

# BROILER ECONOMICS

By Dr. Paul Aho

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## DROUGHT DANGER APPEARS TO HAVE PASSED

Two months ago it seemed that a drought in the Midwest of the US was likely. As a result, grain prices rose substantially in part due to those fears and in part due to crop problems in South America. The combination of a lower crop in both North and South America would have sent prices to exceptionally high levels. As it turned out, it appears that the market only has to deal with the lingering effects of the short crop in South America earlier this year not a short crop in North America. In fact, crops this year in North America are on their way to being record large.

Since markets are always looking forward, a huge crop in North America in the next few months may well be followed by a huge crop in South America at the beginning of 2017. It is looking good for grain users and not so good for grain producers.

The August USDA World Agricultural Supply and Demand Estimates (WASDE report) projects record corn yields this year. The ending supply of US corn this crop year will climb over that of last year and expand again in the next crop year (crop years end on August 31st). When looking at world-ending stock, diminished production in South America this year only slowed down for one year, then increased in ending corn stocks.

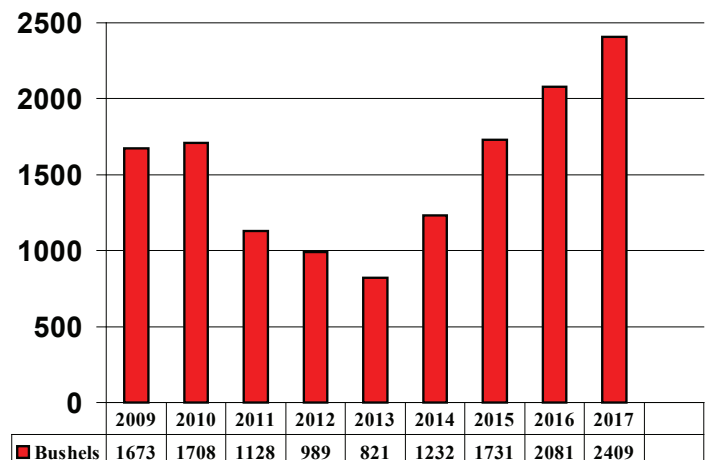
Although it is too early to say for sure that there is no chance of a drought this year, it is becoming increasingly unlikely. Should there be a record-breaking crop, as is now expected, the ending stock in 2017 will be higher than in 2016 and the price will be lower.

As can be seen on the latest drought monitor, the center of the country, the Corn Belt, is relatively free of drought. In addition, the areas of slight drought like Ohio are now receiving a significant amount of rain.

US Corn Supply and Demand – August  
USDA Billions of Bushels

	2014-15	2015-16	2016-17
Beginning Inventory	1.232	1.731	1.706
Harvest	14.216	13.601	15.153
Imports	0.032	0.065	.050
Supply Total	15.479	15.397	16.909
Ethanol	5.209	5.200	5.275
Exports	1.864	1.925	2.175
Feed	5.315	5.200	5.675
Total Use	13.748	13.692	14.500
Ending Inventory	1.731	2.081	2.409
Farm Price	\$3.70	\$3.60	\$3.15

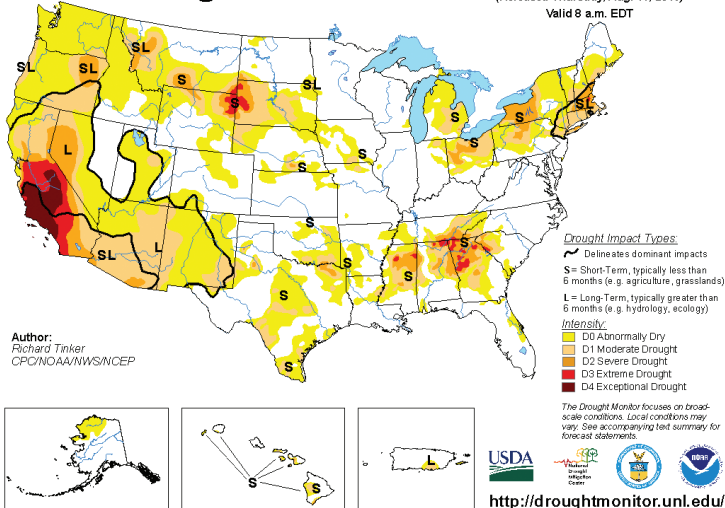
US Ending Stock of Corn  
Millions of Bushels



