



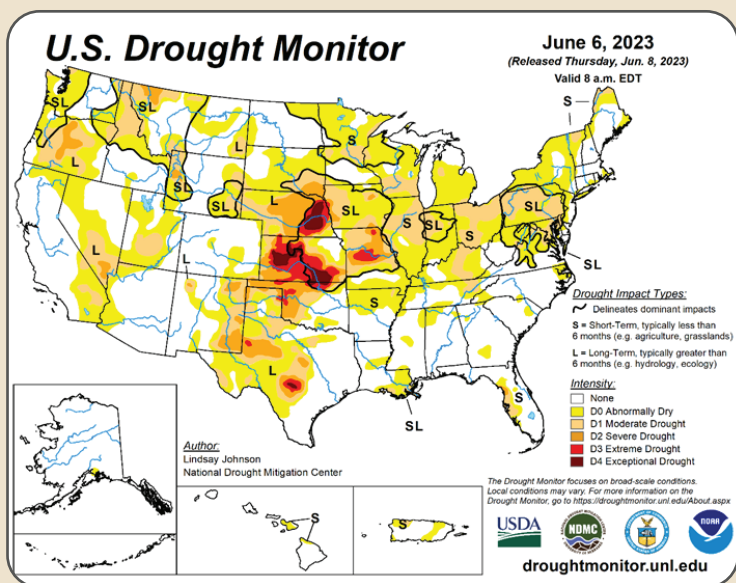
BROILER ECONOMICS

BY DR. PAUL AHO

DROUGHT SCORE

Dry weather in the Corn Belt this spring allowed crops to be planted in a timely way this year. However, now that the crop is planted, the rain needs to start falling. Alas, that has not yet happened. Some areas are having their driest spring ever. As can be seen on the US Drought Monitor (below), the entire Corn Belt is experiencing abnormally dry conditions and some areas are in a drought.

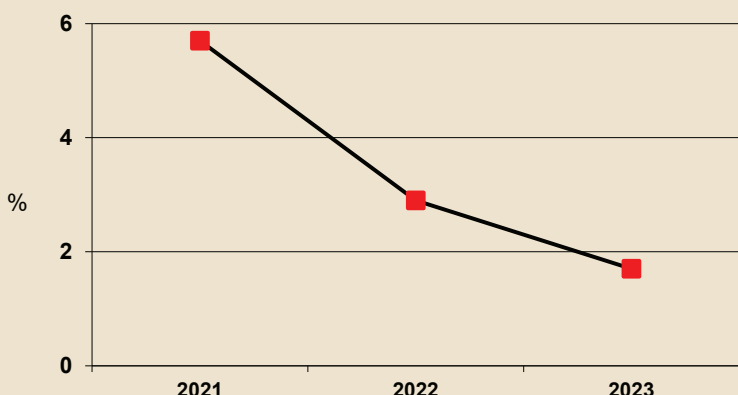
Long term forecasts provide hope that the rain will return in late June. If that proves to be true, there will be a minimal effect on the final harvest and this episode will be just another drought scare of which there is at least one each year.



Grain prices have been high recently in part due to the worst drought in decades in Argentina and a war that broke out in a breadbasket, Ukraine. With the shift from “La Niña” to El Niño in the Pacific, a bumper crop is expected a year from now in Argentina. As for the war, predictions are bound to be wrong, but it is possible that the situation will be no worse next crop year compared to this crop year.

Whether it be crude or corn, bull markets do not last forever because high prices stimulate additional production and discourage use. That potent combination eventually brings a bull market to its knees. Given that underlying economic fact of life, grain prices are likely to move downward over time barring a serious drought. Even a serious drought would only be an interruption in the underlying long-term bear market. Grain use will also be tempered by a slowing world economy. In 2021, world growth was a blistering 5.7%. The World Bank projects growth of only 1.7% in 2023.

