



Livestock, Dairy, and Poultry Outlook: April 2022

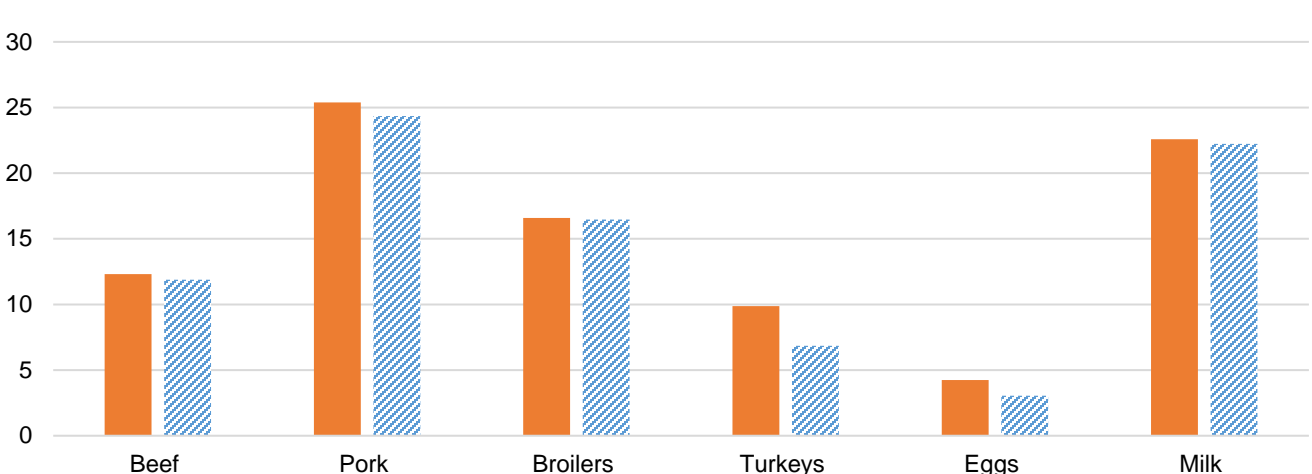


Exports forecast to be smaller share of production in 2022

In 2021, the United States exported 3.447 billion pounds of beef, 7.030 billion pounds of pork, 7.367 billion pounds of broiler meat, and 549 million pounds of turkey on a carcass weight basis. The United States also exported 392.3 million dozen-equivalent eggs and egg products, and 51.1 billion pounds of milk on a skim-solids basis. Pork exported the most as a share of domestic production with 25.4 percent. Beef exports made up 12.3 percent of domestic production, broiler exports made up 16.4 percent, and turkey exports made up 9.9 percent. The United States exported 4.2 percent of eggs and egg products in 2021, and 22.6 percent of milk on a skim-solids basis. In 2022, beef exports are forecast at 3.300 billion pounds, which would be 11.9 percent of production. 2022 pork exports are forecast at 6.595 billion pounds, or 24.4 percent of production. The United States is forecast to export 7.365 billion pounds of broiler meat in 2022, which is almost flat from 2021 and would be 16.3 percent of forecast production. Turkeys and eggs have been more heavily impacted by the outbreak of highly pathogenic avian influenza (HPAI). Forecast turkey exports in 2022 are only 375 million pounds, or 6.9 percent of production. Egg and egg product exports are forecast at 277 million dozen, only 3.1 percent of forecast 2022 production. Finally, exports of milk on a skim-solids basis are forecast at 50.3 billion pounds in 2022, which would represent 22.2 percent of forecast milk production.

Exports as a share of production

Percent



Note: Dairy export shares are on a skim-solids milk-equivalent basis.

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

Summary

Beef/Cattle: Drought, tight forage supplies, and macroeconomic factors are forcing producers to cull deeper in their herds. Therefore, higher beef cow slaughter pushed nonfed cattle slaughter to the highest levels in decades in the first 3 months of the year. Cow and bull slaughter forecasts were raised this year. A reduction in first-quarter expected fed cattle slaughter more than offset an expected increase in fed cattle slaughter in the rest of 2022. On higher nonfed cattle slaughter, the 2022 beef production was raised to 27.7 billion pounds, just below 2021 volumes. Based on elevated fresh beef imports from Brazil and higher year-over-year volumes from North America and Oceania, the import forecast for first-quarter 2022 was raised. Cull cow prices were raised in each of the quarters, while fed steer and feeder cattle prices were raised for late 2022 on tighter supplies.

Dairy: The all-milk price forecast for 2022 has been raised to a record high of \$25.80 per cwt, \$0.75 higher than last month's forecast. Wholesale price projections for all major dairy products except for dry whey have been raised. Milk production for 2022 is projected to total 226.3 billion pounds, 0.3 billion higher than last month's forecast but about the same level as in 2021. Due to competitive U.S. prices, export forecasts have been increased from last month's projections on both the milk-fat and skim-solids bases.

Pork/Hogs: The *Quarterly Hogs and Pigs* report indicated reductions in almost all reported categories that determine 2022 production. Commercial pork production is reduced about 250 million pounds to 27.1 billion pounds, about 2 percent lower than production last year. Pork exports for 2022 are reduced to 6.595 billion pounds, 6.2 percent lower than a year ago, on weak demand from key importing regions.

Poultry/Eggs: Broiler production in 2022 was adjusted down slightly, while exports were adjusted up on strong international demand. Whole broiler prices were adjusted up to an average of 148 cents per pound in 2022 on recent data. As of April 6th, the Highly Pathogenic Avian Influenza (HPAI) outbreak had affected about 5 percent of the table egg layer flock reported on March 1. Based on HPAI discoveries as of the first week in April and the expected path of industry recovery, the forecasts for all of 2022 were revised as follows: table egg production—down to 7,775 million dozen eggs (-2.5 percent year-over-year decrease); egg exports—down to 277 million dozen shell-egg equivalent (-29.4 percent year-over-year decrease); egg imports—up to 48.5 million dozen shell-egg equivalent (+166.6 percent year-over-year increase); and wholesale egg prices (New York, Grade A, Large)—up to 157 cents per dozen (+32.5 percent year-over-year increase). Turkey production and stocks were adjusted down due to the HPAI outbreak. Based on discoveries through the first week of April, annual production is now expected to contract 1.6 percent from 2021. Exports were revised down as key markets have instituted county- and State-level bans on U.S. turkey. Prices were raised each quarter with the expectation that they will increase throughout the year.

Beef/Cattle

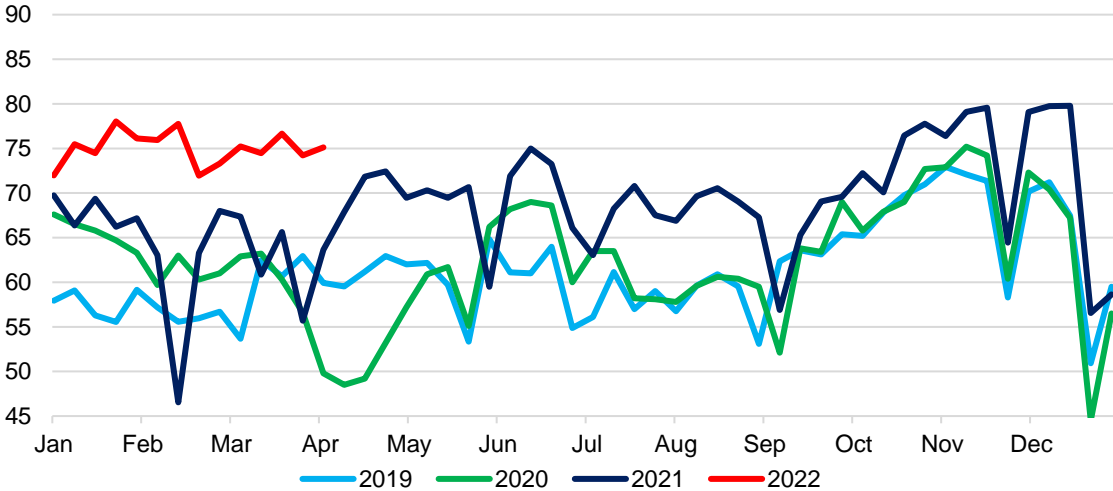
Russell Knight and Hannah Taylor

Cow and Bull Slaughter in First-Quarter 2022 at Highest Level in Decades

In the first quarter of 2022, federally-inspected (FI) nonfed¹ cattle slaughter reached volumes not seen since the mid-1980's, based on USDA, Agricultural Marketing Service (AMS) estimated and actual weekly slaughter data through the week ending April 2, 2022. During this period, weekly FI nonfed cattle slaughter averaged more than 8 percent above year-ago levels. Specifically, through the first 12 weeks,² weekly FI slaughter of beef cows and bulls averaged 18 and 15 percent, respectively, above last year, while dairy cow slaughter declined 3 percent. As the chart below shows, beef cow slaughter has outpaced year-ago levels. Typically, cow slaughter would display this volume in the fourth quarter. However, higher feed costs, drought conditions plaguing much of the nation, and historically high prices for cull cows have cow-calf producers making further cuts to their herds. The macroeconomic situation has also changed from last year with higher fuel prices, feed costs, and operating costs that may be affecting producer decisions as well.

Weekly federally-inspected beef cow slaughter

Thousand head



Source: USDA, Agricultural Marketing Service (AMS) data.

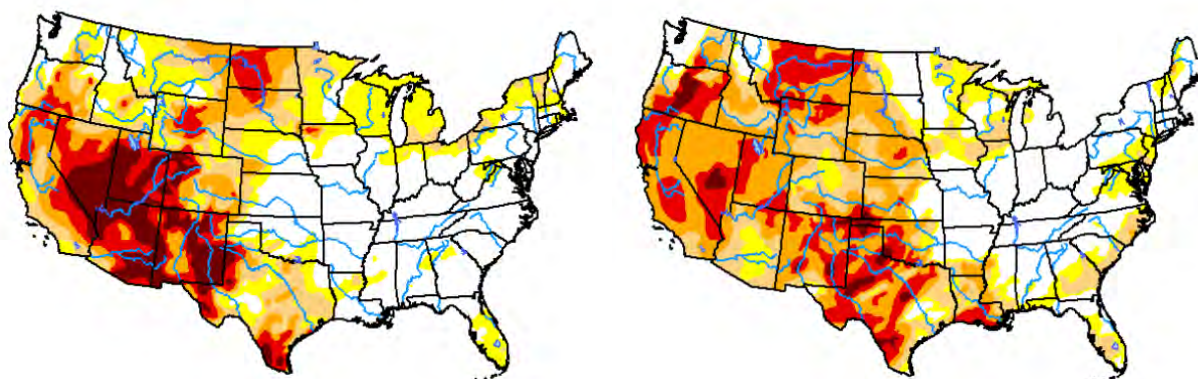
As reported by the U.S. Drought Monitor on March 29, 2022, over 69 percent of the country was experiencing some level of drought, compared with about 63 percent the same week last year (see drought maps below). This put over 61 percent of the U.S. cattle inventory in an area experiencing drought, whereas only 35 percent of the national herd was affected a year ago. Further, 19 percent of the herd is in the worst two tiers versus just 10 percent in the same period.

¹ Nonfed cattle consist mainly of beef cows, dairy cows, and bulls.

² USDA, AMS report of *Actual Slaughter Under Federal Inspection* was only available through the week ending March 26, 2022, at the time of this Outlook publication.

last year. The last time this much drought covered the nation at this time of year was April 2, 2013, when almost 67 percent of the country experienced drought.

Drought maps from the U.S. Drought Monitor: March 30, 2021 versus March 29, 2022



March 30, 2021

March 29, 2022

Source: U.S. Drought Monitor.

Although the price for other hay is relatively unchanged from January to February, prices are up 5 percent from a year ago (February 2021) with States reporting increases of 3 to 80 percent above last year. The Northern Plains and the Northwest are displaying the greatest increases in hay prices from last year.

At the beginning of 2022, the beef cow herd had undergone its third straight year of contraction and the fifth consecutive year of fewer beef replacement heifers reported. To the extent the availability of cows for slaughter remains low and demand for beef is relatively strong, 90-percent lean trimmings for processing are expected to be elevated. Trimmings prices have maintained historically high since July 2021. Beyond a brief period in May 2020, prices thus far in 2022 have not been this high since 2015.

