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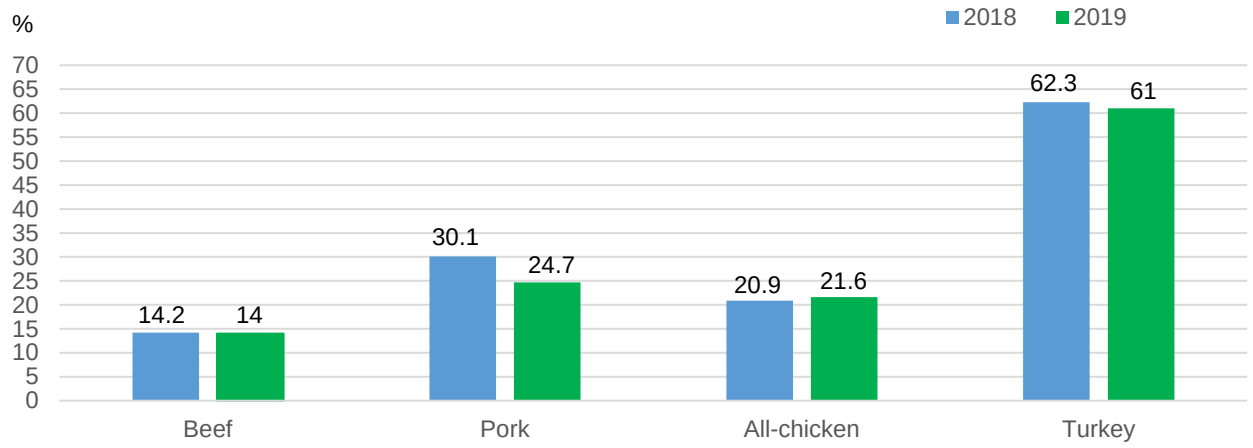
Livestock, Dairy, and Poultry Outlook

Mexico Was the Most Important Destination for Several U.S. Meat Protein Exports in 2019

William Hahn

A significant proportion of major U.S. meat protein production was exported in 2019. The most important meat export volumes last year were all-chicken (broiler and other) meat, the largest at 7.2 billion pounds, followed by pork at 6.3 billion pounds, beef at 3 billion pounds, and turkey meat with 639 million pounds. In terms of share of production exported, pork was by far the largest last year: 22.9 percent of commercial pork production was exported in 2019. All-chicken came in second, with exports accounting for 16.2 percent of production. For both beef and turkey last year, about 11 percent of production was exported. In 2019 Mexico was the largest foreign destination for U.S-exported all-chicken, pork, and turkey, and the third-largest for beef. The top two U.S. beef export destinations in 2019 were Japan and South Korea.

Mexico's 2018/19 share of U.S. exports of major meat proteins



*All-chicken is the sum of broiler and other chicken export data.
Source: USDA, Economic Research Service.

Beef/Cattle: Beef production in 2020 was raised on a faster pace of fed cattle slaughter and heavier dressed weights. Cattle prices were reduced on price weakness and higher production. Prices for fed steers in the 5-Area marketing region are expected to average 6 percent below a year ago in the first quarter. The beef import forecast was raised on higher expected imports of processing-grade beef, while beef exports were reduced on weaker demand overseas.

Dairy: Based on recent milk production data, the 2020 forecast has been raised. The dairy export forecast on a skim-solids milk-equivalent basis has been increased due to robust exports in January, improved access to China's markets, and the impact of drought on New Zealand's dairy sector. However, with potential effects of coronavirus (COVID-19), expectations for higher dairy export forecasts have been tempered. Based on recent weakening of dairy product prices, higher expected milk production, and lower expectations for global demand, the all-milk price forecast for 2020 has been lowered to $18.25 per cwt, 60 cents lower than last month's forecast.

Pork/Hogs: First-quarter pork production was raised to 7.4 billion pounds, 8 percent ahead of a year ago, anticipating that very strong slaughter hog numbers will continue through the end of the quarter. Increased hog demand is likely to push first-quarter average hog prices above year-ago averages. First-quarter live equivalent 51-52 percent lean hog prices are expected to average out to $40.56 per cwt, almost 4 percent above a year ago, but below most producers' cost of production breakeven. 2020 pork exports kicked off with a bang in January, increasing almost 39 percent year over year, driven primarily by significant production deficits in China caused by African Swine Fever, but also by strong shipments to Mexico.

Poultry/Eggs: The 2020 broiler production forecast was revised up on production indicators, as well as expectations for continued growth in the broiler breeding flock, while the 2020 price forecast was decreased on the expectation that supply will continue to put downward pressure on prices. The first-quarter broiler export forecast was increased due to expectations for strong demand in Southeast Asia and Mexico. The 2020 table egg production forecast was increased based on lay rates, while the price forecast was increased on recent price movements and expectations for strengthening demand. The 2020 turkey production forecast was increased on heavier average weights and net poult placement data. Wholesale turkey prices remain above a year ago. Turkey exports for the first quarter of 2020 were revised down to 140 million pounds due to lower-than-expected exports in January.

Beef/Cattle

Russell Knight and Christopher Davis

Fed Cattle Slaughter and Dressed Weights Lift Production Forecast

The 2020 beef production forecast for 2020 was raised by 240 million pounds to 27.7 billion pounds from last month. This increase is based on the pace of fed cattle slaughter and heavier expected cattle dressed weights. Both fed cattle slaughter and carcass weights during February were above expectations. Based on the USDA Agricultural Marketing Service weekly livestock slaughter reported for the week ending February 22, average dressed weights were 21 pounds (3 percent) above a year ago for the same week, and nearly 10 pounds above the 5-year average for the same period. Steer and heifer dressed weights were up 26 pounds and 13 pounds, respectively, above year-ago levels for the same period. This was the first winter in 3 years in which weather events did not significantly affect cattle performance in feedlots. Further contributing to higher expected overall dressed weights is the anticipation of a smaller proportion of nonfed cattle in the slaughter mix in the first quarter.

However, for the third quarter, higher dressed weights were more than offset by a reduction in expected fed cattle marketings. Based on the February USDA National Agricultural Statistical Service (NASS) *Cattle on Feed* report, there were 0.3 percent fewer net placements in January. This was lower than expected and led to a reduction in expected marketings and fed cattle slaughter for third-quarter 2020.

Cattle Prices Weaker on Beef Production and Market Uncertainty

Since the February *Outlook* report, fed cattle prices have been trending downward when they should be trending seasonally upward; prices typically peak in the spring. Seasonally, the first quarter is normally when the fewest fed cattle are slaughtered and carcass weights begin trending lighter. However, with the current pace of slaughter, combined with higher trending carcass weights, increasing supplies of beef and pressure from large supplies of competing meats are not conducive to higher boxed beef prices. In addition, buyers of wholesale boxed beef may be anticipating that prices will stay relatively low going into the grilling season.

In a normal year, it would be expected that heavier carcass weights and greater beef production might pressure fed cattle prices, absent any externalities. However, price signals indicated by the futures market may be encouraging feedlots to market cattle in as timely a fashion as possible. Packers' margins are strong for this time of year and have likely supported the increased pace of slaughter. Fortunately, this has kept the supply of fed cattle from backing up, despite the largest number of cattle on feed on February 1 since 2008.

Based on recent price data, the first-quarter 2020 average price for fed steers in the 5-Area marketing region was reduced by $5 to $118 per hundredweight (cwt). This price weakness was carried over into the second and third quarters, which resulted in a 2020 price forecast of $114.50 per cwt.

This price weakness is also spilling over into the feeder cattle markets. With lower prices received for fed cattle, feedlots are likely to offer lower prices for feeder calves. Based on current price weakness,

first-quarter 2020 was reduced $7 to $138 per cwt, and weaker prices were carried through the rest of the year, resulting in an annual price forecast of $142.50 per cwt, $3.50 below last month.

