

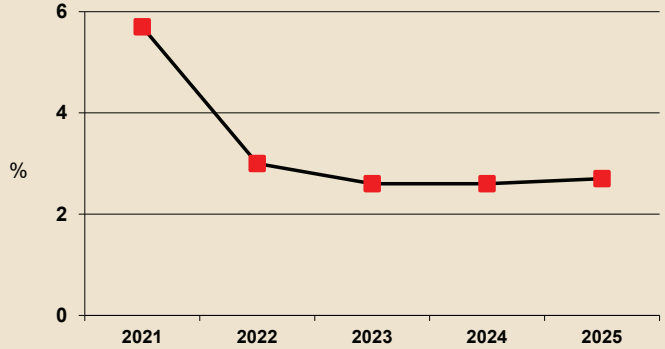
GRAIN MARKET SHIFT FROM BEAR TO BULL MARKET

The bear market in grain may well be over. From early 2022 until August of this year the price of corn fell by 50% from \$8 per bushel to \$4 per bushel (\$320 per metric ton to \$160 per metric ton) in Chicago. A large harvest this year in the US of corn and soybeans combined with continued growth in production in South America means that poultry producers worldwide are currently enjoying low grain prices. However, the market probably hit bottom in August of this year. What can now be expected is the next bull market of rising prices over the next few years.

Why do falling markets (bear markets) turn into rising markets (bull markets)? When prices are low, as they are currently, there is less incentive to produce corn and more incentive to utilize corn. At the lowest prices this year farmers lost money on every bushel of corn produced. As a result, farmers are likely to plant less corn next year. At the same time there are enthusiastic buyers of corn to be used in feed rations, ethanol and other uses. The combination of reduced supply and greater demand leads to higher prices.

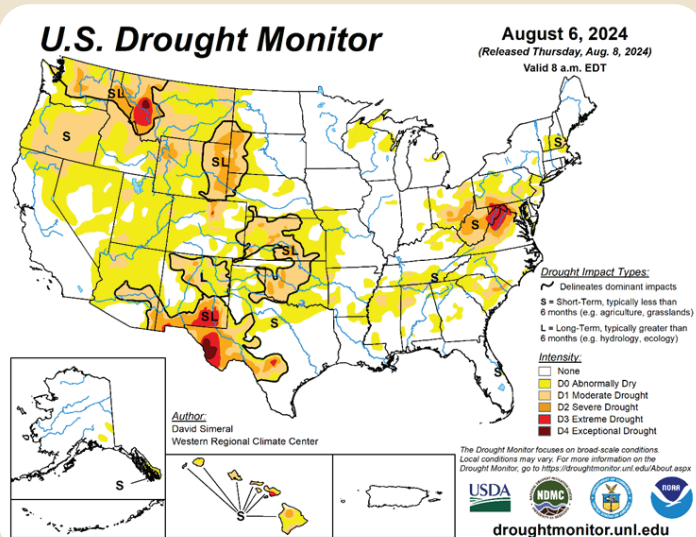
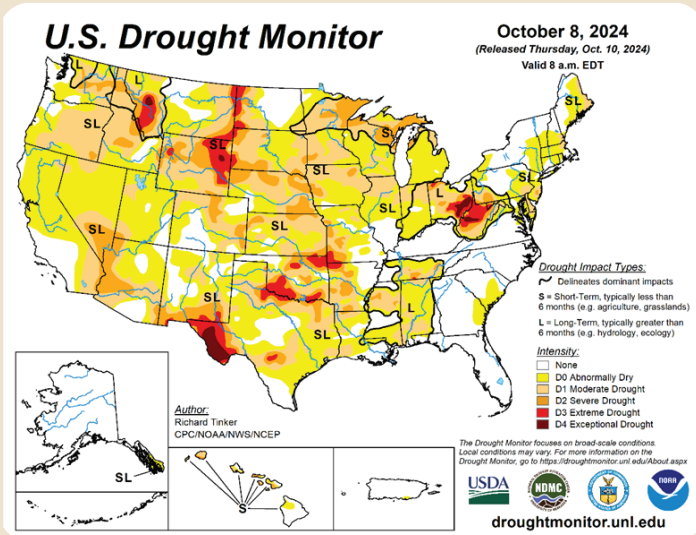
Another factor that influences grain production is, of course, the weather. The US drought monitors below show a sharp deterioration in the US Corn Belt from August to October. The dryness came too late to affect production this year. However, a continuation of the drought would affect production next year. In South America, Brazil awaits the rainy season. The forecast is that the rain will arrive in a timely manner.

