 (+1 cent), and \$0.39 (+1 cent) per pound, respectively. Due to recent price decreases and a higher ending stock level for July, the butter price forecast for 2019 has been lowered to \$2.265 per pound (-5.5 cents).

With higher cheese and whey price forecasts, the Class III price forecast for 2019 has been raised 15 cents to \$16.45 per cwt. The Class IV price forecast has been lowered 15 cents to \$16.15 per cwt, due to the lower butter price forecast. The all-milk price forecast for 2019 is \$18.35 per cwt, 5 cents higher than last month's estimate.

Dairy Forecasts for 2020

With expectations for slower growth in the size of the milking herd in the second half of 2019 carrying into next year, the 2020 forecast has been lowered 10 thousand head to 9.340 million. The milk per cow forecast for 2020 has been raised to 23,690 pounds as higher expected growth carries into 2020. Overall, these changes result in a milk production forecast of 221.2 billion pounds for 2020, 0.2 billion pounds lower than the previous forecast.

Imports on a milk-fat basis are now forecast at 6.9 billion pounds, a reduction of 0.1 billion pounds from the last forecast, due to continued lower expected imports of butterfat. The export forecast for 2020 has been lowered 0.3 billion pounds to 9.6 billion, due to lower expected exports of butterfat products. Ending stocks on a milk-fat basis are projected at 13.0 billion pounds, unchanged from last month's forecast. Domestic use is forecast at 217.3 billion pounds for 2020, 0.2 billion pounds lower than the previous forecast due to continued weakness in domestic use for butter.

On a skim-solids basis, the import forecast for 2020 has been raised 0.4 billion pounds to 5.6 billion, as higher imports of milk protein products this year should continue into next year. The forecast for exports on a skim-solids basis has been raised to 42.6 billion pounds, 0.2 billion higher than last month's forecast, due to higher expected exports of lactose and modified whey. Domestic use on a skim-solids basis in 2020 is forecast 0.3 billion pounds higher than last month's estimate, at 183.4 billion pounds, as relative strength in demand should continue. Ending stocks on a skim-solids basis are forecast at 9.8 billion pounds, 0.3 billion pounds lower than the last forecast.

The Cheddar cheese price forecast for 2020 has been raised 5 cents to \$1.775 per pound due to recent price strength that is expected to carry over into next year. The butter price has been lowered 11 cents

to \$2.225 per pound due to lower expectations for butter demand. The dry whey price has been raised 1.5 cents to \$0.375 per pound, while the NDM price has been raised 2 cents to \$1.035.

The Class III price forecast for 2020 has been raised 50 cents to \$17.05 per cwt, due to higher price forecasts for cheese and dry whey. The Class IV price forecast has been lowered 30 cents to \$16.15 per cwt as a result of the lower butter price forecast. The all-milk price for 2020 is now estimated at \$18.85 per cwt, 5 cents higher than last month's forecast.

Pork/Hogs

Mildred Haley

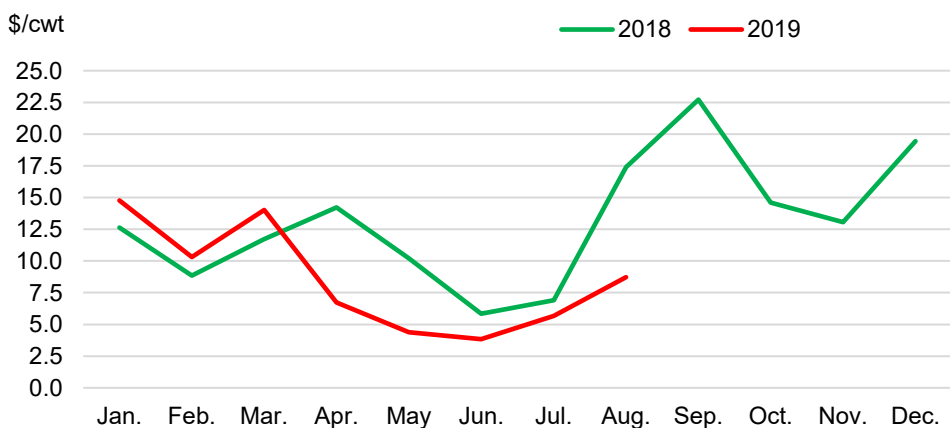
Third-Quarter Commercial Pork Production Forecast Lowered Slightly

Third-quarter commercial pork production is expected to be about 6.7 billion pounds, more than 6 percent greater than the same period a year ago. This forecast is about 55 million pounds below last month, due to August's slower-than-anticipated slaughter rate and the month's slightly lower average dressed weights. Prices of live equivalent 51-52 percent lean hogs averaged \$55.45 per cwt in August. With prices expected to average in the mid-to upper-\$40's per cwt in September, it is anticipated that prices will average \$51 per cwt for the third quarter, about 16 percent higher than prices in the third quarter 2018.

Processor Margins Under Pressure

Since the second quarter of 2019, average gross processing margins for the U.S. pork processing industry have fallen below year-earlier levels. An important factor contributing to year-over-year lower gross processing margins from April through August of this year was the rise in hog prices that likely resulted from the increased demand for hogs that accompanied the opening of a third new Midwest slaughter plant in March 2019. The figure below shows a calculation of monthly gross margins for U.S. pork processors, i.e., the difference between wholesale values of the hog carcass and average monthly 51-52 percent lean hog prices. In the first quarter of 2019, the industry slaughtered 2.6 percent more hogs, paying prices that averaged 17.2 percent lower year over year, for the larger hog quantities. While pork prices (summarized by the wholesale hog carcass cutout) was also year-over-year lower by 12.2 percent, their lower rate of decline yielded a gross margin that was 17.7 percent above the same period a year earlier.

Gross pork processing margin



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

In early March a new processing plant opened in Iowa—the third new Midwest plant to open since 2017—gradually ramping up operations, and increasing industry demand for hogs. In the second quarter of 2019 the industry increased demand for hogs by 3.7 percent, paying hog prices that averaged 21 percent more than a year earlier. Even though wholesale pork prices increased as well (+11.3 percent, year over year), gross processing margins decreased 50.6 percent.

In the summer of 2019, pork processors' margins were squeezed further. In July and August, demand for hogs increased compared with a year earlier. Estimated federally inspected hog slaughter increased 3.4 percent. Processors paid prices for hogs that averaged 35.3 percent higher in July and August compared with a year earlier. While average wholesale pork prices increased at the same time (+13.7 percent), the gross processing margin decreased 55.7 percent compared with the July-August period of 2018. Processor margins are likely to continue to be pressured on the supply side—as processors bid for hogs to fill new processing capacity—until a higher degree of coordination and equilibrium is achieved between hog supplies and processor hog demand. Increases in consumer demand for pork—from U.S. as well as foreign consumers—could also raise pork prices and expand processor margins.

USDA's *Quarterly Hogs and Pigs* report will be released on September 27. The report will provide information on September 1 animal inventories and producer farrowing intentions into early 2020.