Beef Imports Start the Year Lower Than Last January

After 3 consecutive months of growth in U.S. imports year over year, January's beef imports dropped to 244 million pounds, 3.5 percent below last year. The largest reduction in beef imports was from New Zealand, which likely diverted exports to China. Imports from New Zealand were 26 percent or 10.2 million pounds less than those received the previous year. January's year-over-year beef imports from Canada were 2.2 million pounds less than January 2019. There were some increases in year-over-year U.S. beef imports from sources such as Australia, Mexico, and Nicaragua, but they were insufficient to outweigh the overall lower imports from most major regions.

However, greater domestic fed cattle slaughter and strength in U.S. cull cow prices are expected to spur demand for imported lean processing beef. As a result, the first- and second-quarter 2020 import forecasts were raised by 20 and 15 million pounds to 720 and 750 million pounds, respectively.

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

Major beef suppliers	January 2019	January 2020	Difference in volume	Year-over-Year change
	--- Million pounds ---			Percent
Australia	59.6	66.1	6.6	1.1
Canada	63.8	61.7	-2.2	1.0
New Zealand	38.7	28.4	-10.2	0.7
Mexico	46.9	49.3	2.4	1.0
Brazil	11.5	7.4	-4.1	0.6
Uruguay	10.5	5.8	-4.7	0.6
Nicaragua	16.3	17.2	0.9	1.1

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

Beef Exports Grow in New Year, but Less Than Expected

Following 12 months of year-over-year reductions, January 2020 U.S. beef exports were 3 percent above year-earlier levels, boosted by increased domestic supply. January's beef exports amounted to 245 million pounds, the largest shipment with which the United States has ever started the year. For January 2020, Japan, the U.S. top beef destination, was down 3 percent or 1.8 million pounds year over year. U.S. exports to all other major beef destinations exceeded or equaled shipments from last year. Of the seven countries displayed below, Taiwan and Vietnam had the largest year-over-year increases.

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

Major beef destinations	January 2019	January 2020	Difference in volume	Year-over-Year change
	--- Million pounds ---			Percent
Japan	68.3	66.5	-1.8	1.0
Mexico	38.8	38.6	-0.2	1.0
South Korea	46.6	47.4	0.7	1.0
Canada	24.2	24.2	0.0	1.0
Hong Kong	17.2	17.2	0.1	1.0
Taiwan	13.2	16.3	3.1	1.2
Vietnam	1.5	2.8	1.3	1.9

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

The 2020 beef export forecasts for the first and second quarters were lowered by 25 and 15 million pounds, respectively, due to weaker expected demand in several markets. However, some of this demand is expected to shift to the third quarter, which was raised by 5 million pounds to 850 million pounds. Fourth-quarter 2020 was unchanged from last month.

Dairy

Jerry Cessna

Recent Developments in Dairy Markets

From the week ending February 1 to the week ending March 7, most wholesale dairy product prices reported in the USDA *National Dairy Products Sales Report* (NDPSR) declined. The butter price fell by 13.6 cents to $1.7352 per pound. The nonfat dry milk (NDM) price declined by 10.3 cents to $1.1549 per pound. Prices for Cheddar cheese 40-pound blocks and 500-pound barrels fell to $1.8464 (-9.8 cents) and $1.6232 (-0.8 cents), respectively. The dry whey price rose 2.2 cents to $0.3750 per pound.

Dairy wholesale product prices (dollars per pound)

	For the week ending		
	Feb. 1	Mar. 7	Change
Butter	1.8711	1.7352	-0.1359
Cheddar cheese			
40-pound blocks	1.9445	1.8464	-0.0981
500-pound barrels [1]	1.6313	1.6232	-0.0081
Nonfat dry milk	1.2579	1.1549	-0.1030
Dry whey	0.3529	0.3750	0.0221

[1] Adjusted to 38-percent moisture.

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

In February, U.S. domestic prices were competitive with international export prices of other major global suppliers. Butter prices for Oceania and Europe were $1.891 and $1.786 per pound, respectively, at the midpoints of the ranges. The Oceania Cheddar cheese export price was $2.010 per pound. Skim milk powder (SMP) prices for Oceania and Europe were $1.363 and $1.287 per pound, respectively. Europe's dry whey export price was $0.414 per pound.

International export prices for dairy products (dollars per pound)

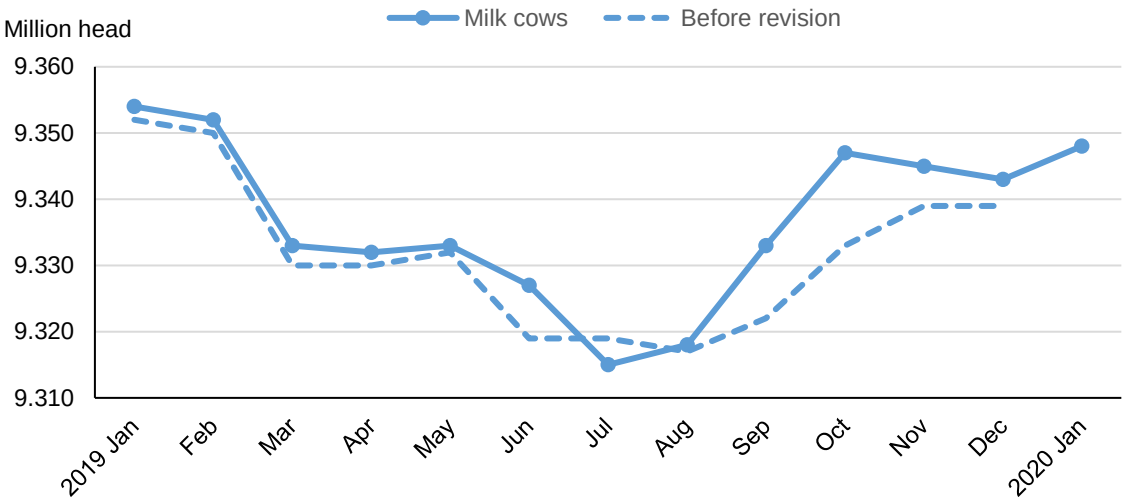
	January	February	Change
Butter			
Oceania	1.858	1.891	0.033
Europe	1.835	1.786	-0.049
Cheddar cheese			
Oceania	1.830	2.010	0.180
Skim milk powder			
Oceania	1.395	1.363	-0.032
Europe	1.318	1.287	-0.031
Dry whey			
Europe	0.419	0.414	-0.005

Source: USDA, Agricultural Marketing Service.

In the latest *Milk Production* report, the USDA National Agricultural Statistics Service (NASS) revised its estimates for 2018 and 2019. The latest annual milk production estimate for 2019 is 218.382 billion pounds, an increase of 60 million from the estimate reported in January. The most recent estimate of milk production for December 2019 is 18.365 billion pounds, an upward revision of 88 million. The latest estimate for the average number of milk cows in December is 9.343 million head, an upward revision of 4,000 head. The most recent December yield estimate is 1,966 pounds per head, 9 pounds higher than previously reported.

For January 2020, milk production is estimated at 18.785 million pounds, 0.9 percent higher than January 2019. The milk cow estimate is 9.348 million head, 5,000 higher than December. Milk per cow for January 2020 is estimated at 2,010 pounds per head, 20 pounds higher than January 2019.

U.S. milk cows

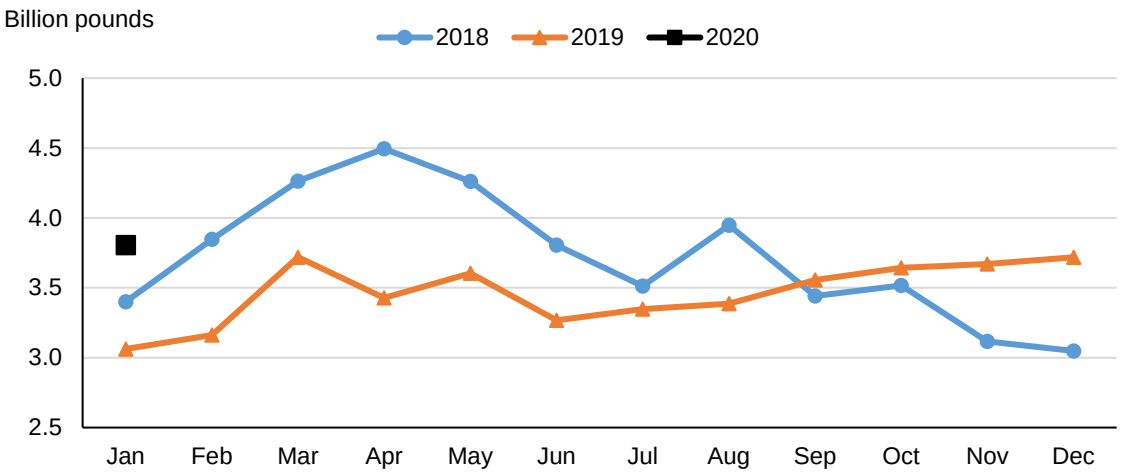


Source: USDA, National Agricultural Statistics Service.

