

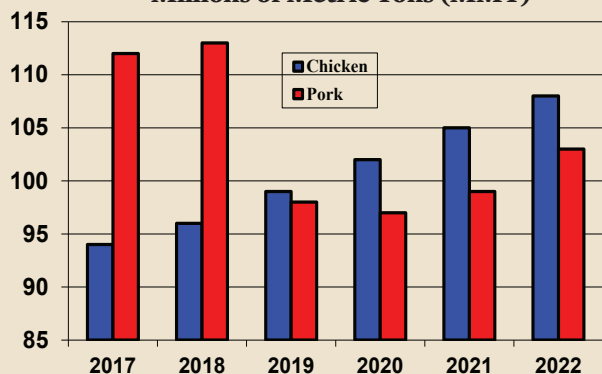
Broiler Economics

By Dr. Paul Aho

CHICKEN IS THE NEW KING OF MEATS

It wasn't expected to happen for another ten years but the sudden decrease in world pork production this year means that chicken is now the king of meats. As of June 2019, it is estimated that pork will be dethroned from its long-standing position at the top and replaced by chicken. It is not likely that chicken will ever relinquish the crown.

World Chicken/Pork Production
Millions of Metric Tons (MMT)



Unprecedented Planting Delays

Record breaking rain and floods in the US Midwest created planting delays that could result in millions of acres of corn that will never be planted. Yield will be far below what was expected just a few weeks ago. Corn production is now projected by the USDA to decline 1.4 billion bushels from last crop year and that number could climb as the extent of the damage becomes better known.

The crop progress report of June 17th shows that 92% of the corn crop is now planted. However, it is so late in the season that the planting of corn is now virtually ended. The remaining 7 million acres that would have been planted to corn are now either abandoned due to flooding, will never be planted this year or will be planted to some other crop like soybeans.

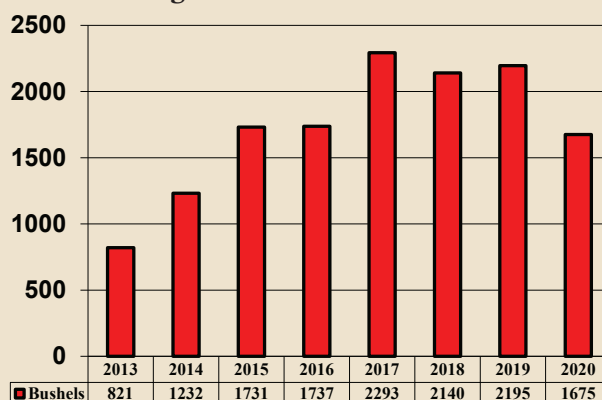
The corn market, which had been drifting downward for months, reacted to the rain and flooding with a rally that took corn from \$3.50 per bushel to \$4.50 per bushel in just one month. If the damage to the crop is worse than currently reflected in USDA estimates, prices could go much higher.

The June USDA World Agricultural Supply and Demand Estimates (WASDE report) projects a dramatically lower supply of corn this crop year due to the persistent rain and floods in the Midwest. With supplies falling faster than use, the estimates for ending stock are falling rapidly as well. Not surprisingly, the price of corn rose by 25% in just a few weeks. In the past, weather-related price rallies like this were often short-lived. If the situation turns out to be less extreme than now feared, corn prices may well moderate in the next few months. Nevertheless, the USDA estimate of \$3.80 for next crop year appears to be low given the current situation.

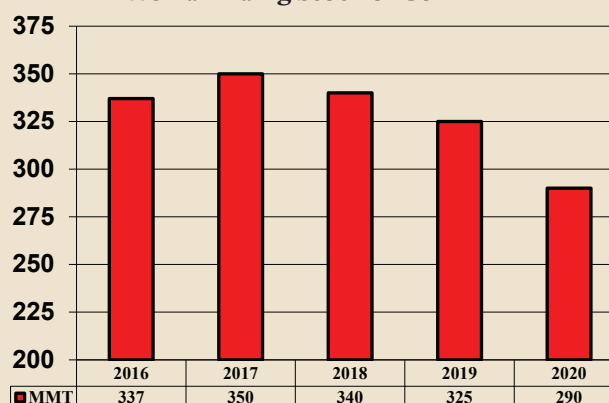
US Corn Supply and Demand – June 2019
USDA Billions of Bushels