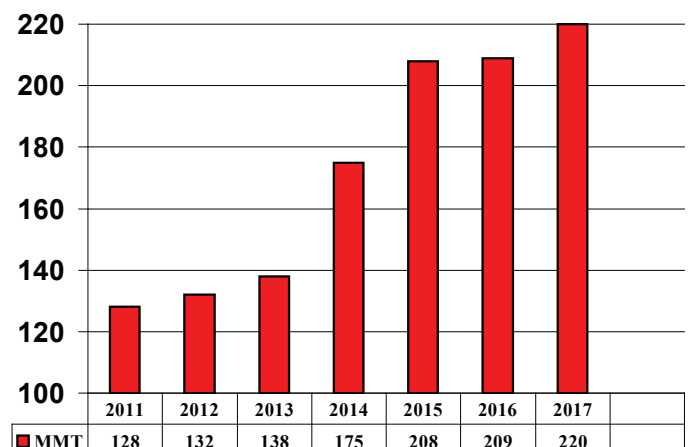
The August WASDE report estimates world-ending stock in 2016 to be 209 million tons, up 1 million tons from 2015. An additional increase of 11 million tons is projected for 2017. This trend is, of course, welcome to the users of grain.

### U.S. Drought Monitor

August 9, 2016  
(Released Thursday, Aug. 11, 2016)  
Valid 8 a.m. EDT

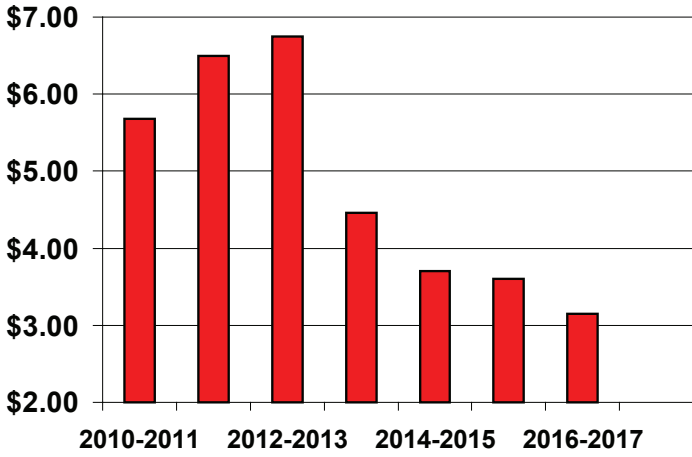


World-Ending Stock of Corn MMT



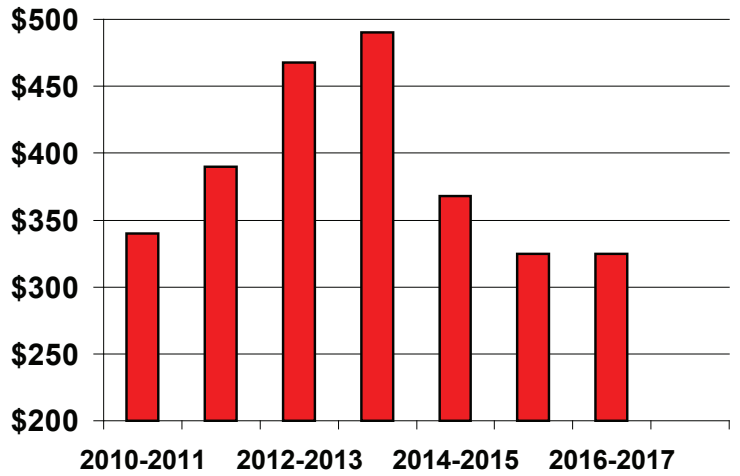
With increased supply worldwide and the slim chance of a drought in the US this year, prices are falling, reversing the outlook of two months ago. The direction arrow switched to downward for corn prices.

