

# Commodity Market Outlook

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## **Market Outlook Reports for March 3, 2017**

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How many acres of corn, wheat, and soybeans will be planted for the 2017 harvest? I gave my projections in the February Annual Outlook Issue and restated in the Balance Sheets in last issue. On February 24, 2017 the USDA gave it their shot at the USDA Annual Outlook Forum. And on March 31 the USDA/NASS will release the Prospective Planting Report. The Prospective Planting Report is an early March survey based report indicating producers planting intentions for the 2017 crops. This report is not meant to be a forecast in the sense that this is what will occur, but rather letting the markets, including producers, know producers thoughts are, this allows for adjustments if called for before plantings are complete.

While we all know weather will play a part, there are two main themes that farmers have some control over, how much to plant, and what to plant, decided somewhat by returns per acre. The winter wheat seeding report released in January showed 3.8 million less acres of winter wheat were planted. This is mostly due to not only poor returns, but lower projected returns than to other crops. The USDA is projecting the three crop total planted acres to be 224 million, the lowest since 2011, just above my 223.4 million acre projection, and down 3.6 million acres from 2016. They expect total wheat acres planted to be 46 million, down 4.2 million, corn acres planted at 90 million, down 4 million, and soybeans acres planted at 88 million, up 4.6 million.

This put total corn and soybean acres at 178 million, up 600,000 acres from last year. This means 3.6 million of the 4.2 million acre decrease in wheat planted acres, switched to other crops, pasture, or will be left fallow. And the other 600,000 acres are projected to switch to soybeans, along with 4 million corn acres going to soybeans. The switch from corn to soybeans

is projected due to higher returns per acre, for many producers, being offered by the market as shown by relative prices and costs. The USDA's first 2017-18 Balance Sheet projections, released at the USDA Ag Outlook, Forum are shown in Tables 1-3, they will start updating them every month beginning in the May World Agricultural Supply and Demand Estimate Report.

## **CORN**

Along with the 90 million planted corn acres, the USDA is projecting 82.4 million acres will be harvested for grain based on projected acres harvested for silage and an average percent acres abandoned. The USDA is projecting a 170.7 bushel per acre weather adjusted 1988-2016 trend yield assuming normal growing season weather. I tend to use a straight trend yield which would be 168.3 over the same period. This would lead to 2017 corn production of 14,065 million bushels, while down from last year's record crop, would still be the third largest corn crop on record. And when projected production is added to the huge projected beginning stocks, it would be the second largest supply, down 3% from last year.

While the USDA projected total corn use would be down, they still projected the second highest use on record. Corn used for feed and residual was projected to be down 150 million bushels, based partially on less residual disappearance with the smaller crop, and partially due to more DDG's being available for feed with an increased projection of corn use for ethanol production. Total grain consuming animal units are projected to be up close to 3%, so I think they may be low here even given their reasons.

Use of corn for ethanol production is up 50 million bushels based on more forecasted of miles to be driven and more purchases of less efficient vehicles, increasing gasoline and therefore ethanol use. Other uses of corn for FSI use, other than for ethanol, are expected to be up mostly based on population growth. Exports are expected to drop off 325 million bushels based on more competition from Argentina, their growers face reduced policy barriers, Brazil, much bigger 2016-17 second crop corn production, and Ukraine, who has increased its market share in in Asia.

This leaves us with projected ending at a still very large 2,215 million bushels. And while down some from last year, the stocks to use ratio is still 15.6% versus 15.9%. The USDA is projecting an annual average weighted 2017-18 corn price of \$3.50, up marginally from the 2016-17 corn price of \$3.40. All

in all, this is about where I come out. These fundamentals would suggest March 2018 futures around \$3.85, in the low-range of where March 2018 futures have been trading over the past four months. Maybe over \$4.00 new crop Dec 18 corn futures aren't too bad.