	2017-2018	2018-2019	2019-2020
Harvest	14,609	14,420	13,680
Supply Total	16,939	16,595	15,925
Ethanol	5,605	5,450	5,500
Exports	2,438	2,200	2,150
Feed	5,304	5,300	5,150
Total Use	14,799	14,400	14,250
Ending Inventory	2,140	2,195	1,675
Farm Price	\$3.36	\$3.60	\$3.80

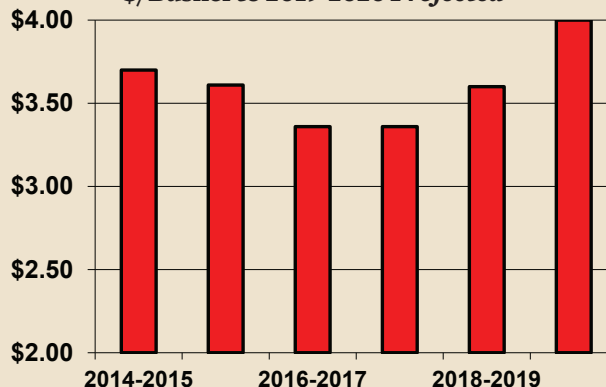
US Ending Stock of Corn - Millions of Bushels



World Ending Stock of Corn - MMT



Average US Farm Price of Corn
\$/Bushel to 2019-2020 Projected



Soybeans

In contrast to corn, soybean and soybean meal (SBM) prices will not rise as high as corn. The planting of soybeans is also delayed and yields will be affected. However, US and world soybean stocks are ample and the trade war with China depresses US prices so the extent of the rise will be limited.

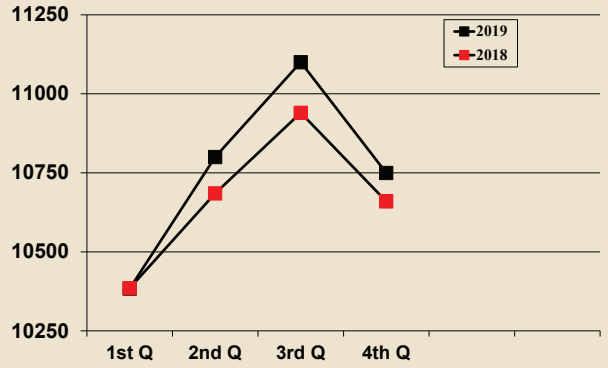
US soybean ending stocks rose an unusual amount last crop year due to the trade war with China. Yet to be determined are future trade politics. China may purchase a considerable amount of US soybeans this year or very little. Assuming some will be purchased, soybean meal prices are likely to rise somewhat next crop year but not as much as corn.

The USDA predicts a falling price of SBM next crop year. A rising price appears to be more likely given the severe nature of delayed planting this spring.

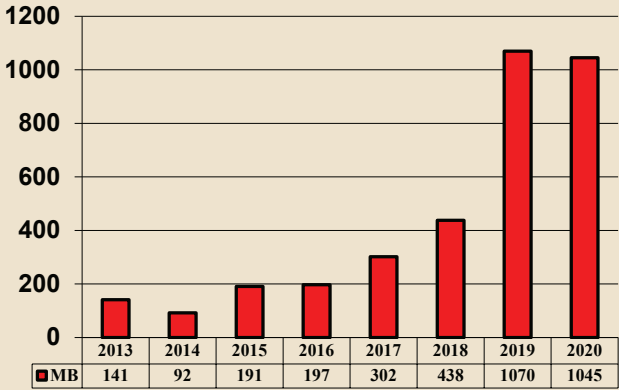
US Soybeans – USDA - June – Billions of Bushels

	2017-2018	2018-2019	2019-2020
Harvest	4,412	4,544	4,150
Export	2,129	1,700	1,950
Total Use	4,297	3,929	4,195
Ending Inventory	438	1070	1045
Meal Price short ton	\$ 345	\$ 305	\$ 295