**Average Farm Price of Corn  
\$/Bushel to 2016-2017 Projected**



With soybean meal prices currently at \$330 per short ton, the market is anticipating a huge US harvest. The USDA predicts \$325 per short ton (\$357 per metric ton) for next crop year.

**Average Crop Year Price of Soybean Meal  
2016-2017 Projected**



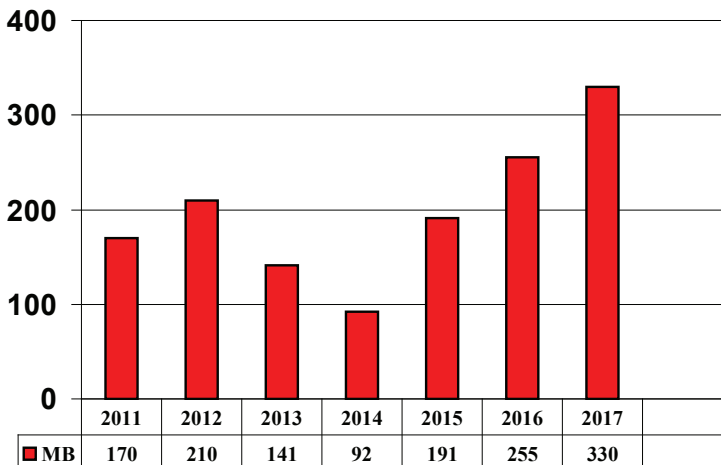
**Soybeans**

Like corn, soybeans reached their high point earlier this year and have dropped recently. Fortunately for those who use soybean meal, the supply and stock of soybeans will be more abundant than earlier expected and prices will be falling. The effects of a poor harvest in South America had a greater effect on soybeans than corn. World-ending supply will indeed fall this crop year and is expected to fall slightly again next year, however, the decline is less than earlier expected. The US ending stock continues to rise.

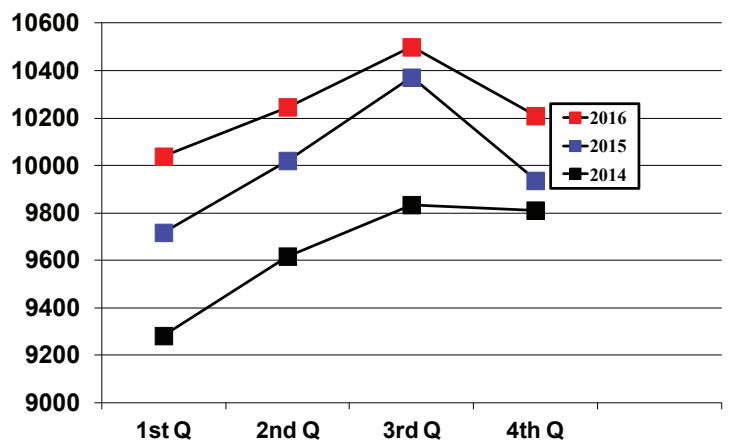
**US Chicken Industry Production**

The total number of chicken processed this year is expected to rise 1%. Weights are also running 1% higher. Therefore, total production is likely to rise about 2%. This is in sharp contrast to last year when weights increased by 2% and numbers by 2% resulting in an unsustainable increase of 4%. Production increases will be higher in the fourth quarter which could lead to price weakness.

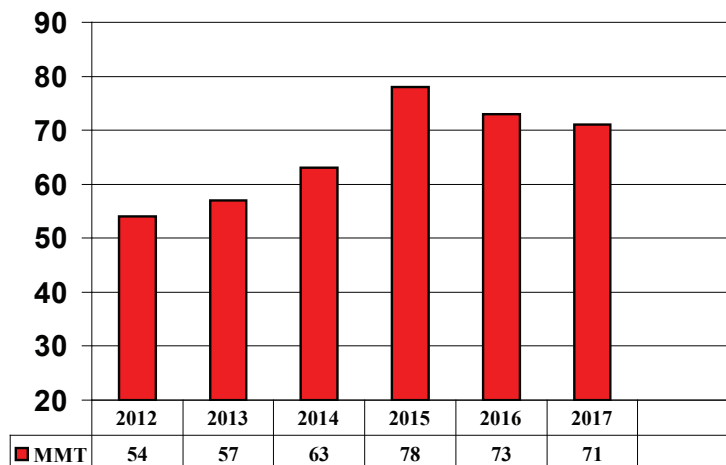
**US Ending Stock of Soybeans in Millions of Bushels**



