



Livestock, Dairy, and Poultry Outlook

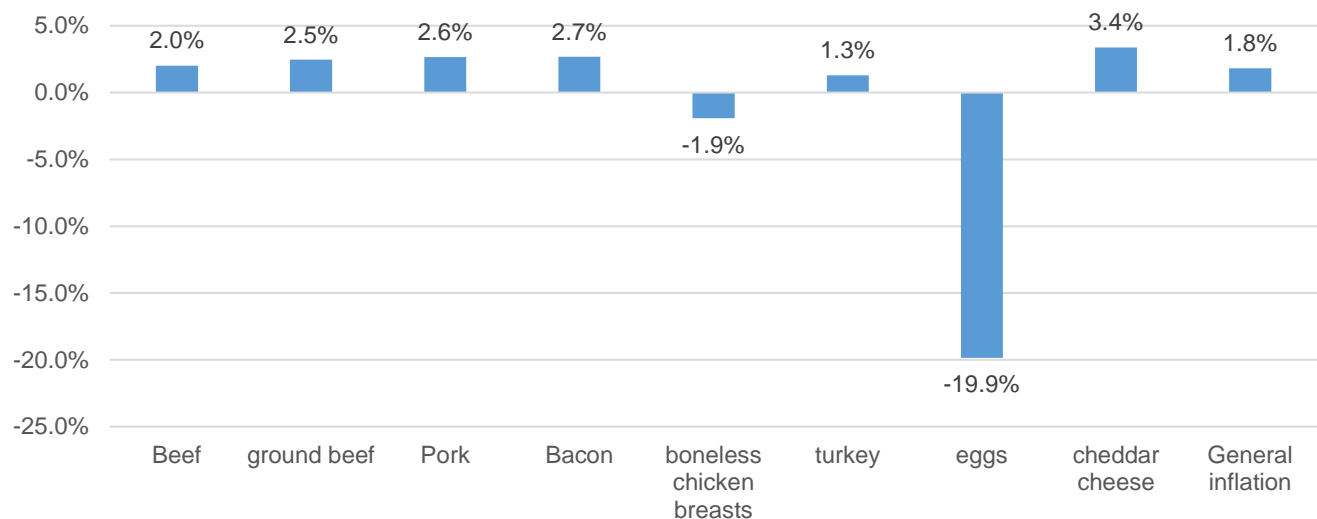
Retail Prices for Most Animal Proteins Increased Faster Than Inflation in 2019

William Hahn

In mid-January, the U.S. Department of Labor Bureau of Labor Statistics released estimates of the retail prices for selected animal products and the consumer price indexes, CPIs. The CPI measures price inflation. Using 1982-84=100, the overall CPI was 251.1 in 2018 and 255.7 in 2019, a 1.8-percent increase. The figure below shows the percent increase in prices for beef, ground beef, pork, bacon, boneless chicken breasts, turkey, eggs, and cheddar cheese. All of the prices for red meat and cheddar cheese increased more rapidly than inflation. The average price of turkey also increased, but by only 1.3 percent, 0.5 percent less than inflation in general. Boneless chicken breasts declined by 1.9 percent; eggs declined 19.9 percent.

Percent changes in selected animal protein prices, 2018 versus 2019

Percent change



Source: USDA, Economic Research Service calculations with data from U.S. Department of Labor, Bureau of Labor Statistics.

Beef/Cattle: Beef production in first-half 2020 was raised, reflecting a faster pace of slaughter, but the second half was lowered on anticipation of fewer steers and heifers available for slaughter due to a slower pace of placements during 2020. Feeder steer prices were raised, reflecting strong demand and a lower supply of calf crops available in January 2019 and 2020. Beef exports in December were below year-ago levels as the 2020 first-quarter forecast was lowered, reflecting weakness in beef demand in several markets.

Dairy: The all-milk price forecast for 2020 has been lowered to \$18.85 per hundredweight, \$0.40 lower than last month's forecast. Based on recent price weakness and lower expectations for cheese and butter demand, 2020 price forecasts for butter and cheese have been reduced. The dry whey price forecast has been raised slightly, and the nonfat dry milk price forecast is unchanged. The 2020 export forecast on a skim-solids milk-equivalent basis has been raised due to higher expected exports of nonfat dry milk/skim milk powder.

Lamb/Sheep: USDA's National Agricultural Statistics Service (NASS) released its January 1, 2020, sheep and lamb inventory report last month. The inventories of most classes of sheep are lower than 2019. The 2020 lamb and mutton production forecast was reduced to 146 million pounds.

Pork/Hogs: Stronger-than-expected numbers of slaughter-ready hogs presented at processing plants in January and early February necessitated the increase of 2020 commercial pork production to almost 29 billion pounds. Despite hog numbers, 2020 prices are expected to average about 2 percent above prices last year due to solid domestic and export demand. U.S. pork exports are forecast at 7.4 billion pounds, more than 17 percent higher than the 6.3 billion pounds shipped to foreign markets in 2019.

Poultry/Eggs: The 2020 broiler production forecast was revised up on current chick placement data, as well as on continued growth in the broiler breeding flock. The 2020 ending stocks were revised down on lower beginning stocks, while the first-quarter price forecast was revised up on recent price movements. The 2020 egg (table and hatching) production forecast was increased on table egg layer flock and lay rates, as well as expectations for increased broiler production. The ending stocks forecast was revised upward on higher beginning stocks, while the price forecast was increased on recent price movements. The 2020 turkey production forecast was revised down on expectations of a slower recovery in production. The 2020 turkey price forecast was revised up after starting the year 17.9 percent above a year ago. Total turkey exports increased from 2018 to 2019 by 4.6 percent. The turkey export forecast was revised down to 660 million pounds in 2020 on increased global competition from other meats.

Beef/Cattle

Christopher Davis and Russell Knight

U.S. Cattle Inventory Down Fractionally

The USDA National Agricultural Statistics Service (NASS) released its semiannual *Cattle* report on January 31st. The total number of cattle and calves on January 1, 2020, was estimated at 94.4 million head, nearly 400,000 head lower than the previous year. This marks the first year of contraction for cattle producers, and most of the decline was attributed to fewer beef cows, 392,400 below last year at 31.3 million head. The States that experienced the largest reductions in beef cows included Kansas (-96,000 head), Texas (-85,000), Oklahoma (-51,000), South Dakota (-45,000), Illinois (-27,000), Colorado (-21,000), and North Dakota and Montana (-20,000 head each). Compared to last year, beef cattle producers are indicating their intentions to retain 2 percent fewer heifers for beef cow replacement, and the number of those heifers expected to calve during the year is down 1 percent. This is the third consecutive year of fewer heifers retained in the herd. A similar pattern is reflected on the dairy side, with milk cow numbers fractionally lower and heifers for milk-cow replacement estimated down 1 percent.

The 2019 calf crop estimate was 36.1 million head, revised lower by about 240,000 head from the July 2019 *Cattle* report. This revision to the 2019 calf crop estimate reduces the pool of cattle that might be expected to be placed in feedlots in 2020. Further, the total number of cattle on feed was estimated at 14.7 million head on January 1, 2020, 2 percent higher than last year and second only to 2008's record. These two factors contributed to fewer cattle outside feedlots, which were 0.4 percent below last year at this time.

Growth in Beef Production in First-Quarter 2020

The forecast for beef production in first-half 2020 was raised based on a faster pace of fed and nonfed cattle slaughter. Average dressed weights were raised in both the first and second quarters. However, the beef production forecasts for third- and fourth-quarter 2020 were reduced on lower anticipated steer and heifer slaughter in the second half of the year. This reflects lower forecast placements in 2020 due to the smaller number of cattle outside feedlots on January 1.

Feeder Steer Price Revised Up in 2020

The 2020 feeder cattle forecast was raised by \$1 due to a January price of \$144.36 per hundredweight (cwt) and fewer cattle outside feedlots available in 2020. The lower year-over-year 2019 calf crop will reduce the number of steers and heifers available for slaughter in the second half of the year and place upward pressure on feeder steer prices.

The first-quarter 2020 fed steer price was revised lower to \$123.00 per cwt on recent price weakness, while the outlying quarters remain unchanged from the previous month.

Live Cattle Trade Increased in December and 2019

U.S. live cattle imports for December 2019 totaled 212,625 head, about 9.2 percent (or 17,991 head) over a year earlier. In December, Mexico accounted for 75 percent of total U.S. cattle imports, and Canada accounted for the remaining 25 percent. Annually, the U.S. imported 2.043 million live cattle in 2019, exceeding 2018 live cattle imports by 143,777 head. The 2020 annual forecast for live cattle imports is unchanged at 2.065 million head.

In December, live cattle exports totaled 27,552 head, up 33 percent (or 6,826 head) from a year earlier. Canada and Mexico received the largest shipments of live cattle in December at 25,244 head and 1,681, respectively. Annually, the United States exported 305,157 head of live cattle in 2019, 61,362 more than last year. Over 89 percent of U.S. live cattle shipments were to Canada. The live cattle export forecast for 2020 is unchanged at 285,000 head.