US Quarterly Broiler Production - Millions Pounds USDA

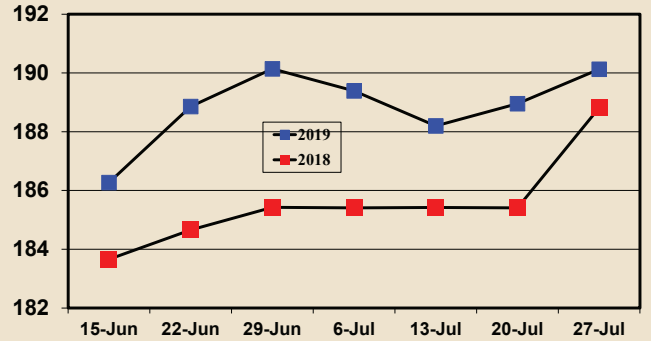


US Ending Stock of Soybeans - Millions of Bushels

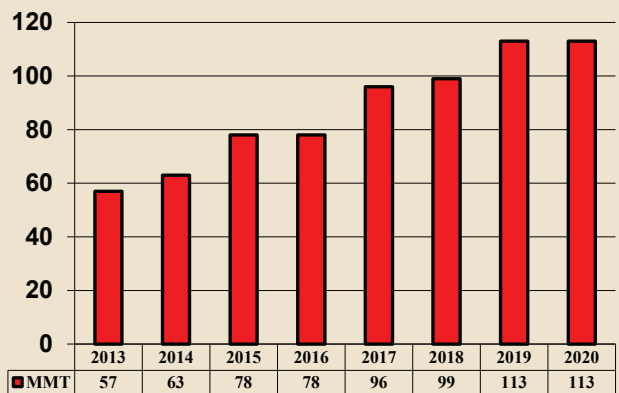


A clue to future supply can be found in the number of chicks being placed by the industry. The number of chicks placed is rising at a rate of about 1%. Since the average weight of chickens processed this year is equal to last year, total production increases this year appear to be headed for just 1%.

Weekly Chick Placement - Millions 7 Weeks Forward - 2019 versus 2018

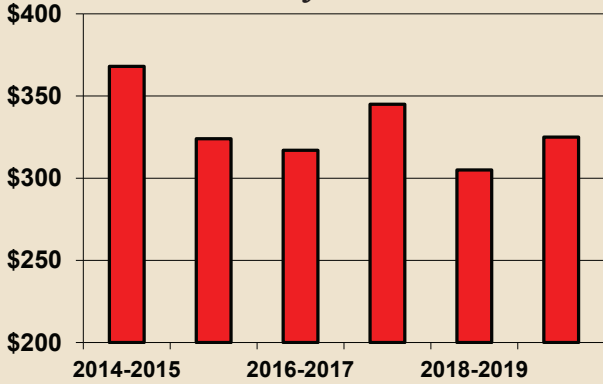


World Ending Stock of Soybeans - Millions of Bushels

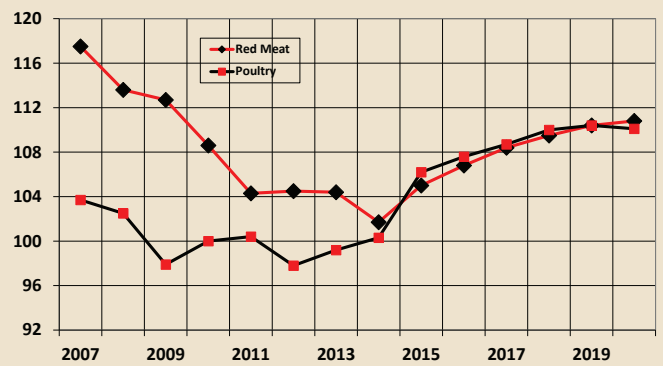


From 2014 to this year, meat consumption of both red meat and poultry rose robustly year after year. However, the US meat industry may be reaching market saturation. Consumption reached 220 pounds in 2006, then fell to 201 pounds during the great recession and now, after many years, has returned to 221 divided equally between red meat and poultry. It appears to be stuck at 221 pounds. If that is the average going forward, competition with red meat will become a zero-sum game. If red meat loses, poultry will win an equal amount and vice versa. At the moment, red meat and poultry are locked in tie at about 110 pounds each.

Average US Crop of Soybeans - MMT Projected



US Per Capita Consumption of Red Meat and Poultry lbs USDA to 2020



US Chicken Industry

In the last few months it has become evident that China is suffering a major decline in pork production due to African Swine Fever (ASF). It is estimated that pork production will fall by 16 million metric tons in China. That huge shortfall in pork production should result in sharply increased exports of US pork to China. However, the trade war will determine to what extent that export takes place. Thanks to the worldwide shortage of protein triggered by ASF, pork and beef prices have been moving higher all over the world including the US.

