

# **BROILER ECONOMICS**

By Dr. Paul Aho

Vol. 24, Issue 5 October 2016

# THE (NOT-SO-LOW) HARVEST LOW

It is often the case that grain prices reach their lowest price of the year during the harvest or shortly after the harvest. This year appears to follow that pattern. Unfortunately, the harvest low is not quite as low as it otherwise would have been due to wet conditions in the US Corn Belt.

Just a few months ago there was speculation that a drought might affect grain production. Instead of a drought the rains came and would not stop. As a result, yields will be somewhat lower than was earlier expected.

Given the backdrop of abundant global feed supplies, the relatively minor problems in the US Corn Belt will preclude a rapid rise in prices after harvest. The problems in the US appear to have only affected the harvest low rather than alter the average price over the next 12 months.

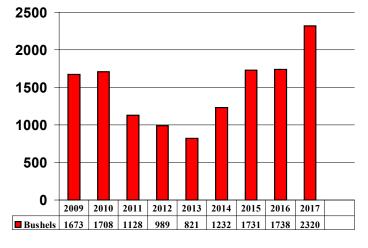
Meanwhile, conditions appear favorable for planting in South America. If an abundant harvest of corn and soybeans from South America hits the world market early next year, poultry producers should enjoy relatively low prices from now until at least a year from now. Nevertheless, grain users should be aware that grain prices are close to (if not at) a long term bottom.

The October USDA World Agricultural Supply and Demand Estimates (WASDE report) reported slightly lower production, increased exports, reduced stocks and higher prices for corn. In addition, the world corn outlook is for slightly lower production, increased consumption, and lower stocks compared to last month. Nevertheless, supplies as measured by ending inventory are higher than last year and abundant.

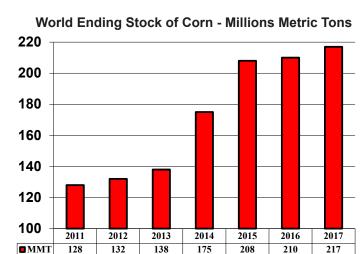
**US Corn Supply and Demand - October** IISDA Rillions of Rushals

| USDA Billions of Busileis |         |         |         |  |
|---------------------------|---------|---------|---------|--|
|                           | 2014-15 | 2015-16 | 2016-17 |  |
| Beginning Inventory       | 1.232   | 1.731   | 1.738   |  |
| Harvest                   | 14.216  | 13.601  | 15.057  |  |
| Imports                   | 0.032   | 0.067   | .050    |  |
| Supply Total              | 15.479  | 15.400  | 16.845  |  |
| Ethanol                   | 5.209   | 5.206   | 5.275   |  |
| Exports                   | 1.864   | 1.898   | 2.225   |  |
| Feed                      | 5.314   | 5.192   | 5.650   |  |
| Total Use                 | 13.748  | 13.662  | 14.525  |  |
| Ending Inventory          | 1.731   | 1.738   | 2.320   |  |
| Farm Price                | \$3.70  | \$3.61  | \$3.25  |  |

**US Ending Stock of Corn - Millions of Bushels** 



The October WASDE report estimates world-ending stock in 2017 to be 217 million tons, up 7 million tons from 2016. This trend is, of course, beneficial to the users of grain.



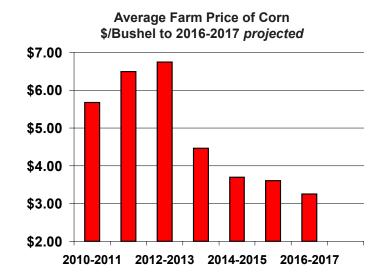
With increased supply worldwide, prices are likely to have little ability to rise over the next several months barring a weather problem in South America.

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### **SOYBEANS**

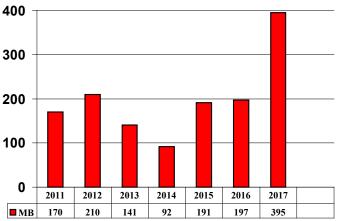
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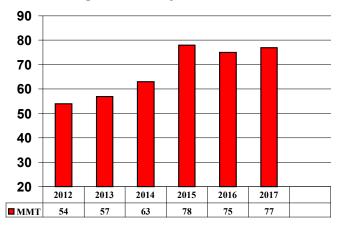
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Like corn, soybean prices are relatively low and in all likelihood close to the harvest low. Fortunately, like corn, there appears to be little likelihood of a significant increase in the next several months. The supply of soybeans is abundant with much more on the way early next year from South America. Worldending supply is high. The US-ending stock is expected to rise substantially this crop year.