In January, New Zealand milk production was down 0.7 percent from January 2019, while Australia milk production was up 0.5 percent. January milk production data are not yet available for all of the EU countries. In December, milk production of the top four dairy exporters (EU, New Zealand, United States, and Australia) totaled 54.5 billion pounds, a 0.9-percent increase from December 2018. EU milk production was up 1.2 percent, Australia was even with the previous year, and New Zealand was down 0.5 percent. New Zealand's North Island, where most dairy farms are located, has experienced a severe drought in recent months. The drought was declared a medium-scale adverse event for Northland and parts of Auckland by Agriculture Minister Damien O'Connor on February 11.

In January, U.S. dairy exports on a skim-solids milk-equivalent basis were robust, totaling 3.806 billion pounds, an increase of 87 million from December and 744 million from January 2019. This was a record high for January, surpassing 3.399 billion pounds in January 2018. By contrast, January dairy exports on a milk-fat milk-equivalent basis were comparatively low, totaling 674 million pounds, 21 million less than December and 12 million less than January 2019.

Commercial exports of U.S. dairy products on a skim-solids milk-equivalent basis



Sources: U.S. Department of Commerce, U.S. Census Bureau; and USDA, Economic Research Service calculations.

Notably, January nonfat dry milk and skim milk powder (NDM&SMP) exports totaled 153.3 million pounds, 0.8 million higher than December and 44.5 million higher than January 2019. NDM&SMP exports to Southeast Asia[1] were particularly strong, totaling 63.0 million pounds, 41.1 percent of total U.S. NDM&SMP exports for the month. U.S. exports of whey products[2] and lactose in January were up over January 2019 at 90.7 million pounds (+13.7 million) and 73.8 million pounds (+10.0 million), respectively. On the other hand, January exports of butter were below the previous year at 3.4 million pounds (-0.8 million). Exports of cheese totaled 61.7 million pounds in January, 0.2 million higher than January 2019.

In January, dairy imports on a milk-fat basis totaled 543 million pounds, 28 million higher than December and 64 million higher than January 2019. On a skim-solids basis, dairy imports totaled 476 million pounds, 43 million lower than December and 4 million below January 2019. Notably, January imports of anhydrous milk fat and butteroil totaled 140.5 million pounds, 83.1 million more than January 2019.

For the 3 months from November 2019 through January 2020, domestic use on a milk-fat basis was 53.8 billion pounds, 0.3 billion lower than the 3 months from November 2018 through January 2019. On a skim-solids basis, domestic use for the 3 months from November 2019 through January 2020 was 44.1 billion pounds, 1.3 billion lower than the same 3 months of the previous year. Ending stocks for January on a milk-fat basis were 15.1 billion pounds, 0.4 billion higher than January 2019. On a skim-solids basis, January ending stocks were 10.6 billion pounds, 0.3 billion lower than January 2019.

Uncertainties Due to Coronavirus

There are two types of potential effects of the coronavirus (COVID-19) on the U.S. dairy industry: (1) supply chain disruptions and (2) lower global demand for dairy products resulting from weaker economic conditions. Since data concerning domestic and foreign supply and demand quantities are not yet available for February or March, the extent of the effects on the U.S. dairy industry thus far are

[1] In January, the United States exported NDM&SMP to the following Southeast Asia countries: Philippines, Indonesia, Vietnam, Malaysia, Thailand, Singapore, and Cambodia.
[2] Whey products include dry whey, modified whey, and milk albumin.

unknown. Health authorities are highly uncertain of the severity and duration of the epidemic in the coming months, and macroeconomists are highly uncertain of the potential impact on the global economy.

The COVID-19 epidemic has already caused supply chain disruptions for exports to China. According to a Reuters news report, the average wait time for container vessels at Zhoushan in southern China spiked to more than 60 hours in the week of February 11-17. Due to travel restrictions for workers returning from the Lunar New Year holiday, several ports in China operated with reduced staffing. Since then, the situation at China's ports has started to improve as many workers have returned to work.

On March 2, the Organization for Economic Cooperation and Development (OECD) released an interim economic assessment. OECD projects that global GDP will grow by 2.4 percent in 2020, 0.5 percentage points lower than its November 2019 projection, if the epidemic peaks in China during the first quarter of 2020 and outbreaks elsewhere in the world are mild. However, with a longer lasting and more severe global outbreak, OECD projects that global GDP growth could drop to 1.5 percent in 2020. In addition to the high degree of uncertainty concerning global and domestic economic growth, there is also considerable uncertainty as to how changes in economic growth would affect dairy markets.

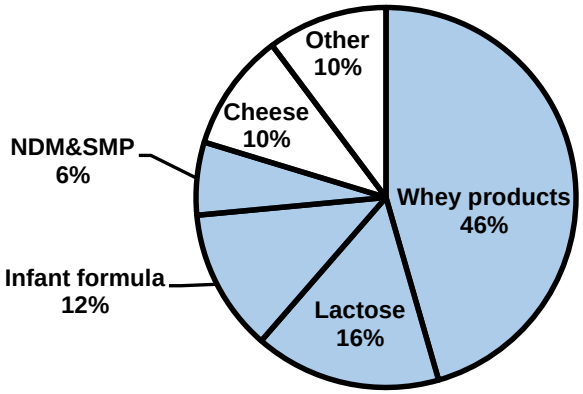
China's New Round of Tariff Exclusions

On February 18, 2020, China announced a new round of tariff exclusions for U.S. agricultural commodities impacted by the retaliatory tariffs levied by China. The announcement designates certain products for exclusion from the retaliatory tariffs.[3] However, China-based importers must apply for tariff exclusion. In addition to products specifically designated for exclusion, China's importers may apply for tariff exclusion for any product, provided that the product has not already received a tariff exclusion. The announcement stated that qualified importers could begin applying for exclusions beginning March 2, 2020. The bulk of dairy products that the United States exports to China are included in the exclusion list. In 2019, these products accounted for 80 percent of total value of U.S. dairy products exported to China.

[3] On September 11, 2019, China announced that 16 products would be exempt from retaliatory tariffs. The only dairy product in this list was modified whey for animal use with a protein content of 2-7 percent and a lactose content of 76-88 percent by weight. Whey permeate, a product often used for feeding piglets, meets these criteria.

Product-category shares of total U.S. dairy exports to China, by value in 2019

Shaded areas represent products that China has recently listed for a tariff exclusion process.[1]



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

Outlook for Feed Prices

The 2019/20 corn price forecast is $3.80 per bushel, 5 cents lower than last month's forecast. The 2019/20 soybean meal forecast is $305 per short ton, unchanged from the previous forecast. The alfalfa hay price in January was $171 per short ton, $4 lower than December and $8 lower than January 2019. The 5-State weighted-average price for premium alfalfa hay in January was $210 per short ton, $10 higher than the December but $11 lower than January 2019. For more information, see *Feed Outlook,* published by USDA, Economic Research Service.

Dairy Forecasts for 2020

Based on recent milk production data, the 2020 forecast for the number of milk cows has been raised to 9.345 million head, 10,000 higher than last month's forecast. Milk per cow is now forecast at 23,780 pounds, 5 pounds lower than the previous forecast. With the higher projection for milk cows more than offsetting the lower projection for milk per cow, the milk production forecast has been raised by 0.3 billion pounds to 222.3 billion.