World Economic Growth - World Bank

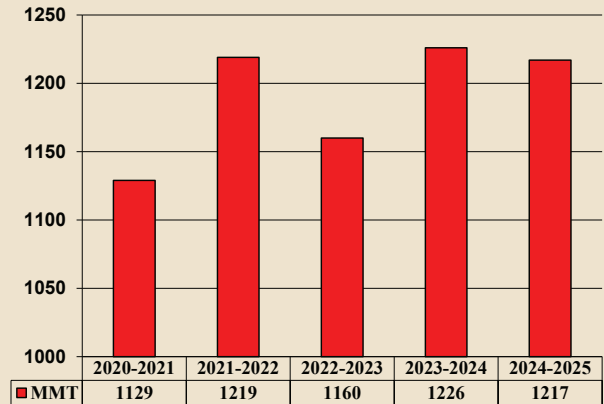


Corn

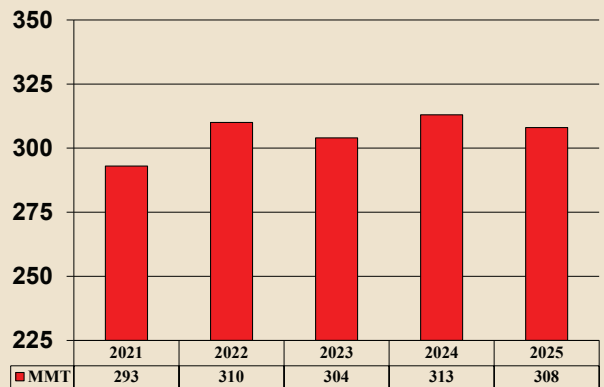
The latest WASDE report projects that world corn production and ending inventory will both be lower this crop year a harbinger of a bull market. The average farm price in the US last crop year was \$4.55 per bushel (\$182 per metric ton). The average this entire crop year could be slightly lower, however, the trend is likely to be up. The lowest price in Chicago (and the end of the bear market) probably took place in August of this year at the end of the last crop year.



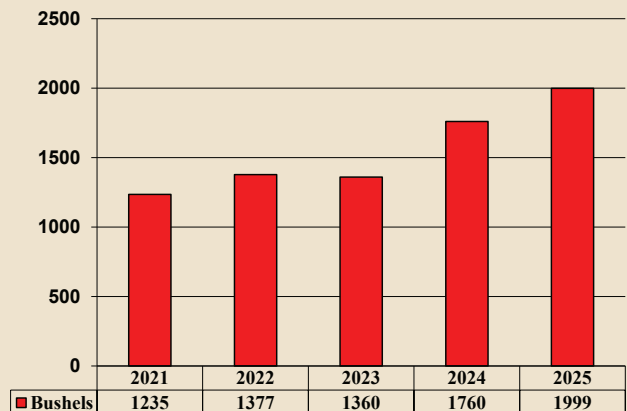
World Production of Corn
USDA - Million Metric Tons



World Ending Stock of Corn
USDA - Millions of Bushels



US Ending Stock of Corn
USDA - Millions of Bushels



The world economy continues to be sluggish. The World Bank reports that the half decade of 2020 to 2025 will have the slowest world economic growth in 30 years. However, economic growth, and therefore demand for grain, can be expected to accelerate after this current period of slower growth.

**Argentina Corn Supply and Demand
WASDE October - Million Metric Tons**

	2021-22	2022-23	2023-24	2024-25
Harvest	50	35	50	51
Imports	0	0	0	0
Exports	36	24	32	36
Ending Inventory	1	1	4	3

**Brazil Corn Supply and Demand
WASDE October - Million Metric Tons**

	2021-22	2022-23	2023-24	2024-25
Harvest	116	137	122	127
Imports	2	1	1	1
Exports	47	56	46	49
Ending Inventory	4	10	6	3