July Pork Exports Accelerate

July pork exports totaled more than 542 million pounds in July, almost 27 percent higher than a year ago. Increased shipments to Mexico (+18 percent) and to China/Hong Kong (+380 percent) were what really pushed up the total for the month. The 10 largest foreign destination markets for U.S. exported pork in July are summarized below.

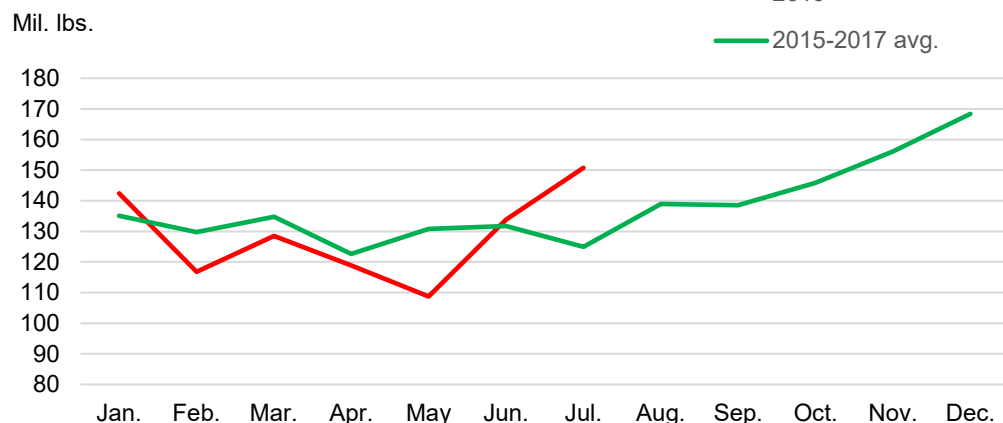
U.S. pork exports: Volumes and export shares for the 10 largest foreign destinations, July 2018 and 2019

Country	Exports July 2018 (mil. lbs)	Exports July 2019 (mil. lbs)	Percent change (2019/2018)	Export share July 2018 %	Export share July 2019 %
World	428,149	542,154	26.6		
Mexico	127,348	150,753	18.4	29.74	27.81
China/Hong Kong	23,476	112,671	379.9	5.48	20.78
Japan	96,715	97,664	1.0	22.59	18.01
Canada	40,784	45,657	11.9	9.53	8.42
South Korea	41,049	36,206	-11.8	9.59	6.68
Australia	17,993	20,483	13.8	4.20	3.78
Colombia	17,181	15,216	-11.4	4.01	2.81
Chile	10,942	14,252	30.3	2.56	2.63
Honduras	7,485	8,610	15.0	1.75	1.59
Philippines	10,152	6,343	-37.5	2.37	1.17

Source: USDA: Economic Research Service.

July exports to Mexico, almost 151 million pounds, were the largest thus far in 2019. The figure below—showing 2019 exports and average U.S. exports to Mexico 2015-2017 (before trade flows were distorted by tariffs in June, 2018 to May, 2019)—suggests that July 2019 shipments are regaining consistency with past Mexican import behavior since the removal of tariffs in late May 2019.

U.S. pork exports to Mexico



Source: USDA, Economic Research Service.

U.S. Pork Exports Triple to China in July

Despite total tariffs of more than 60 percent, the United States exported almost 108 million pounds of pork to China in July, more than three times the exports shipped a year earlier. Data from the World Trade Atlas show, however, that the U.S. share of Chinese pork imports in July remained modest, likely due to the tariffs:

China pork imports, January-July, 2019: Volume, unit value, and market share of major exporting countries

	2019 Jan.-Jul. Volume MT	2019 Jan.-Jul. Unit value \$/MT	2019 Jan.-Jul. Market share %
World	1,000,930	1,946	
EU	616,672	1,983	62
Canada	154,772	1,812	15
Brazil	101,686	2,449	10
US	87,771	1,406	9
Mexico	4,256	1,974	0.43
Other	35,773	1,785	4

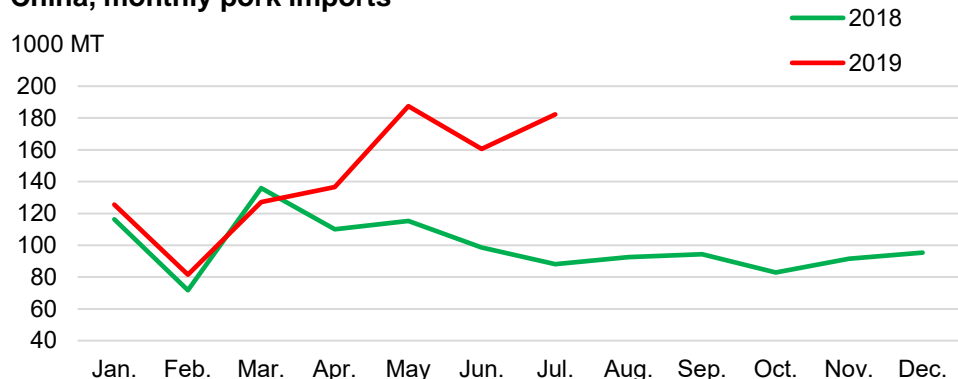
Source: World Trade Atlas.

The unit value for China-imported U.S. pork—\$1,406 per MT—is calculated from Global Trade Atlas data, likely before China tariffs were assessed. When multiplied by tariffs to which U.S. products were

subject during the January-July period, U.S. pork attains a value that is in the ballpark with other imported pork products in China. These data indicate that during the January-July period, the average unit value for Chinese imported pork products was equivalent to about \$92 per cwt. At the same time, the average wholesale pork carcass cutout value in the United States was about \$76 per cwt.

The figure below shows monthly Chinese pork imports from 2018 through July 2019. It is apparent that while African Swine Fever was identified in China in August 2018, imports did not begin to reflect pork deficits created by the disease until April 2019.

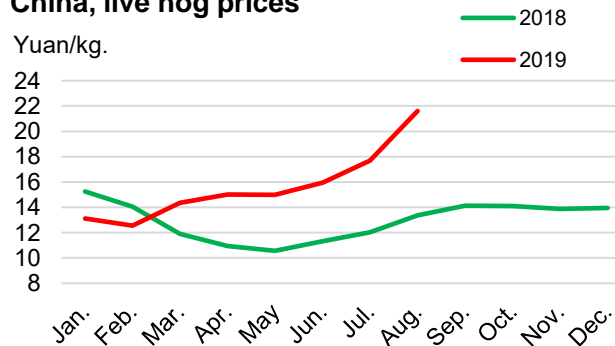
China, monthly pork imports



Source: World Trade Atlas.