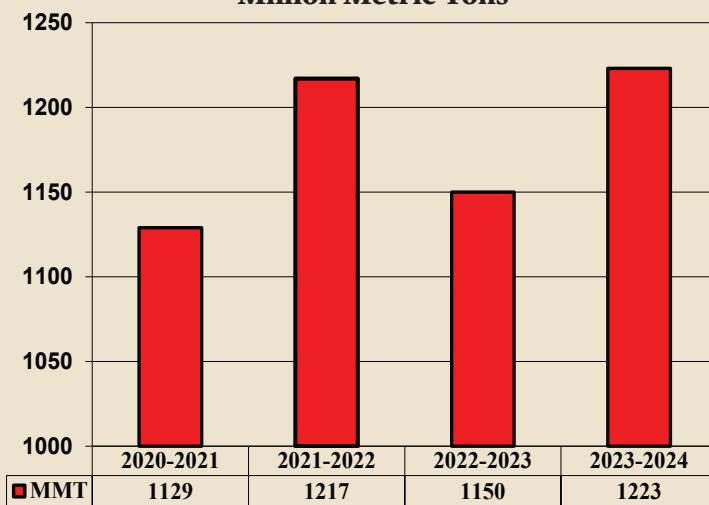
World Economic Growth - World Bank



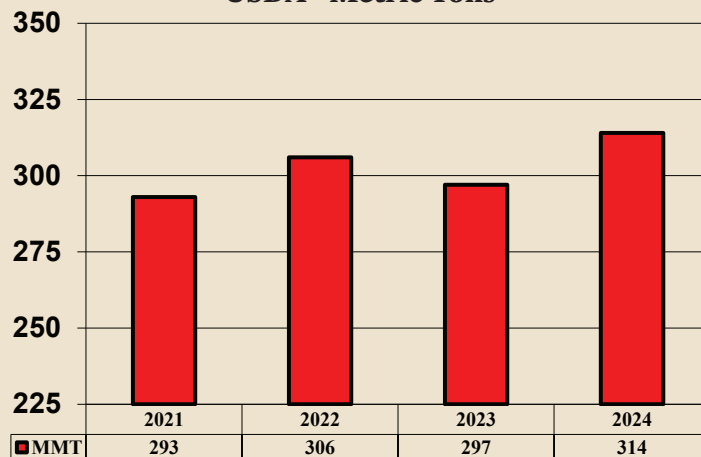
Corn

World corn production fell this crop year due to decreases in the US, Ukraine, and Argentina. Despite lower production, world ending corn inventory numbers for this crop year are down only slightly which indicates that demand was falling along with supply. If the next crop rebounds, a likely if not certain scenario, prices will move lower. South America, in particular, looks poised to rebound strongly next crop year.

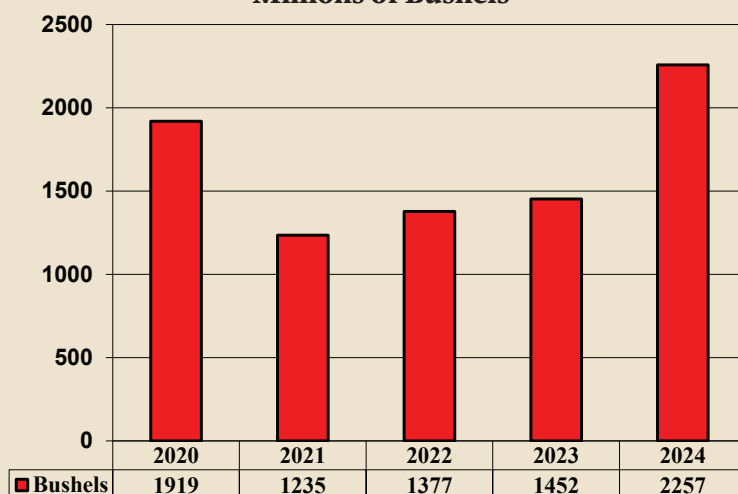
World Production of Corn
Million Metric Tons



World Ending Stock of Corn
USDA - Metric Tons



US Ending Stock of Corn
Millions of Bushels



**Argentina Corn Supply and Demand
WASDE June 2023 - Million Metric Tons**

	2021-2022	2022-2023	2023-2024
Harvest	50	37	54
Imports	0	0	0
Exports	36	25	41
Ending Inventory	1	1	2

Note: Production in Argentina was lower due to drought.