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

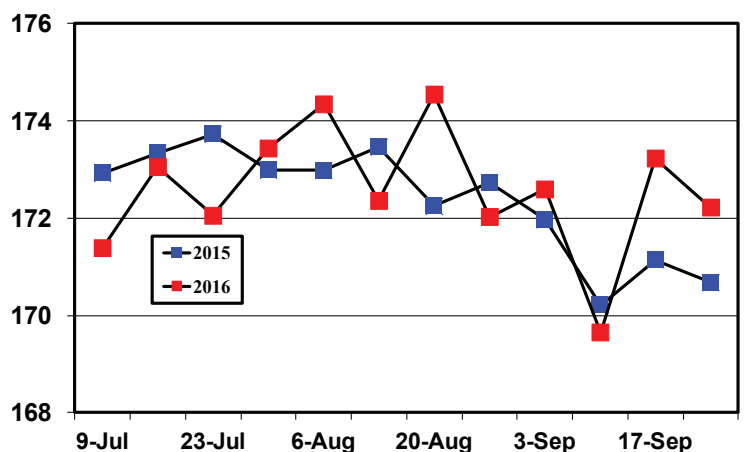


**World-ending Stock of Soybeans in MMT**



The graph below shows weekly chick placement in millions moved forward 7 weeks to estimate chickens processed. Using this method of estimation, process numbers are, at the moment, similar to last year but will begin a period of higher production compared to last year in September.

**Weekly Chick Placement - Millions  
7 Weeks Forward - 2016 versus 2017**

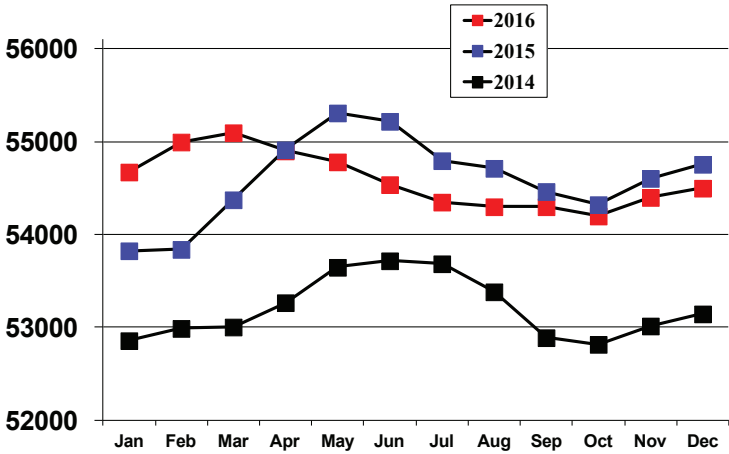


**US Soybeans – USDA August– Billions of Bushels**

	2014-15	2015-16	2016-17
Harvest	3.927	3.929	4.060
Export	1.843	1.880	1.950
Total Use	3.861	3.889	4.016
Ending Inventory	191	255	330
Meal Price short ton	\$368	\$325	\$325

As can be seen on graph below, there are currently fewer breeders in the supply flocks than last year. After a big increase last year, numbers this year are no higher to those of 2015. Part of the reason for this is due to the lowering average age of breeders. Younger breeders are more productive so production can actually rise even with similar numbers.