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



#### **World-Ending Stock of Soybeans - Millions Metric Tons**

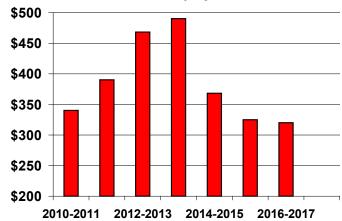


### US Soybeans - USDA August- Billions of Bushels

|                      | 2014-15 | 2015-16 | 2016-17 |
|----------------------|---------|---------|---------|
| Harvest              | 3.927   | 3.926   | 4.269   |
| Export               | 1.843   | 1.886   | 1.950   |
| Total Use            | 3.861   | 3.943   | 4.101   |
| Ending Inventory     | 191     | 197     | 395     |
| Meal Price short ton | \$368   | \$325   | \$320   |

With soybean meal prices currently at \$300 per short ton, the market is anticipating a huge US harvest. The USDA predicts an average price of \$320 per short ton (\$357 per metric ton) for next crop year, a prediction that appears reasonable.

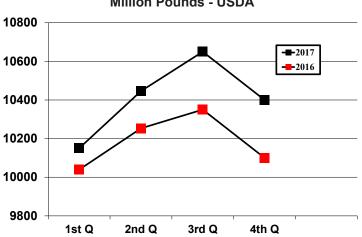




# US CHICKEN INDUSTRY PRODUCTION

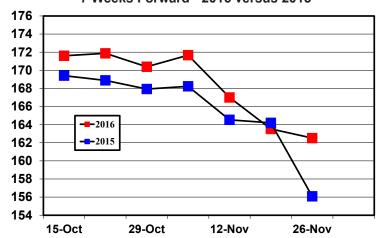
The total US production of chicken meat is expected to increase by 2% next year, a similar increase to that of 2016. Production increases are expected to be highest in the third quarter which could lead to price weakness in the middle of the year.

US Quarterly Broiler Production Million Pounds - USDA



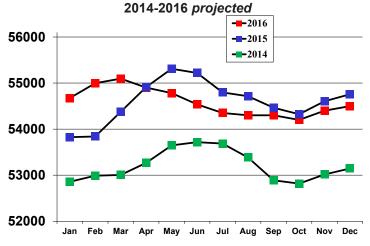
The graph below shows weekly chick placement in millions moved forward 7 weeks to estimate chickens processedd. The numbers seasonally decline at this time of year. Using this method of estimation, processing numbers are running about 1% over last year. However, in late November the numbers increase. Based on the eggs set information, this increase in processing numbers compared to last year is likely to continue at least through December and could be the first sign of an expansion or simply a false alarm.

# Weekly Chick Placement - Millions 7 Weeks Forward - 2016 versus 2015



As can be seen on the graph below, there are currently fewer breeders in the supply flocks than last year. From the smaller flocks we are getting more chicks. That is due to the lowering average age of breeders. Younger breeders are more productive so production can actually rise even with smaller numbers.

Layers on Hand - Broiler Breeder Flock

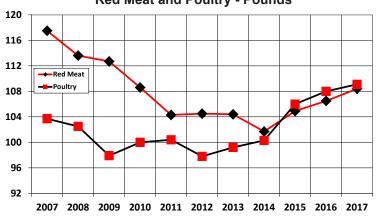


Chicken availability within the US increased at an unusual rate in 2015 due to increased production combined with a sudden drop in export quantity. Exports amounts stopped falling this year while production increases slowed. As a result, chicken availability slowed and chicken prices recovered. Recently, lower grain prices increased profitability even as chicken prices fell seasonally.

Chicken prices are under pressure from increased production of red meats. In 2016, there will be 1 billion additional pounds of red meat available for domestic use. Next year there is projected to be an additional 1 billion pounds. In all, total red meat consumption per capita will rise 7 pounds from 2014 to 2017. The per capita consumption of poultry jumped 6 pounds last year but is expected to rise just 1 pound this year and 1 pound next year.

It is interesting to note that total meat consumption in 2017 is still not back to the level of 2006. Total meat consumption is closely correlated to median income. Median income in the US has also still not yet returned to the level of 2006 after the recession of 2008-2010.