	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	Est. 2015- 2016	Proj. 2016- 2017	USDA 2017- 2018
(million acres)																
Acres Planted	78.9	78.6	80.9	81.8	78.3	93.5	86.0	86.4	88.2	91.9	97.3	95.4	90.6	88.0	94.0	90.0
Acres Harvested	69.3	70.9	73.6	75.1	70.6	86.5	78.6	79.5	81.4	84.0	87.4	87.5	83.1	80.7	86.7	82.4
Yield/Bushels	129.3	142.2	160.4	148	149.1	150.7	153.9	164.7	152.8	147.2	123.1	158.1	171.0	168.4	174.6	170.7
(million bushels)																
Beginning Stocks	1596	1087	958	2114	1967	1304	1624	1673	1708	1128	989	821	1232	1731	1737	2320
Production	8967	10089	11807	11114	10531	13038	12092	13092	12447	12360	10755	13829	14216	13602	15148	14065
Imports	14	14	11	9	12	20	14	8	28	29	160	36	32	67	55	50
Total Supply	10578	11190	12776	13237	12510	14362	13729	14774	14182	13517	11904	14686	15479	15401	16940	16435
Use:																
Feed & Residual	5563	5798	6158	6155	5591	5913	5182	5125	4795	4557	4315	5040	5280	5131	5600	5450
Food, Seed & Ind	2340	2537	2686	2981	3490	4387	5025	5961	6426	6428	6038	6493	6601	6635	6795	6870
Ethanol for fuel	996	1168	1323	1603	2119	3049	3709	4591	5019	5000	4641	5124	5200	5206	5350	5400
Total Domestic	7903	8335	8844	9136	9081	10300	10207	11086	11221	10985	10353	11534	11881	11766	12395	12320
Exports	1588	1897	1818	2134	2125	2437	1849	1980	1834	1543	730	1920	1867	1898	2225	1900
Total Use	9491	10232	10662	11270	11206	12737	12056	13066	13055	12528	11083	13454	13748	13664	14620	14220
Ending Stocks	1087	958	2114	1967	1304	1624	1673	1708	1128	989	821	1232	1731	1737	2320	2215
Ending Stocks, %of Use	11.5	9.4	19.8	17.5	11.6	12.8	13.9	13.1	8.6	7.9	7.4	9.2	12.6	12.7	15.9	15.6
U.S. Loan Rate	\$1.98	\$1.98	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95
U.S. Season Ave																
Farm Price, \$/Bu.	\$2.32	\$2.42	\$2.06	\$2.00	\$3.04	\$4.20	\$4.06	\$3.55	\$5.18	\$6.22	\$6.89	\$4.46	\$3.70	\$3.61	\$3.40	\$3.50

Source: USDA/WASDE and Jim Hilker. (2 - 24 - 17)

## WHEAT

Along with the projected 46 million planted wheat acres, the USDA is projecting 39.0 million acres will be harvested for grain based on a 5-year average percent acres abandoned. They use an all wheat trend yield of 47.1 bushels per acre, down from last year's whopping record of 52.6, but equal to the second highest yield on record. So with the second lowest winter wheat acres planted on record, and lowest in 108 years, pulling down total wheat acres planted, total production with the trend yield is expected to be down 20.5%. But with the larger beginning stocks, total supply will be down only 9.2%.

Domestic use is expected to drop on 30 million bushels. Feed use of wheat is expected to drop about 35 million bushels based on an expected increase in the wheat-corn price spread due to lower wheat production. Seed use is expected to be up 5 million bushels with an expected increase in 2018-19 wheat planted acres. Exports are expected to be down 50 million bushels based on strong competition, especially from Europe, and higher prices. This would put total use at 2,191 million bushels, down 80 million bushels, 3.5%.

Projected 2017-18 ending stocks would decrease from 1,139 to 905 million bushels. This would lead to a projected stocks to use ratio of 41.3%, down significantly from the projected 2016-17 of 50.2%. The USDA is projected the average price to be \$4.30, up from this years \$3.85. This is in line with what the futures are suggesting, and fits my own analysis.

	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	Est. 2015- 2016	Proj. 2016- 2017	USDA 2017- 2018
<b>(Million Acres)</b>															
Acres Planted	62.1	59.7	57.2	57.3	60.5	63.2	59.2	53.6	54.4	55.3	56.2	56.8	55.0	50.2	46.0
Acres Harvested	53.1	50.0	50.1	46.8	51.0	55.7	49.9	47.6	45.7	48.8	45.3	46.4	47.3	43.9	39.0
Bu./Harvested Acre	44.2	43.2	42.0	38.6	40.2	44.9	44.5	46.3	43.7	46.2	47.1	43.7	43.6	52.6	47.1
<b>(Million Bushels)</b>															
Beginning Stocks	491	546	540	571	456	306	657	976	862	743	718	590	752	976	1139
Production	2345	2158	2105	1808	2051	2499	2218	2207	1999	2252	2135	2026	2062	2310	1837
Imports	68	71	82	122	113	127	119	97	112	123	173	151	113	125	120
Total Supply	2904	2775	2727	2501	2620	2932	2993	3279	2974	3118	3026	2768	2927	3411	3096
Use:															
Food	907	910	915	938	948	927	919	926	941	951	955	958	957	960	960
Seed	80	78	78	82	88	78	69	71	76	73	77	79	67	61	66
Feed and Residual	212	182	160	117	16	255	150	132	162	364	228	114	152	225	190
Total Domestic	1194	1169	1152	1137	1051	1260	1138	1128	1180	1388	1260	1151	1176	1246	1216
Exports	1159	1066	1003	908	1263	1015	879	1289	1051	1012	1176	864	775	1025	975
Total Use	2353	2235	2155	2045	2314	2275	2018	2417	2231	2400	2436	2015	1952	2271	2191
Ending Stocks	546	540	571	456	306	657	976	862	743	718	590	752	976	1139	905
Ending Stocks, %of Use	23.2	24.2	26.5	22.3	13.2	28.9	48.3	35.7	33.3	29.9	24.2	37.3	50.0	50.2	41.3
U.S. Loan Rate	\$2.80	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75
U.S. Season Ave															
U.S. \$/Bu.	\$3.40	\$3.40	\$3.42	\$4.26	\$6.48	\$6.78	\$4.87	\$5.70	\$7.24	\$7.77	\$6.87	\$5.99	\$4.89	\$3.85	\$4.30
Michigan \$/Bu.	\$3.35	\$3.01	\$3.13	\$3.41	\$5.01	\$5.63	\$4.25	\$5.72	\$6.70	\$7.75	\$6.70	\$5.60	\$5.00	\$3.75	\$4.30