**Layers on Hand - Broiler Breeding Flock  
2014-2016 Projected**

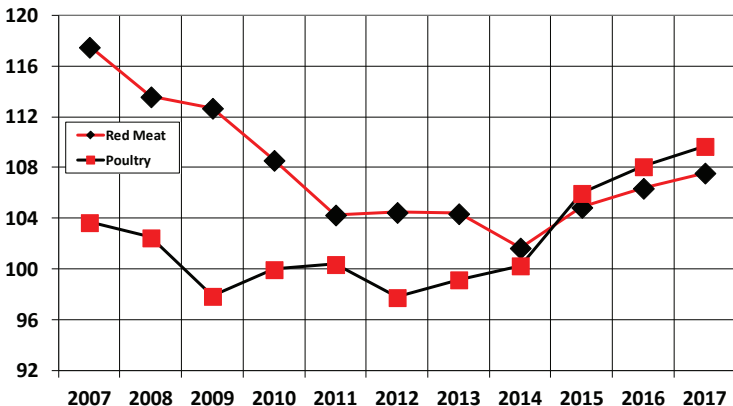


Chicken available within the US increased at an unusual rate last year and prices fell due to increased production combined with a sudden drop in export quantity. Export amounts stopped falling this year while production increases slowed. As a result, chicken prices stabilized and even rose in the case of leg quarters in 2016. Recently, lower grain prices increased profitability even as chicken prices remain relatively low.

A large increase in chicken production this year would have been unprofitable given the pressure of increased beef and pork availability. In 2015, there were 1.6 billion additional pounds of red meat available for domestic use. This year there are projected to be an additional one billion pounds. In all, total red meat consumption per capita will rise 5 pounds from 2014 to 2016. The per capita consumption of poultry jumped 6 pounds last year but is expected to rise just 2 pounds this year.

It is interesting to note that the total poultry consumption exceeded total red meat consumption in 2015 for the first time and that total meat consumption in 2016 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 in Pounds**



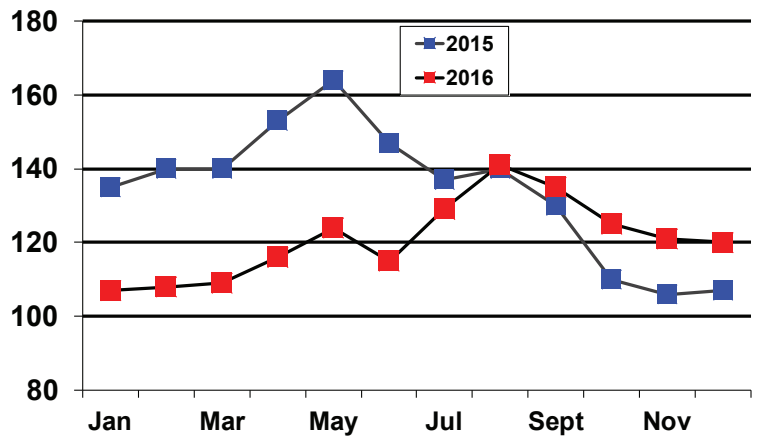
**Per Capita Consumption Per Capita in Pounds - US**

	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	55	90	17	214
2017	51	55	92	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 somewhat higher leg quarter prices ensure continued profitability even at lower levels for this key price. The highest price of the year is occurring now during the preparation for the Labor Day weekend at the beginning of September. Prices can be expected to fall in the last quarter but end the year higher than last year.

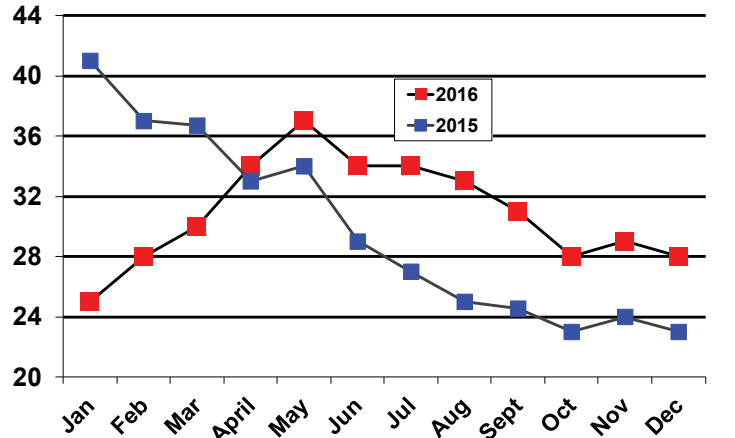
**Deboned Breast - 2015-2016  
USDA - Northeast Price - Cents/lb**



Leg Quarters

Leg quarter prices moved up this year. 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. With indications of a possible problem in the largest export market, Mexico, leg quarter prices can be expected to drift downward for the rest of this year.