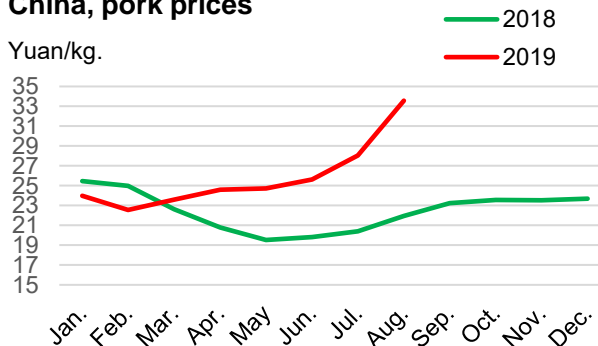
Current Chinese Government price data show that live hog prices increased more than 22 percent in August and almost 62 percent year over year. The national price of pork increased almost 20 percent in August and almost 53 percent year over year. Recent wire stories report that one of the four Vice-Premiers of China has been charged with specific responsibilities for overseeing Government efforts to control pork prices and to increase pork supplies. An appointment at this ranking shows the high importance that the Government of China attaches to having adequate supplies of pork available to Chinese consumers at reasonable prices.

China, live hog prices



Source: China Ministry of Agriculture.

China, pork prices



Source: China Ministry of Agriculture.

U.S. Pork Export Forecasts Increased

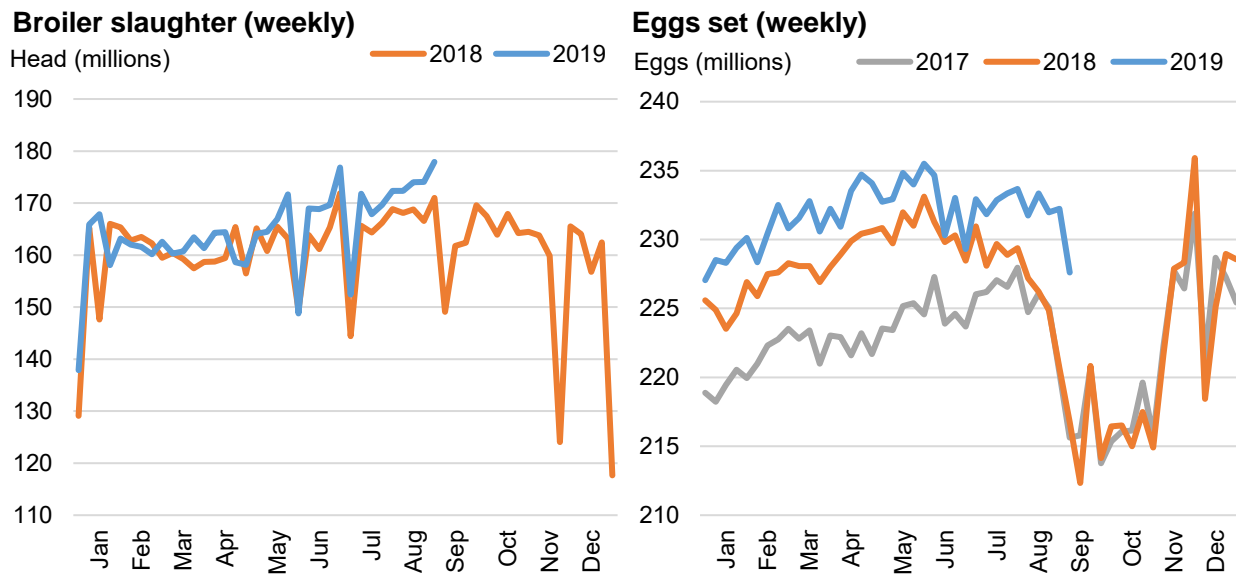
Based on stronger than expected shipments in July, the third- and fourth-quarter export forecasts were raised to 1.6 and 1.95 billion pounds, respectively. Total pork exports for 2019 are expected to be 6.5 billion pounds, 7.3 percent above a year earlier. For 2020, total exports were raised 120 million pounds to reflect increased foreign demand expectations. Total exports next year are expected to be almost 7.1 billion pounds, nearly 8 percent higher than exports forecast for 2019.

Poultry

Kim Ha and Alex Melton

Broiler Production Forecast Revised Up on Expectations of More Birds Available for Slaughter

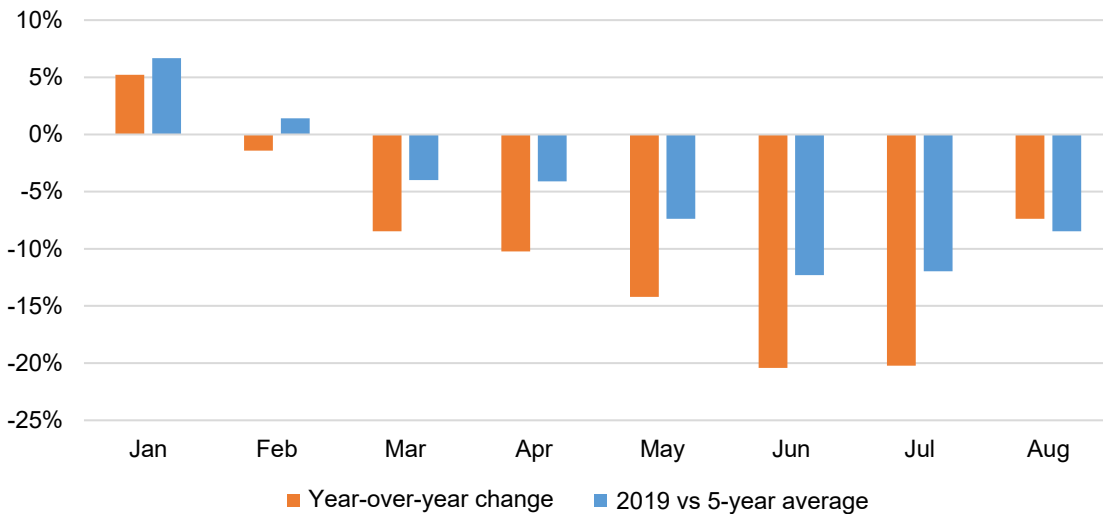
July broiler production is estimated at 3.9 billion pounds, up 6.2 percent from 2018, or 1.4 percent when adjusted for slaughter days. This year-over-year increase was comprised of a 0.2-percent decrease in bird slaughter (adjusted for slaughter days), but nearly a 1.8-percent increase in average bird weights. Preliminary weekly slaughter data from the Agricultural Marketing Service indicates more birds were available for slaughter in August compared to last year (see chart). Furthermore, eggs-set data in recent weeks has averaged more than 3 percent year-over-year growth (see chart). Assuming hatch rates will approximate or exceed 2018 levels for the remainder of 2019—which has largely been the case in 2019 thus far—the data suggest that there will be more birds available for slaughter than expected in the coming months. Accordingly, the third-quarter production forecast was increased to 11.3 billion pounds, and the fourth quarter to 10.9 billion pounds. The 2020 forecast was revised up to 44 billion pounds, more than 1 percent higher than the 2019 production forecast.