**Ukraine Corn Supply and Demand
WASDE October - Million Metric Tons**

	2021-22	2022-23	2023-24	2024-25
Harvest	42	27	32	26
Imports	0	0	0	0
Exports	27	27	29	23
Ending Inventory	5	2	2	1

**China Corn Supply and Demand
WASDE October - Million Metric Tons**

	2021-22	2022-23	2023-24	2024-25
Harvest	273	277	288	292
Imports	22	19	23	19
Exports	0	0	0	0
Ending Inventory	209	206	211	209

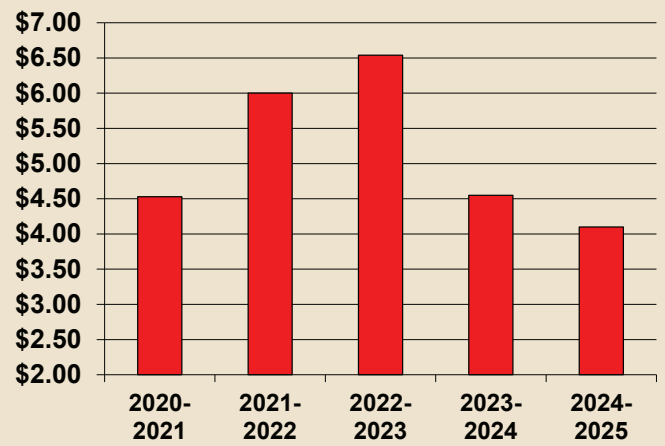
**US Corn Supply and Demand
WASDE October - Million Metric Tons**

	2021-22	2022-23	2023-24	2024-25
Harvest	381	346	390	386
Imports	1	1	1	1
Exports	62	42	58	59
Ending Inventory	35	34	44	50

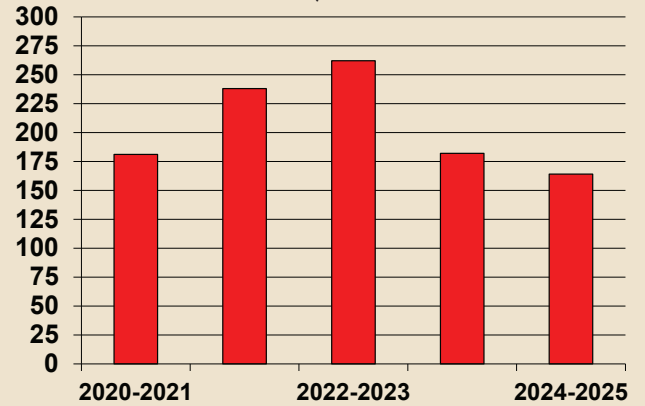
**US Corn Supply and Demand -
WASDE October Millions of Bushels**

	2022-23	2023-24	2024-25
Harvest	13,651	15,341	15,203
Supply Total	15,066	16,729	16,989
Ethanol	5,176	5,471	5,450
Exports	1,661	2,292	2,325
Feed	5,487	5,814	5,825
Total Use	13,706	14,069	14,965
Ending Inventory	1,360	1,760	1,999
Farm Price	\$6.54	\$4.55	\$4.10

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



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



Soybeans

Like corn, the price of soybeans probably reached a low point in August at \$300 per short ton (\$330 per metric ton) after a two-and-a-half-year bear market. Alas for the poultry industry, soybean meal prices have already started rising and are likely to rise further in the coming months. Continued rising production in South America may act to temper somewhat the price rise of the next bull market. The US benchmark price of soybean meal is projected to average \$320 (\$352 per metric ton) in this crop year.

**Argentina Soybean Supply and Demand
WASDE October - Million Metric Tons**

	2021-22	2022-23	2023-24	2024-25
Harvest	44	25	48	51
Imports	3	9	7	6
Exports Beans + Meal	31	25	32	34
Ending Inventory	24	18	24	29