With relatively low exports on a milk-fat basis in January, the export forecast for 2020 has been lowered to 9.2 billion pounds, 0.2 lower than last month's forecast. The forecast for 2020 dairy exports on a skim-solids basis has been raised to 43.9 billion pounds, 0.3 billion higher than last month's forecast. Strong exports of NDM&SMP, whey products, and lactose are expected to continue. The higher forecast reflects improved access to China's markets and the impact of drought on New Zealand's dairy sector. However, with potential effects of the COVID-19, expectations for higher dairy export forecasts have been tempered.

The import forecast for 2020 on a milk-fat basis has been raised to 6.8 billion pounds as higher imports of cheese and butterfat products are expected. On a skim solids basis, the forecast for 2020 has been

raised to 43.9 billion pounds, as higher imports of cheese, milk protein products, and other products are expected.

The forecast for domestic commercial use has been raised to 218.2 billion pounds on a milk-fat basis (+0.3 billion) but is unchanged at 182.7 billion pounds on a skim-solids basis. The forecast for ending stocks on a milk-fat basis has been raised to 14.1 billion pounds (+0.7 billion) and to 10.4 billion pounds on a skim-solids basis (+0.1 billion).

Based on recent price weakening, higher expected milk production, and lower expectations for global demand, 2020 price forecasts for cheese, butter, and NDM have been lowered to $1.755 (-3.5 cents), $1.845 (-6.5 cents), and $1.175 (-8.0 cents) per pound, respectively. With recent strengthening in the dry whey price, its forecast has been raised by 1.0 cent to $0.355 per pound.

With the lower expected cheese price more than offsetting the higher expected dry whey price, the Class III milk price forecast has been lowered $0.30 to $16.65 per hundredweight (cwt). With lower expected prices for butter and NDM, the Class IV price forecast has been lowered by $0.95 to $15.75 per cwt. The all-milk price forecast for 2020 is $18.25 per cwt, a reduction of $0.60 from last month's forecast of $18.85 per cwt.

Pork/Hogs

Mildred Haley

Heavy Slaughter Numbers in February Prompt an Increase in the First-Quarter Pork Production Forecast

Hog slaughter numbers continued to exceed expectations in February—similar to January—prompting an increase in the forecast of first-quarter pork production. At 10.7 million head, estimated federally inspected hog slaughter last month was more than 6 percent above February of last year. First-quarter pork production is now expected to be about 7.4 billion pounds, an 8-percent increase over production in 2019. This production volume is about 100 million pounds greater than last month's forecast and reflects a continuation of the pace of February's slaughter through the end of the quarter.

Despite larger numbers of hogs slaughtered in February, hog prices averaged higher than a year earlier, indicating that hog demand increased compared to February 2019. Live equivalent prices of 51-52 percent lean hogs averaged $40.56 per cwt in February, 3.9 percent above average prices in February 2019. Higher year-over-year hog prices are likely attributable to packer competition for hogs to fill expanded processing capacity, along with solid consumer—domestic and foreign—pork demand in the later part of the month.

It is notable that although average hog prices have been year-over-year higher for both January and February, the averages are at levels considerably below most hog producers' costs of production. Estimated returns to Farrow to Finish, Iowa, compiled and calculated by Iowa State University,[4] show January breakeven producer costs per cwt in the mid-40-dollar range. Consequently, the USDA first-quarter hog price forecast—$42 per cwt for average live equivalent 51-52 percent lean hogs—implies that many hog producers will not have covered first-quarter 2020 costs of production by the end of March.

USDA\NASS will release its *Quarterly Hogs and Pigs* report on March 26, 2020. The report will provide information on March 1 hog and pig inventories and producer farrowing intentions for the spring and summer pig crops, along with farrowing numbers and litter rates for the winter 2020 crop.

January Exports Up Sharply on Shipments to China and Mexico

U.S. pork exports in January were 663 million pounds, almost 39 percent ahead of volumes shipped a year earlier, due almost entirely to very large exports going to China and Mexico. Exports to China\Hong Kong totaled about 203 million pounds, almost 7 times more than the amount exported there in January 2019. Exports to Mexico were only slightly less impressive at about 156 million pounds, the most since May 2018 when Mexican demand for U.S. pork accelerated in anticipation of the retaliatory tariffs imposed later that year. January exports to the 10 largest foreign destinations are summarized below. These 10 countries together accounted for 95 percent of U.S. pork exports in January.

[4] Estimated Livestock Returns-Swine, Iowa State University.

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

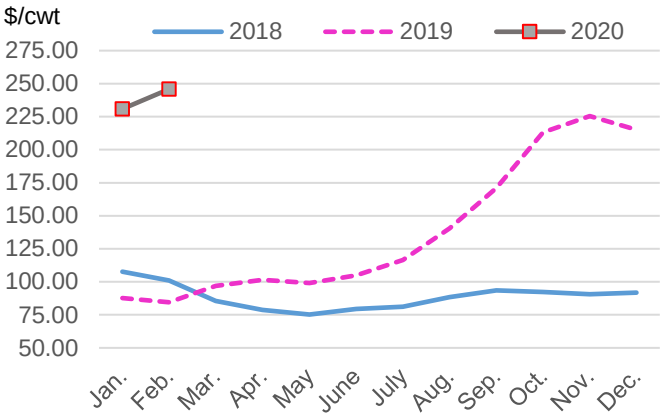
	Country	Exports Jan. 2019 (mil. lbs)	Exports Jan. 2020 (mil. lbs)	Percent change (2020/2019)	Export share Jan. 2019 %	Export share Jan. 2020 %
	World	478	663	38.8		
1	China\Hong Kong	26	203	685.2	5.4	30.6
2	Mexico	142	156	9.4	29.8	23.5
3	Japan	102	98	-4.2	21.4	14.8
4	South Korea	55	50	-9.6	11.5	7.5
5	Canada	42	47	13.4	8.7	7.1
6	Australia	24	32	37.1	4.9	4.9
7	Colombia	27	18	-30.8	5.6	2.8
8	Dominican Republic	9	10	7.4	1.9	1.5
9	Chile	8	10	20.7	1.7	1.5
10	Honduras	8	7	-15.0	1.6	1.0

Source: USDA, Economic Research Service.

Sky-high U.S. pork exports to China in January were driven by continued pork supply deficits caused by African Swine Fever losses. USDA estimates that by the end of 2020, China's annual pork production will have declined by more than a third since the disease broke out in the summer of 2018. This year, USDA forecasts that China will import 3.7 million metric tons (mmt) of pork—an increase of 42 percent over last year—after having increased imports 67 percent in 2019 to 2.6 mmt.

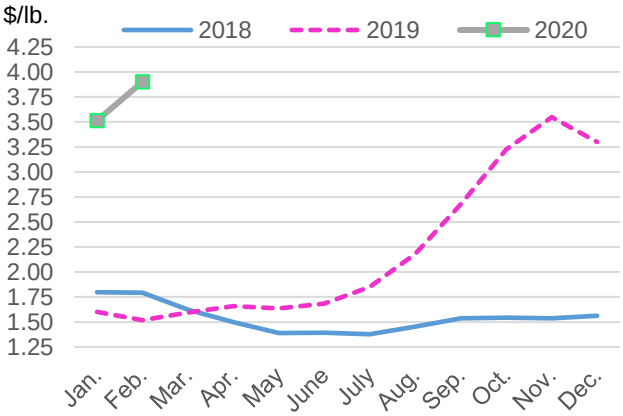
The figures below suggest that the destructive effects of the disease continue unabated. In February, the U.S. dollar price of live hogs was almost $231 per cwt, more than 6 times the average February price of live equivalent, 51-52 percent lean hogs. The U.S. dollar price of China pork in February, at $3.90 per pound, was about 6 times the average U.S. per pound wholesale cutout value in February. The U.S. dollar price of a 40-lb feeder pig in China was about $216.48 in February, or about four times the price of a feeder pig in the United States.