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

Whole bird (National Composite) wholesale prices averaged 80.88 cents per pound in August, more than 7 percent lower than 2018 and 8 percent lower than the 5-year average. For most of 2019, prices have underperformed compared to last year and the historical average, with the largest percentage decreases in June and July (see chart). However, August prices declined less than expected and the third-quarter whole bird price forecast was revised up to 82 cents per pound. Forecasts for the outlying quarters remain unchanged.

Percentage change in wholesale whole bird (National Composite) prices (2019/2018 and 2019 vs. 5-year average)

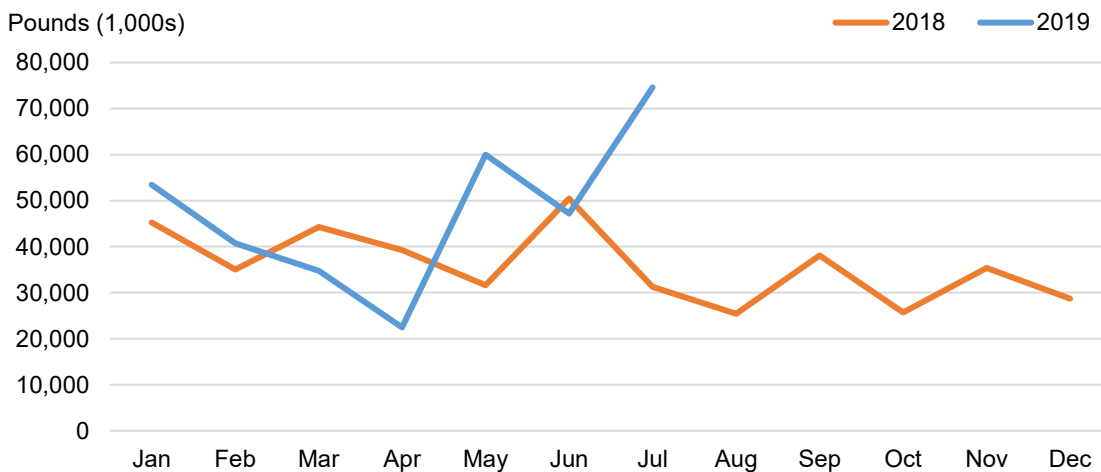


Source: USDA, Economic Research Service calculations using data from USDA, Agricultural Marketing Service.

Broiler Export and Import Forecasts Revised Up

July broiler shipments totaled 606.5 million pounds, a year-over-year increase of 3.5 percent. This increase was driven by higher shipments to several key markets, including Mexico (+15.8 percent), Cuba (+138.6 percent), Guatemala (+13.4 percent), Georgia (+887.3 percent), and Colombia (+40.6 percent). July volumes to Cuba represented an alltime high of 74.6 million pounds—nearly 20 percent higher than the previous record set in May 2019 (see chart). The implementation of Title III of the Helms-Burton Act earlier this year has brought significant uncertainty to future U.S.-Cuba poultry trade, motivating increased purchases of U.S. broiler products by Cuba, which has traditionally imported a significant volume of chicken meat to distribute countrywide as a Government social program. Based on recent trade data, the third-quarter export forecast was raised to 1,840 million pounds.

U.S. broiler shipments to Cuba



Source: ERS calculations using data from U.S. Department of Commerce, Bureau of the Census.

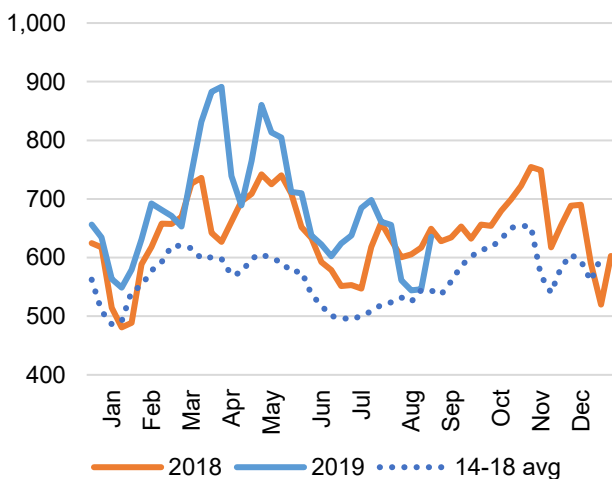
Broiler imports to the United States reached 13.3 million pounds in July, nearly 5 percent higher than last year. Shipments from Chile continued to increase year over year (up more than 44 percent), while shipments from Canada and Israel were down 21 percent and 74 percent, respectively. Based on expectations of increased shipments from Chile, the third-quarter import forecast was revised up to 35 million pounds.

Improved Supply and Demand Situation Supports Higher Wholesale Egg Prices in August

After 6 months of depressed prices, wholesale egg prices (New York, Grade A Large) climbed 61 cents during August from 57 cents per dozen to 118 cents per dozen. Prices averaged 92.9 cents per dozen for the month, an increase of nearly 49 percent compared to July but still almost 22 percent below August 2018. This price rally was supported by an improving supply and demand balance. In particular, weekly shell egg inventories available for marketing, which have been oversupplied throughout much of 2019, fell to 544 thousand cases in mid-August, the lowest marketing inventory year to date (see graph). The decrease in inventory is likely due to a combination of supply and demand factors. On the supply side, the number of table eggs produced per day has been on a downward trend since April (see chart), as producers reduced their table egg layer flocks from about 341 million layers in March to 328 million in July (a reduction of almost 4 percent). Based on the August 1 layer flock, it is expected that daily table egg production will stabilize in August; nonetheless, supplies will be moderate compared to the first half of 2019. On the demand side, retailers increased purchases and retail feature activity in August, in line with rising demand associated with the new school year. While retail purchases have slowed in the beginning of September, relatively tight supplies are expected to put upward pressure on prices in the coming months, which is the basis for increasing the third-quarter price forecast to 85 cents per dozen and the fourth quarter to \$1.00 per dozen. The 2020 price forecast was revised up to 99 cents per dozen, about 9 percent higher than the 2019 price forecast.

Weekly shell egg inventory* (large)

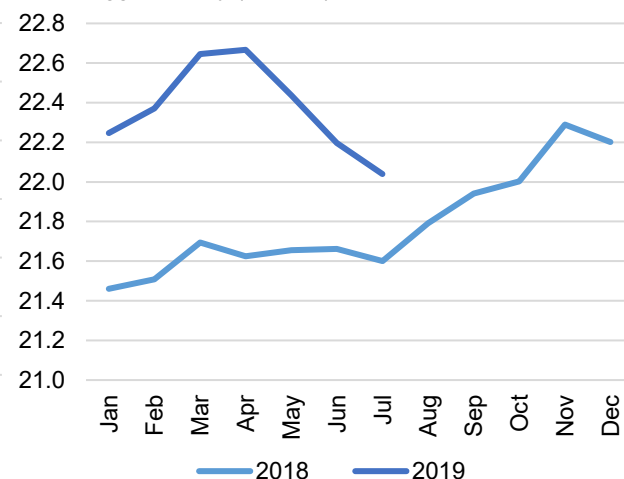
30-dozen cases (000s)



* Total stocks on hand available for marketing
 Source: USDA, Economic Research Service calculations using data from USDA, Agricultural Marketing Service.