December Beef Imports Remained Strong

U.S. beef imports in December totaled 228.4 million pounds, up 7.6 percent (or over 16 million pounds) from a year ago. Year over year, U.S. beef imports rose from major suppliers such as Australia (+18 million pounds), Nicaragua (+8.5 million pounds), Mexico (+7.3 million pounds), Argentina (+1 million pounds) and Brazil (+707,000 pounds). However, shipments from New Zealand in December were 12.3 million pounds lower year over year. Lower shipments from New Zealand reflect, in part, the increased competition with Asia for animal protein. Shipments were also lower in December relative to a year ago from Canada (-5.4 million pounds) and Uruguay (-2.9 million pounds).

The U.S. imported 3.057 billion pounds of beef in 2019, exceeding 2018 beef imports by 59 million pounds. The 2020 beef import forecast is unchanged at 2.880 billion pounds.

December Beef Exports Fall

In December, beef exports totaled 255 million pounds, 2.3 percent (or 6.1 million pounds) lower than December 2018. U.S. beef exports to Japan (+1.1 million pounds) were up from a year earlier. Japan continues to be the largest U.S. beef export market, accounting for 24.4 percent of U.S. total exports in December 2019. Along with Japan, several other major destinations experienced positive growth year over year in December, including South Korea (+8 million pounds), and Canada (+227,000 pounds). The United States was also able to capitalize on China's strong demand for animal protein by shipping more than 5.5 million pounds of beef, the largest-ever beef shipment to China. These expansions in U.S. beef exports were offset by reductions in shipments to Hong Kong (-12 million pounds), Mexico (-4.9 million pounds), and Taiwan (-1.2 million pounds).

Fourth-quarter beef exports totaled 748.4 million pounds in 2019, about 52 million pounds less than a year earlier. Cumulatively, the U.S. exported 3.022 billion pounds of beef. The 2020 beef export forecast for first quarter was lowered by 5 million pounds to 760 million pounds due to weaker demand in several markets.

Dairy

Jerry Cessna

Recap of the 2019 Dairy Situation

In 2019, the supply and demand situation for the dairy industry was tighter than it was in 2018. The simple average all-milk price was \$18.60 per hundredweight (cwt), \$2.33 higher than the simple-average all-milk price of \$16.27 in 2018. Average Class III and IV milk prices for 2019 were \$16.96 per cwt (\$2.35 higher than 2018) and \$16.30 per cwt (\$2.07 higher), respectively. Average prices for cheese, nonfat dry milk (NDM), and dry whey increased to \$1.759 per pound (+22.1 cents), \$1.042 (+24.7 cents), and \$0.380 per pound (+3.8 cents), respectively. The average butter price in 2019 was \$2.243 per pound, 1.4 cents lower than 2018.

For the year, 2019 milk production was 218.3 billion pounds, only 0.3 percent higher than 2018. The average size of the milking herd was 9.332 million head, 67 thousand less than 2018. Quarterly average milk cow numbers fell through most of the year, from 9.334 million head in the first quarter to 9.319 million in the third quarter before rising to 9.337 million head in the fourth quarter. Milk per cow in 2019 averaged 23,396 pounds, 1.1 percent higher than 2018.

Commercial exports for dairy products in 2019 totaled 9.1 billion pounds on a milk-fat basis, 1.3 billion less than 2018. On a skim-solids basis, 2019 exports totaled 41.6 billion pounds, 3.1 billion below 2018. While exports of cheese rose from 2018 to 2019, exports of butter, NDM/SMP, dry whey, whey protein concentrate, and lactose decreased. Retaliatory tariffs by China throughout 2019 and by Mexico in the first 5 months of the year contributed to the year-over-year decline in exports of most dairy products. Exports of some types of whey products (often used as animal feed) were also affected by the spread of African Swine Fever in China.

For the year, 2019 dairy imports on a milk-fat basis totaled 7.0 billion, 0.7 billion higher than 2018. On a skim-solids basis, 2019 dairy imports totaled 5.8 billion pounds, 0.3 billion higher than 2018. Notably, butter imports, which were supplied mostly by Ireland, totaled 84.5 million pounds, 5.7 million more than 2018.

For the year, 2019 domestic use totaled 215.1 billion pounds on a milk-fat basis, 1.4 percent higher than 2018. On a skim-solids basis, 2019 domestic use totaled 181.8 billion pounds, 1.8 percent higher than 2018. Year over year, domestic use increased for butter, NDM, cheese, and whey products. The greatest percentage growth was for whey products and lactose. With lower U.S. exports of these products, dairy manufacturers likely adjusted some of their marketing resources to attract greater domestic sales. Fluid milk sales continued to decline in 2019; the most recent data from USDA Agricultural Marketing Service (AMS) shows that the volume of fluid milk product sales for January through October 2019 declined by 1.8 percent compared to January through October 2018.

Ending stocks for 2019 were 13.6 billion pounds on a milk-fat basis, 0.2 billion less than ending stocks for 2018. On a skim-solids basis, 2019 ending stocks totaled 10.2 billion pounds, 0.5 billion lower than ending stocks for 2018. Notably, American-type cheese stocks at the end of 2019 were 743.5 million pounds, 56.8 million pounds less than ending stocks for 2018.

Domestic use of milk and dairy products

	Units	2018	2019	Percent change
Milk in all products				
Milk-fat milk-equivalent basis	Billion pounds	212.1	215.1	1.4
Skim-solids milk-equivalent basis		178.5	181.8	1.8
Dairy products				
Butter		1,901	1,937	1.9
Nonfat dry milk		814	845	3.8
American-type cheese		5,064	5,122	1.1
Other-than-American cheese	Million pounds	7,433	7,534	1.4
Dry whey		546	634	16.1
Whey protein concentrate		268	283	5.6
Lactose		329	393	19.5

Sources: USDA, National Agricultural Statistics Service; USDA, Farm Service Agency; USDA, Foreign Agricultural Service; U.S. Dept. of Commerce, Bureau of the Census; and USDA, Economic Research Service (ERS) calculations.

Numerous sources were used for conversion factors. For more information, see the ERS Dairy Data Documentation webpage.

Recent Developments in Dairy Markets

During the month of January, movements of dairy product prices, as reported in the USDA *National Dairy Products Sales Report* (NDPSR), were mixed. From the week ending January 4 to the week ending February 8, the butter price declined by 12.3 cents to \$1.8561 per pound. Prices for NDM and dry whey rose to \$1.2542 per pound (+1.9 cents) and \$0.3634 per pound (+3.0 cents), respectively. The price spread between 40-pound blocks and 500-pound barrels of Cheddar cheese widened, with blocks rising to \$1.9639 per pound (+7.7 cents) and barrels falling to \$1.6242 per pound (-12.7 cents).

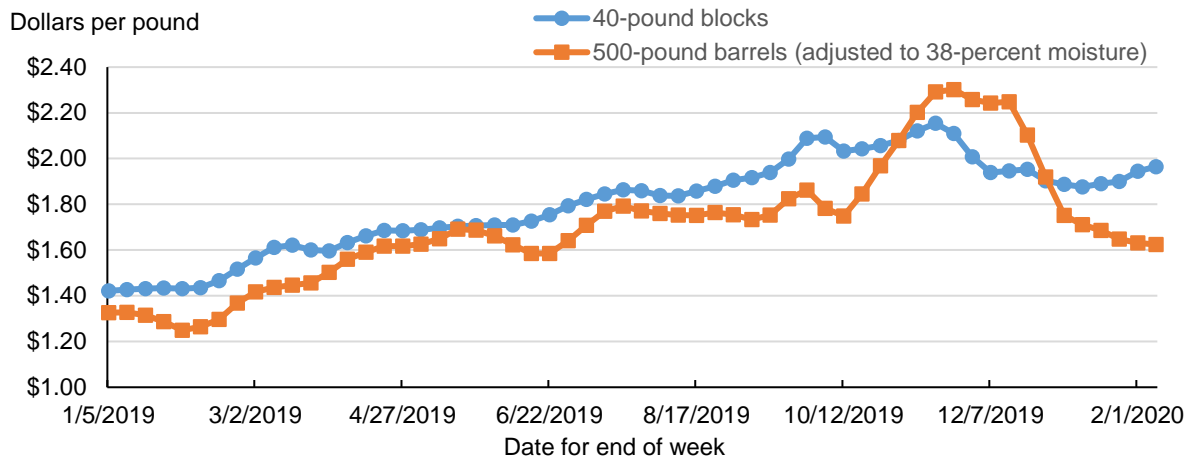
Dairy wholesale product prices (dollars per pound)

	For the week ending		Change
	Jan. 4	Feb. 8	
Butter	1.9789	1.8561	-0.1228
Cheddar cheese			
40-pound blocks	1.8873	1.9639	0.0766
500-pound barrels ¹	1.7511	1.6242	-0.1269
Nonfat dry milk	1.2356	1.2542	0.0186
Dry whey	0.3331	0.3634	0.0303

¹ Adjusted to 38-percent moisture.