**Brazil Corn Supply and Demand
WASDE June 2023 - Million Metric Tons**

	2021-2022	2022-2023	2023-2024
Harvest	116	125	129
Imports	2	1	1
Exports	47	50	55
Ending Inventory	4	7	7

**Ukraine Corn Supply and Demand
WASDE June 2023 - Million Metric Tons**

	2021-2022	2022-2023	2023-2024
Harvest	42	27	24
Imports	0	0	0
Exports	27	25	19
Ending Inventory	5	1	1

**China Corn Supply and Demand
WASDE June 2023 - Million Metric Tons**

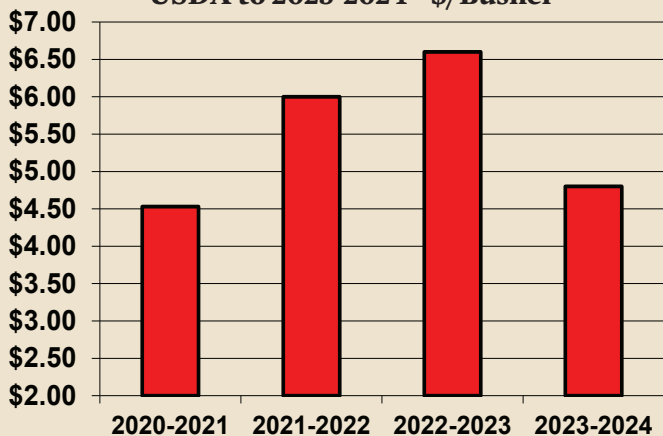
	2021-2022	2022-2023	2023-2024
Harvest	273	277	280
Imports	22	18	23
Exports	0	0	0
Ending Inventory	209	207	204

**US Corn Supply and Demand
WASDE June 2023 - Millions of Bushels**

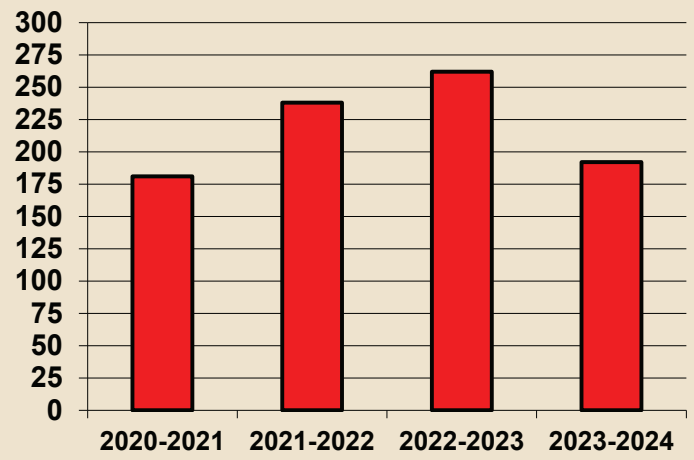
	2021-2022	2022-2023	2023-2024
Harvest	15,074	13,730	15,265
Supply Total	16,333	15,132	16,742
Ethanol	5,328	5,250	5,300
Exports	2,471	1,725	2,100
Feed	5,717	5,275	5,650
Total Use	14,956	13,680	14,485
Ending Inventory	1,377	1,452	2,257
Farm Price	\$6.00	\$6.60	\$4.80

The average price of corn this crop year in the US is higher than last crop year. After this crop year, lower average prices in crop year 2023-2024 can be expected if the crop in the Northern Hemisphere is close to normal.