Daily table egg production

Dozen eggs per day (millions)



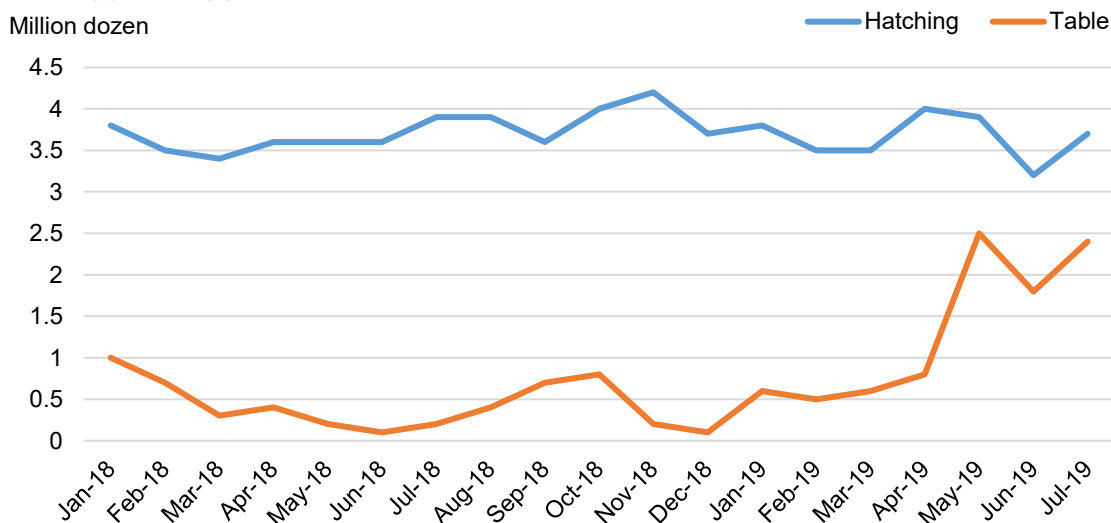
Source: USDA, Economic Research Service calculations using data from USDA, National Agricultural Statistical Service.

Regarding production, July table egg production is estimated at 683 million dozen, a 2-percent increase year over year. This increase was driven by a more productive layer flock relative to last year (the lay rate was 2.2 percent higher), while the table egg layer flock fell just below year-earlier inventories—the first year-over-year decline since March 2016. Although the layer flock is expected to hover around year-earlier levels for the remainder of the year—as suggested by egg-type chicks hatched—it is anticipated that bird productivity will be higher than previously expected. The third-quarter table egg production forecast was revised up to 2,035 million dozen. The forecasts for the outlying quarters remain unchanged.

Shell Egg Exports Drive Total Egg Exports Up in July

July egg and egg product exports totaled 26.7 million dozen, more than a 3-percent increase year over year. Shell egg volumes, which represent 63 percent of year-to-date U.S. shipments, increased by 8 percent, while egg product volumes decreased by 3 percent. The three largest U.S. shell egg export markets are Mexico, Canada, and Hong Kong, which combined represented 84 percent of total volume shipped in Jan-July 2019. Mexico, which represented 30 percent of U.S. shell egg exports, increased year-to-date shell egg shipments by 23 percent year over year. While the majority (74 percent) of U.S. shell egg shipments to Mexico are hatching eggs to supply needed genetics for Mexican domestic production, the increase in shell egg volumes was driven by table egg products (see chart). Specifically, year-to-date table egg shipments increased by more than 217 percent year over year, while hatching eggs increased by less than 1 percent. Shell egg exports to Canada, which represent 27 percent of the U.S. shell egg export market, increased by 1 percent, driven by higher shipments of hatching eggs. Finally, Hong Kong, which represents 26 percent of U.S. shell egg exports, increased year-to-date shell egg shipments (largely comprised of table eggs) by 26 percent year over year. Both the export and import forecasts remain unchanged.

U.S. egg and egg product exports to Mexico

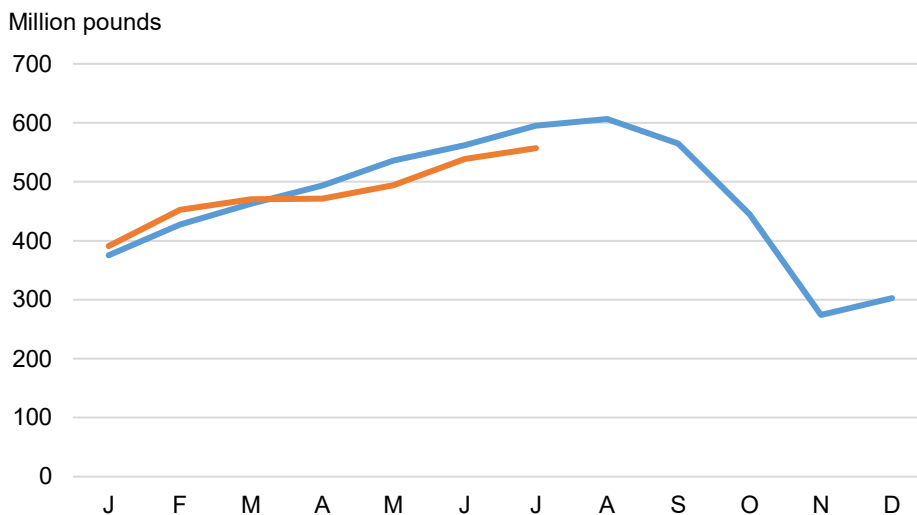


Source: ERS calculations using data from U.S. Department of Commerce, Bureau of the Census.

Turkey Production Up Slightly in July

July 2019 turkey production totaled 491 million pounds, a 1-percent increase from July 2018. On a daily average slaughter basis, however, production was down 3.6 percent relative to a year earlier. Hatchery report data for July was mixed with a year-over-year decline of 5 percent in poults placed, a 2-percent decrease in poults hatched, and less than half-a-percent increase in the number of eggs in incubators on the first of the month (August 1). Although production remains down year to date relative to the same period in 2018, turkey ending stocks in cold storage have been below 2018 levels since April. Ending stocks at the end of July 2019 were 6 percent lower than in July 2018. Turkey production for 2019 is decreased by 20 million pounds from last month's forecast to 5.866 billion pounds, less than 0.5 percent below 2018. Turkey production in 2020 is expected to total 5.930 billion pounds. If realized, production would be 1 percent higher than 2019.