Based on the economic and environmental factors noted, expectations for cow and bull slaughter were raised in each quarter of 2022. Despite the highest cow slaughter volume typically occurring at the end of the year, the volume in fourth-quarter 2022 will likely not surpass the first quarter. The 2022 price forecast for live cutter cows³ was raised to \$79 per hundredweight (cwt). This is 22 percent above the 2021 average of \$64.91 per cwt and the highest price since 2015.

Higher Nonfed Slaughter Supports Greater Beef Production

Beef production in the first quarter of 2022 was raised slightly on the latest actual and estimated FI slaughter through March. Since last month's report, USDA, AMS actual and estimated slaughter data reflected fewer fed cattle⁴ and more nonfed cattle in the slaughter mix than expected. Despite this change in slaughter proportions, steer and heifer carcass weights since mid-February averaged about 16 and 14 pounds heavier than in the same weeks last year. As a result, expected average carcass weights were raised for the first quarter.

³ Live prices are converted from prices for cutter cow carcasses that are expected to yield 90-percent lean meat and weigh 500 pounds and up. The carcass prices are converted to live weight using a conversion factor of 0.495.

⁴ Fed cattle consist mainly of steers and heifers marketed from feedlots for slaughter.

To the extent that the pace of fed cattle slaughter in March was slower than expected, a portion of those animals were shifted into expectations for second-quarter slaughter. Further, as noted, the expectations for nonfed cattle slaughter were also raised in the second quarter, lifting production.

Beef production in the third quarter was also raised based on higher expected nonfed cattle slaughter, along with more marketings from larger-than-anticipated cattle placements in the first quarter. According to the most recent USDA, National Agricultural Statistics Service (NASS) *Cattle on Feed* report, the number of cattle placed in feedlots with 1,000 or more head capacity in February was up more than 9 percent from last year. Placements outpaced marketings of cattle for slaughter, keeping feedlot inventories elevated, with the March 1 inventory being the largest since the series began in 1996. Although inventories are at historic levels, supplies of market-ready cattle are not as large as they were last year.

Finally, expected fourth-quarter beef production was reduced on fewer expected fed cattle slaughtered that more than offset nonfed cattle slaughter. As a result of the temporal shifts in fed cattle slaughter among the quarters and increased cow and bull slaughter, 2022 beef production was raised 140 million pounds to 27.7 billion pounds, less than 1 percent below 2021 production.

Cattle Price Forecasts Raised in Late 2022

March prices for fed steers in the 5-area marketing region averaged \$139.17 per cwt, almost \$25 above March 2021 prices, bringing the first-quarter average to \$139.25 per cwt. In early second quarter, fed cattle prices were generally steady-to-lower at about \$139 per cwt. Although market-ready cattle supplies on March 1 are below a year ago, they are above the average volume for this time of year. Further, because marketings in the first quarter were reduced, anticipated fed cattle marketings in the second and third quarters were raised. As a result, those quarters will likely remain under pressure, reflecting seasonally-increasing supplies of market-ready cattle in feedlots at heavier than year-ago weights. Further reflecting the temporal shifts in fed cattle marketings, fed cattle prices in the fourth quarter were raised \$1 to \$143 per cwt for an unchanged annual forecast of \$139.50 per cwt.

The March price for 750–800-pound feeder steers sold at the Oklahoma City National Stockyards was \$153.09 per cwt, about \$16, or 12 percent, above last year. With higher placements in the first quarter, it is likely that calves that might have remained on pastures later in the year were pulled forward. As a result, from last month, tighter anticipated feeder cattle supplies in second-half 2022 will likely support elevated prices. The third- and fourth-quarter prices were raised \$4 and \$6, respectively, to \$165 and \$172 per cwt. The 2022 price forecast for feeder steers is \$163 per cwt, an 11-percent increase from 2021 prices.

Beef Exports Strong Despite Slowdown in Top Two Markets

In February 2022, U.S. beef exports totaled 254 million pounds, about 2 percent higher than a year earlier and 10 percent above the 5-year average. This was the second-highest beef export level for the month, only about half-a-percent lower than the record set in February 2020. Year-over-year increases in shipments to China, Taiwan, Canada, and other markets offset decreases to South Korea, Japan, Hong Kong, and Mexico.

Year-to-date exports to China are up over 95 percent year over year, leading to a significant increase in export share, as the table below shows. Shipments to Taiwan increased almost 59 percent over the previous year, and exports to other markets also account for a larger share of

total imports thus far in 2022. The remaining major destinations account for a smaller share of exports for the first 2 months this year.

Exports to the top two markets decreased year over year in February. South Korea remains the top destination for U.S. beef, despite a sharp month-over-month decline in exports in February. Exports to Japan in February, while nearly unchanged from January, were 11 percent below last year; Japan is the second-largest export market so far this year. Year-to-date exports to Mexico, Canada, and Hong Kong were also down year over year.

Exports are expected to seasonally increase in March, leaving the first-quarter forecast, as well as the remaining quarterly and annual forecasts, unchanged from the previous month.

U.S. beef exports: Volume, February 2021 and 2022

Country	Exports year-to-date			Export share		
	2021	2022	Year-over-year change		2021	2022
	<i>Million pounds</i>	<i>Million pounds</i>	<i>Million pounds</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Top 5 largest foreign markets						
South Korea	126.5	135.6	9.1	7.2	25.5	25.0
Japan	125.2	117.8	-7.4	-5.9	25.2	21.7
China	46.8	91.4	44.6	95.4	9.4	16.9
Mexico	58.3	43.2	-15.0	-25.8	11.7	8.0
Canada	44.2	40.8	-3.4	-7.7	8.9	7.5
World	496.4	542.1	45.7	9.2	100.0	100.0
Additional foreign markets of note						
Taiwan	23.8	37.7	13.9	58.6	4.8	7.0
Hong Kong	23.1	11.1	-12.0	-51.9	4.6	2.0
Other markets	48.5	64.3	15.8	32.6	9.8	11.9

Note: Largest markets are based on 2022 export volumes. Other markets collectively refer to countries other than Japan, South Korea, China, Mexico, Canada, Taiwan, and Hong Kong.

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

Record-High February Beef Imports

U.S. beef imports in February totaled 279 million pounds, over 40 percent higher year over year and 31 percent above the 5-year average. This was a record for the month of February. Imports from Brazil once again drove this notable increase, accounting for more than half of the year-over-year total beef import increase. Imports from Mexico were nearly 36 percent higher year over year and 41 percent higher than the 5-year average. Imports from Australia and Canada also showed notable year-over-year increases at 44 and 13 percent, respectively.

U.S. beef imports: Year-to-date, February 2021 and 2022

Country	Imports year-to-date				Import share	
	2021	2022	Year-over-year change		2021	2022
	<i>Million pounds</i>	<i>Million pounds</i>	<i>Million pounds</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Top 5 largest suppliers						
Brazil	28.6	156.2	127.6	445.4	6.8	24.8
Canada	128.3	145.6	17.3	13.5	30.3	23.1
Mexico	87.8	129.9	42.0	47.9	20.8	20.6
Australia	51.9	65.4	13.5	26.0	12.3	10.4
New Zealand	70.9	64.2	-6.7	-9.4	16.8	10.2
World	423.0	630.8	207.9	49.1	100.0	100.0
Additional suppliers of note						
Nicaragua	22.9	32.4	9.5	41.4	5.4	5.1
Uruguay	20.6	17.3	-3.3	-16.1	4.9	2.7
Argentina	5.9	10.1	4.2	70.7	1.4	1.6

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

Imports from Brazil have been elevated in recent months, with year-to-date imports increasing almost 128 million pounds, or 445 percent, over the same period last year. Nearly 83 percent of imports from Brazil so far this year are fresh beef, whereas historically most or all beef imports from Brazil have been heat-treated beef. Fresh beef enters the United States under a tariff-rate-quota system; once the quota is filled, fresh beef imports from Brazil will be subject to a higher tariff of 26.4 percent of the value of the imports. As of March 28, 2022, the quota open to countries without a specific quota—including Brazil—was almost 97 percent filled, according to “Year-to-Date Imports Under the WTO, Fresh, Chilled and Frozen” data provided on the USDA, Economic Research Service webpage *Livestock and Meat International Trade Data*.

The table above shows that year-to-date imports from Mexico are also higher, up nearly 48 percent year over year. As a result, the year-to-date share of imports from Mexico has not declined from last year even as the import share from Brazil has risen significantly. The shares from the remainder of the top five suppliers have decreased year over year.

The first-quarter import forecast was increased 20 million pounds to 910 million, reflecting recent data. Forecasts for the outlying quarters were left unchanged from the previous month, raising the annual import forecast to 3.440 billion pounds.

Dairy

Jerry Cessna and Angel Teran

Recent Wholesale Dairy Product Prices

From the week ending March 5 to the week ending April 2, all wholesale dairy product prices reported in the USDA National Dairy Products Sales Report (NDPSR) increased, except for dry whey. Prices for Cheddar cheese 40-pound blocks and 500-pound barrels (adjusted to 38-percent moisture) rose to \$2.2034 (+22.0 cents) and \$2.1292 per pound (+16.4 cents), respectively. Prices for butter and nonfat dry milk (NDM), rose to \$2.7912 (+10.2 cents), and \$1.8225 (+4.0 cents), respectively. The dry whey price decreased to \$0.7846 (-1.4 cents).

Dairy wholesale product prices

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

	For the week ending		Change
	March 5	April 2	
Butter	2.6894	2.7912	0.1018
Cheddar cheese			
40-pound blocks	1.9835	2.2034	0.2199
500-pound barrels [*]	1.9650	2.1292	0.1642
Nonfat dry milk	1.7829	1.8225	0.0396
Dry whey	0.7989	0.7846	-0.0143

^{*}Adjusted to 38-percent moisture.

Source: USDA, Agricultural Marketing Service, *National Dairy Products Sales Report*, April 6, 2022.

For the trading week⁵ ending April 8 at the Chicago Mercantile Exchange (CME), the average spot prices for Cheddar cheese 40-pound blocks and 500-pound barrels averaged \$2.2930 and \$2.3015 per pound, respectively. CME prices for butter, NDM, and dry whey averaged \$2.7545, \$1.8290, and \$0.6135 per pound, respectively.

For Oceania and Europe, all export prices reported by USDA Dairy Market News increased from February to March. Except for dry whey, Oceania and Europe prices for the main dairy products have been higher to date, on average, than U.S. domestic prices so far this year.

⁵ While the end of each week for NDPSR average prices falls on a Saturday, the trading week for CME usually ends on a Friday.

Dairy product export prices for Oceania and Western Europe

(Dollars per pound)

Product	Region	February 2022	March 2022	Change
Butter	Oceania	2.984	3.152	0.168
	Western Europe	3.142	3.260	0.118
Cheddar cheese	Oceania	2.637	2.799	0.162
Skim milk powder	Oceania	1.932	2.072	0.140
	Western Europe	1.895	2.000	0.105
Dry whey	Western Europe	0.700	0.736	0.036
Whole milk powder	Oceania	2.019	2.101	0.082
	Western Europe	2.410	2.518	0.108

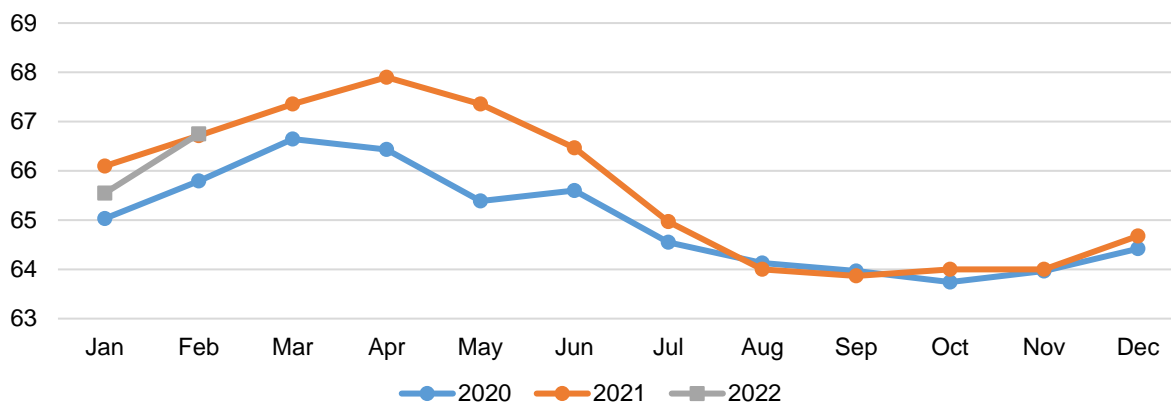
Source: USDA, Agricultural Marketing Service, *Dairy Market News*.