**Average US Farm Price of Corn
USDA to 2023-2024 - \$/Bushel**



**Average US Farm Price of Corn
USDA to 2023-2024 - \$/Metric Ton**



Soybeans

Soybean meal prices were less affected by the war and more affected by drought and floods in Argentina and Brazil last crop year and a continuing drought in Argentina this crop year. Production in South America dropped by 15 MMT last crop year but bounced back 10 MMT this crop year. Next crop year could see even greater production increases, perhaps as much as 30 MMT (20 in Argentina and 10 in Brazil). The enormous capacity for Brazil to increase soybean production (mostly) negated the effect of a serious drought in Argentina this year and puts a long-term cap on prices in the future.

In the case of soybeans, a drought in the US is less important than it is for corn. Given the prospects for an “El Nino” weather scenario, crops in South America are likely to be large and growing over the next few years. Over time, the US is diminishing in importance with respect to soybeans and therefore the effect of the US crop on price, while South America is rapidly growing in importance.

**Argentina Soybean Supply and Demand
WASDE June 2023 - Million Metric Tons**

	2021-2022	2022-2023	2023-2024
Harvest	44	27	48
Imports	3	8	6
Exports Beans + Meal	31	25	29
Ending Inventory	24	18	24

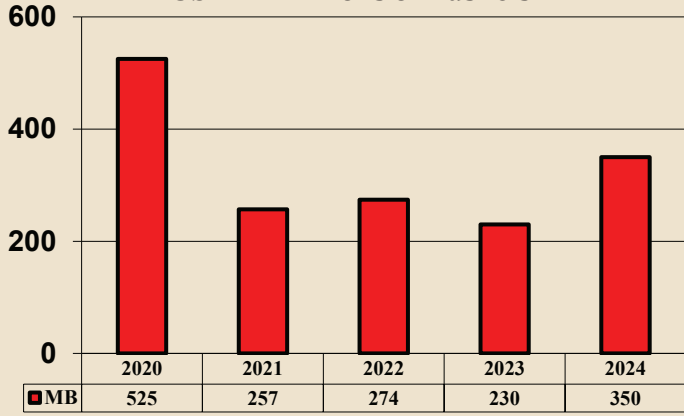
Note: Production in Argentina was lower due to drought

**Brazil Soybean Supply and Demand
WASDE June 2023 - Million Metric Tons**

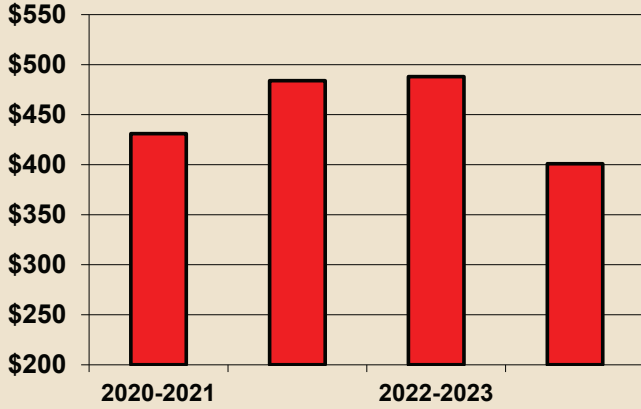
	2021-2022	2022-2023	2023-2024
Harvest	125	154	163
Imports	1	1	1
Exports Beans + Meal	100	114	118
Ending Inventory	21	33	22

US ending stock fell somewhat this crop year while world ending stocks were remarkably stable in the light of the severe drought in Argentina. A bear market next crop year (2023-2024) is a reasonable expectation given the likelihood of increased production in Brazil and Argentina.

**US Ending Stock of Soybeans
USDA - Millions of Bushels**



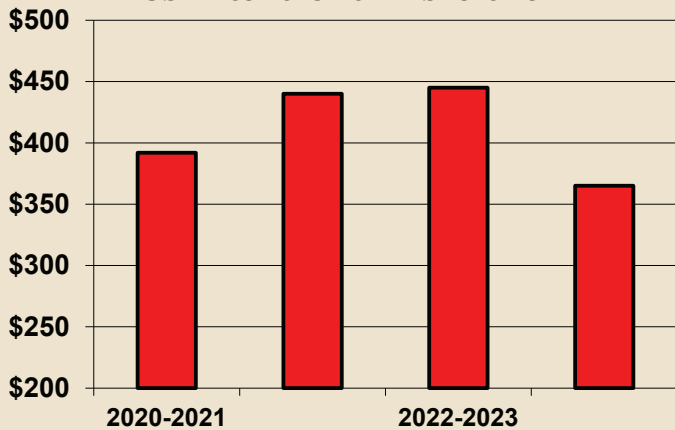
**World Ending Stock of Soybeans
USDA - Million Metric Tons**