Turkey meat ending stocks

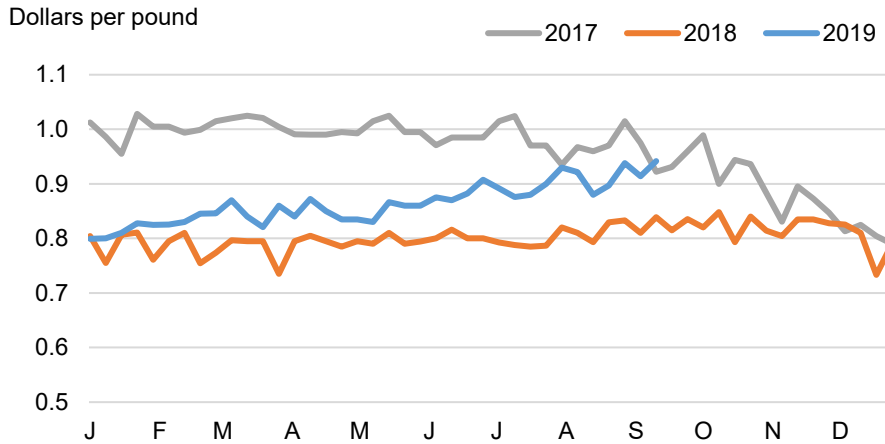


Source: USDA, Economic Research Service using USDA, National Agricultural Statistics Service Cold Storage data.

Whole Turkey Prices Continue Rising Above 2018 Levels

Wholesale whole-hen frozen turkey prices were remarkably stable throughout 2018 after their nearly 2-year fall to prices last seen in 2010. The latest price data, covering the week ending September 13, 2019, shows frozen whole hen prices at 94 cents per pound. This is the first increase over 2017 prices, and the upward price trend since the beginning of the year strongly suggests a return to the seasonal price patterns once typical in the turkey market. In 2019, turkey prices are expected to average \$0.885 per pound, 10 percent higher than 2018. In 2020, turkey prices are forecast to average \$0.90 per pound, 2 percent higher than in 2019.

Wholesale whole hen turkey prices

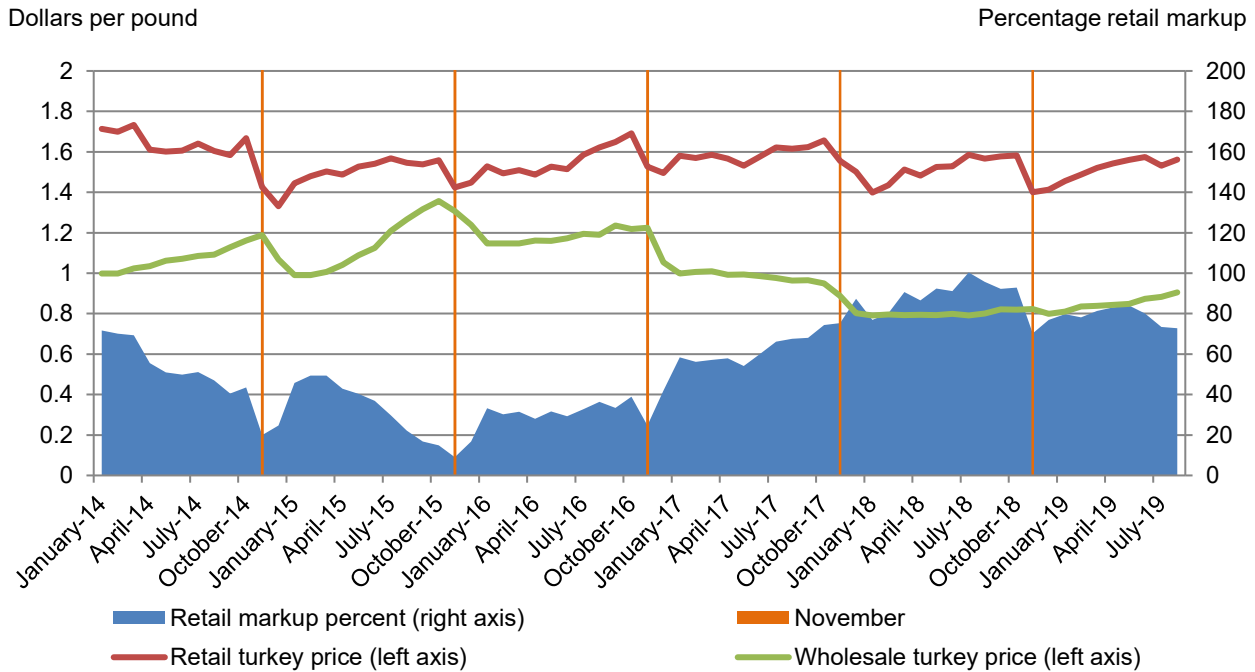


Source: USDA, Economic Research Service using USDA, Agricultural Marketing Service, Turkey Market News reports data.

Retail and Wholesale Turkey Prices Are Breaking With Past Thanksgiving Trends, Leading to Growing Retail Markups

Thanksgiving meals typically include such iconic dishes as pumpkin pie and stuffing, and turkey is usually the centerpiece. This year and last, wholesale turkey prices have been sharply lower than in years past. Do lower wholesale prices mean lower turkey prices at the grocery store? Not always. While wholesale and retail turkey price movements are historically correlated on a yearly basis, seasonal factors can disrupt this correlation. Commonly in the past, retail turkey prices in the Thanksgiving holiday season were near annual low points, while wholesale prices were near yearly highs. Between 2014 and 2016, the November markup from wholesale to retail prices for turkey was 18 percent, compared with an average 38-percent markup over the entire 3-year period. Beginning in 2017, however, wholesale turkey prices began a sustained decline that was not reflected in retail price movements. The retail markup in November 2017 reached 75 percent and remained high at 70 percent in November 2018. The markup is expected to remain high in 2019, but should contract slightly due to rising wholesale prices in 2019. The data suggest that the past relationship between wholesale and retail Thanksgiving turkey prices may be fading, as retail prices appear to have become less responsive to downward movements in wholesale prices.