Recent Supply and Use Data

According to the most recent *Milk Production* report published by USDA, National Agricultural Statistics Service (NASS), in February, estimated milk production in the United States was 17.515 billion pounds, down 1.0 percent from February 2021. Milk cows totaled 9.370 million head, 96,000 head fewer than February 2021. However, the number of cows in February was 3,000 head above the previous month, which is the first month-over-month increase in the number of cows since May 2021. The average milk per cow in February was 1,869 pounds, up 1 pound from February 2021. It is worth mentioning that milk cow productivity increased from 65.5 pounds per day in January to 66.8 pounds per day in February (+1.2 pounds), which is a larger increment compared to the same period in 2020 (+0.8 pounds) and 2021 (+0.6 pounds), as shown in the graph below.

U.S. milk per cow per day

Pounds

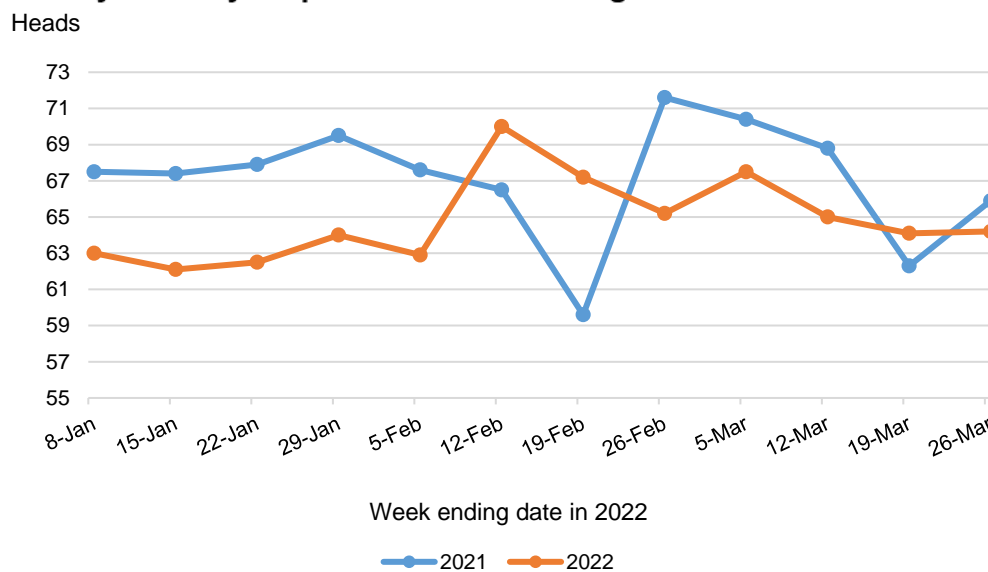


Source: USDA, National Agricultural Statistics Service.

With fewer cows producing milk than last year, dairy farm operators are likely milking the most productive cows. Although NASS reported that the number of milk cows increased from January to February, at this point it is not clear if this signals the beginning of an expansion in milk cow numbers as 2022 progresses. According to official data, federally-inspected milk cow slaughter increased year over year in the middle of February, but then the slaughter activity declined

compared to the previous year in March. Total federally-inspected milk cow slaughter from the week ending January 8 to the week ending March 26 has been below the corresponding weeks in 2021.

Weekly federally inspected milk cow slaughter



Source: USDA, National Agricultural Statistics Service.

During February, exports of some products declined year over year, including exports of 139.7 million pounds of dry skim milk products⁶ (-18.1 million) and 32.5 million pounds of dry whey (-8.2 million). On the other hand, February year-over-year exports of some other dairy products increased, including 11.2 million pounds of butter (+3.5 million), 72.6 million of cheese (+6.1 million), and 63.4 million of lactose (+8.2 million). On a milk-fat milk-equivalent basis, dairy exports totaled 1.008 billion pounds, 166 million higher than February 2021. On a skim-solids milk-equivalent basis, February exports totaled 3.797 billion pounds, 150 million below February 2021.

In February, imports of most major dairy products increased year over year. On a milk-fat basis, dairy imports totaled 367 million pounds in February, 43 million higher than February 2021. On a skim-solids basis, February imports totaled 471 million pounds, 100 million higher than February 2021. Butter imports in February totaled 5.5 million pounds, 2.0 million higher than February 2021 but 0.9 million below the previous month. February imports for cheese totaled 18.2 million pounds, 0.2 million higher than February 2021 but 3.1 million below January 2022. Imports of milk protein products⁷ totaled 23.9 million pounds in February, 8.6 million higher than February 2021 but 1.7 million lower than January 2021.

For the 3 months from December 2021 to February 2022, domestic use on a milk-fat basis totaled 52.436 billion pounds, 0.9 percent higher than the 3 months from December 2020 to February 2021. On a skim solids basis, from December 2021 to February 2022 domestic use

⁶ Dry skim milk products include nonfat dry milk, skim milk powder, and dry skim milk for animal use.

⁷ Milk protein products include milk protein concentrate, milk protein isolate, and casein products.

totaled 44.709 billion pounds, 1.3 percent higher than the 3 months from December 2020 to February 2021.

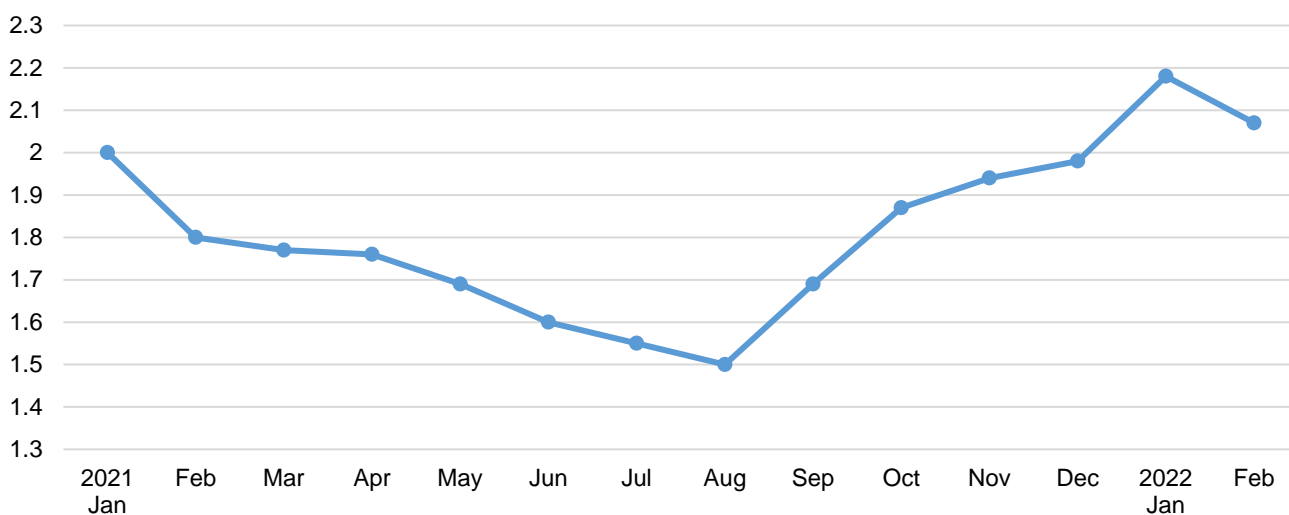
On a milk-fat basis, ending stocks at the end of February totaled 15.818 billion pounds, 10.3 percent lower than the end of February 2021. On a skim-solids basis, ending stocks totaled 11.639 billion pounds, 2.1 percent lower than at the end of February 2021. February ending stocks for butter, dry skim milk products, and dry whey were down from February 2021 by 25.8 percent, 16.4 percent, and 9.9 percent, respectively. February ending stocks for cheese, whey protein concentrate, and lactose were up by 2.3 percent, 1.1 percent, and 24.2 percent, respectively, from February 2021.

Outlook for Feed Prices

After a rising trend over the 5 months from September 2021 to January 2022, the milk-feed ratio declined in February. From January 2022 to February 2022, the all-milk price increased from \$24.20 to \$24.70 per hundredweight (cwt) of milk. However, for those same months, the 16-percent protein dairy feed value used by NASS increased from \$11.10 to \$11.93 per cwt of feed. As a result of these changes, the milk-feed ratio decreased from 2.18 in January to 2.07 in February.

Milk-feed ratio *

All-milk price / feed value



*The milk-feed ratio measures pounds of 16-percent protein dairy feed equal in value to 1 pound of all milk. The feed value is based on the composite U.S. average prices of 51 percent corn, 8 percent soybeans, and 41 percent alfalfa hay. Source: USDA, National Agricultural Statistics Service.

The 2021/22 corn price projection is \$5.80 per bushel, \$0.15 higher than last month's projection. The 2021/22 price projection for soybean meal is \$420 per short ton, unchanged from last month's forecast. For more information, see *Feed Outlook*, published by USDA, Economic Research Service. The alfalfa hay price in February was \$214 per short ton, \$3 lower than January but \$43 higher than February 2021. The 5-State weighted-average price for premium alfalfa hay in February was \$266 per short ton, \$4 higher than January and \$55 higher than February 2021.

Dairy Forecasts for 2022

Milk production for 2022 is projected to total 226.3 billion pounds, 0.3 billion higher than last month's forecast and about the same as 2021. Although NASS reported that the number of milk cows increased from January to February after an 8-month contraction, it is not clear if dairy herd expansion will continue throughout the year. Recent input prices for feed, fuel, and fertilizer have been high. The corn price forecast has been raised for the 2021/22 marketing season, and the soybean meal price forecast remains higher. While milk cows are forecast to average 9.370 million head for the first half of the year, they are projected to decline to 9.365 million in the second half. The annual average forecast rounds to 9,370 million head, 15,000 higher than last month's forecast. The forecast for 2022 average milk per cow is unchanged from last month's forecast of 24,160 pounds per head.

With U.S. prices for most dairy products expected to be very competitive compared to international export prices, dairy export projections for 2022 have been raised. The projection for dairy exports on a milk-fat basis is 11.5 billion pounds, 0.6 billion higher than last month's forecast. On a skim solids basis, the projection for dairy exports is 50.3 billion pounds, an increase of 0.5 billion from last month's projection. Higher exports are expected for cheese, butter, dry skim milk products, and whey products.

Imports on a milk-fat basis for 2022 are projected at 6.4 billion pounds, 0.4 billion pounds lower than last month's forecast, due to lower expected imports of butter and cheese. On a skim-solids basis, the import forecast is 5.8 billion pounds, unchanged from the previous projection.

Based on recent data, the projection for 2022 domestic use on a milk-fat basis is 221.6 billion pounds, 0.6 billion lower than last month's forecast. On a skim-solids basis, domestic use is projected to total 180.8 billion pounds, unchanged from the previous projection.

The projection for 2022 ending stocks for 2022 on a milk-fat basis is 12.9 billion pounds, 0.1 billion lower than last month's forecast, as the expected lower imports and higher exports more than offset higher milk production and lower domestic use. On a skim solids basis, the forecast for 2022 ending stocks is 11.0 billion pounds, 0.2 lower than the previous forecast, as higher expected exports more than offset higher milk production.

Due to relatively high domestic and international dairy product prices in recent weeks and higher expected exports, price forecasts for most dairy products in 2022 have been raised. Price projections for Cheddar cheese, butter, and NDM are \$2.150 (+12.0 cents), \$2.640 (+6.5 cents), and \$1.745 (+0.5 cents) per pound, respectively. Due to recent weakening in the domestic dry whey price and competitive export prices from Western Europe, the forecast for the U.S. dry whey price in 2022 has been lowered to \$0.690 per pound (-2.0 cents).

With higher projected prices for Cheddar cheese more than offsetting lower projected prices for dry whey, the Class III milk price forecast for 2022 has been raised to \$22.75 per hundredweight (cwt), \$1.10 higher than last month's forecast. With higher forecasts for butter and NDM prices, the Class IV milk price projection has been raised to \$24.05 per cwt, \$0.35 higher than the previous projection.