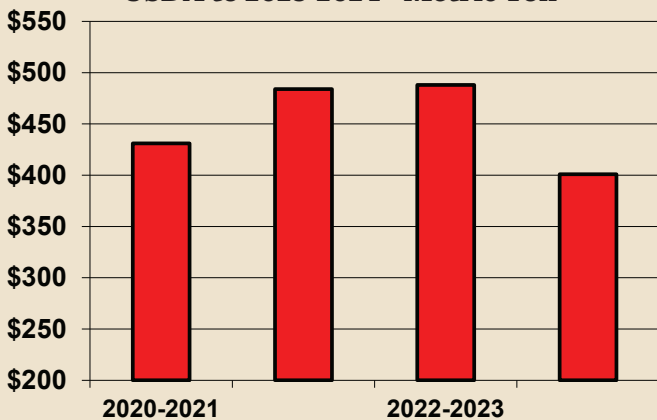
**US Soybeans – USDA
WASDE June 2023 - Millions of Bushels**

	2021-2022	2022-2023	2023-2024
Harvest	4,465	4,276	4,510
Total Supply	4,738	4,571	4,760
Export	2,158	2,000	1,975
Total Use	4,465	4,340	4,411
Ending Stock Inventory	274	230	350
Meal Price short ton	\$440	\$445	\$365

**Average US Crop Year Price of Soybean Meal
USDA to 2023-2024 - Short Ton**



**Average US Crop Year Price of Soybean Meal
USDA to 2023-2024 - Metric Ton**

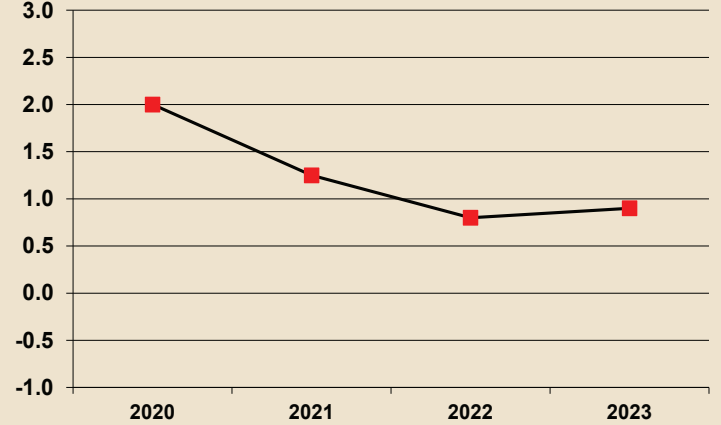


Chicken Industry

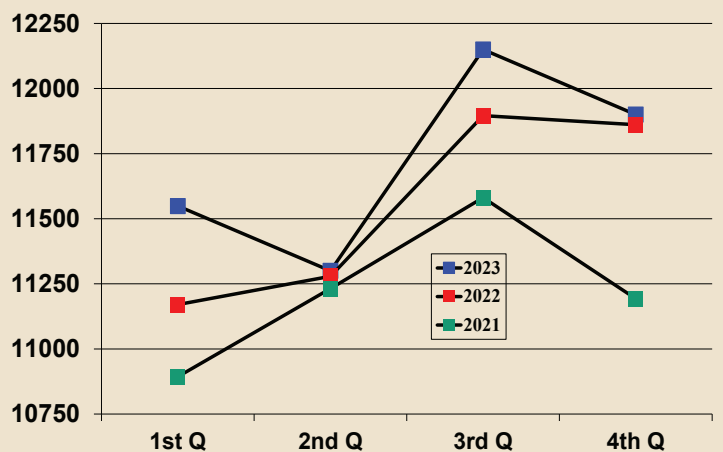
The world chicken industry expanded just 0.8% last year and slow growth is projected to continue this year. The latest USDA estimate puts world chicken growth at just 0.9% this year. The slow acceleration in production growth is due to a looming recession and recent relatively high grain prices in addition to some losses due to avian influenza. Normal growth in the world chicken industry should be about 2% per year.