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

Cheddar cheese wholesale prices (National Dairy Products Sales Report)



Source: USDA, Agricultural Marketing Service.

In January, international export prices, as reported by USDA *Dairy Market News*, were mostly higher than U.S. domestic prices. Butter export prices for Oceania and Europe were \$1.86 and \$1.83 per pound, respectively. Skim milk powder (SMP) export prices for Oceania and Europe were \$1.40 and \$1.30 per pound, respectively. The Cheddar cheese export price for Oceania was \$1.83 per pound, and the dry whey export price for Europe was \$0.42 per pound.

USDA National Agricultural Statistics Service (NASS) estimated that U.S. milk production in December totaled 18.277 billion pounds, an increase of 0.7 percent from December 2018. Milk cows totaled 9.339 million head in December, unchanged from the most recent estimate for November but 14,000 head less than December 2018. Milk per cow was 1,957 pounds per head in December, 0.8 percent higher than December 2018.

According to the NASS *Cattle* report, the milk cow inventory as of January 1 was 9.335 million head, 19,000 head less than January 1, 2019. Milk replacement heifers on January 1 totaled 4.637 million head, 65 thousand fewer than January 1, 2019. Milk replacement heifers expected to calve totaled 2.931 million head, 74 thousand less than January 1, 2019. The ratio of milk replacement heifers to milk cows for January 1 was 49.7 percent, the lowest percentage since January 1, 2014. For the first 5 weeks of 2020, federally inspected commercial dairy cow slaughter, as reported by USDA AMS, totaled 325.900 head, 1.8 percent above the first 5 weeks of 2019.

In December, dairy exports on a milk-fat milk-equivalent basis totaled 695 million pounds, 4 million lower than November but 27 million higher than December 2018. December exports on a skim-solids milk-equivalent basis were 3.719 billion pounds, 49 million higher than November and 671 million higher than December 2018. Notably, exports of NDM/SMP were 152.5 million pounds in December, 3.9 million above November and 41.5 million higher than December 2018. The spread of a coronavirus in China and other countries has reportedly disrupted commerce to some extent. However, the magnitude and potential duration of the effects are highly uncertain.

In December, dairy imports on a milk-fat basis totaled 515 million pounds, 11 million higher than November but 144 million lower than December 2018. On a skim-solids basis, dairy imports totaled 519 million pounds, 35 million higher than November and 18 million higher than December 2018.

Additional U.S. tariffs on imports of dairy products from the European Union, which began on October 18, have likely had an impact on butter imports. U.S. total imports of butter, which come mostly from Ireland, fell from 29.0 million pounds in the third quarter of 2019 to 14.8 million pounds in the fourth quarter. This contrasts with an increase in imports of milk fat and butteroil, from 10.7 million pounds in the third quarter to 16.7 million in the fourth quarter. In recent months, the main suppliers of milk fat and butteroil imports have been Mexico, New Zealand, and India.

Domestic use on a milk-fat basis in the fourth quarter of 2019 was 56.5 billion pounds, 0.6 billion higher than the fourth quarter of 2018. On a skim-solids basis, domestic use totaled 44.5 billion pounds, 0.2 billion less than the fourth quarter of 2018.

Recent Developments in Trade Policy

On January 1, 2020, the U.S.-Japan Trade Agreement (USJTA) became effective. Under the agreement, Japan's tariffs on cheese (some as high as 40 percent) from the United States will be phased out over 15 years. Japan's imports of U.S. cheese totaled \$156 million in 2018. Tariffs on whey products from the United States will be phased out over 5, 15, or 20 years, depending upon the type of whey product. Japan's imports of U.S. whey products totaled \$59 million in 2018. Japan immediately eliminated its 8.5-percent tariff on U.S. lactose and 2.9 percent tariff on U.S. milk albumin. U.S. access to the Japanese market under USJTA is similar to access provided to Japan's trading partners participating in the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (entered into force on December 30, 2018) and the EU-Japan Economic Partnership Agreement (entered into force on February 1 2018).

On January 15, 2020, the United States and China signed an agreement called the Phase One trade deal. For dairy products, the agreement addresses several nontariff issues. These include changes related to U.S. facility and product registration; changes to regulations concerning imports of certain U.S. dairy products (including extended shelf-life milk, fortified milk, infant formula, ultra-filtered milk, and permeate powder); and transparency and due process provisions with respect to geographical indications and common food names. China has also agreed that U.S. agricultural exports to China shall exceed the 2017 baseline amount by no less \$12.5 billion in 2020 and \$19.5 billion in 2021. Dairy products are included in the list of agricultural goods for this provision, but there is not a specific value allocation for the dairy sector within the agricultural product category. Retaliatory tariffs were not addressed by the agreement.

On February 6, 2020, China announced that it would reduce some retaliatory tariffs on various imports from the United States, including some dairy products, effective February 14. Some dairy products receive tariff rate reductions of 2.5 percentage points under the agreement. These include milk and cream in liquid form; yogurt; buttermilk and curdled, fermented, or acidified milk and cream; and cheese. These are small tariff-rate reductions, with most retaliatory tariffs remaining in place. Prior to these tariff-rate reductions, China's total applied tariffs have been 45 percent for milk and cream in liquid form; 40 percent for yogurt; 50 percent for buttermilk and curdled, fermented, or acidified milk and cream; and 38 to 42 percent for cheese, depending on the type.

On January 29, President Trump signed legislation to implement the U.S.-Mexico-Canada Agreement (USMCA), which would replace the North American Free Trade Agreement. Under the agreement, Mexico's zero tariffs for U.S. dairy products would be preserved. Canada would agree to allow greater access to U.S. dairy imports, and the United States would agree to allow greater access to dairy imports from Canada. Canada would also agree to make changes to its classified pricing system with respect to milk used to produce certain dairy ingredients. Mexico ratified USMCA in June 2019, but

Canada has not yet approved the agreement. Since our projections reflect government policies in place, our forecasts do not reflect potential effects of USMCA because it has not been ratified by Canada.

Market Facilitation Payments

On February 3, 2020, USDA announced that a third and final tranche of 2019 Market Facilitation Payments (MFP) would be issued. MFP assistance is aimed at assisting U.S. farmers affected by retaliatory tariffs of foreign nations. Dairy producers who were in business as of June 1, 2019, are receiving payments based on production history as calculated for the Dairy Margin Coverage (DMC) program. For more information, see the USDA Farm Service Agency website.

Outlook for Feed Prices

The 2019/20 price forecasts for corn and soybean meal are both unchanged from the January forecast, at \$3.85 per bushel and \$305 per short ton, respectively. The alfalfa hay price in December 2019 was \$175 per short ton, \$2 higher than November but \$4 lower than December 2018. The 5-State weighted-average price for premium alfalfa hay in December was \$200 per short ton, \$9 lower than the November price. For more information, see *Feed Outlook*, published by USDA, Economic Research Service.

Dairy Forecasts for 2020

This month, relatively small changes have been made to supply and use forecasts for 2020. The annual forecast for milk production is unchanged from last month's forecast of 222.0 billion pounds. Annual forecast for milk cow numbers and milk production per cow are unchanged from last month.

Import forecasts for 2020 on both a milk-fat basis and skim-solids basis are unchanged at 6.3 billion and 5.5 billion pounds, respectively. The commercial export forecast on a milk-fat basis is unchanged at 9.4 billion pounds. With the recent strength in NDM/SMP exports expected to continue in 2020, the forecast for commercial exports on a skim-solids basis has been raised 0.2 billion pounds to 43.6 billion.

The forecast for domestic commercial use has been lowered to 217.9 billion pounds on a milk-fat basis (-0.1 billion) and to 182.7 billion pounds on a skim-solids basis (-0.2 billion). The forecast for ending stocks on a milk-fat basis is unchanged at 13.4 billion pounds. With lower beginning stocks for 2020 on a skim-solids basis, ending stocks for 2020 have been lowered by 0.1 billion pounds to 10.3 billion.

Based on recent price weakening and lower expectations for cheese and butter demand, 2020 price forecasts have been lowered to \$1.790 per pound (-4.5 cents) and \$1.910 per pound (-5.0 cents) per pound, respectively. With recent price strengthening for dry whey, the 2020 forecast has been raised to \$0.345 per pound (+0.5 cents). The NDM price forecast for 2020 is unchanged at \$1.255 per pound.

With the lower expected cheese price more than offsetting the higher expected dry whey price, the Class III milk price forecast for 2020 has been lowered \$0.40 to \$16.95 per cwt. With the lower butter price forecast, the Class IV milk price forecast has been lowered by \$0.20 to \$16.70 per cwt. The all-milk forecast for 2020 has been lowered to \$18.85 per cwt, \$0.40 lower than last month's forecast.