**Brazil Soybean Supply and Demand
WASDE October - Million Metric Tons**

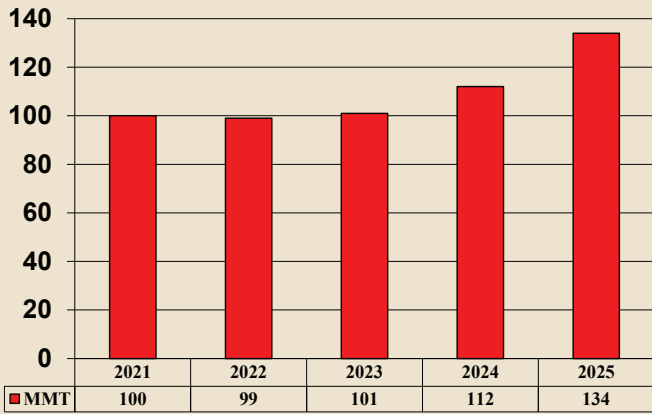
	2021-22	2022-23	2023-24	2024-25
Harvest	125	162	153	169
Imports	1	1	1	1
Exports Beans + Meal	100	116	127	125
Ending Inventory	21	37	27	34

**US Soybean Supply and Demand
WASDE October - Million Metric Tons**

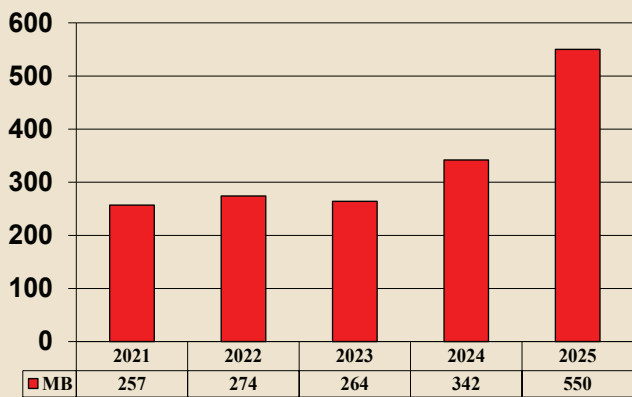
	2021-22	2022-23	2023-24	2024-25
Harvest	122	116	113	124
Imports	1	1	1	1
Exports Beans + Meal	70	67	60	66
Ending Inventory	7	7	9	15

World and US ending stocks will be higher at the end of this crop year and the average price of soybeans and soybean meal over the entire crop year may be lower. Nevertheless, the low point in the bear market in Chicago may already have occurred in August.

**World Ending Stock of Soybeans
USDA - MMT**



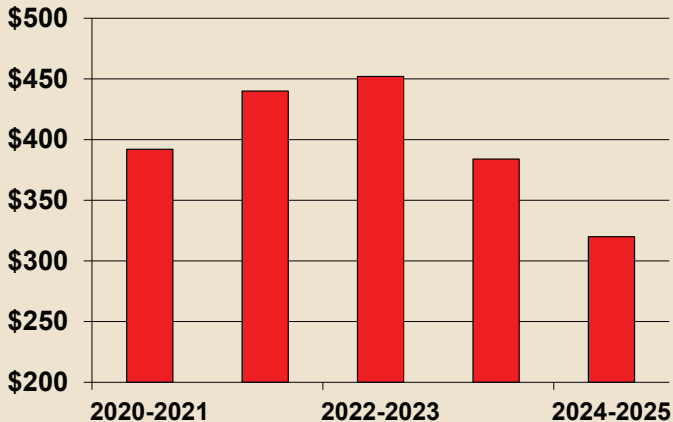
**US Ending Stock of Soybeans
USDA - Millions of Bushels**



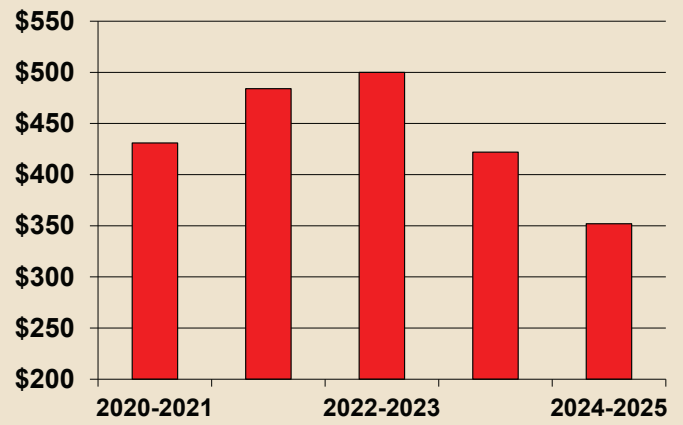
**US Soybeans - USDA - WASDE October
Millions of Bushels**