US production accelerated in the last half of 2022 leading to a decline in wholesale prices. The increase over year earlier numbers between August and November of 2022 reached 5.8%, an unusually high number. After the first quarter of this year, production is likely to be just slightly higher than in 2022. For all of 2023, production in the US is expected to increase 1.5%, slightly more than the 0.9% increase in world production.

**Increase in World Broiler Chicken Production
USDA - %**

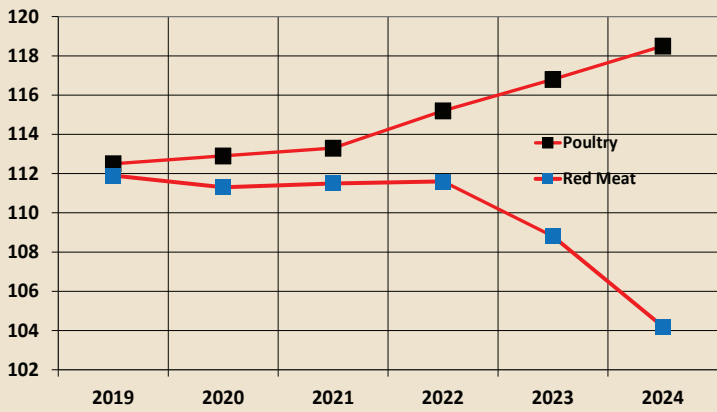


**US Quarterly Broiler Production
USDA - Million Pounds**



Poultry per capita consumption in the US is increasing while red meat per capita consumption is declining. This year, red meat per capita consumption is expected to fall by three pounds (1.4 kilos) while poultry consumption rises by two pounds (one kilo). Next year, poultry is expected to again increase two pounds per capita while red meat falls another five pounds (2.3 kilos) per capita. The relative scarcity of red meat and the resulting higher prices for red meat will help increase poultry prices. In 2024 the beef industry will be at the bottom of the beef cycle. Therefore, production and per capita consumption of beef can be expected to increase starting in 2025.

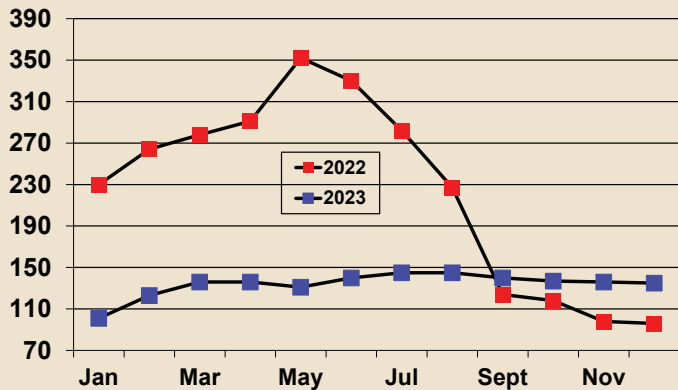
**US Per Capita Consumption of Red Meat and Poultry
USDA to 2024 - lbs**



Deboned Breast

Deboned breast meat prices fell sharply in the last half of last year with increased supply but recovered somewhat in recent months. Prices are now around \$1.40 per pound (\$3.08 per kilo), down sharply from \$3.50 per pound (\$7.70 per kilo) a year ago. In 2023 prices are likely to average significantly less than in 2022.