The all-milk price forecast for 2022 has been raised to a record high of \$25.80 per cwt, \$0.75 higher than last month's forecast.

Pork/Hogs

Mildred Haley

March *Quarterly Hogs and Pigs*: Implications for 2022 Pork Production and Hog Prices

The *Quarterly Hogs and Pigs* published by USDA on March 30 showed year-over-year declines in almost all reported categories that determine hog production in 2022. Only the December-February litter rate was year-over-year higher, at 10.95 pigs per litter versus 10.94 a year earlier. Overall, the report indicated that the March 1 inventory of hogs and pigs, market hogs, and breeding animals all declined 2 percent from a year ago. Further, the December-February pig crop declined 1 percent from a year earlier, and producers indicated intentions to farrow 2 percent fewer sows in the March-May quarter and 1 percent fewer in the June-August quarter. The declines in hog supplies implied by the March report have strong implications for pork supply and hog prices for the balance of 2022. On the basis of the new information provided by the March report, USDA revised expected 2022 commercial pork production to about 27.1 billion pounds, about 250 million pounds lower than the last month's forecast and more than 2 percent lower than production last year. Prices of live equivalent 51-52 percent lean hogs are expected to average about \$73 per cwt in 2022, about 3 percent higher than last month's forecast.

First-quarter estimated federally-inspected (FI) hog slaughter totaled about 31.5 million head. The estimated FI totals for January and February were, respectively, 10.4 million head, and 9.9 million head. The estimated FI total in March of 11.2 million head, about 4 percent lower than a year ago, was consistent with the weight category in the March 1 report composed of hogs weighing 180 pounds and over. The report stated that the March 1 heavy-weight hog inventory was 4 percent below a year ago. Pork production in the first quarter, with estimated dressed weights slightly higher than a year ago, calculates to about 6.9 billion pounds, more than 5 percent below a year ago. First-quarter prices of live equivalent 51-52 percent lean hogs averaged \$65.55 per cwt, about 18 percent higher than a year ago.

Second-quarter pork production derives largely from the fall 2021 pig crop—the September-November pig crop was 3.64 percent lower than that of a year earlier. The fall pig crop is reflected in the March 1 report's weight classifications as hogs weighing from 120–179 pounds and from 50 to 119 pounds. The report shows the 120–179 pound category to have been 4 percent lower, year-over-year, on March 1. The lighter-weight category—animals weighing 50 to 119 pounds—was 2 percent below a year earlier on March 1. Second-quarter pork production is forecast at 6.5 billion pounds, about 2 percent below the same period a year ago, taking into account expectations for somewhat higher year-over-year average dressed weights. Average prices of second-quarter live equivalent 51-52 percent lean hogs are expected to be \$80 per cwt, still about 1 percent below a year ago, when record-high wholesale pork prices pushed hog prices higher.

In the third quarter of this year, anticipated pork production of about 6.6 billion pounds—about 1 percent higher than July-September 2021—derives from the December-February pig crop (1 percent lower than a year earlier). This is in part reflected in the lighter weight hog categories of the March report: the 50–119 pound category (2 percent below a year ago) and the under 50 pounds category (1 percent below a year ago). The year-over-year increase in third-quarter pork production is largely attributable to expected heavier average dressed weights. Prices of third-quarter hogs are forecast at \$77 per cwt, about 1 percent higher than a year ago.

Fourth-quarter pork production is expected to be about 7.1 billion pounds, about 1 percent below production a year earlier. Production in the last calendar quarter of 2022 derives largely from the spring (March-May) pig crop, which is likely to be year-over-year lower if producers follow through on their intentions to farrow 2 percent fewer sows than a year ago. Expectations for slightly higher year-over-year spring-quarter litter rates and a moderate increase in average dressed weights would likely be offset by the effects of the reduction in farrowing sow numbers, if producers' follow through on their intentions stated in the March report.

March Report Reflects Producer Response to Risky Market Environment

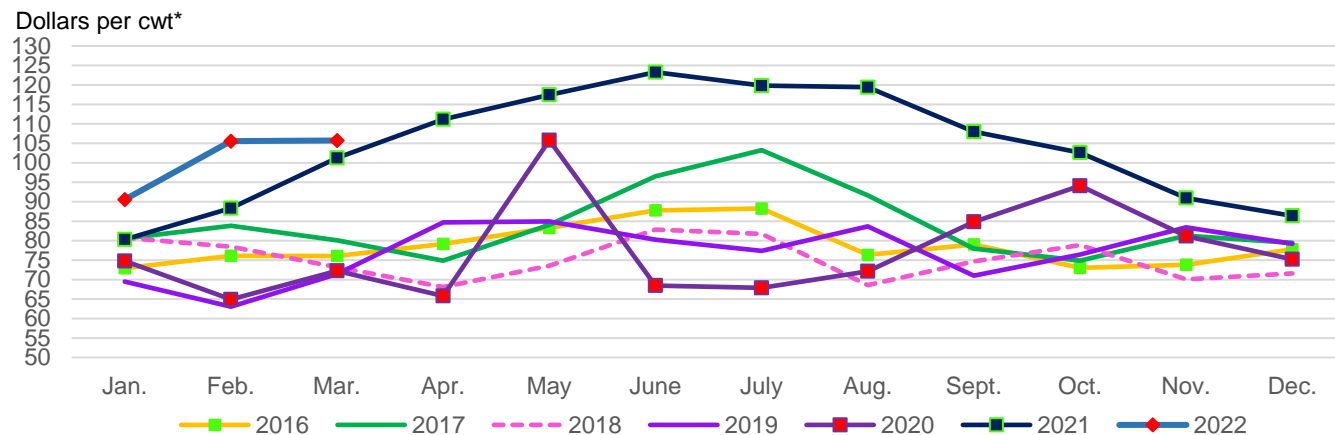
Across-the-board reductions in hog and pig inventories reported in the March *Quarterly Hogs and Pigs*—breeding inventories in particular, as well as lower farrowing intentions—are both likely reflections of pork producers' response to a market environment characterized by new, heightened levels of risk and uncertainty. Prospects of continued cost increases likely induced producers to hit the investment breaks: the year-over-year increase in the annual rate of inflation⁸ confronts producers directly, in terms of increased costs of feed, energy, labor, veterinary care and pharmaceuticals, and building materials. Moreover, legal issues surrounding line speeds in some pork processing plants remain unresolved and may contribute to investment uncertainty despite some slow progress toward resolution. State initiatives such as California Proposition 12 add to medium-to-long term uncertainty, likely slowing sector investment and expansion.

While consumer demand for pork is always a key factor for the pork production sector, in 2022 consumer willingness and ability to pay higher prices for pork products will be crucial in determining whether processors and producers are able to cover increased production and operating costs. The figure below⁹ shows monthly average estimated wholesale values of the pork carcass. While the March 2022 cutout value averaged \$105.73 per cwt, 4.4 percent higher than a year ago, its rate of year-over-year increase is slower than that of January 2022 (when the price, \$90.56, was 12.8 percent above a year earlier), and February 2022 (when the year-over-year increase was almost 20 percent), perhaps signaling a slowing of consumer demand—domestic, foreign, or both.

⁸ FRED Economic Data, Federal Reserve Bank of St Louis. Producer Price Index by Commodity: All Commodities (PPIACO).

⁹ The figure labeled “Monthly estimated wholesale pork carcass values, 2016 to March 2022” includes 6 full years of data, to show the comparative increase in values since early 2021. It is likely that increased consumer demand has played an important role since then in raising and maintaining significantly elevated levels of wholesale pork carcass values.

Monthly estimated wholesale pork carcass values, 2016-March 2022

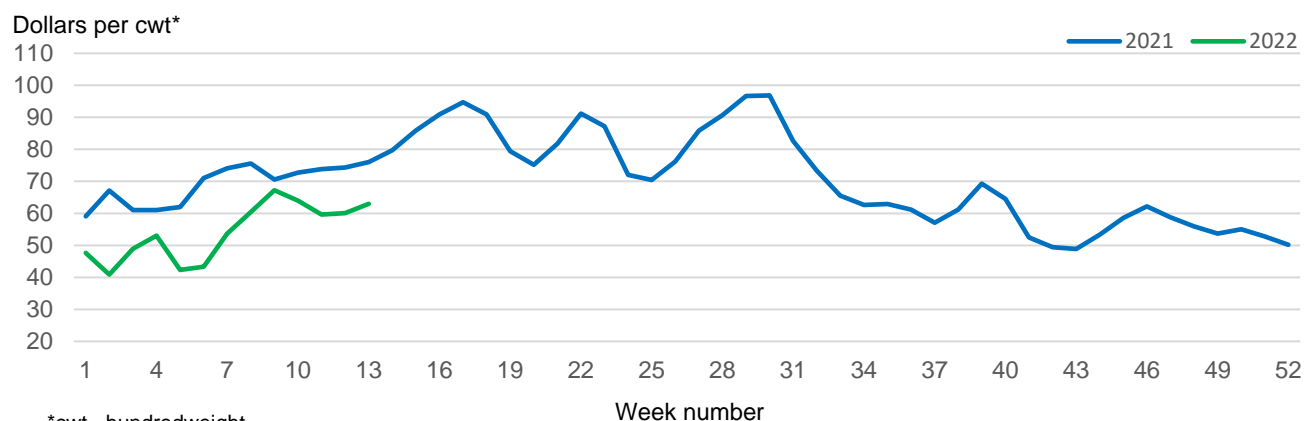


Sharply Lower February Exports Prompt Downward Revisions in 2020 Quarterly Forecasts

February pork exports totaled 486 million pounds, almost 18 percent lower than a year ago. Shipments to most major markets were lower. Mexico exports were the exception, at almost 181 million pounds, 42 percent higher than a year ago. Well-priced bone-in hams are likely driving Mexican purchases of U.S. pork. Bone-in hams, a favored Mexican pork cut, have been priced below-year ago values through the week ending April 1 (week 13 in the figure below), averaging almost 22 percent below the same period last year. A steady U.S. dollar-peso exchange rate, which has averaged about 20.5 pesos per dollar since January, combined with below year-earlier bone-in ham prices, is likely to maintain Mexico sales.

On the other hand, higher U.S. pork prices, combined with continued port congestion and higher shipping costs for other Western Hemisphere countries not as closely located to the United States as Mexico, are likely to lead to reduced demand for U.S. pork. These factors—higher pork prices and higher costs of transport and handling—are also likely to reduce demand for U.S. pork in more price-sensitive markets in Asia. Consequently, quarterly pork export forecasts are revised downward as follows: first-quarter exports are revised to 1.555 billion pounds, a reduction of 25 million pounds from the previous forecast, and more than 19 percent lower than exports in the first quarter of 2021. Second quarter, exports are expected to be 1.580 billion pounds, a reduction of 50 million pounds from the previous forecast and more than 17 percent below the second quarter last year. For the third quarter, exports of 1.6 billion pounds are anticipated, a reduction of 20 million pounds from the previous forecast but almost 4 percent above same-period exports in 2021. In the fourth quarter, exports are expected to be 1.86 billion pounds, 40 million pounds below the previous forecast but almost 13 percent above year-earlier exports. Total U.S. exports in 2022 are expected to be 6.595 billion pounds, 6.2 percent below those of 2021.

Weekly prices, 23–27 pound trimmed selected hams



U.S. pork exports: Volumes and export shares of the 10 largest foreign destinations in February 2021 and 2022					
Country	Exports	Exports	Percent change (2022/2021)	Export share	Export share
	Feb. 2021 (Million pounds)	Feb. 2022 (Million pounds)		Feb. 2021 Percent	Feb. 2022 Percent
World	592	486	-17.9		
Mexico	128	181	41.5	22	37
Japan	99	99	-0.5	17	20
South Korea	42	40	-4.2	7	8
China\Hong Kong	142	42	-70.4	24	9
Canada	47	38	-19.4	8	8
Colombia	27	20	-25.3	4	4
Dominican Republic	16	16	-1.5	3	3
Australia	23	10	-55.7	4	2
Honduras	11	10	-11.4	2	2
Guatemala	7	6	-18.5	1	1

Source: USDA, Economic Research Service.