	2022-23	2023-24	2024-25
Harvest	4,270	4,162	4,582
Total Supply	4,569	4,447	4,939
Export	1,992	1,695	1,850
Total Use	4,305	4,105	4,389
Ending Stock Inventory	264	342	550
Meal Price short ton	\$452	\$384	\$320

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



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

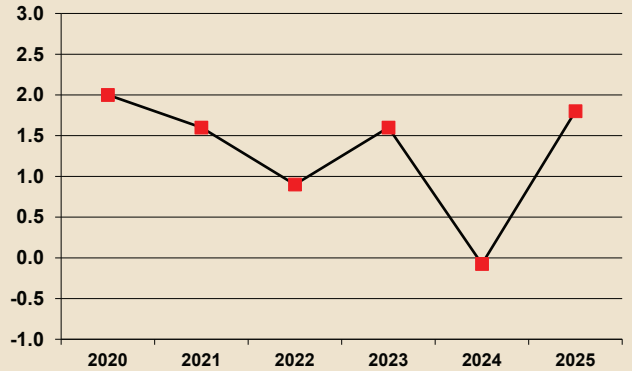


Chicken Industry

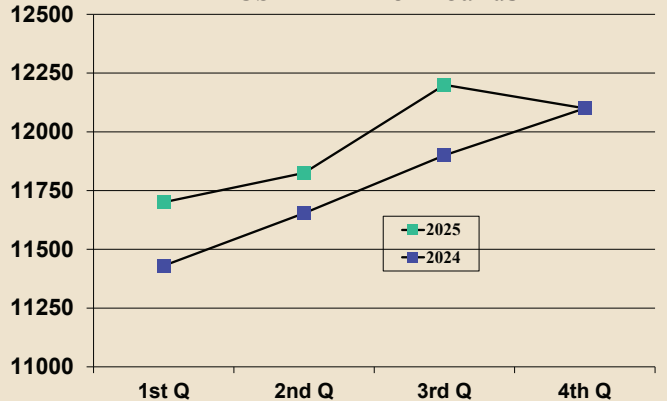
Slow growth in the world economy recently is reflected in the slow growth of world chicken production. This year, world production did not increase at all according to the USDA October report. It is likely that world growth will accelerate starting in 2025.

US production increased by an estimated 1.5% in 2024 and is projected to increase 1.6% in 2025. Interestingly, production in the 4th quarter of 2024 is projected to increase instead of decreasing as it usually does in the last quarter.

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

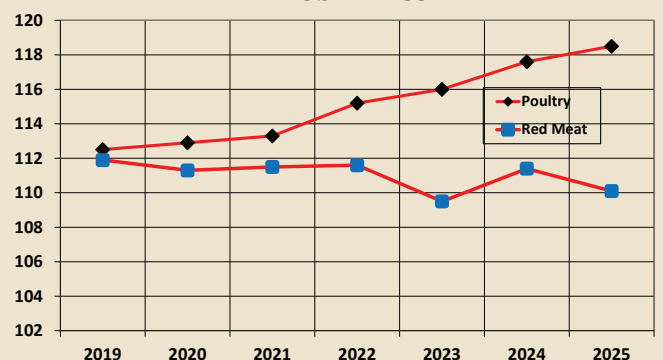


**US Quarterly Broiler Production
USDA - Million Pounds**



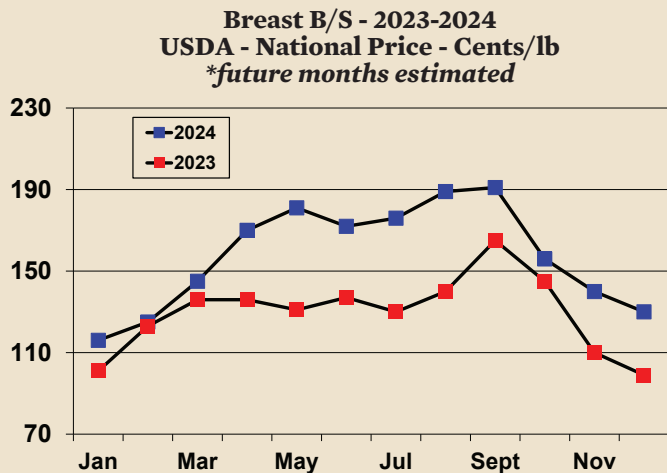
Poultry per capita consumption in the US continues to take market share from red meat. Between 2021 and 2025, red meat per capita consumption fell by 2 pounds (1 kilo) while poultry consumption rose by 6 pounds (2.7 kilos). Total meat consumption is relatively stable.