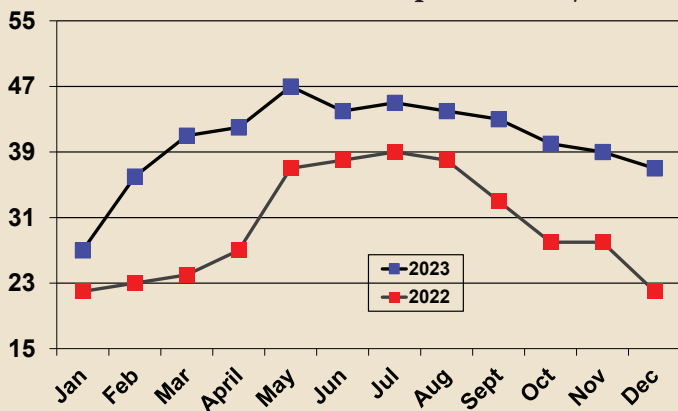
**Deboned Breast 2022-2023
USDA - National Price - Cents/lb**



Frozen Leg Quarters for Export

In contrast to deboned breast, leg quarter prices are higher than last year. One year ago, frozen leg quarters for export were just 25 cents (\$0.55 per kilo). Now the price is nearly double at 48 cents (105 cents per kilo). Robust domestic demand for fresh leg quarters and international demand for frozen leg quarters sent prices higher. Overall, the average price in 2023 can be expected to be higher than that of 2022.

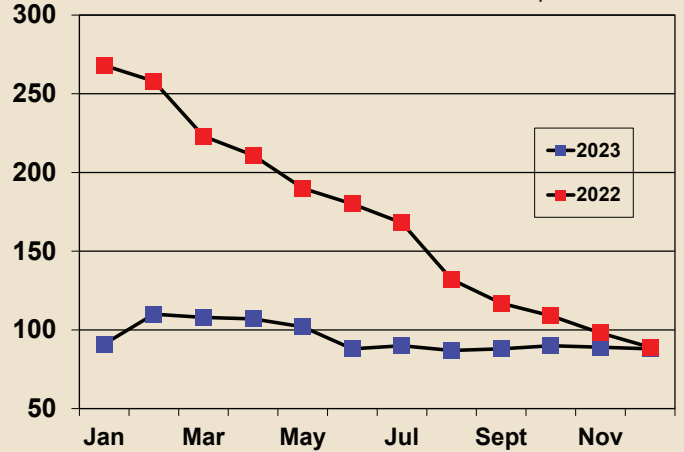
**Leg Quarter Price 2022-2023
USDA - Frozen Bulk Export - Cents/lb**



Wings

The falling price of wings last year was a harbinger of declines in the other chicken parts that came later. The wholesale price is 50% of what it was at this time last year. The year-to-year comparisons are likely to show wings meeting last year's price by the end of the year. Overall, the average price of wings, like deboned breast is likely to be lower this year compared to last year.

**Whole Wing Prices 2022-2023
USDA - National Price - Cents/lb**



Chicken production in the US is now profitable thanks to the recent seasonal increase in chicken prices. The industry is likely to remain profitable as grain prices fall and competing meats continue to remain scarce.

June 2023 US Measure

Frozen Leg Quarters	\$ 0.48 / lb
Deboned Breast	\$ 1.40 / lb
Wings	\$ 0.95 / lb
Chicago Corn	\$ 6.16 / bushel
Soybean Meal	\$ 401 / Short Ton
Total Wholesale Cost per pound	\$ 1.03
Revenue per pound	\$ 1.11
Gain (Loss) per pound	\$ 0.07

June 2023 Metric Measure

Frozen Leg Quarters	\$ 1.06 / kilo
Deboned Breast	\$ 3.08 / kilo
Wings	\$ 2.09 / kilo
Chicago Corn	\$ 242 / ton
Soybean Meal	\$ 442 / ton
Total Wholesale Cost per kilo	\$ 2.28
Revenue per kilo	\$ 2.44
Gain (Loss) per kilo	\$ 0.16

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Dr. Paul Aho is an international agribusiness economist specializing in projects related to the poultry industry and has been a prolific writer in trade journals in both the United States and in Latin America. Dr. Aho now operates his own consulting company called "Poultry Perspective". In this role, he works around the world with poultry managers and government policy makers.

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