China: hogs



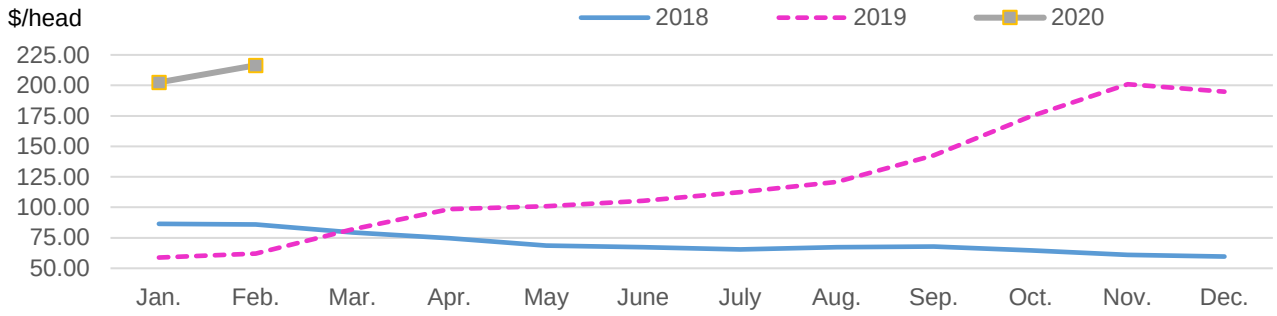
Source: China Ministry of Agriculture.

China: pork



Source: China Ministry of Agriculture.

China: 40 lb feeder pig



Source: China Ministry of Agriculture.

Export Forecasts Raised as Competitive U.S. Prices Continue To Draw Foreign Interest

Based on strong January shipments, first-quarter U.S. exports were raised to 1.9 billion pounds, more than 31 percent above exports during the same period last year. Second-quarter exports are expected to be 1.8 billion pounds, about 16 percent higher than a year earlier. Third-quarter exports are estimated at 1.8 billion pounds, about 19 percent higher than a year ago. Fourth-quarter exports—typically the highest of the year, and coinciding with a period of highest U.S. production and lowest prices—are likely to be about 2.3 billion pounds, about 25 percent higher than during the fourth quarter of last year. For 2020, U.S. pork exports should total 7.8 billion pounds, about 23 percent higher than last year, driven primarily by competitive U.S. prices and disease-reduced pork supplies in China.

Poultry

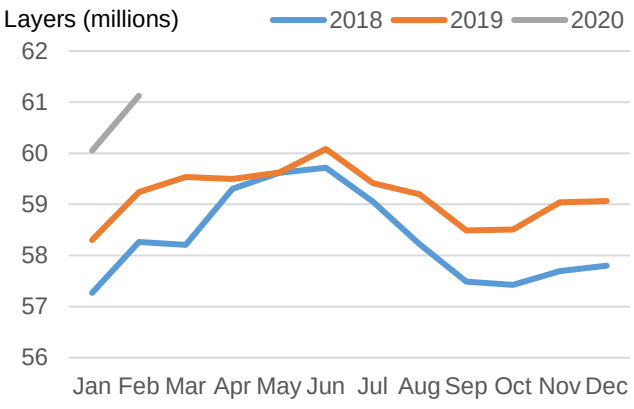
Kim Ha and Grace Grossen

Broiler Production Forecast Increased on Production Indicators and Expectations for Larger Breeding Flock; Price Forecast Revised Down

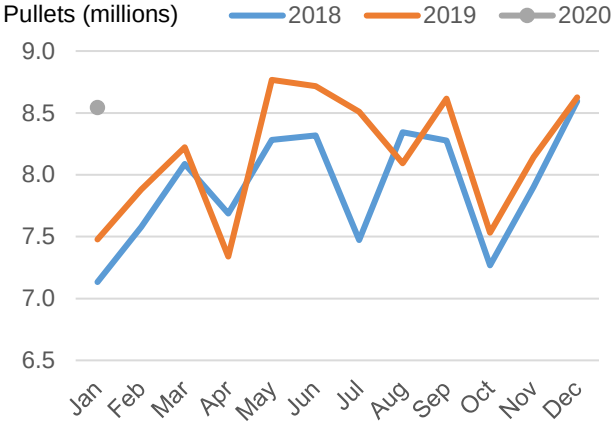
January broiler production is estimated at nearly 4 billion pounds, an increase of 6.5 percent year over year. Both increased slaughter (up 3.9 percent year over year) and heavier bird weights (up 2.6 percent) drove ready-to-cook production higher in January. Preliminary weekly slaughter data indicates that slaughter and bird weights continued to be up year over year in February. In addition, recent eggs set and chick placements averaged about 4 percent higher year over year, pointing to sustained ample supplies of birds available for marketing at least through April. These production indicators continue to support higher slaughter and production, which was the basis for increasing the first-quarter production forecast to 11.25 billion pounds, an increase of 6.6 percent (adjusted for slaughter days) relative to 2019.

As the industry faces record broiler production, record cold storage inventories, and historically low broiler prices, these market conditions raise questions about how long this projected rate of growth will continue. Beyond the first quarter, indicators for the broiler breeding flock do not imply any intentions by producers to slow growth down. The broiler layer flock reached 61 million birds on February 1, more than 3 percent higher than a year ago (see chart). Furthermore, in January, the industry placed more than 8.5 million pullets intended for U.S. hatchery supply flocks, more than 14 percent higher year over year. Based on expectations for a larger breeder flock, the forecast for second-quarter production was increased to 11.525 billion pounds, for third quarter to 11.800 billion pounds, and for fourth quarter to 11.500 billion pounds. In sum, the 2020 production forecast was revised up to 46.075 billion pounds, an increase of 5 percent over 2019 production.

Broiler-type layers (first of month)



Pullet placements intended for U.S. hatchery supply flocks



Source: USDA, National Agricultural Statistical Service.

February wholesale whole broiler prices (National Composite Weighted Average) averaged 80.64 cents per pound, 10 percent below a year earlier and the lowest recorded price for February since the series began in 2009. Based on recent price movements and expectations that abundant supplies will continue to put downward pressure on prices, the 2020 price forecast was revised down to 83 cents per pound.

First-Quarter Broiler Export Forecast Increased on Strong Export Demand from Southeast Asia and Mexico

Broiler exports totaled 596 million pounds in January, an increase of 2.7 percent year over year. The table below delineates trade volumes and export shares of the 10 largest foreign markets (in terms of 2019 export volumes), as well as some additional export markets of note. Exports continued to decrease significantly year over year to Cuba, in part due to foreign exchange constraints, and to Angola due to depreciating local currency. Shipments to these markets are expected to continue lower year over year to the extent that these economic conditions persist. However, despite these sizeable declines, shipments to several markets increased relative to last January, including Vietnam (+30.2 million pounds), the Philippines (+15.5 million pounds), Mexico (+12.0 million pounds), and Georgia (+8.5 million pounds). Shipments to Southeast Asia continue to surge, likely due to increased demand for protein imports stemming from losses related to African Swine Fever. In Mexico, competitively priced U.S. broiler products continue to be attractive to Mexican buyers, supporting increased export volumes to Mexico. Although January 2020 export volumes to China represented less than 1 percent of total U.S. shipments, broiler exports to China reached more than 5 million pounds.[5] Given the disruptions to China's economy by COVID-19, it is unclear how first-quarter shipments will be affected.

U.S. broiler exports: Volume and export share (January 2019 and 2020)

Country	Volume			Export share	
	Jan 2019	Jan 2020	Change in volume	Jan 2019	Jan 2020
	mil. lbs	*mil. lbs*	*mil. lbs*	%	%
Top 10 largest foreign markets (per 2019 export volumes)					
Mexico	123.9	135.9	12.0	21.4	22.8
Cuba	53.5	33.3	-20.2	9.2	5.6
Taiwan	48.7	53.7	5.0	8.4	9.0
Angola	25.2	5.3	-20.0	4.3	0.9
Vietnam	23.3	53.5	30.2	4.0	9.0
Canada	22.3	24.7	2.3	3.9	4.1
Guatemala	23.9	23.2	-0.7	4.1	3.9
Georgia	18.2	26.6	8.5	3.1	4.5
Hong Kong	20.6	14.7	-5.9	3.6	2.5
Philippines	11.8	27.3	15.5	2.0	4.6
Additional foreign markets of note					
South Africa	9.6	14.1	4.5	1.7	2.4
China (Mainland)	0.0	5.1	5.1	0.0	0.9
World	**580.3**	**596.0**	**15.6**	**100**	**100**

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

[5] Does not include paws.