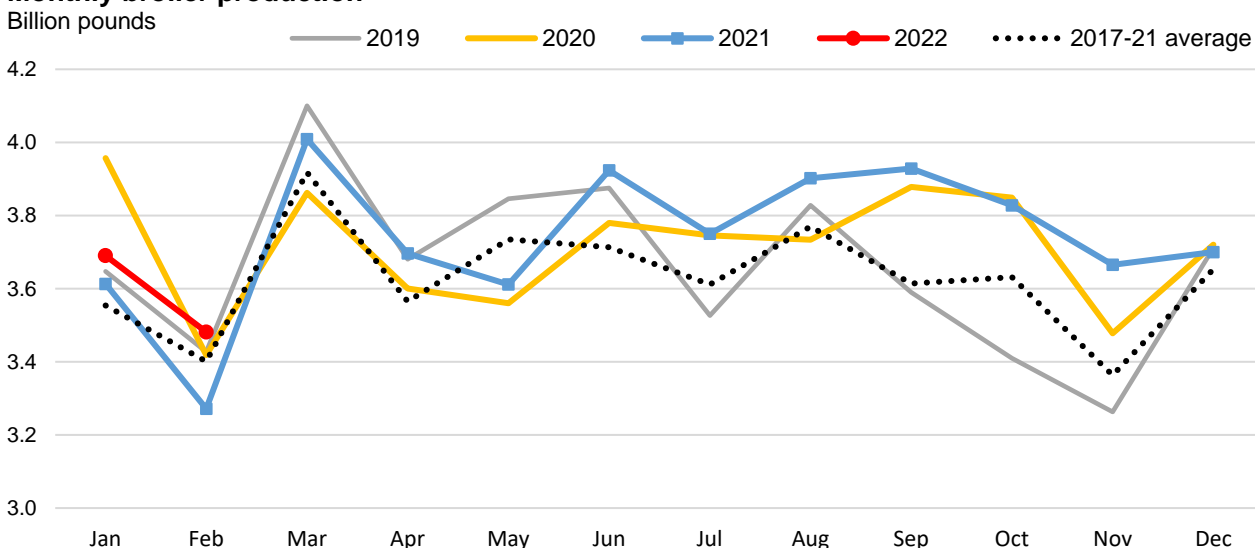
Poultry

Grace Grossen, Adriana Valcu-Lisman, and Margaret Cornelius

Broiler Production in 2022 Adjusted Down While Exports Are Increased

Broiler production in February totaled 3.481 billion pounds, an increase of 6.4 percent year over year. This was a result of increases in both slaughter numbers and bird weights from last February. Preliminary weekly data indicates weaker March production. Based on this, first-quarter production was adjusted down to 11.025 billion pounds. The forecasts for the other quarters of 2022 are unchanged at 11.325 billion pounds in the second quarter, 11.625 billion pounds in the third, and 11.225 billion pounds in the fourth. The 2022 total forecast is 45.2 billion pounds, an increase of 1 percent over 2021.

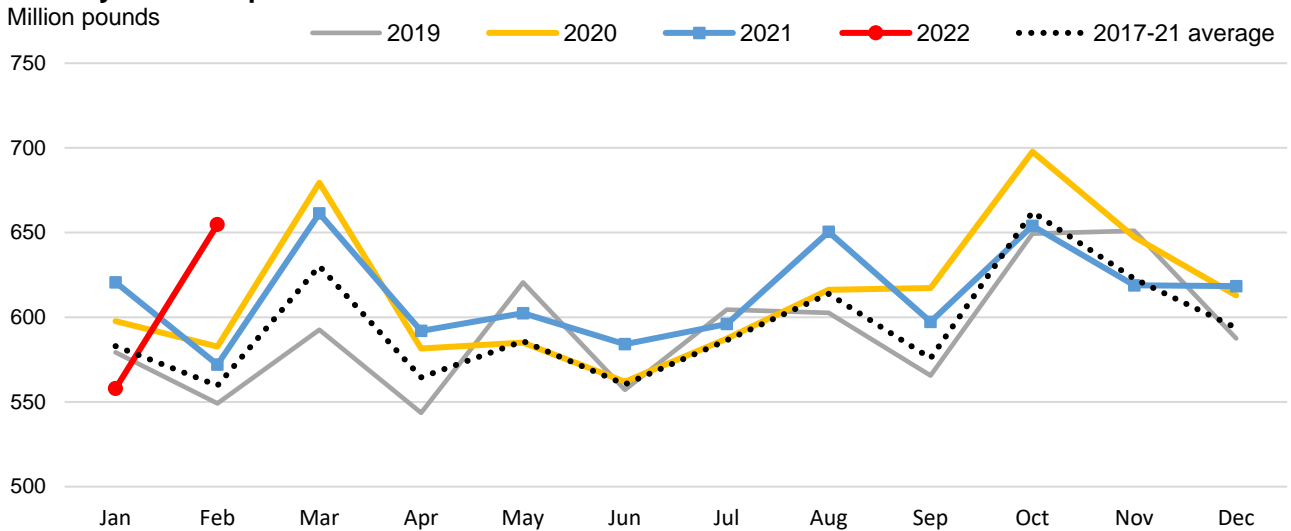
Monthly broiler production



Source: USDA, National Agricultural Statistics Service.

While the 2022 outbreak of Highly Pathogenic Avian Influenza (HPAI) has impacted 24 States and 23.75 million commercial birds, as of this writing only 8 cases have been confirmed in commercial broiler chickens. In total, these cases resulted in the depopulation of 2 million head, which represents a fraction of a percent of typical monthly slaughter. More than 60 percent of U.S. broiler production is in six States: Georgia, Alabama, Arkansas, North Carolina, Texas, and Mississippi. Of these, only North Carolina and Texas have had an HPAI outbreak of any kind so far in 2022. Based on the discoveries and depopulations as of April 8, broiler exports are not expected to be heavily impacted by HPAI. Most countries' import restrictions in response to the HPAI outbreak are not national, but rather on a State- or zone-level basis.

Monthly broiler exports



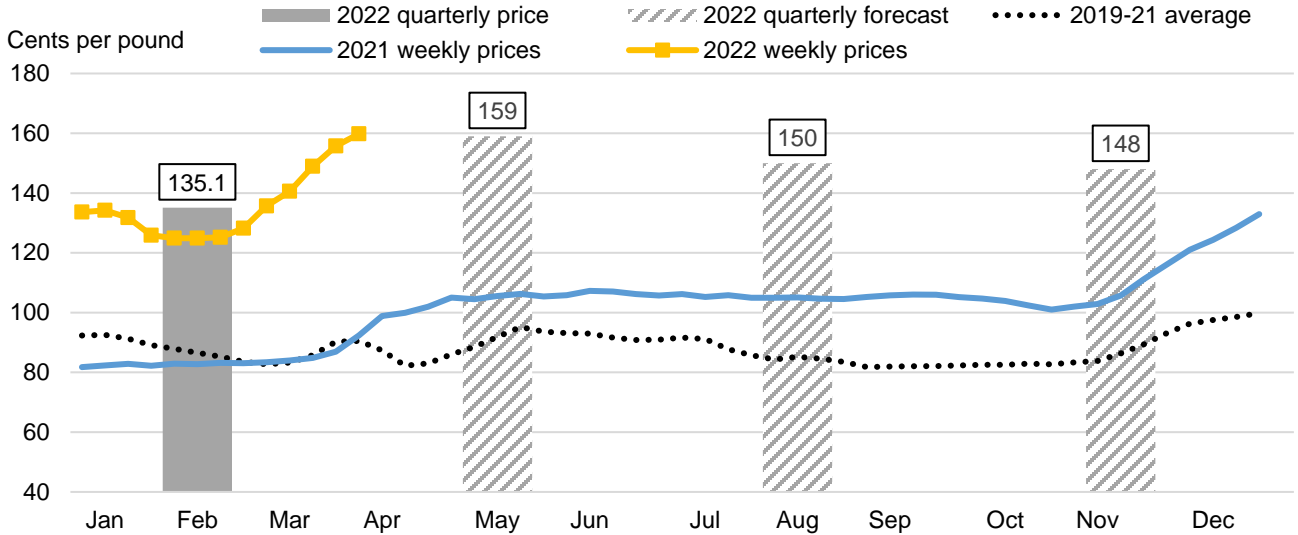
Source: USDA, National Agricultural Statistics Service.

February broiler exports totaled 654.7 million pounds, an increase of 14 percent over last February. Year-over-year increases in shipments to Mexico (+38.7 million pounds), Canada (+5.6 million pounds), Cuba (+15.1 million pounds), China (+6.0 million pounds), Taiwan (+11.7 million pounds), Guatemala (+5.6 million pounds), and others more than made up for year-over-year declines in shipments to Colombia (-7.2 million pounds), Vietnam (-8.7 million pounds), Ghana (-6.4 million pounds), the Philippines (-6.3 million pounds), the United Arab Emirates (-5.3 million pounds), Peru (-3.8 million pounds), and other markets. Based on strong February shipments, strong international demand, and competitive prices for chicken parts, projected broiler exports in 2022 were increased by 60 million pounds to 7.365 billion pounds. This represents about 16 percent of projected production and would be about level with 2021 exports.

While Whole Broiler Prices Climb, Prices for Parts Remain Competitive

The national composite broiler price averaged 148.04 cents per pound in March, bringing the first-quarter average price to 135.1 cents per pound. Weekly prices continued a climb that started in mid-February, averaging 159.81 cents per pound in the week ending April 1st. Expectations are that the composite price will remain elevated thanks to strong demand and relatively slow growth in production. Quarterly price projections for 2022 were adjusted up accordingly, to 159 cents per pound in the second quarter, 150 cents in the third quarter, and 148 cents in the fourth quarter. This would lead to an annual average of 148 cents per pound, 47 cents over last year's average of 101.2 cents.

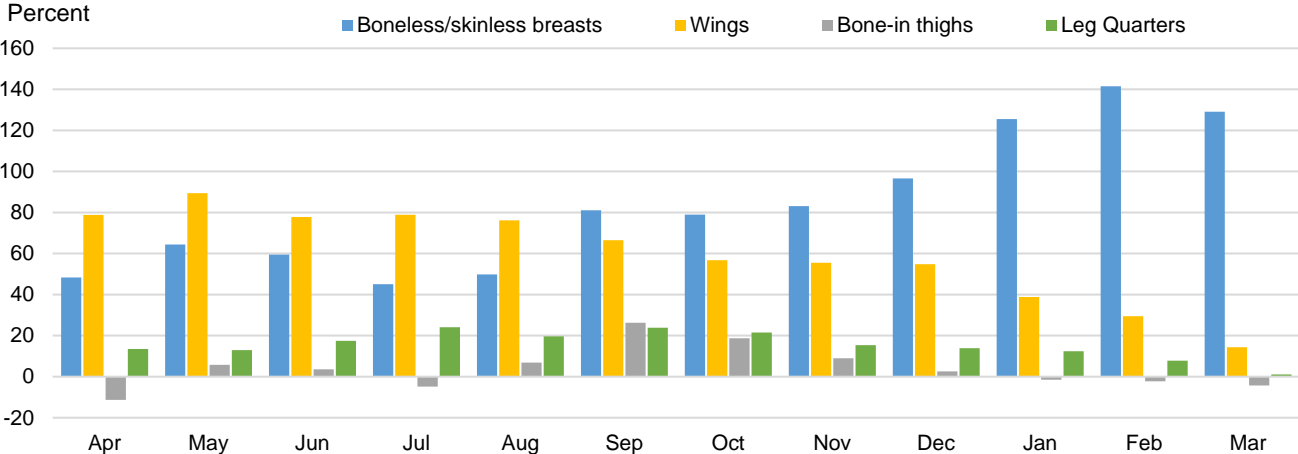
National composite wholesale broiler price



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

The recent upswing in the national composite price is not reflected in wholesale prices for chicken parts. The chart below compares the last 12 months of wholesale prices to the previous 5-year average for boneless/skinless breasts, wings, leg quarters, and bone-in thighs. Boneless/skinless breasts are in high demand domestically as the pandemic weakens and the restaurant industry ramps up, and the recent elevated prices reflect that. The wholesale price averaged 277.55 cents per pound in March, a new record high. Wholesale prices for wings remain elevated relative to pre-pandemic levels, but they have been falling steadily since last summer. Wing prices averaged 223.14 cents per pound in March. Bone-in thighs are less labor-intensive than boneless products and were likely more available than boneless thighs. Their prices didn't climb during the pandemic as those for some other parts did, averaging 61.03 cents per pound in March. Leg quarters have strong export demand, and while prices fell in 2020, they have been relatively stable since. Prices averaged 38.62 cents per pound in March.