The relatively high price of pork and beef ensures that chicken demand will outpace the relatively slow growing supply of chicken. The USDA now expects chicken production to rise by only 1% this year with another 1% projected for next year. If that turns out to be the case, the rest of 2019 is looking to be a profitable year despite rising grain prices.

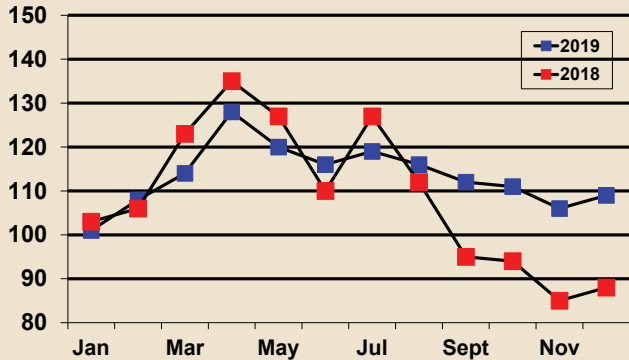
Per Capita Consumption in Pounds - US

	Pork	Beef	Chicken	Turkey	Total
2006	49	66	87	18	220
2007	51	65	85	18	219
2008	49	63	83	18	213
2009	50	61	80	17	208
2010	48	60	82	16	206
2011	46	57	83	16	205
2012	46	57	80	16	202
2013	47	56	82	16	201
2014	46	54	83	16	202
2015	50	54	89	16	211
2016	50	56	90	17	215
2017	50	57	91	16	217
2018	51	57	92	16	219
2019	51	57	93	16	221
2020	52	57	93	16	221

Deboned Breast

For decades, the price of US skinless boneless breast (SBB) was much higher than the rest of the world. Last year, the price of US SBB fell, astonishingly, to below the world price. This year, thanks to the increase in all meat prices, SBB prices are likely to end the year higher than 2018 but still close to the world price.

Deboned Breast - 2018-2019
USDA - Northeast Price - Cents/lb

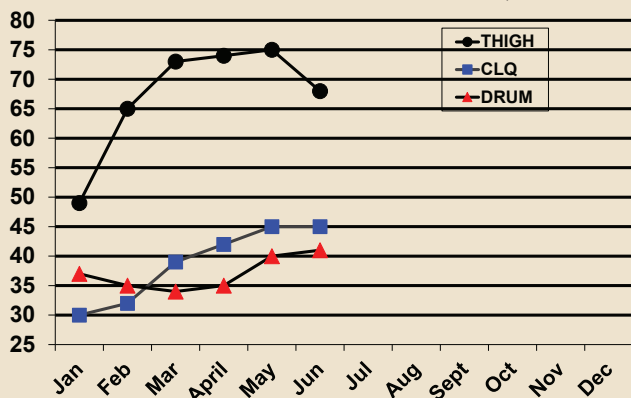


Leg Quarters

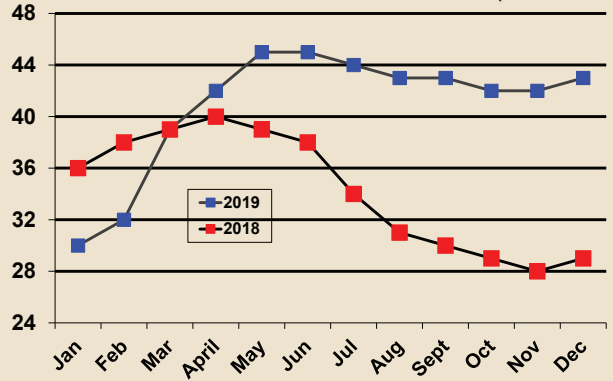
Trade issues loom large in the calculation of leg quarter prices this year. There is no firm trade deal with Mexico yet, only a preliminary agreement. Mexico is the number one destination for US chicken exports, buying nearly one billion pounds of leg quarter per year. If a miracle should happen and China opens up to the US, that country could also become a significant buyer of leg quarters (and paws).

Despite trade uncertainties, leg quarter prices are higher this year helped by steady exports and an increase in the domestic demand for leg quarters. A growing acceptance of boneless dark meat means that skinless boneless thigh (SBT) is now in much greater demand. As can be seen on the following graph, the price of bone-in thighs (many to be deboned) rose from 50 cents in January to 65 cents recently helping to bring up the price of leg quarters in general.