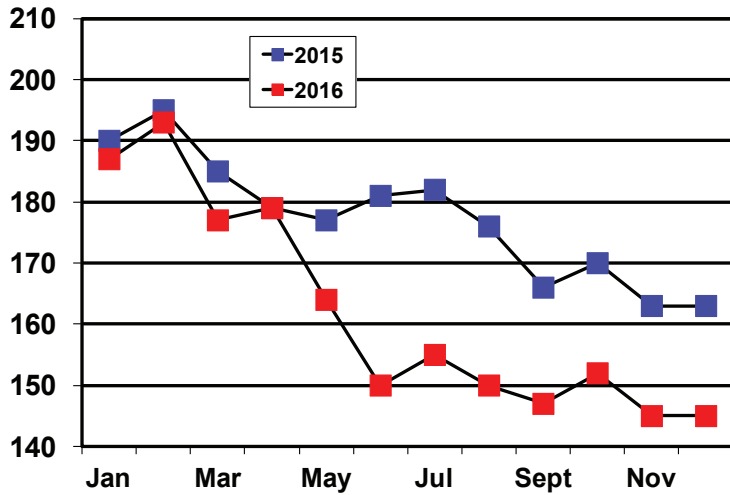
**Leg Quarter Price - 2015-2016  
USDA - Northeast Price - Cents/lb**



Wings

Wings were a very bright spot for the chicken industry until April with prices far above deboned breast. Since “boneless wings” can be made from breast meat, it was inevitable that wing prices would retreat from the \$2 per pound of earlier this year. Prices should hold above \$1.40 for the rest of this year.

**Whole Wing Prices - 2015-2016**  
**USDA - Northeast Price - Cents/lb**



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

**August 2016**

Leg Quarters	\$0.32 per pound
Deboned Breast	\$1.38 per pound
Wings	\$1.48
Chicago Corn	\$3.23 per bushel
Soybean Meal	\$333/Ton
Total Cost of Eviscerated Chicken	\$0.71
Revenue	\$0.81
Gain (Loss) per pound	\$0.10

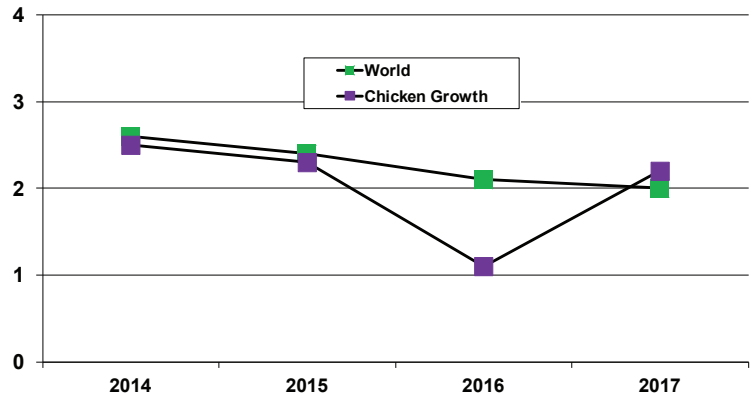
**December 2016**

Leg Quarters	\$0.31 per pound
Deboned Breast	\$1.25 per pound
Wings	\$1.48
Chicago Corn	\$3.15 per bushel
Soybean Meal	\$325/Ton
Total Cost of Eviscerated Chicken	\$0.69
Revenues	\$0.75
Gain (Loss) per pound	\$0.06

**World Chicken Growth Rate**

The growth rate of the world economy continues to be sluggish although a global recession appears to be unlikely. 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 and World Economic Growth Rate**



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