U.S. retail and wholesale turkey prices and retail markup

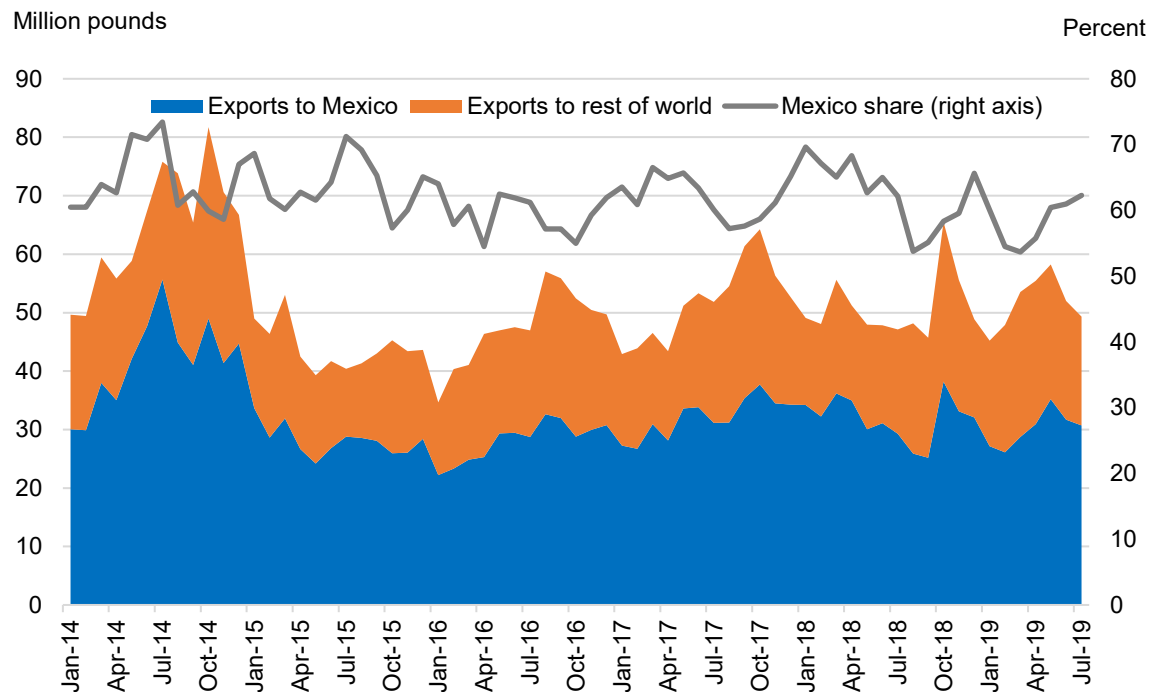


Source: USDA, Economic Research Service using USDA, Agricultural Marketing Service and U.S. Bureau of Labor Statistics.

Turkey Exports Grew Again in July

July 2019 turkey exports were almost 5 percent higher than a year earlier, totaling 49 million pounds. With production flat relative to year-earlier levels, the export market is increasing its share of total utilization. Mexico remained the largest destination for U.S. turkey shipments, with 31 million pounds shipped in July, or 62 percent of all U.S. shipments. July shipments to Mexico were up 5 percent from a year earlier. The year-over-year growth in exports to Mexico in July was the third consecutive month of growth. In 2019, turkey meat exports are expected to total 627 million pounds, 3 percent higher than in 2018. In 2020, turkey exports are expected to total 630 million pounds. If realized, they would be almost 0.5 percent higher than in 2019.

U.S. turkey exports to Mexico and rest of world



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

Suggested Citation

Livestock, Dairy, and Poultry Outlook, LDP-M-303, U.S. Department of Agriculture, Economic Research Service, September 18, 2019

U.S. red meat and poultry forecasts

	2016				2017				2018				2019				2020						
	I	II	III	IV	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual			
Production, million lb																							
Beef	5,938	6,187	6,472	6,625	25,221	6,303	6,407	6,736	6,742	26,187	6,466	6,726	6,819	6,862	26,872	6,414	6,814	6,935	6,790	26,953	6,615	7,060	27,670
Pork	6,230	5,963	6,100	6,648	24,941	6,410	6,137	6,240	6,796	25,584	6,645	6,325	6,315	7,031	26,315	6,838	6,615	6,705	7,420	27,578	7,115	6,785	28,410
Lamb and mutton	38	39	36	37	150	37	36	35	37	145	39	39	39	37	153	37	40	36	37	150	38	37	148
Broilers	10,039	10,253	10,338	10,065	40,696	10,233	10,407	10,551	10,472	41,662	10,385	10,687	10,940	10,588	42,601	10,384	10,933	11,300	10,850	43,467	10,525	11,100	44,000
Turkeys	1,435	1,520	1,515	1,511	5,981	1,488	1,482	1,479	1,533	5,981	1,452	1,477	1,431	1,518	5,878	1,446	1,430	1,450	1,520	5,866	1,455	1,465	5,930
Total red meat & poultry	23,834	24,119	24,623	25,038	97,614	24,617	24,621	25,197	25,734	100,169	25,130	25,410	25,704	26,191	102,435	25,264	26,000	26,574	26,764	104,603	25,893	26,608	106,784
Table eggs, mil. doz.	1,812	1,846	1,895	1,957	7,509	1,928	1,934	1,953	1,992	7,807	1,940	1,970	2,003	2,039	7,952	2,018	2,041	2,035	2,060	8,154	2,020	2,045	8,230
Per capita disappearance, retail lb /1/																							
Beef	13.6	13.9	14.1	14.0	55.6	14.0	14.2	14.4	14.3	57.0	14.0	14.5	14.4	14.4	57.2	13.9	14.7	14.4	14.1	57.2	14.2	14.9	58.0
Pork	12.6	11.9	12.1	13.5	50.1	12.4	11.8	12.4	13.5	50.2	12.6	12.2	12.4	13.8	50.9	13.1	12.5	12.4	13.8	51.8	13.0	12.5	52.1
Lamb and mutton	0.3	0.3	0.2	0.3	1.0	0.3	0.3	0.2	0.3	1.1	0.3	0.3	0.3	0.3	1.1	0.3	0.3	0.3	0.2	1.1	0.3	0.3	1.1
Broilers	22.5	22.7	22.7	21.8	89.8	22.4	22.9	23.2	22.5	91.0	22.7	23.4	23.6	22.8	92.4	22.5	23.9	24.4	23.2	93.9	22.6	23.9	94.4
Turkeys	3.6	3.9	4.2	4.9	16.7	3.7	3.7	4.0	5.0	16.4	3.5	3.8	3.9	4.9	16.2	3.5	3.7	3.9	4.9	16.0	3.4	3.6	16.0
Total red meat & poultry	52.9	53.0	53.7	54.9	214.6	53.2	53.3	54.7	55.9	217.2	53.4	54.4	55.0	56.6	219.5	53.6	55.5	55.7	56.6	221.4	53.8	55.6	223.2
Eggs, number	68.3	67.3	68.2	71.5	275.2	69.4	69.9	70.9	71.6	281.8	69.6	70.3	71.8	72.4	284.0	71.8	72.1	72.5	73.2	289.7	71.6	72.2	291.0
Market prices																							
Choice steers, 5-year Direct, \$/cwt	134.81	127.68	113.26	107.69	120.86	122.96	132.76	112.46	117.88	121.52	125.60	116.72	110.83	115.32	117.12	125.27	118.79	107	103	113.5	119	119	115
Feeder steers, OK City, \$/cwt	155.83	146.49	140.66	128.30	142.82	129.56	147.75	148.12	154.88	145.08	146.29	143.05	150.46	147.90	146.93	140.76	140.51	138	133	138	135	140	141
Culter Cows, National L.E., \$/cwt	73.50	75.87	73.16	57.75	70.07	62.63	69.55	69.78	58.68	65.16	61.60	61.32	57.74	49.07	57.43	53.34	58.30	61	52	56	54	57	55
Choice slaughter lambs, St. Joseph, \$/cwt	136.76	139.35	162.47	142.71	145.32	142.34	167.94	172.40	136.92	154.90	136.83	154.86	147.95	134.30	143.49	136.23	156.16	155	140	147	138	155	146
Net/lb base cost, 51-52 % lean, live equivalent, \$/cwt	44.63	53.71	49.26	37.02	46.16	49.73	51.70	55.59	44.89	50.48	49.12	47.91	43.90	42.77	45.93	40.67	57.95	51	48	45	60	59	59
Broilers, national composite, cents/lb	84.6	93.0	81.7	78.0	84.3	88.5	104.7	94.9	86.1	93.5	95.7	115.1	93.7	86.7	97.80	94.0	97.7	82	75	87	90	101	92
Turkeys, national, cents/lb	114.7	116.5	120.7	116.6	112.1	100.4	99.1	96.9	88.0	96.1	79.4	79.6	80.4	81.4	80.20	82.8	85.5	91	94	88.5	86	88	90
Eggs, New York, cents/doz.	121.5	67.9	71.6	81.7	83.7	80.0	74.7	102.1	147.0	100.9	179.6	124.4	120.8	125.6	137.60	107.3	69.7	85	100	90.5	87	88	99
U.S. trade, million lb, carcass wt. equivalent																							
Beef & veal exports	555	621	660	740	2,557	653	680	746	781	2,859	731	801	828	800	3,161	696	790	825	830	3,141	725	825	3,245
Lamb & veal imports	792	831	751	638	3,012	700	812	814	668	2,993	721	805	807	664	2,988	738	836	780	675	3,030	715	800	2,960
Lamb and mutton imports	68	55	41	52	216	80	58	57	57	252	80	66	70	57	273	80	73	55	50	258	78	65	269
Pork exports	1,229	1,317	1,235	1,457	5,239	1,432	1,426	1,230	1,544	5,632	1,516	1,530	1,298	1,542	5,876	1,446	1,535	1,600	1,950	6,530	1,725	1,690	7,065
Pork imports	293	257	266	275	1,091	264	281	283	287	1,116	279	270	245	248	1,042	259	227	230	240	956	235	225	915
Broiler exports	1,585	1,605	1,734	1,721	6,645	1,720	1,622	1,659	1,785	6,786	1,709	1,704	1,785	1,871	7,069	1,722	1,724	1,840	1,845	7,131	1,780	1,785	7,250
Turkey exports	116	141	160	153	569	133	148	168	173	622	153	147	141	170	611	147	166	155	160	627	150	160	630
Live swine imports (thousand head)	1,468	1,406	1,371	1,413	5,657	1,449	1,458	1,296	1,394	5,597	1,357	1,349	1,258	1,286	5,520	1,339	1,255	1,150	1,200	4,944	1,275	1,275	4,900