Source: USDAWASDE and Jim Hilker (2 - 24 - 2017)

## **SOYBEANS**

Along with the projected 88 million planted soybean acres, the USDA is projecting 87.1 million acres will be harvested for grain based on a 5-year average percent acres abandoned. They use trend yield of 48.0 bushels per acre, down from last year's whopping record of 52.1, but equal to the second highest yield on record. This would put production at 4,180 million bushels, down from last year's record 4,307, but would be the second highest on record. And when added to the large beginning stocks would make for a record total supply for 2017-18.

The USDA is projecting total 2017-18 soybean use up 1%, at 4,205 million bushels. Crush is expected to be up 15 million bushels mainly due to more livestock to be fed and expanding use of biodiesel. Soybean exports are expected to be up 75 million bushels on very strong demand, mostly continued increasing demand coming from China. This increase in exports surprised me a bit given the expected recoveries this year of the South American soybean crops and expected continued expansion of soybean production in 2018-19.

Ending stocks for 2017-18 are projected to be a huge 420 million bushels, the same as the 2016-17 projection, 10% of projected use, versus 10.2% this year. The USDA is projecting the average price will be \$9.60, up from \$9.50. About the same stocks to use ratio each year, at first glance would indicate about the same price, which is what the USDA projected. While I can follow the USDA projections through the projected ending stocks, I question the price projection. Look at 2015-16, ending stocks to use of 5%, and an average price of 8.95. Each year has its peculiarities, so you need to look at several years. Using the same stock to use ratio of 10%, I would expect an annual average price closer to \$9.00. On the other hand, the futures markets adjusted to cash are indicating closer to a \$9.70 annual average price. On the one hand, don't fight the market, on the other hand, might \$9.45 to 9.70 at harvest turn out to be pretty nice.

**TABLE 3  
SUPPLY/DEMAND BALANCE SHEET FOR SOYBEANS**

	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	Est. 2015- 2016	Proj. 2016- 2017	USDA 2017- 2018
<b>(Million Acres)</b>																
Acres Planted	74	73.4	75.2	72	75.5	64.7	75.7	77.5	77.4	75.0	77.2	76.8	83.3	82.7	83.4	88.0
Acres Harvested	72.5	72.3	74.0	71.3	74.6	64.1	74.7	76.4	76.6	73.8	76.1	76.3	82.6	81.7	82.7	87.1
Yield/Bushels	38.0	33.9	42.2	43.0	42.9	41.7	39.7	44.0	43.5	41.9	40.0	44.0	47.5	48.0	52.1	48.0
<b>(Million Bushels)</b>																
Beginning Stocks	208	178	112	256	449	574	205	138	151	215	169	141	92	191	197	420
Production	2756	2454	3124	3063	3197	2677	2967	3359	3329	3094	3042	3358	3927	3926	4307	4180
Imports	5	6	6	3	9	10	13	15	14	16	41	72	33	24	25	25
<b>Total Supply</b>	<b>2969</b>	<b>2638</b>	<b>3242</b>	<b>3322</b>	<b>3656</b>	<b>3261</b>	<b>3185</b>	<b>3512</b>	<b>3495</b>	<b>3325</b>	<b>3252</b>	<b>3570</b>	<b>4052</b>	<b>4140</b>	<b>4529</b>	<b>4625</b>
<b>Use:</b>																
Crushings	1615	1530	1696	1739	1808	1803	1662	1752	1648	1703	1689	1734	1873	1886	1930	1945
Exports	1045	885	1097	940	1116	1159	1279	1499	1501	1365	1317	1638	1842	1936	2050	2125
Seed	89	92	88	93	80	93	90	90	87	90	89	97	96	97	95	97
Residual	41	19	105	101	77	0	16	20	43	-2	16	10	50	24	33	38
<b>Total Use</b>	<b>2791</b>	<b>2526</b>	<b>2986</b>	<b>2873</b>	<b>3081</b>	<b>3056</b>	<b>3047</b>	<b>3361</b>	<b>3280</b>	<b>3155</b>	<b>3111</b>	<b>3478</b>	<b>3862</b>	<b>3943</b>	<b>4108</b>	<b>4205</b>
Ending Stocks	178	112	256	449	574	205	138	151	215	169	141	92	191	197	420	420
Ending Stocks, %of Use	6.4	4.4	8.6	15.6	18.6	6.7	4.5	4.5	6.5	5.4	4.5	2.6	4.9	5.0	10.2	10.0
U.S. Loan Rate	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00
U.S. Season Ave Farm Price, \$/Bu.	\$5.53	\$7.34	\$5.74	\$5.66	\$6.43	\$10.10	\$9.97	\$9.59	\$11.30	\$12.50	\$14.40	\$13.00	\$10.10	\$8.95	\$9.50	\$9.60

Source: USDA/WASDE and Jim Hilker. (2 - 24 - 17)