Percent change in monthly wholesale chicken part prices from 5-year average prices, 2021-2022



Note: Based on average prices over 2016-2021.
Source: USDA, Agricultural Marketing Service.

Highly Pathogenic Avian Influenza (HPAI) Detected in Commercial Poultry Operations

The first case of HPAI since 2015 was detected at the beginning of February in a commercial turkey operation in Indiana. As of April 6th, HPAI outbreaks have been reported in 24 States, impacting 96 commercial operations. These operations comprised more than 23.75 million turkeys, broiler chickens, and table egg layers. The affected portion of table egg layers represents about 71 percent of the total number of affected birds.¹⁰

According to *USDA APHIS Final Report, 2014–2015 HPAI Outbreak*, the outbreak was detected in 211 commercial operations and 21 backyard premises located in 21 States. Overall, it affected 7.4 million turkeys and 43 million egg layers/pullet chickens, as well as a limited number of mixed poultry. The first outbreak was reported in December 2014 in a backyard flock in the northwestern United States, while the first confirmed commercial flock case was reported a month later in California. An increasing number of outbreaks were reported beginning in early April and throughout May. The last confirmed case of HPAI in a commercial flock was reported on June 16th, 2015.

While it is too early to assess the impact of the current HPAI outbreak, several distinctions can be made relative to the previous outbreak. First, the early current outbreaks were reported on the Mississippi and Atlantic flyway rather than the Pacific one. Second, cases from the first outbreaks in the major egg and turkey production States were reported a few weeks sooner than they were in 2015. Third, the current spread of the outbreaks is driven by wild bird migration patterns rather than facility to facility transfer. Last, the enhanced biosecurity measures that followed the 2015 outbreak have the potential to limit the further spread.

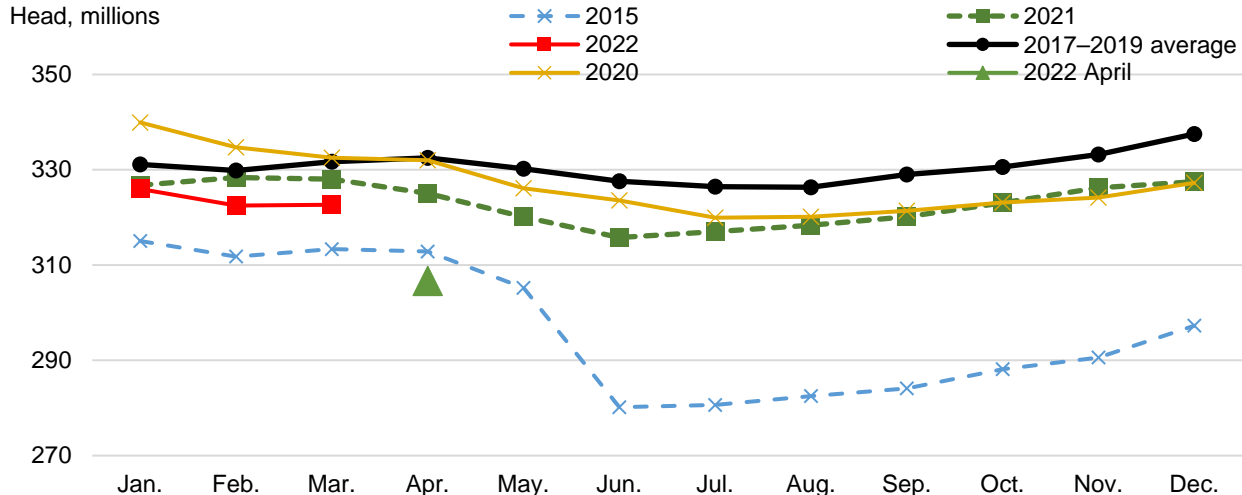
2022 Egg Production Forecast Revised Down Due to HPAI

The timing of the outbreak aligns with the period before Easter, when the U.S. egg producers expand their egg-laying flocks to meet the demand for the holiday. The mid-spring flock expansion is followed by flock contraction during the summer months when the interest in indoor cooking and baking is at its lowest. However, after the Covid-19-related flock depletions in the first half of 2020, producers have been slow in bringing the egg-laying flocks back to their pre-pandemic levels. For example, the 2021 average size of the layer flock was about 1 percent below the 2020 average. More recently, the size of the table egg layer flock on March 1—most likely not accounting for any HPAI related losses— was estimated at 322.7 million layers, 1.6 percent year-over-year lower (see chart). Furthermore, the February table egg production was just under the year-ago levels.

The unknowns related to the evolution of the current HPAI outbreak—the length of quarantine and the recovery period required following the flock depopulations, along with the expectation of high production costs— will likely further hamper the recovery and growth potential of the layer flock and thus the table egg production. First-quarter table egg production was estimated at 1,975 million dozen. The forecasts for the outlying quarters were revised down as follows: second quarter to 1,875 million dozen, third quarter to 1,925 million dozen, and fourth quarter to 2,000 million dozen. Consequently, 2022 total table egg production is forecast at 7,775 million dozen, a 2.5-percent year-over-year decrease.

¹⁰ Using USDA, Animal and Plant Health Inspection Service (APHIS) reported data last updated on April 6, 2022.

Monthly table egg layer flock size at the beginning of the month¹



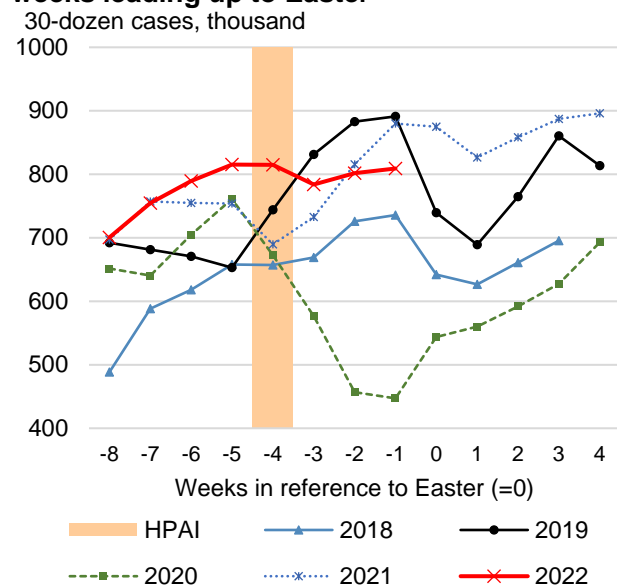
¹April table egg layer flock size is determined by subtracting the total number of egg layers impacted by Highly Pathogenic Avian Influenza (HPAI) as of April 6th from the USDA, NASS table egg layer flock estimate on March 1.
 Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service (NASS)..

Wholesale Egg Prices and Inventories Ahead of Easter

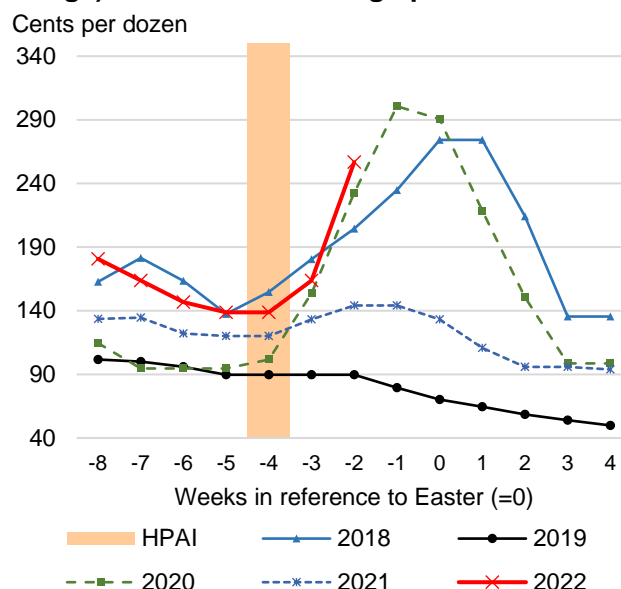
Easter, together with the winter holidays and back to school seasons, is one of the main periods of the year when consumer demand for shell eggs is at its highest. To make sure that the demand is met, the U.S. producers start building their shell egg inventories 5 to 6 weeks before the holiday. At the same time, grocery stores and other marketers begin stocking up their supplies. It is their bid for securing the egg supplies ready to go to consumers and the inventory availability that drives the wholesale prices during this period. Adding to retail demand, there was likely an increase in foodservice demand, and restaurant operations and holiday travel were expected to increase. The expected seasonal increases in prices were already underway in mid-March when the first two significant outbreaks of HPAI in the Upper Midwest were announced (see chart). The two outbreaks reported between March 14–18 affected more than 8 million table egg layers of the March 1 laying flock of 322.7 million layers. Concerns over these events and subsequent outbreak announcements encouraged buyers to aggressively secure supplies, pushing wholesale egg prices up even further.

The total stocks available for marketing for large eggs were at their highest level since 2018 in the recent week of March 14–18. The following week, the reported inventories were 3.8 percent lower week over week. Higher week-over-week inventories were reported for the next couple of weeks. However, relative to the period leading up to Easter, the inventories for large eggs are below 2019 and 2021 levels, but above those for 2018 and 2020 levels. The weekly combined regional shell eggs representing the average prices on sales to volume buyers for USDA Grade A and Grade A white eggs in cartons were following a similar seasonal pattern, albeit at higher levels than the previous 3 years. However, wholesale prices increased sharply following the week when HPAI was detected in the Upper Midwest (see charts).

Weekly shell egg inventories (Large) in the weeks leading up to Easter^{1,2}



Weekly combined regional shell eggs (Grade A, Large) in the weeks leading up to Easter¹



¹ Highly Pathogenic Avian Influenza (HPAI) confirmed in the Upper Midwest States (March 14–18). ² Total stocks on hand available for marketing.

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

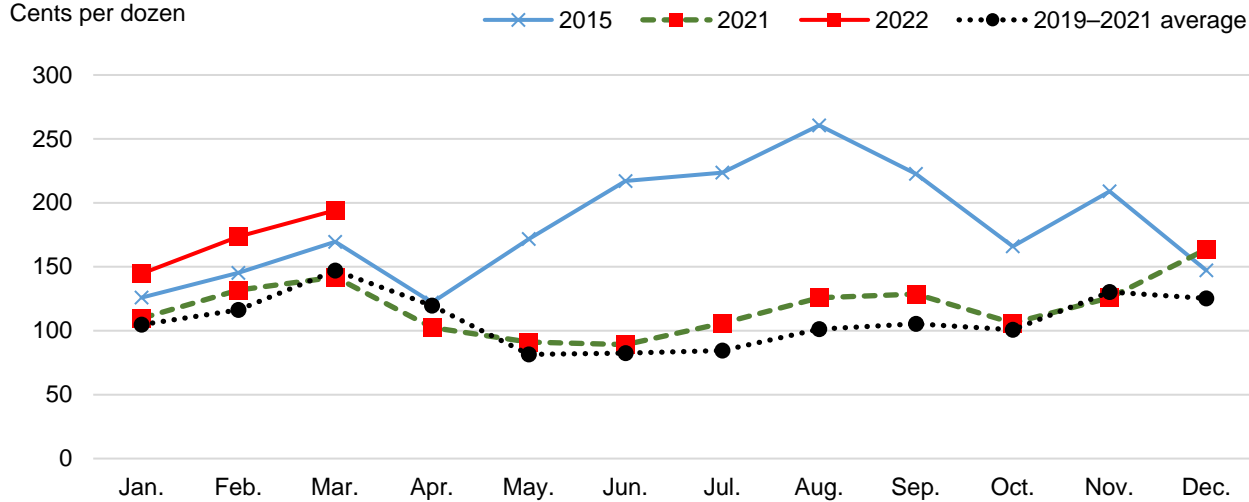
Benchmark Wholesale Egg Prices Forecast Revised Up on HPAI

Following the seasonal pattern, weekly average wholesale egg prices (New York, Grade A, large) trended down in February and early March and started their seasonal increase at the beginning of the third week of March. However, prices increased sharply throughout the second half of the month. At the end of March, wholesale shell-egg prices averaged 194.2 cents per dozen, a 36.8-percent year-over-year increase. Rivaling the previous high of 307 cents per dozen in April 2020, daily prices reached a high of 298 cents per dozen at the end of March and maintained this level through the first week of April.