Nonetheless, despite uncertainty in a few markets, it is expected that increased demand from other key markets, such as Southeast Asia and Mexico, will support stronger-than-previously-expected first-quarter export volumes. The first-quarter broiler export forecast was increased to 1,755 million pounds. The outlying quarters remain unchanged. Exports in 2020 are forecast 5 percent higher than 2019 exports.

Lay-Rate Gains Push Table Egg Production Expectations Higher

The *Chickens and Eggs 2019 Summary* report published by the National Agricultural Statistics Service included significant upward revisions to 2018 and 2019 egg production estimates. The previous estimates had underestimated production, due in large part to an understated 2018 and 2019 layer flock. Given the revisions, contrary to last month's *Livestock, Dairy and Poultry Outlook* newsletter, it now appears that the 2020 year-to-date layer flock is smaller than the 2019 layer flock (see chart). Furthermore, it was previously believed that the 2019 layer flock had exceeded the 2018 layer flock for most of the year, raising concerns about continued oversupply; however, the revisions indicate that the 2019 layer flock was in fact lower than the 2018 layer flock for most of the second half of the year. These revisions suggest that the industry took sustained measures to right-size the layer flock throughout the second half of 2019 and into the beginning of 2020 in response to oversupply in the first half of 2019.

However, egg production is still expected to be higher year over year, driven by gains in the lay rate (see chart). January table egg production is estimated at 709 million dozen, 0.4 percent higher than last year. This increase was comprised of a 0.8-percent year-over-year increase in the average lay rate and a 0.5-percent decrease in the average layer flock. Based on expectations for growth in the lay rate, the first- and second-half table egg production forecasts were revised up to 4.135 billion dozen and 4.235 billion dozen, respectively. Table egg production for 2020 is forecast 1 percent higher than 2019 production.

Table-egg layer flock (first of month)

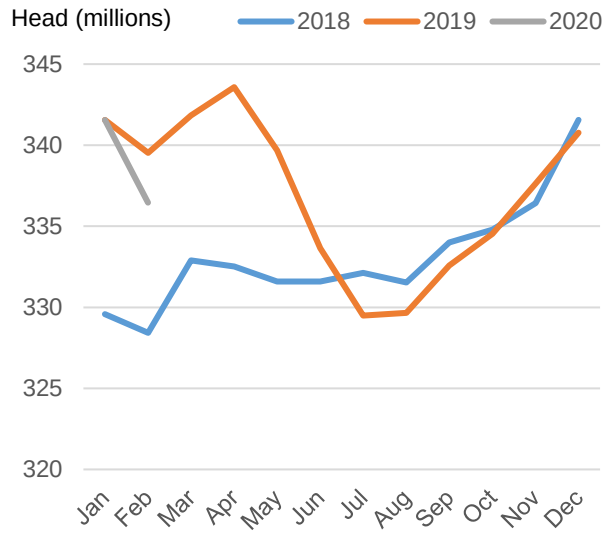
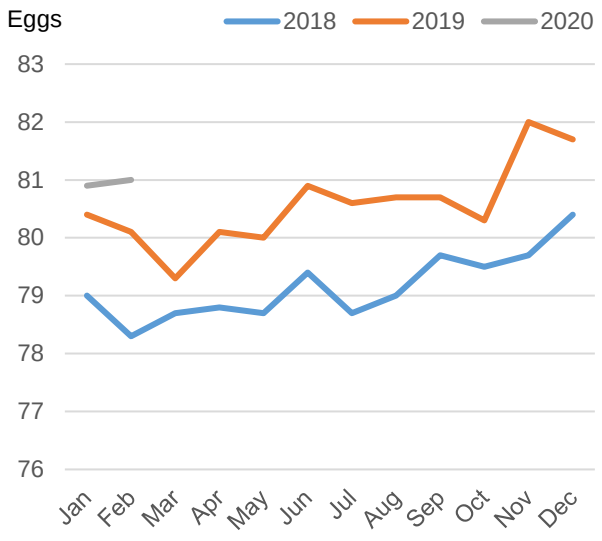


Table eggs per 100 layers (first of month)

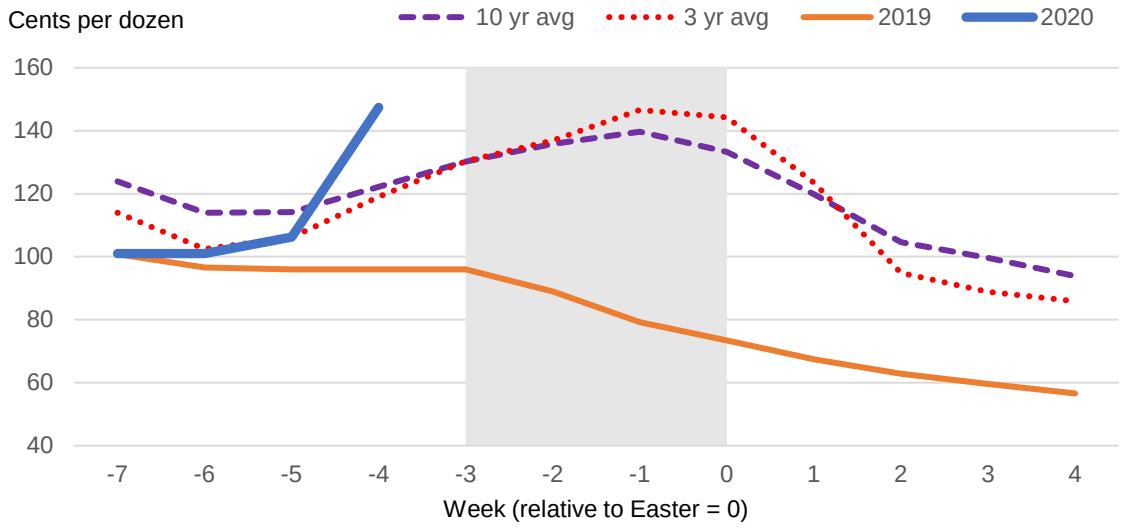


Source: USDA, National Agricultural Statistics Service.

Egg Price Forecast Increased on Expectations for Easter Bump and Strengthening Demand

Wholesale egg prices (New York, Grade A Large) averaged 107.5 cents per dozen in February, 1.7 percent lower year over year. However, since the beginning of March, prices appear to have been strengthening relative to last year. Furthermore, the recent increase in egg prices suggests an Easter price bump is likely. The chart below graphs average weekly egg prices in the weeks relative to Easter. As seen, both long- and short-term historical averages indicate that prices typically increase in the weeks leading up to Easter. In 2019, wholesale prices counterseasonally declined prior to Easter due to an unmatched oversupply of table eggs. However, in 2020, despite expectations for a slight uptick in first-quarter table egg production relative to 2019, prices appear to have resumed seasonal patterns, suggesting relatively stronger demand. Based on recent price movements and expectations for improved demand, the first-quarter egg price forecast was revised up to 110 cents per dozen. Slightly higher demand expectations were the basis for increasing the second-, third-, and fourth-quarter price forecasts to 89 cents, 105 cents, and 120 cents per dozen, respectively. 2020 egg prices are forecast to average 106 cents per dozen, a 13-percent increase over the 2019 average price.

Average weekly midpoint prices for New York eggs (wholesale, large grade A) in weeks before Easter



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

Egg Export Forecast Revised Up

Exports of eggs and egg products totaled 28.9 million dozen in January, an increase of 25.8 percent year over year. Shipments of egg products increased by 4 million dozen relative to last year, while shell eggs increased by 1.9 million dozen. The table below outlines January export data to the top 10 largest export markets (in terms of 2019 export volumes). As seen, shipments increased year over year to some markets, including Mexico (+ 2.5 million dozen), Hong Kong (+874 thousand dozen), the Philippines (+773 thousand dozen), Denmark (+697 thousand dozen), and Japan (+431 thousand dozen). Shipments to Canada, however, decreased by 960 thousand dozen. Based on expectations for continued strength in export demand, the first-quarter export forecast was increased to 80 million dozen. The outlying quarters remain unchanged.