Lamb/Sheep

William Hahn

Sheep inventory report released January 31, 2020

On January 31, 2020, the USDA's National Agricultural Statistics Service (NASS) released its annual sheep inventory report estimating the number of sheep in the United States on January 1st. The table below summarizes some of the report's data, comparing 2020 and 2019.

The total inventory of sheep and lambs declined by 30 thousand head between 2019 and 2020. NASS estimated that there were 5,230 thousand sheep in the United States on January 1, 2019 and 5,200 thousand at the start of this year. The total number of breeding sheep declined 10 thousand head and market sheep declined 20 thousand head. The table (below) also shows a further breakdown of the breeding and market sheep and lambs into categories. The 2019 lamb crop was estimated at 3.230 million head, down slightly from 2018.

The NASS inventory report also estimated the number of lambs per ewe. NASS estimated 108 lambs per 100 ewes in 2019, higher than the 2018 figure of 106.7. The 2019 lamb per ewe estimate is close to the 25-year average in the NASS inventory report. As indicated in the figure below, from 1995 to 2019, the lambs per ewe were at or above 108 in 15 of those 25 years.

Lamb and Mutton Production Lower in 2020

Most of the sheep and lambs that will be marketed in the first quarter and the early months of the second quarter of 2020 were in the inventory on January 1. January's inventory of market sheep is somewhat lower than last year's, which would imply fewer sheep available to be slaughtered. However, classes of the two heaviest weights, the over-105-pound lambs and sheep, were larger in 2020 than the same classes in 2019. These larger animals are almost certainly going to market in the first quarter of 2020. Thus, the 2020 first-quarter lamb production was raised from 37 to 38 million pounds. However, small numbers of lighter weight market lambs imply tighter supplies as the year progresses, and the second-quarter forecast was lowered from 37 to 35 million pounds.

Most of the lambs slaughtered in second-half 2020 will be born this spring. Although the breeding herd is smaller, if the number of lambs per 100 ewes averages over 108 as it has in 15 of the last 25 years, that could offset the slight decline in the breeding herd. The production forecast for the second half of 2020 is unchanged from last month.

The lamb price forecast for the first quarter was raised to \$152 per cwt, reflecting currently strong prices and expectation of firm demand ahead of Easter.

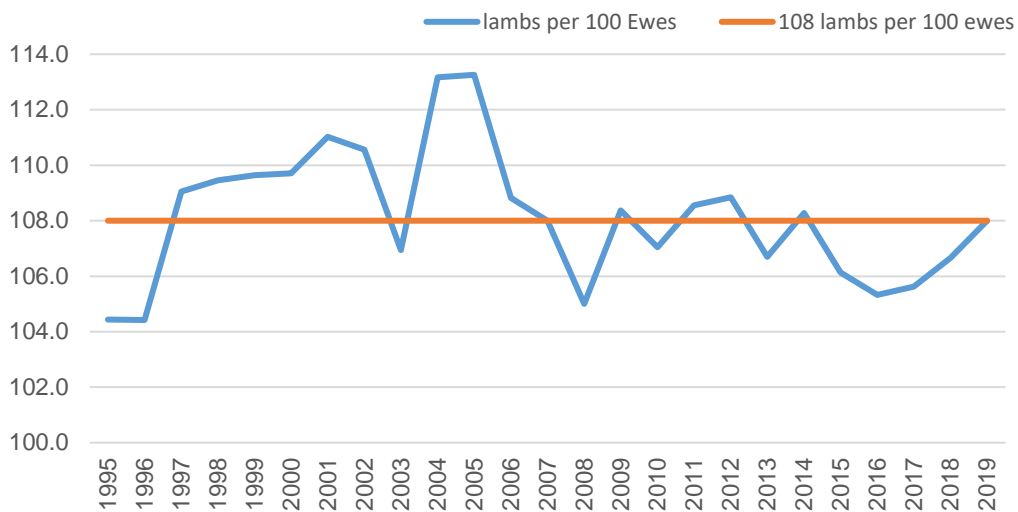
Imports for fourth-quarter 2019 were 66 million pounds, reflecting stronger-than-expected imports from Australia in December. Given expected demand, the 2020 forecast was increased to 257 million pounds. However, that forecast-2020 total lamb and mutton import volume would fall almost 6 percent below imports in 2019.

Summary of NASS sheep inventory report

	2019	2020	change
	thousand head		
all sheep and lambs	5,230	5,200	-30
<i>Total breeding sheep</i>	3,820	3,810	-10
Ewes over one year old	3,000	2,980	-20
Lambs keep for breeding	650	660	10
Rams	170	170	0
<i>Total market sheep and lambs</i>	1,410	1,390	-20
Under 65 Lbs	358	347	-11
65-84 Lbs	205	190	-15
85-105 Lbs	290	271	-19
Over 105 Lbs	475	498	23
Market sheep	82	84	2

Source: USDA, National Agricultural Statistical Service.

Lambs per 100 ewes as estimated by USDA NASS



Source: USDA, National Agricultural Statistical Service.

Pork/Hogs

Mildred Haley

2020 Pork Production Adjusted Upward on Higher Slaughter Numbers

Higher-than-expected numbers of slaughter-ready market hogs, presented at processing plants through the first week of February, prompted significant increases in the first-quarter 2020 pork production forecasts. Estimated federally inspected hog slaughter in January came in at roughly 11.8 million head, 7.3 percent greater than a year ago. The estimated January slaughter yielded a higher-than-expected estimated federally inspected pork production volume of about 2.5 billion pounds. Heavier dressed weights also contributed to this larger-than-expected volume that was 7.7 percent above production in January of 2019. The larger production volume necessitated an upward adjustment of the first-quarter pork production forecast to about 7.3 billion pounds, 6.5 percent higher than a year ago.

USDA's second-half pork production forecasts were also adjusted upward, in expectation that processor demand would result in hog slaughter remaining consistent with available supplies. Third-quarter pork production is expected to be about 7 billion pounds, almost 5 percent above a year earlier. Fourth-quarter production is forecast at almost 8 billion pounds, more than 3 percent higher than fourth-quarter 2019. For 2020 in total, commercial pork production is likely to be almost 29 billion pounds, 4.5 percent above production last year.

2020 Hog Prices Likely To Average Slightly Higher Than Prices in 2019

Quarterly hog prices are expected to run higher in 2020 than in 2019—with the exception of prices in the second quarter—with the year's average running slightly ahead of the 2019 average. First-quarter prices are expected to average \$44 per cwt carcass weight equivalent, about 8 percent above a year ago. In the second quarter, prices should average about \$51 per cwt, 12 percent lower than the second quarter last year. Hog prices this year are significantly below year-earlier second-quarter averages because last year at that time U.S. prices initially spiked on new information from China regarding losses from African Swine Fever. Third-quarter hog prices are expected to average \$54 per cwt, almost 8 percent higher than third-quarter 2019, and in the fourth quarter of this year, hog prices should average about \$46 per cwt, almost 7 percent above a year ago. For the year, hog prices are expected to average \$49, about 2 percent above the 2019 total average, with the total 2020 average being dragged down by the second-quarter comparison to last year.

Pork Demand Will Support 2020 Hog Prices Above Year-Ago Prices Despite Larger Hog Supplies

Despite enormous 2020 hog numbers, hog prices are likely to average above year-earlier prices due to processor demand for hogs, driven by domestic and international consumer pork demand. Domestic consumers will face abundant broiler supplies this year—per capita broiler disappearance is expected to increase almost 4 percent in 2020—and strong demand from export markets. This will result in lower per capita pork disappearance with retail prices slightly above year-earlier levels. Hog prices in 2020

will be supported by exports, with important demand increases coming from China, whose swine herd has been severely reduced by African Swine Fever (ASF). For more information, see “African Swine Fever Shrinks Pork Production in China, Swells Demand for Imported Pork” in the February *Amber Waves*, <https://www.ers.usda.gov/amber-waves/2020/february/african-swine-fever-shrinks-pork-production-in-china-swells-demand-for-imported-pork/> China recently stepped up its purchases of U.S. pork products—mainly frozen carcasses (in part, to re-employ some of the labor released from Chinese processing plants affected by reduced hog numbers) and an unidentified pork category termed “meat of swine, except processed, not elsewhere specified or identified” (hs code 203294) that was among the factors prompting an increase in the 2020 U.S. pork export forecast to about 7.4 billion pounds, more than 17 percent above exports in 2019.

Strong Finish to 2019 Exports on Huge December Shipments to China and Mexico

U.S. pork exports in December were 681 million pounds, more than 29 percent higher than December of last year. This heavy export volume was due largely to shipments to China\Hong Kong and to Mexico. Exports to China\Hong Kong were almost 6 times higher than they were last December, and shipments to Mexico were more than 7 percent higher than a year ago. Exports to the 10 largest foreign destinations for U.S. exported pork in December 2019 are summarized in the table below. Just below it is a summary table of exports for the year, showing shipments to major markets in 2019. Notable in that table is the comparison of 2018 and 2019 export shares, showing major 2019 reductions in the shares of U.S. exports accounted for by Japan, Mexico, Canada, and South Korea. Unsurprisingly, China\Hong Kong’s share increased significantly in 2019—from 6.5 percent of exports in 2018 to almost 34 percent in 2019.