Leg Quarter, Thigh, Drum Price 2019
USDA - Northeast Price - Cents/lb



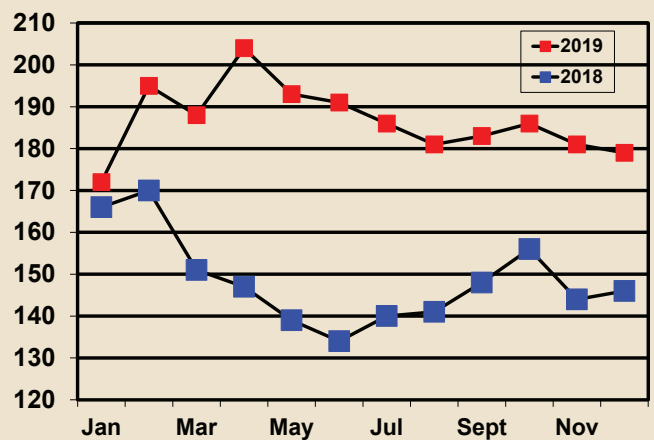
Leg Quarter Price - 2018 to 2019
USDA - Northeast Price - Cents/lb



Wings

Wings are a bright spot for chicken producers and prices can be expected to remain higher than last year. A low unemployment rate and rising wages, in addition to an increase in the price of competing meats and a slow growing supply, creates the perfect conditions for high wing prices.

Whole Wing Prices - 2018 to 2019
USDA - Northeast Price - Cents/lb



The production of chicken in the US became, for a short time, highly profitable earlier this year as chicken prices rose. Now that grain prices have spiked higher, profitability fell to a few cents per pound and could be eliminated if grain prices continue to rise.

June 2019

Leg Quarters	\$ 0.45 per pound
Deboned Breast	\$ 1.16 per pound
Wings	\$ 1.91
Chicago Corn	\$ 4.52 per bushel
Soybean Meal	\$ 324/Ton
Total Cost of Wholesale Chicken	\$ 0.77
Revenue	\$ 0.80
Gain (Loss) per pound	\$ 0.03

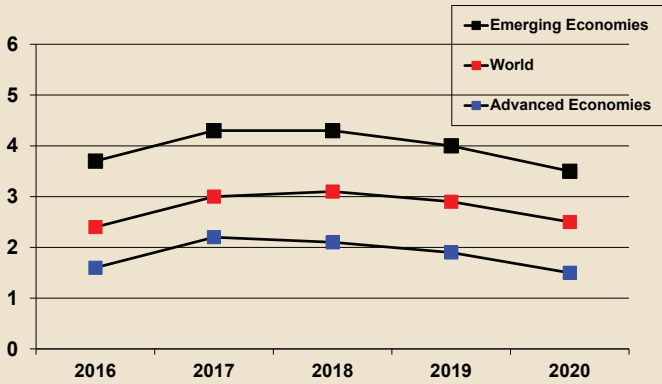
December 2019

Leg Quarters	\$ 0.43 per pound
Deboned Breast	\$1.10 per pound
Wings	\$ 1.80
Chicago Corn	\$ 4.25 per bushel
Soybean Meal	\$ 315/Ton
Total Cost of Wholesale Chicken	\$ 0.76
Revenue	\$ 0.77
Gain (Loss) per pound	\$ 0.01

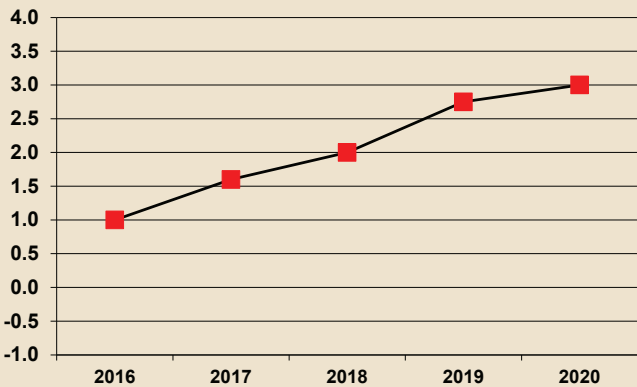
World Chicken Growth Rate

World economic growth was rising in 2017 but started to slow down in 2018. It is increasingly likely that world economic growth will decline in the next few years. Declining world economic growth usually restricts the ability of the world chicken industry to grow. However, given sharply declining world pork production, chicken growth should rise to 3% in 2019 to make up for the shortage of pork.

Economic Growth Rate



World Chicken Growth Rate in %



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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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