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



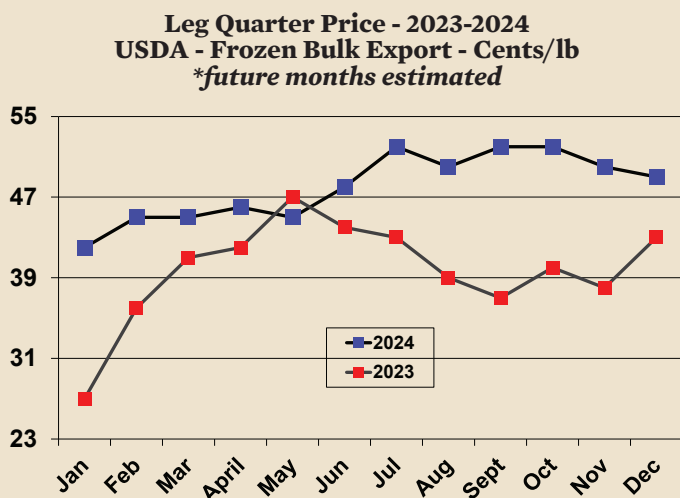
Deboned Breast

The spot prices of deboned breast in the US rose surprisingly fast in the first five months of 2024 helped by high prices for competing meats. That price rise is now seasonally reversing. Recent production losses due to the hurricane may reduce production and temper the seasonal drop in prices.



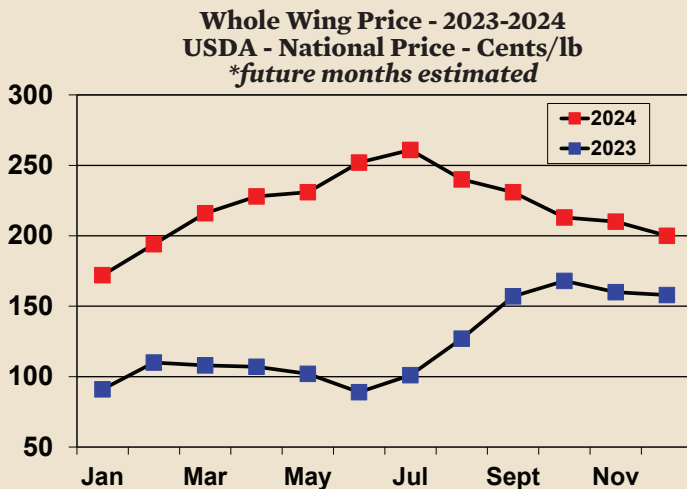
Frozen Leg Quarters for Export

Exports of frozen leg quarters dropped by 12% in the first 8 months of the year, but the value of those exports only dropped 6%. Some of that export decline is a lack of inventory which shows that more leg quarters are being consumed in the US.



Wings

Wing prices are slowly declining from their remarkable high earlier this year. Wing prices can be expected to remain higher than deboned breast as demand appears to be insatiable.



When calculated using spot prices, chicken production is profitable. However, declining chicken prices and rising grain prices are reducing the profitability of chicken production in the US.

US Broiler Chicken Industry Profitability August US Measure

Frozen Leg Quarters	\$0.52/pound
Deboned Breast	\$1.56/pound
Wings	\$2.13/pound
Chicago Corn	\$4.16/bushel
Soybean Meal	\$315/Short Ton
Total Wholesale Cost per pound	\$0.99
Revenue per pound (spot price)	\$1.13
Gain (Loss) per pound	\$0.14

US Broiler Chicken Industry Profitability August Metric Measure

Frozen Leg Quarters	\$1.14/kilo
Deboned Breast	\$3.43/kilo
Wings	\$4.69/kilo
Chicago Corn	\$163/ton
Soybean Meal	\$347/ton
Total Wholesale Cost per kills	\$2.18
Revenue per kilo (spot price)	\$2.49
Gain (Loss) per kilo	\$0.31

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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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