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

	Country	Exports Dec. 2018 (mil. lbs)	Exports Dec. 2019 (mil. lbs)	Percent change (2019/2018)	Export share Dec. 2018 %	Export share Dec. 2019 %
	World	526	681	29.4		
1	China\Hong Kong	34	229	567.6	6.5	33.6
2	Mexico	139	150	7.2	26.5	22.0
3	Japan	93	91	-1.9	17.6	13.4
4	South Korea	77	51	-34.0	14.7	7.5
5	Canada	48	44	-7.7	9.1	6.5
6	Australia	30	29	-3.2	5.7	4.3
7	Colombia	32	23	-29.0	6.1	3.4
8	Panama	14	15	9.3	2.6	2.2
9	Honduras	8	9	17.3	1.4	1.3
10	Chile	10	8	-21.5	1.8	1.1

Source: USDA, Economic Research Service.

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

	Country	Exports 2018 (mil. lbs)	Exports 2019 (mil. lbs)	Percent change (2019/2018)	Export share 2018 %	Export share 2019 %
	World	5,876	6,321	7.6		
1	Mexico	1,768	1,560	-11.7	30.1	24.7
2	Japan	1,218	1,149	-5.7	20.7	18.2
3	China\Hong Kong	396	1,067	169.3	6.7	16.9
4	South Korea	727	625	-14.0	12.4	9.9
5	Canada	530	555	4.8	9.0	8.8
6	Australia	231	307	32.9	3.9	4.9
7	Colombia	283	295	4.4	4.8	4.7
8	Chile	84	106	25.9	1.4	1.7
9	Honduras	91	99	8.4	1.5	1.6
10	Dominican Republic	123	95	-22.4	2.1	1.5

Source: USDA, Economic Research Service.

The table below is compiled from monthly import statistics issued by the Government of China. The table shows pork import volumes from important exporting countries for 2018 and 2019. The most eye-catching aspect of the table is the import share of the European Union, at more than 60 percent in each year. It is notable that United States picked up share in 2019—moving from 7.2 percent of China’s pork imports in 2018 to 12.3 percent in 2019—likely at the combined expense of Canada and Brazil.

China pork imports from important exporting countries, 2018 and 2019

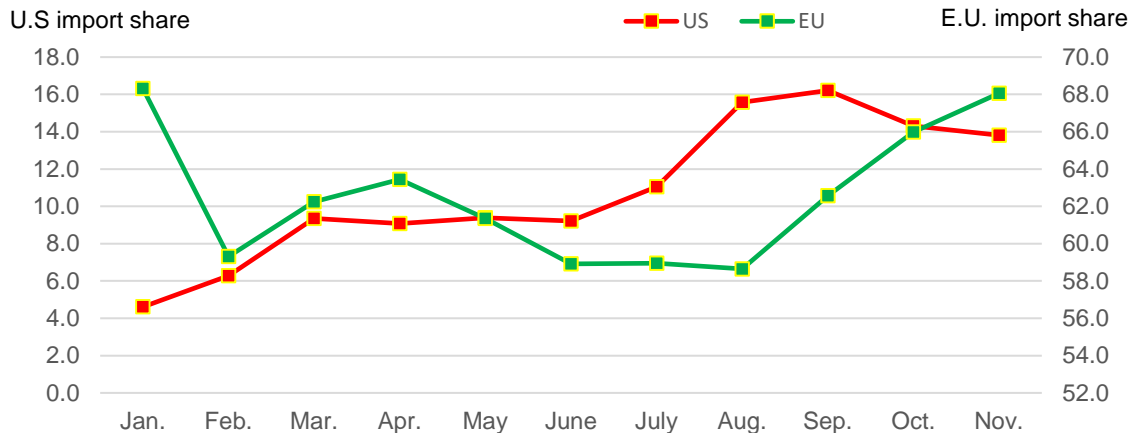
Country	Imports 2018 (thousand mt)	Imports 2019 (thousand mt)	Percent change (2019/2018)	Avg. Import share 2018 %	Avg. Import share 2019 %
World	1,193	1,995	67		
European Union	752	1,261	68	63.0	63.2
United States	86	245	186	7.2	12.3
Brazil	150	222	48	12.6	11.1
Canada	160	172	7	13.4	8.6
Mexico	2	15	631	0.2	0.7
Other	44	80	84	3.7	4.0

Source: China Customs Statistics.

Finally, the figure below shows the monthly evolution of the United States and E.U. import shares of Chinese pork imports in 2019. It is again notable that the U.S. share began 2019 with a 4.6-percent

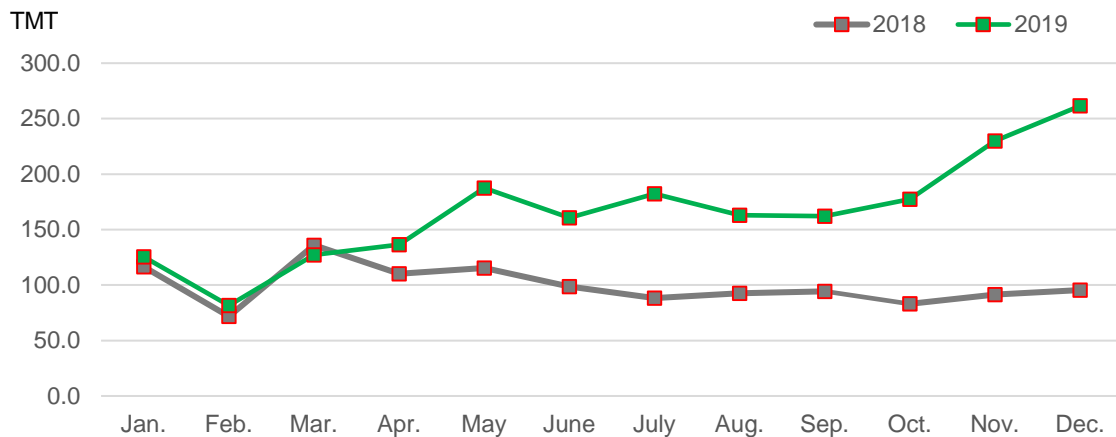
share of Chinese imports in January and ended the year with a 13.8-percent share, for an average of 12.3 percent of Chinese pork imports. Retaliatory tariffs imposed by the Chinese Government in 2018 played a role in reducing the U.S. share, with the growing U.S. share in 2019 attributable to comparatively low U.S. pork prices, and—as the last figure shows—to Chinese import demand that began the year at a stepped-up pace but quickly mushroomed as losses from ASF became more pronounced.

Evolution of U.S. and E.U. shares of Chinese pork imports, 2019



Source: China Customs Statistics.

China pork imports, 2018 and 2019



Source: China Customs Statistics.

Poultry

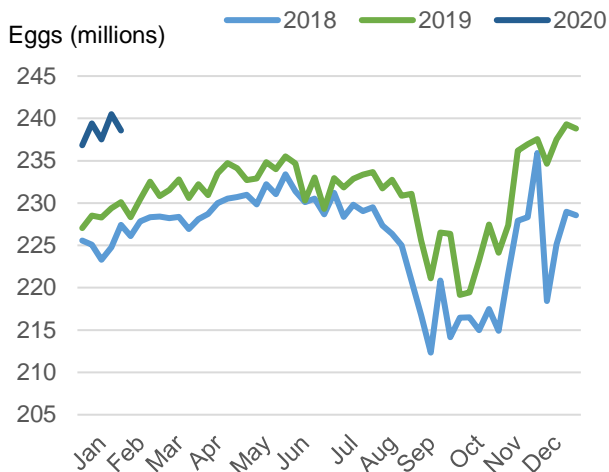
Kim Ha and Grace Grossen

2020 Broiler Production Revised Up on Production Indicators

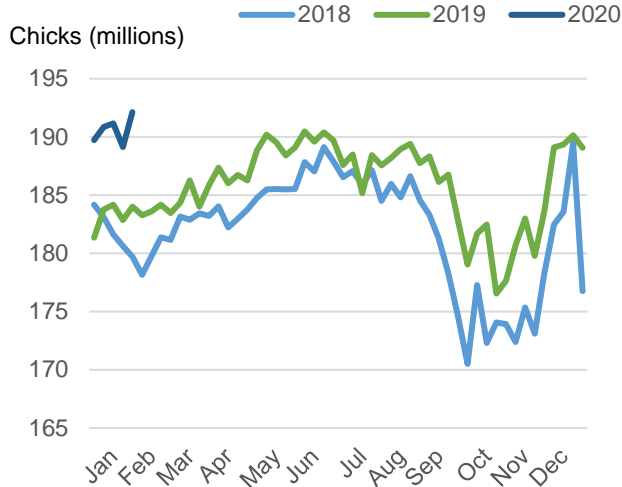
December broiler production is estimated at 3.6 billion pounds, a year-over-year increase of 7.2 percent when adjusted for slaughter days. Slaughter numbers increased by 4.2 percent (adjusted for slaughter days), while average weights increased by 2.5 percent. Total 2019 production amounted to 43.9 billion pounds, a year-over-year increase of 3 percent. Birds slaughtered totaled 9.2 billion (a year-over-year increase of just over 2 percent), while aggregate average live weights reached 6.32 pounds. This 1-percent increase in bird weights was due to an increasing share of heavy-bird production (i.e., of birds weighing more than 6.25 lbs), which increased by 2.4 percentage points in 2019.