# **US Per Capita Consumption of Red Meat and Poultry - Pounds**



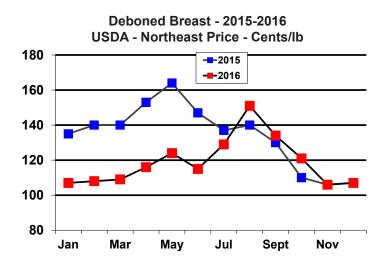
#### Per Capita Consumption in Pounds - US

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|--|------|------|---------|--------|-------|
|  | 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   | 55   | 90      | 17     | 214   |
| 2017                                     | 51   | 56   | 91      | 17     | 217   |

#### **Deboned Breast**

The highest prices for breast meat this year were lower than the highest prices in 2015. However, falling grain prices and higher leg quarter prices ensure continued profitability even at lower levels for this key price. Prices are falling and are likely to end the year at about the same price level as last year.

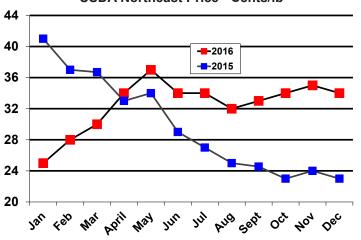
Interestingly, some of the heaviest categories of chickens are lighter in weight this year while lighter chickens are heavier. That will mean less deboned breast meat in the next several months than was earlier expected.



# Leg Quarters

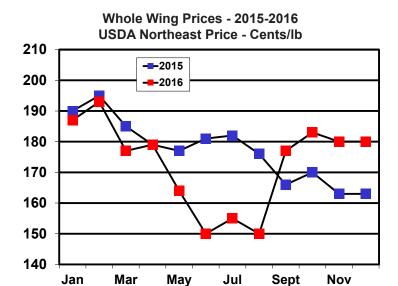
Leg quarter prices moved up this year as bird flu export restrictions were lifted and the export market stabilized. The highest price was reached in May at 37 cents (Northeast Price). It is important to note that there is a wide range in prices for leg quarters with many leg quarters sold at a price lower than the published Northeast price. There are indications of a possible problem in the largest export market, Mexico, nevertheless leg quarter prices remain relatively stable.

# Leg Quarter Price - 2015-2016 USDA Northeast Price - Cents/lb



#### Winas

Wings were a bright spot for the US chicken industry most of the year except a few months in the summer. Demand for wings is phenomenal and highly inelastic. A reduction in the supply increase of wings appears to have sent prices higher.



The US Chicken industry is now profitable and is likely to remain profitable this year due to lower grain prices and higher leg quarter and wing prices.

#### October 2016

| Leg Quarters                      | \$ 0.35 per pound  |
|-----------------------------------|--------------------|
| Deboned Breast                    | \$ 1.21 per pound  |
| Wings                             | \$ 1.82            |
| Chicago Corn                      | \$ 3.37 per bushel |
| Soybean Meal                      | \$ 295/Ton         |
| Total Cost of Eviscerated Chicken | \$ 0.69            |
| Revenue                           | \$ 0.79            |
| Gain (Loss) per pound             | \$ 0.10            |

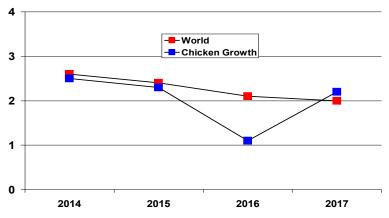
# December 2016

| Leg Quarters                      | \$ 0.34 per pound  |
|-----------------------------------|--------------------|
| Deboned Breast \$1.07 per pound   |                    |
| Wings                             | \$ 1.80            |
| Chicago Corn                      | \$ 3.37 per bushel |
| Soybean Meal                      | \$ 295/Ton         |
| Total Cost of Eviscerated Chicken | \$ 0.69            |
| Revenue                           | \$ 0.75            |
| Gain (Loss) per pound             | \$ 0.06            |

# World Chicken Growth Rate

The growth rate of the world economy continues to be sluggish. The consequences of slower world economic growth dropped the world chicken growth rate to only 1% this year. Lower grain prices should ensure that the chicken growth rate recovers to a level exceeding the world growth rate of 2% next year.

# World Chicken Growth Rate & World Economic Growth Rate



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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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