Note: Forecasts are in bold.

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

Source: World Agricultural Supply and Demand Estimates and Supporting Materials.

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Updated 9/19/2019

Dairy Forecasts

	2018			2019					2020		
	III	IV	Annual	I	II	III	IV	Annual	I	II	Annual
Milk cows (thousands)	9,383	9,359	9,399	9,344	9,327	9,315	9,320	9,325	9,325	9,330	9,340
Milk per cow (pounds)	5,752	5,703	23,149	5,827	5,980	5,790	5,775	23,375	5,950	6,050	23,690
Milk production (billion pounds)	54.0	53.4	217.6	54.5	55.8	53.9	53.8	218.0	55.5	56.4	221.2
Farm use	0.3	0.3	1.0	0.3	0.3	0.3	0.3	1.0	0.3	0.3	1.0
Milk marketings	53.7	53.1	216.6	54.2	55.5	53.7	53.6	217.0	55.2	56.2	220.2
Milk-fat (billion pounds milk equiv.)											
Milk marketings	53.7	53.1	216.6	54.2	55.5	53.7	53.6	217.0	55.2	56.2	220.2
Beginning commercial stocks	18.9	17.1	13.4	13.8	16.1	18.2	16.2	13.8	13.0	16.0	13.0
Imports	1.7	1.8	6.3	1.4	1.9	1.8	1.9	7.0	1.5	1.7	6.9
Total supply	74.3	72.0	236.3	69.4	73.5	73.7	71.6	237.7	69.7	73.9	240.1
Commercial exports	2.6	2.4	10.4	2.4	2.5	2.3	2.2	9.3	2.3	2.6	9.6
Ending commercial stocks	17.1	13.8	13.8	16.1	18.2	16.2	13.0	13.0	16.0	18.4	13.0
Commodity Credit Corporation donations	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.1	0.2
Domestic commercial use	54.5	55.9	212.1	50.9	52.8	55.1	56.4	215.2	51.3	52.9	217.3
Skim solids (billion pounds milk equiv.)											
Milk marketings	53.7	53.1	216.6	54.2	55.5	53.7	53.6	217.0	55.2	56.2	220.2
Beginning commercial stocks	11.5	10.5	11.8	10.7	11.1	11.2	10.4	10.7	10.0	11.0	10.0
Imports	1.3	1.4	5.5	1.3	1.6	1.5	1.5	5.9	1.3	1.4	5.6
Total supply	66.5	65.1	233.8	66.2	68.2	66.3	65.5	233.5	66.5	68.6	235.9
Commercial exports	10.9	9.7	44.7	9.9	10.3	10.0	9.9	40.2	10.4	11.1	42.6
Ending commercial stocks	10.5	10.7	10.7	11.1	11.2	10.4	10.0	10.0	11.0	10.9	9.8
Commodity Credit Corporation donations	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.1
Domestic commercial use	45.1	44.7	178.5	45.1	46.7	45.8	45.5	183.2	45.1	46.6	183.4
Milk prices (dollars/cwt) ¹											
All milk	16.17	17.07	16.26	16.97	17.93	19.00	19.40	18.35	18.90	18.65	18.85
Class III	15.05	14.58	14.61	14.30	16.20	17.70	17.60	16.45	17.10	16.95	17.05
Class IV	14.53	15.05	14.23	15.68	16.28	16.60	16.05	16.15	15.90	16.20	16.15
Product prices (dollars/pound) ²											
Cheddar cheese	1.565	1.463	1.538	1.440	1.678	1.840	1.835	1.700	1.790	1.760	1.775
Dry whey	0.369	0.459	0.342	0.449	0.378	0.365	0.370	0.390	0.370	0.380	0.375
Butter	2.284	2.264	2.257	2.258	2.310	2.320	2.175	2.265	2.190	2.250	2.225
Nonfat dry milk	0.816	0.887	0.795	0.963	1.007	1.040	1.045	1.015	1.020	1.030	1.035

Totals may not add due to rounding.

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

² Simple averages of monthly prices calculated by the USDA, Agricultural Marketing Service, for use in class price formulas.

Based on weekly USDA, *National Dairy Products Sales Report*.

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

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

Updated 9/17/2019.