Preliminary weekly slaughter data point to continued year-over-year increases in slaughter and average live weights in January. Additionally, eggs set and chick placements have been trending higher year over year (see chart), averaging increases of 4.9 percent and 4.5 percent over the past 10 and 7 weeks,¹ respectively, suggesting a larger-than-previously-expected number of birds available for marketing in the coming months. Furthermore, the broiler layer flock continues to be higher relative to last year. Based on more birds available for slaughter thus far in the year and an increasing broiler layer flock supporting increased broiler availability, the 2020 production forecast was increased to 45.8 billion pounds, more than 4 percent over 2019 production.

Broiler eggs set (weekly)



Broiler chick placements (weekly)



Source: USDA, National Agricultural Statistical Service.

¹ The approximate time for broiler eggs and chicks to reach market weight, respectively.

December ending stocks are estimated at 921 million pounds. Although 2019 ending stocks came in lower than expected—partly due to an 11-million-pound downward revision to November ending stocks—the December 2019 ending inventories represent the highest year-end stocks to date. Of the 76.8 million pounds added to cold storage since the beginning of the year, other broiler meat represented 46 percent, while breast meat, leg quarters, and thigh meat represented 37, 26, and 18 percent,² respectively. Anticipated increases in broiler supplies in 2020 are expected to continue weighing on cold storage inventories; however, given that 2020 stocks started out lower than expected, the 2020 ending stocks forecast was revised down to 915 million pounds.

The whole bird (National Composite) wholesale price averaged 90.56 cents per pound in January, 8.4 percent lower year over year and 2.8 percent lower than the 5-year average. Despite the benchmark price being down in January, recent price movements exceeded expectations, which was the basis for increasing the first-quarter price forecast to 89 cents per pound. The outlying quarters remain unchanged.

2019 Broiler Trade Volumes and Values Up From 2018

Broiler exports in December totaled 586 million pounds, finishing out 2019 at 7.1 billion pounds, a 0.6-percent increase over 2018. In 2019, Mexico continued to be the largest U.S. broiler export market (in terms of volume) (see table), while Cuba became the second-largest market. In Cuba, the implementation of Title III of the Helms-Burton Act in the early part of the year brought significant uncertainty to 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; however, exports to Cuba dropped off significantly in the fourth quarter, likely due at least in part to foreign exchange constraints. Exports to Georgia increased by 139 million pounds year over year, but it is likely that the ultimate destination for much of this volume was Kazakhstan. Shipments to Vietnam increased by 109 million pounds, likely due to increased demand for protein imports stemming from losses from African Swine Fever. Foreign sales to Angola decreased significantly by 94 million pounds, which can likely be attributed to Angola's depreciating Kwana.

² Sum exceeds 100 percent, as cold storage of wings and thighs and thigh quarters decreased, offsetting those broiler cuts that increased.

U.S. broiler exports: Volume, value, and export share for the 10 largest markets, 2018 and 2019

Country	Exports			Export share		
	2018	2019	% change	2018	2019	Rank
Volume						
	<i>Million pounds</i>		%	%	%	
Mexico	1,435	1,506	4.9	20.3	21.2	
Cuba	430	484	12.5	6.1	6.8	↑
Taiwan	439	455	3.7	6.2	6.4	
Angola	461	367	-20.4	6.5	5.2	↓
Vietnam	223	332	48.8	3.2	4.7	↑
Canada	311	287	-7.9	4.4	4.0	↓
Guatemala	272	286	4.9	3.9	4.0	↓
Georgia	117	256	118.3	1.7	3.6	↑
Hong Kong	252	234	-7.4	3.6	3.3	↓
Philippines	251	216	-13.8	3.5	3.0	↓
World	7,069	7,109	0.6	100.0	100.0	
Value						
	<i>Million dollars</i>		%	%	%	
World	3,152	3,231	2.5	100.0	100.0	

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

In terms of value, 2019 broiler exports were valued at 3.2 billion dollars, 2.5 percent higher than 2018, largely due to higher U.S. leg and leg quarter prices, which represent approximately 60 percent of export volumes. Both the export and import forecasts remain unchanged.

2020 Egg Production Expectations Increase; Stocks Revised Up

December table egg production is estimated at 716 million dozen, a 4-percent increase over last year. This increase reflected a 2.8-percent increase in the monthly average table egg laying flock and a 1.2-percent increase in the lay rate. In 2019 table egg production totaled 8,214 million dozen, 3.3 percent higher than 2018, while hatching egg production increased 1.6 percent. The table egg laying flock and lay rate continue to exceed year-earlier levels (see chart), increasing expectations for table egg production. The 2020 table egg production forecast was revised up to 8,330 million dozen, more than 1 percent higher than 2019. Given expectations for growth in the table egg layer flock and increased broiler production, the 2020 hatching egg production forecast was revised up to 1,235 million dozen, more than 4 percent higher than 2019.

Table egg layers (first of month)

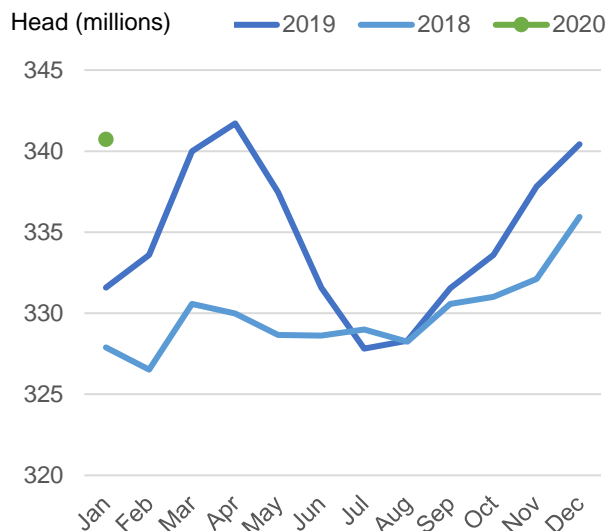
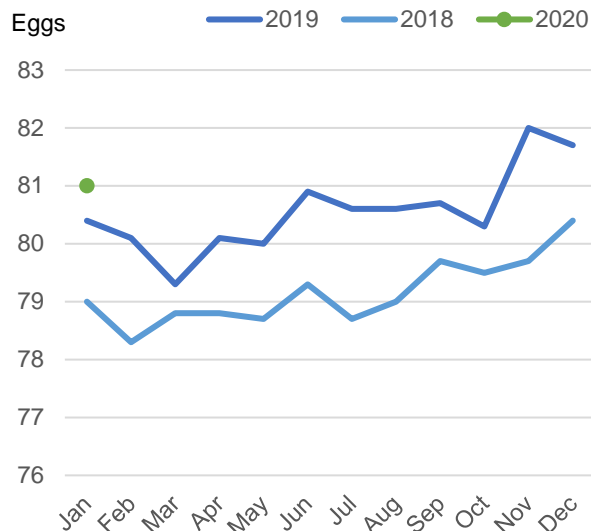


Table eggs per 100 layers (first of month)



Source: USDA, National Agricultural Statistics Service.

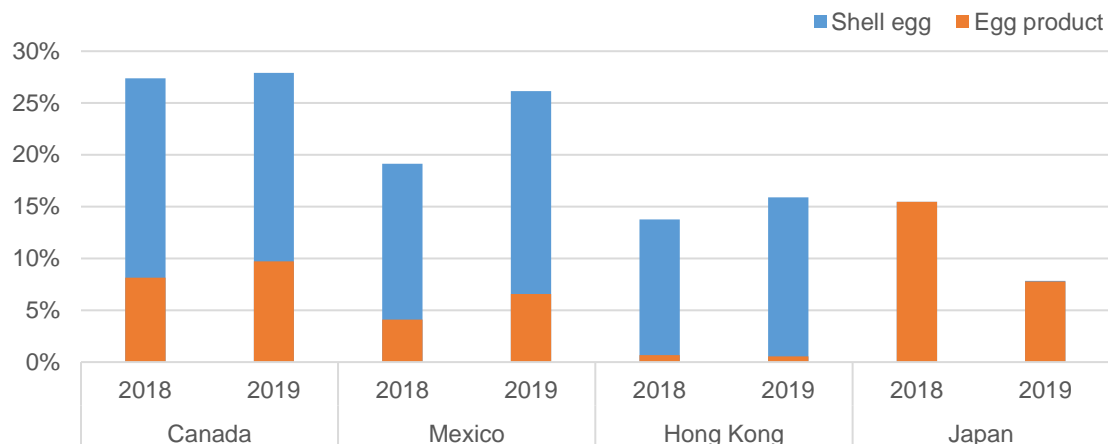
2019 ending stocks are estimated at 108.7 million dozen, nearly 30 million dozen or 38 percent higher than last year. Compared to the beginning of the year, frozen egg storage increased by almost 9 million dozen, while dried egg inventories increased by more than 21 million dozen. Given the higher-than-expected 2020 beginning inventories, the 2020 ending stocks forecast was revised up to 121 million pounds.