Going forward, starting the week before Easter, wholesale egg prices are expected to follow their seasonal pattern and decrease as most buyers are expected to have filled their needs ahead of the holiday. Also, the demand for eggs relaxes during the summer months, bringing some ease to the prices. During the previous HPAI outbreak in 2015, wholesale prices reached and maintained record-high values through the summer months. However, the outbreaks in the commercial flocks occurred later in the spring, and the number of layers affected was much higher than those discoveries as of the first week of April.

The first-quarter wholesale prices averaged 170.8 cents per dozen. This represents a 33.6-percent year-over-year increase. For the 2022 forecast, with production affected due to the impacts of current discoveries HPAI on the size of the laying flock and the expected pace of flock rebuilding, each subsequent quarter was increased as follows: second quarter to 155 cents per dozen, third quarter to 145 cents, and fourth quarter to 157 cents. These changes bring the wholesale egg price forecast for 2022 to 157 cents per dozen, a 32.5-percent year-over-year increase.

Monthly average midpoint prices for whole eggs (New York, Grade A, large)



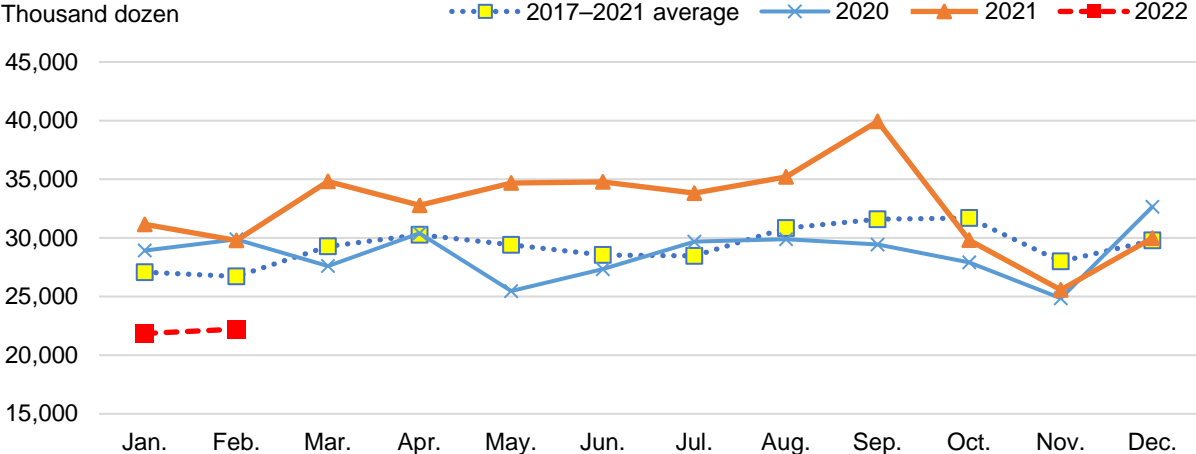
Source: USDA, Economic Research Service using data from USDA, Agricultural Marketing Service.

Egg Exports Revised Down, Egg Imports Revised Up on HPAI

February exports of eggs and egg products totaled 22.2 million dozen shell-egg equivalent, a 25.4-percent year-over-year decrease. The year-over-year decrease in shipments of shell eggs (-45.7 percent) more than offset the increase in the shipments of egg products (+8.3 percent). In terms of volume, similar to the previous month, modest increases in shipments to smaller markets (Jamaica, Trinidad and Tobago, Bahamas, and China) were not sufficient to offset significant decreases in shipments to the top four markets (Mexico, Canada, Hong Kong, and South Korea). Japan, one of the top five market destinations, was the only major market with higher year-over-year shipments.

February marked the third consecutive month when egg export shipments fell well below year-earlier levels. Given the domestic market uncertainties driven by the HPAI outbreaks, the current trend in egg exports, the expectations of higher domestic wholesale egg prices, and lower table egg production, the forecast for 2022 exports was revised further down to 277 million dozen shell-egg equivalent—a 29.4-percent year-over-year decrease.

Monthly U.S. eggs and egg products export volumes (shell-egg equivalent)



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

February imports of egg and egg products totaled 1.7 million dozen shell-egg equivalent. This represents a 34.8-percent year-over-year increase. Given the expected impact of HPAI on domestic egg production, the forecast for 2022 imports was revised up to 48.5 million dozen shell-egg equivalent, a 166.6-percent increase from last year.

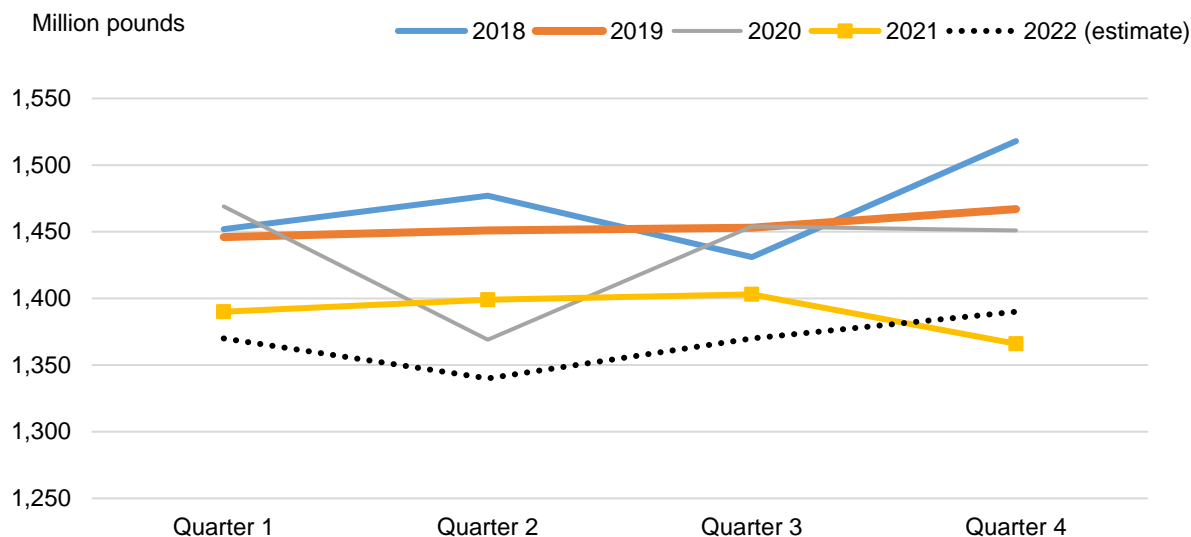
HPAI Dents Turkey Production

February turkey production totaled 422.8 million pounds, a 0.53-percent increase from February 2021. Per day slaughter was up 0.65 percent and live weights were down 0.15 percent year-over-year. Placements were up 2.6 percent and stocks were down 7.7 percent year-over-year.

As HPAI spreads to poultry production facilities throughout the country, the turkey industry has been affected most of all. HPAI was first detected in the United States in early February and has not yet shown signs of abating. As of early April, HPAI had been detected in commercial turkey flocks in Indiana, Kentucky, Iowa, Missouri, South Dakota, Minnesota, North Carolina, and North Dakota. As a result, 1-percent annual growth is no longer expected for 2022 turkey production. Instead, total annual production was revised down to 5,470 million pounds, a 1.6-percent contraction year over year. Ending turkey stocks were revised down 10 million pounds to 165 million.

The first-quarter production estimate for 2022 was adjusted down 5 million pounds to 1,370 million. AMS weekly slaughter figures for March were strong, but HPAI wiped out 1.6 million turkeys in commercial facilities in March. Second-quarter production was revised down by 70 million pounds to 1,340 million, third-quarter production was revised down 45 million pounds to 1,370 million, and fourth-quarter production was revised down 30 million pounds to 1,390 million. At the time these estimates were made, approximately 3.1 million turkeys had been exterminated after HPAI exposure.

Quarterly turkey production



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

Turkey Export Forecast Reduced Again, Imports Up

February turkey exports were reported at 33.6 million pounds, which was 4.9 percent of total February turkey supply. This is a year-over-year reduction of 19.2 percent. The 2022 export estimate was revised down 85 million pounds to 375 million due to HPAI and high prices. Mexico, which was the destination for 68.9 percent of U.S. turkey exports in 2021, has instituted State-level and county-level import bans on U.S. turkey from States where HPAI was detected. Import bans have been issued by other key markets as well. Meanwhile, turkey's historically high prices are likely to limit demand from price-sensitive countries, many of which are key markets for U.S. turkey.

Turkey imports to the United States have been unusually strong so far in 2022. January imports were up 46 percent from the 5-year average and February imports were up 26 percent from the 5-year average. This growth comes from an increase in imports from Chile, which are drawn by the higher U.S. prices. Imports for 2022 were revised up 2 million pounds to 25 million.

Key markets for U.S. turkey exports

Country	2021 share of exports	Feb. 2022 share of exports
Mexico	69.08%	65.88%
China	2.41%	7.10%
Hong Kong	0.65%	0.92%
Canada	2.45%	2.22%
Dominican Republic	1.89%	2.93%
Japan	0.37%	0.48%
Panama	1.26%	0.45%
South Africa	2.27%	0.52%
Guatemala	1.79%	1.19%
Haiti	1.55%	0.94%
Benin	3.11%	2.95%
Jamaica	1.33%	2.31%
Costa Rica	1.07%	2.27%
Bahamas	1.03%	1.21%
All Others	9.73%	8.63%

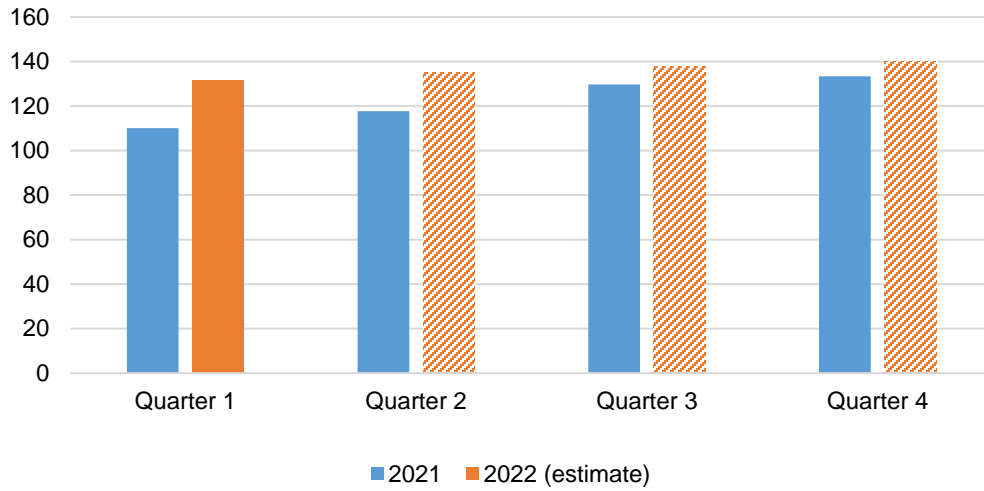
Source: USDA, Economic Research Service, Livestock and Meat International Trade Data.

Turkey Prices Historically High

The 2022 first-quarter whole-hen frozen turkey price was reported at 131.4 cents per pound, a 19.4-percent increase from the 2021 first-quarter price. The February whole-hen frozen turkey price was reported at 129.84 cents per pound and the March price at 134.88 cents per pound, record-high prices for both months. February's price was 18.4 percent higher and March's price 20.4 percent higher year over year. With lower forecast production due to HPAI, prices are expected to continue to rise at a more rapid rate in 2022: the second-quarter price was raised 4 cents to 135 cents per pound, the third-quarter price was raised 6 cents to 138 cents per pound, and the fourth-quarter price was raised 7 cents to 140 cents per pound.

Quarterly turkey prices

Cents per pound



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

Suggested Citation

Livestock, Dairy, and Poultry Outlook, April 2022, LDP-M-334, U.S. Department of Agriculture, Economic Research Service, April 14, 2022.