U.S. egg and egg product exports: Volumes and export shares of 10 largest markets (January 2019 and 2020)

Country	Volume			Export share	
	Jan 2019	Jan 2020	Change in volume	Jan 2019	Jan 2020
	Thousand dozen	*Thousand dozen*	*Thousand dozen*	%	%
Canada	6,005	5,045	-960	26	17
Mexico	6,320	8,805	2,485	27	30
Hong Kong	3,173	4,048	874	14	14
Japan	2,283	2,714	431	10	9
Jamaica	617	772	155	3	3
Trinidad and Tobago	408	626	218	2	2
South Korea	166	286	120	1	1
Philippines	122	895	773	1	3
United Arab Emirates	390	721	331	2	2
Denmark		697	697	0	2
World	**22,987**	**28,924**	**5,937**	**100**	**100**

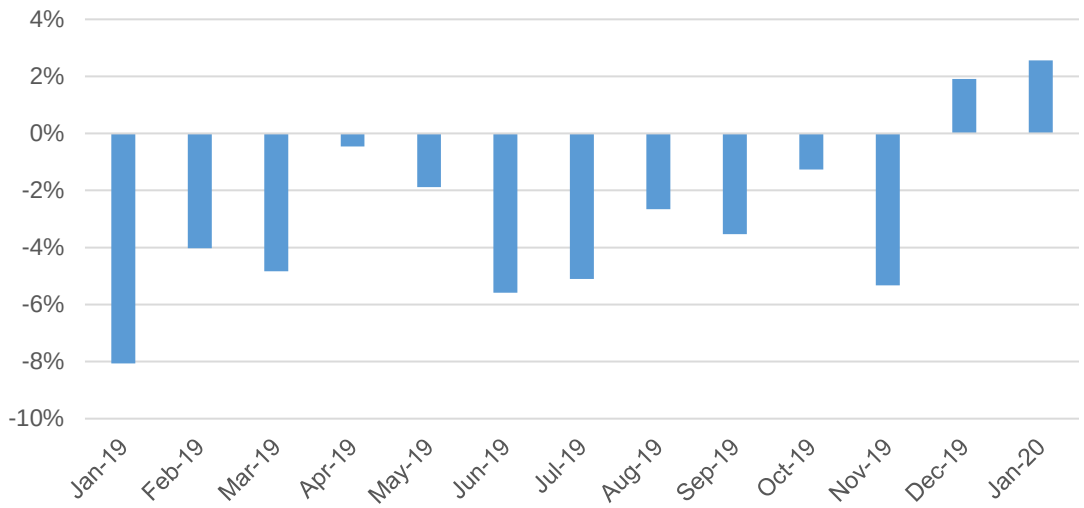
Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

Turkey Production Forecast Increased on Net Poult Placements and Expectations for Improved Producer Margins

January turkey production is estimated at 515 million pounds, a 0.9-percent increase compared to last year. As expected, turkey slaughter was down year over year (by 0.8 percent); however, average live weights, which were up 1.6 percent, drove January production higher. Despite expectations for lower average slaughter in the first two quarters, heavier average weights are expected to support a boost in production, which was the basis for increasing the first-half production forecast to 2.920 million pounds.

The chart below illustrates that net poult placements were lower year over year for much of 2019, which is consistent with the year-over-year decrease in slaughter during 2019 as well as in January 2020. However, December 2019 and January 2020 net poult placements indicated a year-over-year increase. To the extent this trend continues, slaughter will likely increase in the second half of 2020. Furthermore, higher wholesale turkey prices in 2020 are expected to support producer margins and incentivize increased production as the year progresses. The second-half forecast was increased to 3.000 million pounds. Turkey production for 2020 is forecast to increase by 2 percent over 2019 production.

Year-over-year percent change in net poult placements

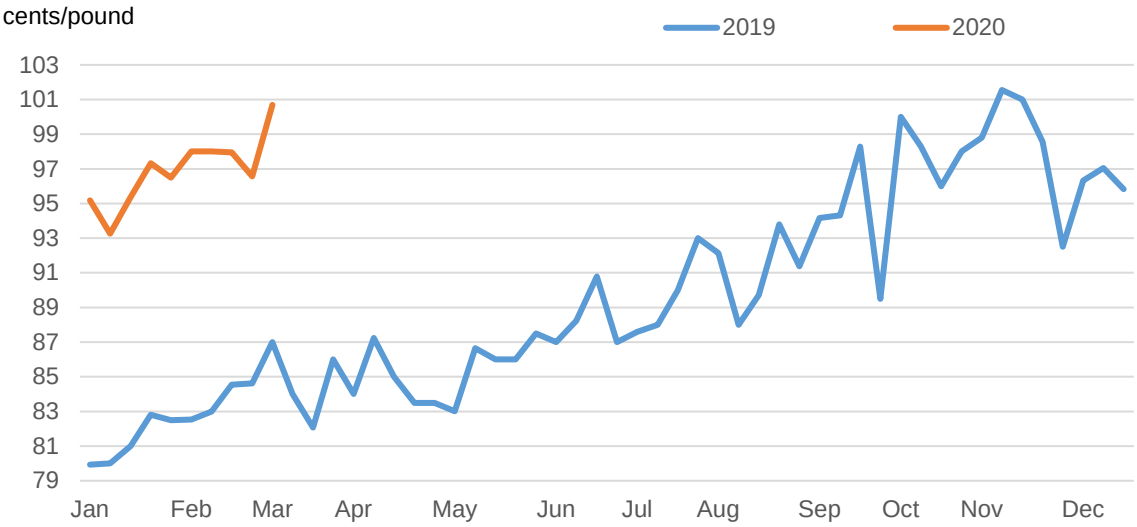


Source: USDA, Economic Research Service calculations using data from USDA, National Agricultural Statistics Service.

Turkey price remains above 2019

2020 turkey prices have continued to climb. So far in 2020, weekly weighted average prices for frozen whole hens have averaged 14 cents above a year before. The latest price, reported on Friday, March 6th, was 100.7 cents per pound, the peak for 2020 so far. This price is just below the high price of 2019. The first-quarter turkey price was revised to 97 cents per pound based on the prices available from January and February and expected supply pressure from stronger March production, while the remaining quarters are unchanged.

Frozen whole hen wholesale turkey price, weekly



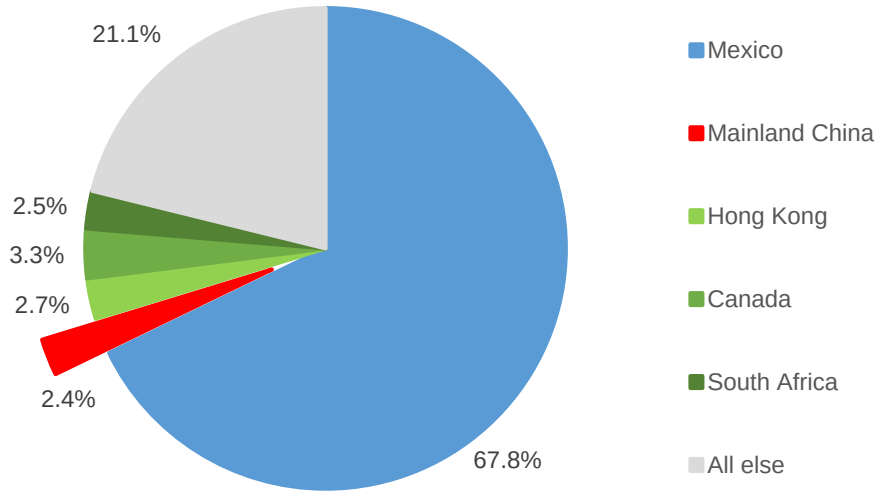
Source: USDA, Economic Research Service using data from USDA, Agricultural Marketing Service.