January wholesale table egg prices (New York, Grade A Large) averaged 88.38 cents per dozen, 24 percent lower year over year and 27 percent lower than the 5-year average. Despite relatively low prices in January, recent price movements have been stronger than expected and prices should receive support from increased buying activity ahead of Easter. The 2020 price forecast was increased to 99.5 cents per dozen.

2019 Egg Exports Up Slightly

December exports of eggs and egg products are estimated at 29.7 million dozen, finishing out 2019 at 334.1 million dozen, an increase of 0.3 percent year over year. 2019 shell-egg exports increased by 9.6 percent year over year, while foreign sales of egg products decreased by 12.6 percent. For the year, the top four largest markets (in terms of volume) continue to be Canada, Mexico, Hong Kong, and Japan, which combined represented 78 percent of 2019 export volumes. Exports to Canada, Mexico, and Hong Kong—which are predominantly comprised of shell eggs—increased in volume share, while the Japanese market—which is entirely egg products—decreased by 8 percentage points. Both the 2020 export and import forecasts remain unchanged from last month.

Percent share of egg and egg product exports by country (2018 and 2019)



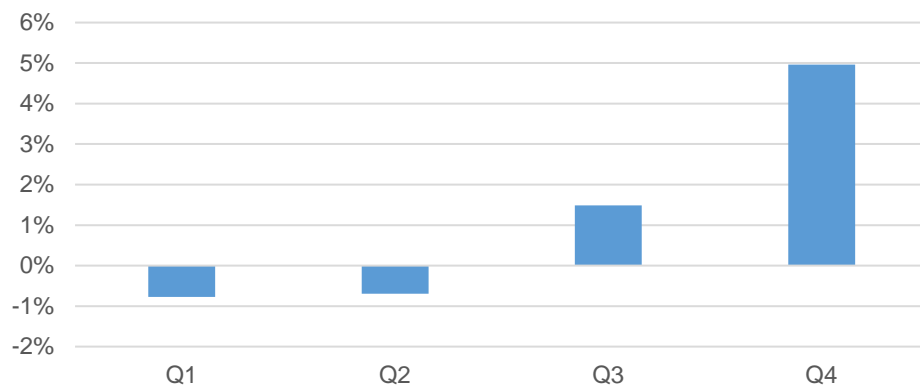
Source: USDA, Economic Research Service.

2020 Turkey Production Forecast Revised Down

December turkey production is estimated at 447 million pounds, a year-over-year decrease of 5.1 percent, adjusted for slaughter days. This decrease was comprised of a 7-percent decrease in slaughter numbers (adjusted for slaughter days) and a 2-percent increase in average live weights. In 2019 total production amounted to 5,817 million pounds, a decrease of 1 percent compared to 2018. Annual slaughter numbers decreased by 3.9 percent relative to 2018, while average weights increased by 3 percent. This increase in average weights was driven by higher average weights for both hens and toms.

Production in the first half of 2020 is expected to remain below 2019 as producers work to match production to expected demand and clear overhanging stocks; however, with higher forecast wholesale turkey prices in 2020, it is likely returns will provide incentives to increase production above year-earlier levels in the second half of the year (see chart). The 2020 production forecast was revised down by 20 million pounds to 5,890 million pounds, reflecting an expected slower pace of production recovery in 2020. This would be an increase of 1 percent over 2019 production.

Forecast year-over-year growth of turkey production

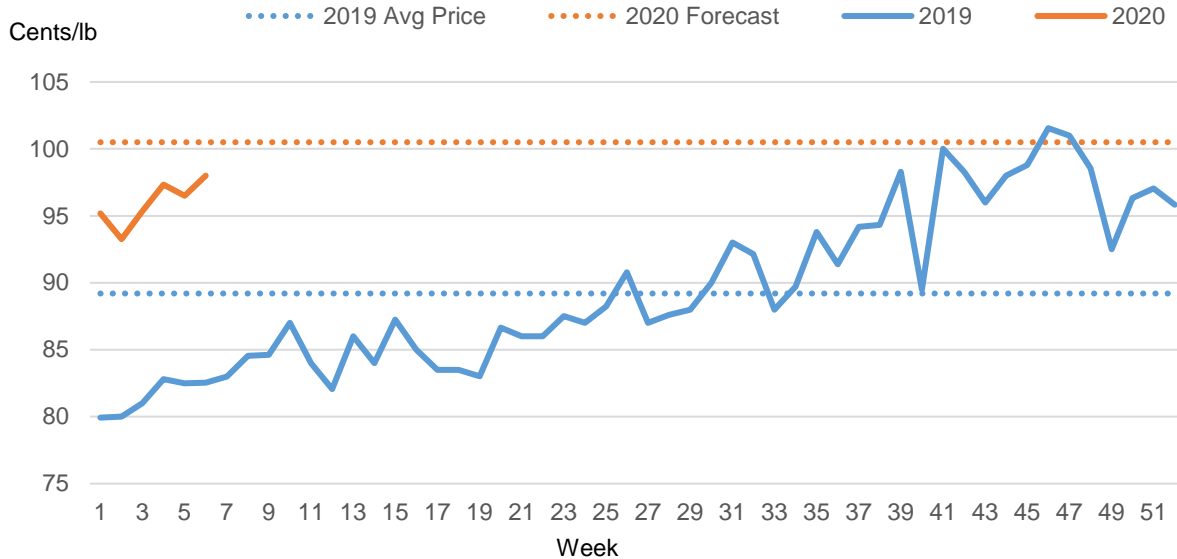


Source: USDA, Economic Research Service using data from USDA, World Agricultural Supply and Demand Estimates.

2020 Turkey Price Forecast Revised Up

The weighted average wholesale turkey price for January was 95.5 cents per pound. This is a 17.9 percent year-over-year increase from January of 2019, before the steady increase of prices last year. The 2020 price forecast was revised up to 100.5 cents/pound as the prices are expected to follow more typical patterns with support from slower forecast growth in production.

Frozen whole hen wholesale turkey price, weekly



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

Turkey Exports Grew in 2019

While the fourth-quarter exports decreased slightly year over year from 170 to 167.5 million pounds, the annual total increased by 4.6 percent to 639 million pounds in 2019. December 2019 exports were estimated at 45.9 million pounds, including 387 thousand pounds exported to China. Mexico accounted for over 60 percent of U.S. turkey exports in the fourth quarter of 2019. The 2020 turkey export forecast was decreased to 660 million pounds due to increased competition in the global market from other meats, a reduced U.S. production forecast, and higher forecast domestic prices. This would be a 3.3-percent increase from 2019. The 2020 import forecast remains at 12 million pounds as turkey plants in Israel, which exported over 2 million pounds of turkey to the United States in 2018, still have not been reapproved.

Suggested Citation

Livestock, Dairy, and Poultry Outlook, LDP-M-308, U.S. Department of Agriculture, Economic Research Service, February 18, 2020