Use of commercial and trade names does not imply approval or constitute endorsement by USDA.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotope, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint](#) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.

U.S. red meat and poultry forecasts

Production, million pounds	2017					2018					2019					2020					2021					2022				
	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	I	II	III	IV	Annual
Beef	6,303	6,407	6,736	6,742	26,187	6,486	6,726	6,819	6,862	26,872	6,414	6,817	6,923	7,001	27,155	6,931	6,059	7,115	7,069	27,174	6,895	6,957	6,978	7,108	27,937	7,020	6,905	7,035	6,750	27,710
Pork	6,410	6,137	6,240	6,796	23,584	6,645	6,325	6,315	7,031	26,315	6,638	6,615	6,706	7,478	27,638	7,426	6,313	7,048	7,515	28,303	7,291	6,668	6,529	7,185	27,673	6,910	6,508	6,555	7,105	27,075
Lamb and mutton	37	36	35	37	145	39	39	37	39	153	37	40	36	36	149	35	36	34	33	138	35	36	32	35	138	29	33	32	35	129
Broilers	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	11,238	10,940	11,358	11,047	44,583	10,893	11,232	11,581	11,193	44,899	11,025	11,325	11,625	11,225	45,200
Turkeys	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	1,469	1,369	1,454	1,451	5,743	1,390	1,399	1,403	1,366	5,568	1,370	1,340	1,370	1,390	5,470
Total red meat and poultry	24,617	24,621	25,197	25,734	100,169	25,130	25,410	25,704	26,191	102,435	25,264	26,019	26,675	27,308	105,266	27,251	24,870	27,172	27,263	106,556	26,645	26,444	26,676	27,031	106,797	26,498	26,260	26,770	26,375	106,173
Table eggs, million dozen	1,928	1,934	1,953	1,997	7,811	1,952	1,987	2,024	2,079	8,043	2,047	2,056	2,046	2,111	8,260	2,090	1,957	2,008	2,051	8,086	1,962	1,957	1,982	2,050	7,971	1,975	1,875	1,925	2,000	7,775
Per capita disappearance, retail pounds 1/																														
Beef	14.1	14.2	14.4	14.3	57.0	14.0	14.5	14.4	14.4	57.3	13.9	14.7	14.5	14.7	57.8	14.6	13.5	15.5	14.5	58.2	14.5	14.9	14.6	14.8	58.9	15.0	14.8	14.8	14.1	58.7
Pork	12.4	11.8	12.4	13.5	50.2	12.6	12.2	12.4	13.8	51.0	13.0	12.4	12.8	13.8	52.1	13.1	11.5	13.2	13.9	51.7	13.0	11.8	12.3	14.0	51.1	13.2	12.3	12.5	13.0	51.0
Lamb and mutton	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	0.4	0.3	0.3	0.3	1.2	0.3	0.4	0.3	0.4	1.4	0.3	0.3	0.3	0.4	1.3
Broilers	22.4	22.9	23.2	22.5	91.1	22.7	23.4	23.6	22.9	92.6	22.4	23.8	24.6	23.7	94.5	24.2	23.7	24.4	23.4	95.8	23.5	24.3	25.0	23.8	96.5	23.5	24.3	25	23.8	96.6
Turkeys	3.7	3.7	4.0	5.0	16.5	3.5	3.8	3.9	4.9	16.2	3.4	3.7	4.0	4.8	15.9	3.6	3.5	3.9	4.7	15.7	3.4	3.6	3.8	4.5	15.3	3.5	3.5	3.5	4.5	15.4
Total red meat and poultry	53.3	53.3	54.7	56.0	217.3	53.4	54.5	55.1	56.8	219.8	53.4	55.4	56.4	57.8	223.0	56.3	52.9	57.7	57.2	224.2	55.2	55.3	56.4	57.9	224.8	55.9	55.7	56.8	56.1	224.6
Eggs, number	69.4	69.6	70.3	71.0	280.3	69.6	70.9	72.7	74.3	287.5	72.7	72.6	72.3	74.0	291.6	72.1	69.3	71.1	72.8	285.5	69.7	68.8	69.3	72.7	280.5	70.7	66.5	69.0	71.6	277.8
Market prices																														
Steers 5-year Direct, Total all grades, dollars/cwt	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	118.32	105.79	101.74	108.18	108.51	112.98	120.75	123.51	132.36	122.40	139.25	139.00	136.00	143.00	139.31
Feeders Steers, Medium Frame No. 1, OK C/ly, dollars/cwt	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	136.42	126.37	141.42	137.57	135.45	134.30	140.22	153.69	159.59	146.95	158.04	159.00	165.00	172.00	163.01
Cows, Live equivalent, Culler 90% lean, 500 lbs and up, National, dollars/cwt	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	59.38	63.14	64.97	54.93	60.61	59.63	67.54	69.21	63.24	64.91	72.65	85.00	86.00	73.00	79.16
Choice/Prime slaughter lambs, National, dollars/cwt	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	159.12	N/A	N/A	164.31	161.72	165.42	211.79	256.86	233.61	216.92	225.00	225.00	215.00	220.00	221.25
Barrows and gilts, National base cost, 51-52% lean, live equivalent, dollars/cwt	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	42.52	38.96	40.50	50.75	43.18	55.71	80.92	76.15	56.36	67.29	65.55	80.00	77.00	69.00	72.39
Broilers, Wholesale, National composite, weighted average, cents/lb	88.5	104.7	94.9	86.1	93.5	86.1	115.1	93.7	87.7	97.8	94.0	97.7	82.0	80.6	88.6	83.5	67.0	66.7	75.7	73.2	84.0	104.4	105.4	110.9	101.2	135.1	159.0	150.0	148.0	148.0
Turkeys, Wholesale, National composite, weighted average, cents/lb	100.4	99.1	96.9	88.0	96.1	79.4	79.6	80.4	81.4	80.2	82.8	85.5	90.8	97.8	88.2	97.4	103.7	111.3	113.6	106.5	110.1	117.7	129.7	133.4	122.8	131.4	135.0	138.0	140.0	136.1
Eggs, Grade A large, New York, volume buyers, cents/dozen	80.0	74.7	102.1	147.0	100.9	179.6	124.4	120.8	125.6	137.6	107.3	69.7	81.9	117.2	94.0	133.1	119.6	89.0	107.2	112.2	127.8	94.2	120.1	131.8	118.5	170.8	155.0	145.0	157.0	157.0
U.S. Trade, million pounds, carcass-weight equivalent																														
Beef and veal exports	653	680	746	781	2,899	731	801	828	799	3,160	700	790	788	749	3,026	769	605	759	819	2,951	786	873	911	867	3,447	830	820	840	810	3,300
Beef and veal imports	700	812	814	668	2,993	721	805	807	664	2,998	739	836	771	712	3,058	774	848	1,028	693	3,342	696	866	923	863	3,348	910	860	890	780	3,440
Lamb and mutton imports	80	58	57	57	252	80	66	70	57	273	80	73	53	66	272	102	67	62	70	302	69	93	100	103	364	97	91	89	93	370
Pork exports	1,432	1,426	1,230	1,544	5,632	1,515	1,521	1,298	1,542	5,877	1,445	1,535	1,515	1,826	6,321	2,021	1,773	1,627	1,859	7,280	1,927	1,907	1,544	1,653	7,030	1,565	1,580	1,600	1,860	6,595
Pork imports	264	281	283	287	1,116	279	270	245	248	1,042	259	227	232	227	945	206	220	226	252	904	247	260	308	364	1,180	350	330	335	385	1,400
Broiler exports	1,720	1,622	1,659	1,785	6,766	1,709	1,704	1,785	1,871	7,069	1,721	1,721	1,773	1,888	7,103	1,880	1,729	1,821	1,958	7,367	1,854	1,778	1,844	1,891	7,367	1,825	1,820	1,830	1,890	7,355
Turkey exports	133	148	168	173	622	153	147	141	170	611	147	166	159	167	639	139	126	143	164	571	130	142	138	139	549	105	85	85	100	375
Live swine imports (thousand head)	1,449	1,458	1,296	1,394	5,597	1,357	1,349	1,258	1,286	5,250	1,338	1,253	1,200	1,305	5,096	1,332	1,202	1,272	1,487	5,293	1,607	1,651	1,773	1,635	6,666	1,565	1,610	1,650	1,675	6,500

Note: Forecasts are in bold, cwt=hundredweight.

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

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

For further information, contact: Mildred Haley, Economic Research Service, USDA.

Updated 4/8/2022

Dairy forecasts

	2020	2021					2022				
	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual
Milk cows (thousands)	9,392	9,466	9,503	9,442	9,381	9,448	9,370	9,370	9,365	9,365	9,370
Milk per cow (pounds)	23,777	6,005	6,119	5,914	5,909	23,948	6,000	6,170	6,000	5,990	24,160
Milk production (billion pounds)	223.3	56.8	58.1	55.8	55.4	226.3	56.2	57.8	56.2	56.1	226.3
Farm use	1.1	0.3	0.3	0.3	0.3	1.1	0.3	0.3	0.3	0.3	1.1
Milk marketings	222.2	56.6	57.9	55.6	55.2	225.2	56.0	57.6	55.9	55.8	225.3
Milk-fat (billion pounds milk equiv.)											
Milk marketings	222.2	56.6	57.9	55.6	55.2	225.2	56.0	57.6	55.9	55.8	225.3
Beginning commercial stocks	13.6	15.6	18.1	20.0	17.9	15.6	14.3	16.4	17.5	15.8	14.3
Imports	6.8	1.3	1.8	1.8	1.7	6.5	1.3	1.6	1.7	1.8	6.4
Total supply	242.6	73.5	77.8	77.4	74.8	247.4	71.6	75.6	75.2	73.4	246.0
Commercial exports	9.3	2.6	3.1	3.2	2.7	11.6	2.9	3.2	2.9	2.5	11.5
Ending commercial stocks	15.6	18.1	20.0	17.9	14.3	14.3	16.4	17.5	15.8	12.9	12.9
Commodity Credit Corporation donations ¹	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Domestic commercial use ²	217.5	52.8	54.6	56.3	57.7	221.4	52.3	54.9	56.5	58.0	221.6
Skim solids (billion pounds milk equiv.)											
Milk marketings	222.2	56.6	57.9	55.6	55.2	225.2	56.0	57.6	55.9	55.8	225.3
Beginning commercial stocks	10.2	10.9	11.6	12.0	11.3	10.9	11.0	11.8	12.2	11.3	11.0
Imports	5.6	1.4	1.5	1.4	1.5	5.8	1.5	1.5	1.5	1.5	5.8
Total supply	238.0	68.8	71.0	69.0	67.9	241.8	68.4	70.8	69.6	68.6	242.1
Commercial exports	47.2	12.4	14.1	12.9	11.8	51.1	12.0	13.5	12.9	11.8	50.3
Ending commercial stocks	10.9	11.6	12.0	11.3	11.0	11.0	11.8	12.2	11.3	11.0	11.0
Commodity Credit Corporation donations	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Domestic commercial use ²	179.8	44.9	44.9	44.8	45.1	179.7	44.6	45.1	45.4	45.8	180.8
Milk prices (dollars/hundredweight) ³											
All milk	18.24	17.33	18.67	18.00	20.77	18.69	24.85	26.75	25.75	25.90	25.80
Class III	18.16	15.98	17.95	16.32	18.07	17.08	21.25	23.80	23.55	22.35	22.75
Class IV	13.49	13.71	15.98	16.09	18.57	16.09	23.95	24.90	24.20	23.10	24.05
Product prices (dollars/pound) ⁴											
Cheddar cheese	1.9236	1.6146	1.7250	1.6016	1.7609	1.6755	1.955	2.250	2.250	2.150	2.150
Dry whey	0.3621	0.5064	0.6358	0.5668	0.5888	0.5744	0.760	0.705	0.670	0.630	0.690
Butter	1.5808	1.4677	1.7952	1.7375	1.9297	1.7325	2.670	2.700	2.650	2.550	2.640
Nonfat dry milk	1.0417	1.1226	1.2256	1.2676	1.4613	1.2693	1.725	1.820	1.760	1.680	1.745

Totals may not add due to rounding.

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

² Domestic use for 2020 includes additional milk marketed but not processed.

³ Simple averages of monthly prices. May not match reported annual averages.

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

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

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

Updated 4/14/2022.