Turkey Exports Revised Down in the First Quarter

The first quarter export forecast was revised down to 140 million pounds, reflecting lower-than-expected exports in January. The remaining quarters of 2020 are unchanged. Turkey exports in January of 2020 totaled 43.3 million pounds. This is a 4.3-percent year-over-year decline from last

January. While Mexico accounted for 67.8 percent of January's exports with 29.4 million pounds, the share of turkey exports going to China grew to 2.4 percent.

Share of U.S. turkey meat exports, January 2020



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

Suggested Citation

Livestock, Dairy, and Poultry Outlook, LDP-M-309, U.S. Department of Agriculture, Economic Research Service, March 16, 2020

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	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	6,923	7,000	**27,151**	**6,845**	**7,185**	**6,825**	**6,845**	**27,700**
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	6,706	7,478	**27,637**	**7,380**	**6,865**	**7,015**	**7,725**	**28,985**
Lamb and mutton	38	39	36	37	150	37	36	35	37	145	39	39	37	39	153	37	40	35	36	**148**	**37**	**35**	**35**	**38**	**145**
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	10,945	11,402	11,175	**43,905**	**11,250**	**11,525**	**11,800**	**11,500**	**46,075**
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	1,451	1,453	1,467	**5,818**	**1,460**	**1,460**	**1,485**	**1,515**	**5,920**
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	25,265	26,016	26,675	27,306	**105,262**	**27,116**	**27,225**	**27,321**	**27,773**	**109,435**
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	2,046	2,054	2,049	2,116	**8,265**	**2,055**	**2,080**	**2,095**	**2,140**	**8,370**
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	**14.6**	**15.2**	**14.1**	**14.1**	**57.9**
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	**13.2**	**12.4**	**12.6**	**13.5**	**51.6**
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**	**0.3**	**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	24.6	23.8	94.8	**24.5**	**25**	**25.3**	**24.4**	**99.2**
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	**3.6**	**3.6**	**4.0**	**4.8**	**15.9**
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	56.6	58.0	223.7	**56.5**	**56.9**	**56.7**	**57.4**	**227.4**
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	72.8	72.6	72.4	74.3	292.1	**72.7**	**73.5**	**74.1**	**75.5**	**295.7**
Market prices																									
Choice steers, 5-area 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	108.16	114.88	116.78	**118**	**114**	**111**	**114**	**114.5**
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	140.19	147.44	142.23	**138**	**140**	**146**	**145**	**142.5**
Cutter 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	60.42	53.66	56.43	**61**	**63**	**64**	**55**	**61**
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	154.93	150.99	149.58	**159**	**157**	**157**	**157**	**157.5**
Nat'l 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	50.08	43.11	47.95	**42**	**51**	**54**	**44**	**48**
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	82.0	80.60	80.60	**86.0**	**90.0**	**80.0**	**75.0**	**83.0**
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	85.5	90.8	97.80	89.20	**97.0**	**100.0**	**101.0**	**103.0**	**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	**110.0**	**89.0**	**105.0**	**120.0**	**106.0**
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	3022	**735**	**815**	**850**	**865**	**3265**
Beef & veal imports	792	831	751	638	3,012	700	812	814	668	2,993	721	805	807	664	2,998	738	836	771	711	3057	**720**	**750**	**745**	**700**	**2915**
Lamb and mutton imports	68	55	41	52	216	80	58	57	57	252	80	66	70	57	273	80	73	53	66	272	**80**	**64**	**61**	**57**	**262**
Pork exports	1,229	1,317	1,235	1,457	5,239	1,432	1,426	1,230	1,544	5,632	1,516	1,520	1,298	1,542	5,876	1446	1535	1516	1825	6321	**1900**	**1775**	**1800**	**2275**	**7750**
Pork imports	293	257	266	275	1,091	264	281	283	287	1,116	279	270	245	248	1,042	259	227	231	227	945	**205**	**195**	**205**	**210**	**815**
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	1722	1724	1784	1880	7109	**1755**	**1800**	**1915**	**1960**	**7430**
Turkey exports	116	141	160	153	569	133	148	168	173	622	153	147	141	170	611	147	166	159	168	639	**140**	**170**	**165**	**175**	**650**
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	5,250	1,339	1,255	1,201	1,305	5100	**1,300**	**1,225**	**1,175**	**1,290**	**4990**

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.

For further information, contact: Mildred Haley, mildred.haley@usda.gov

Updated 3/12/2020

Dairy Forecasts

	2018	2019					2020				
	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual
Milk cows (thousands)	9,398	9,346	9,331	9,322	9,345	9,336	9,350	9,345	9,345	9,345	9,345
Milk per cow (pounds)	23,150	5,823	5,971	5,818	5,779	23,391	5,955	6,085	5,885	5,855	23,780
Milk production (billion pounds)	217.6	54.4	55.7	54.2	54.0	218.4	55.7	56.9	55.0	54.7	222.3
Farm use	1.0	0.3	0.3	0.3	0.3	1.0	0.3	0.3	0.3	0.3	1.0
Milk marketings	216.5	54.2	55.5	54.0	53.7	217.4	55.4	56.6	54.7	54.5	221.2
Milk-fat (billion pounds milk equiv.)											
Milk marketings	216.5	54.2	55.5	54.0	53.7	217.4	55.4	56.6	54.7	54.5	221.2
Beginning commercial stocks	13.4	13.8	16.1	18.2	17.1	13.8	13.7	16.6	18.7	17.3	13.7
Imports	6.3	1.4	1.9	2.0	1.7	7.0	1.6	1.6	1.8	1.8	6.8
Total supply	236.2	69.4	73.4	74.2	72.5	238.1	70.7	74.8	75.2	73.6	241.7
Commercial exports	10.4	2.4	2.5	2.2	2.1	9.1	2.1	2.5	2.4	2.2	9.2
Ending commercial stocks	13.8	16.1	18.2	17.1	13.7	13.7	16.6	18.7	17.3	14.1	14.1
Commodity Credit Corporation donations	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.1	0.1	0.1	0.3
Domestic commercial use	212.1	50.9	52.8	54.8	56.7	215.1	52.0	53.6	55.4	57.2	218.2
Skim solids (billion pounds milk equiv.)											
Milk marketings	216.5	54.2	55.5	54.0	53.7	217.4	55.4	56.6	54.7	54.5	221.2
Beginning commercial stocks	11.8	10.7	11.1	11.2	10.8	10.7	10.2	11.0	11.3	10.6	10.2
Imports	5.5	1.3	1.6	1.5	1.5	5.8	1.4	1.4	1.5	1.4	5.6
Total supply	233.8	66.1	68.1	66.6	66.0	233.9	67.0	69.0	67.5	66.5	237.1
Commercial exports	44.7	9.9	10.3	10.3	11.0	41.6	10.8	11.1	11.1	10.9	43.9
Ending commercial stocks	10.7	11.1	11.2	10.8	10.2	10.2	11.0	11.3	10.6	10.4	10.4
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
Domestic commercial use	178.5	45.1	46.6	45.5	44.7	181.9	45.2	46.5	45.8	45.2	182.7
Milk prices (dollars/cwt) [1]											
All milk	16.27	16.97	17.93	18.97	20.53	18.60	18.80	17.90	18.05	18.20	18.25
Class III	14.61	14.30	16.20	17.82	19.51	16.96	16.75	16.50	16.70	16.60	16.65
Class IV	14.23	15.68	16.28	16.66	16.56	16.30	16.20	15.60	15.65	15.60	15.75
Product prices (dollars/pound) [2]											
Cheddar cheese	1.538	1.440	1.678	1.852	2.064	1.759	1.770	1.745	1.760	1.750	1.755
Dry whey	0.342	0.449	0.378	0.367	0.325	0.380	0.355	0.350	0.360	0.360	0.355
Butter	2.257	2.258	2.310	2.330	2.076	2.243	1.850	1.845	1.850	1.840	1.845
Nonfat dry milk	0.795	0.963	1.007	1.042	1.155	1.042	1.225	1.155	1.160	1.160	1.175

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.

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