	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	6,726	6,742	26,187	6,666	6,726	6,819	6,862	26,872	6,414	6,814	6,923	7,000	27,151	6,665	7,160	6,830	6,825	27,480
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	26,515	6,838	6,615	6,706	7,478	27,627	7,280	6,865	7,015	7,225	28,385
Lamb and mutton	38	39	36	37	150	37	36	35	37	145	39	39	39	39	153	37	37	35	40	151	38	35	35	38	146
Broilers	10,039	10,253	10,338	10,065	40,661	10,233	10,407	10,551	10,472	41,662	10,385	10,687	10,940	10,888	42,601	10,384	10,933	11,163	11,397	43,877	11,100	11,430	11,775	11,450	45,775
Turkeys	1,435	1,520	1,515	1,488	5,981	1,488	1,482	1,479	1,533	5,981	1,488	1,477	1,431	1,318	5,878	1,446	1,430	1,453	1,467	5,816	1,435	1,440	1,475	1,540	5,890
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	26,669	27,294	105,227	26,663	27,105	27,291	27,729	108,788
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	2,041	2,114	8,214	2,045	2,070	2,085	2,130	8,330
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	14.5	14.8	57.9	14.1	15.0	14.1	14.1	57.3
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	12.8	13.9	52.3	13.1	12.6	12.9	13.8	52.3
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	0.2	0.3	1.1	0.3	0.3	0.3	0.2	1.0
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	24.6	23.8	94.8	24.1	24.8	25.2	24.4	98.5
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	4.0	4.8	16.0	3.4	3.5	4.0	4.8	15.8
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	56.5	58.0	223.7	55.5	56.7	56.8	57.7	226.5
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	72.0	74.2	290.1	72.8	73.4	73.8	75.1	295.1
Market prices																									
Beef steers, 5 area Direct, S/ewt	134.81	127.88	113.76	107.69	120.86	129.06	132.76	112.46	117.88	121.52	125.60	116.72	110.83	115.32	117.12	125.27	118.79	108.16	114.88	116.78	123	118	112	117	
Fiber Choice, O/C/D, S, S/ewt	155.83	146.49	140.66	128.30	142.82	129.56	147.25	148.12	154.88	145.08	146.29	143.02	150.66	147.90	146.57	140.76	140.51	140.19	147.44	142.23	145	146	146	146	
Cutter Choice, N/direct, 1/2, S/ewt	73.90	75.87	73.16	57.75	70.07	62.63	69.55	69.78	58.68	65.16	61.60	61.32	57.74	46.07	57.43	53.34	58.30	60.42	53.66	56.43	60	63	64	55	
Choice slaughter lambs, St. Joseph, S/ewt	136.76	139.35	162.47	142.71	145.32	167.94	172.40	156.92	154.90	136.83	147.92	154.86	147.95	134.30	136.23	156.16	154.93	150.99	149.88	152	155	155	155	154.5	
Natl base cost, 51-52 % lean, live equivalent, S/ewt	44.63	53.71	49.26	37.02	46.16	49.73	55.59	44.89	50.48	49.12	47.91	43.90	42.77	45.93	40.67	57.95	50.08	43.11	47.95	44	51	54	46	49	
Broilers, national composite, cents/lb	84.6	95.0	81.7	78.0	84.3	88.5	104.7	94.9	86.1	95.7	95.7	115.1	86.7	97.80	94.0	97.7	82.0	80.60	89.20	89.0	95.0	86.0	78.0	87.0	
Turkeys, national, cents/lb	114.7	116.5	120.7	116.6	117.1	100.4	99.1	96.9	88.0	96.1	79.4	79.6	80.4	81.4	80.20	82.8	83.5	80.8	87.80	89.20	88.0	100.0	101.0	100.5	
Eggs, New York, cents/doz.	121.5	67.9	71.6	81.7	85.7	80.0	74.7	102.1	147.0	100.9	179.6	124.4	120.8	125.6	137.60	107.3	69.7	81.9	117.20	94.00	98.0	98.0	100.0	99.5	
U.S. trade, million lb, carcass wt. equivalent																									
Beef & veal exports	535	621	660	740	2,557	653	680	746	781	2,859	731	801	828	800	3,161	696	790	788	748	3,022	760	830	845	865	3,300
Lamb and mutton imports	792	831	751	638	3,012	700	812	814	668	2,993	721	805	807	664	2,998	738	836	771	711	3,057	700	735	745	700	2,880
Pork exports	68	55	41	52	216	80	58	57	57	273	80	66	70	57	273	80	73	53	66	272	75	64	61	57	257
Pork imports	1,239	1,317	1,235	1,457	5,239	1,432	1,426	1,230	1,544	5,622	1,516	1,520	1,298	1,542	5,876	1,446	1,535	1,516	1,825	6,231	1,825	1,700	1,700	2,150	7,375
Broiler exports	293	257	266	275	1,091	264	281	283	287	1,116	279	270	245	248	1,042	222	227	231	227	945	215	205	205	210	835
Turkey 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	1,784	1,880	7,109	1,750	1,800	1,915	1,960	7,425
Live swine imports (thousand head)	116	141	160	153	569	133	148	168	173	622	153	147	141	170	611	147	166	159	168	639	150	150	165	175	660
Live swine imports (thousand head)	1,408	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	5,250	1,339	1,255	1,201	1,305	5,100	1,300	1,235	1,175	1,290	4,990

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. For further information, contact Mildred Halevy, mildred.halevy@usda.gov. Updated 2/14/2020

Dairy Forecasts

	2018						2019					2020				
	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual
Milk cows (thousands)	9,399	9,344	9,327	9,319	9,337	9,332	9,330	9,335	9,335	9,335	9,335	9,330	9,335	9,335	9,335	9,335
Milk per cow (pounds)	23,149	5,827	5,980	5,824	5,764	23,396	5,960	6,085	5,885	5,855	23,785	5,960	6,085	5,885	5,855	23,785
Milk production (billion pounds)	217.6	54.5	55.8	54.3	53.8	218.3	55.6	56.8	54.9	54.7	222.0	55.6	56.8	54.9	54.7	222.0
Farm use	1.0	0.3	0.3	0.3	0.3	1.0	0.3	0.3	0.3	0.3	1.0	0.3	0.3	0.3	0.3	1.0
Milk marketings	216.6	54.2	55.5	54.0	53.5	217.3	55.4	56.5	54.7	54.4	221.0	55.4	56.5	54.7	54.4	221.0
Milk-fat (billion pounds milk equiv.)																
Milk marketings	216.6	54.2	55.5	54.0	53.6	217.3	55.4	56.5	54.7	54.4	221.0	55.4	56.5	54.7	54.4	221.0
Beginning commercial stocks	13.4	13.8	16.1	18.2	17.1	13.8	13.6	16.5	18.5	16.8	13.6	13.6	16.5	18.5	16.8	13.6
Imports	6.3	1.4	1.9	2.0	1.7	7.0	1.3	1.6	1.7	1.7	6.3	1.3	1.6	1.7	1.7	6.3
Total supply	236.3	69.4	73.5	74.2	72.3	238.0	70.3	74.6	74.9	72.9	241.0	70.3	74.6	74.9	72.9	241.0
Commercial exports	10.4	2.4	2.5	2.2	2.1	9.1	2.2	2.5	2.4	2.2	9.4	2.2	2.5	2.4	2.2	9.4
Ending commercial stocks	13.8	16.1	18.2	17.1	13.6	13.6	16.5	18.5	16.8	13.4	13.4	16.5	18.5	16.8	13.4	13.4
Commodity Credit Corporation donations	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.1	0.1	0.0	0.3	0.1	0.1	0.1	0.0	0.3
Domestic commercial use	212.1	50.9	52.8	54.9	56.5	215.1	51.5	53.6	55.6	57.3	217.9	51.5	53.6	55.6	57.3	217.9
Skim solids (billion pounds milk equiv.)																
Milk marketings	216.6	54.2	55.5	54.0	53.6	217.3	55.4	56.5	54.7	54.4	221.0	55.4	56.5	54.7	54.4	221.0
Beginning commercial stocks	11.8	10.7	11.1	11.2	10.8	10.7	10.2	11.1	11.1	10.3	10.2	10.2	11.1	11.1	10.3	10.2
Imports	5.5	1.3	1.6	1.5	1.5	5.8	1.3	1.4	1.4	1.4	5.5	1.3	1.4	1.4	1.4	5.5
Total supply	233.8	66.2	68.2	66.6	65.8	233.8	66.8	69.0	67.2	66.1	236.7	66.8	69.0	67.2	66.1	236.7
Commercial exports	44.7	9.9	10.3	10.3	11.0	41.6	10.5	11.3	11.1	10.8	43.6	10.5	11.3	11.1	10.8	43.6
Ending commercial stocks	10.7	11.1	11.2	10.8	10.2	10.2	11.1	11.1	10.3	10.3	10.3	11.1	11.1	10.3	10.3	10.3
Commodity Credit Corporation donations	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Domestic commercial use	178.5	45.1	46.7	45.5	44.5	181.8	45.2	46.6	45.8	45.0	182.7	45.2	46.6	45.8	45.0	182.7
Milk prices (dollars/cwt) ¹																
All milk	16.27	16.97	17.93	18.97	20.53	18.60	18.95	18.75	18.70	19.05	18.85	18.95	18.75	18.70	19.05	18.85
Class III	14.61	14.30	16.20	17.82	19.51	16.96	16.75	16.90	16.95	17.15	16.95	16.75	16.90	16.95	17.15	16.95
Class IV	14.23	15.68	16.28	16.66	16.56	16.30	16.50	16.70	16.90	16.80	16.70	16.50	16.70	16.90	16.80	16.70
Product prices (dollars/pound) ²																
Cheddar cheese	1.538	1.440	1.678	1.852	2.064	1.759	1.775	1.790	1.790	1.810	1.790	1.775	1.790	1.790	1.810	1.790
Dry whey	0.342	0.449	0.378	0.367	0.325	0.380	0.345	0.340	0.350	0.350	0.345	0.345	0.340	0.350	0.350	0.345
Butter	2.257	2.258	2.309	2.330	2.076	2.243	1.875	1.920	1.940	1.900	1.910	1.875	1.920	1.940	1.900	1.910
Nonfat dry milk	0.795	0.963	1.007	1.042	1.155	1.042	1.245	1.250	1.260	1.270	1.255	1.245	1.250	1.260	1.270	1.255

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; 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*.

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