

Commodity Market Outlook

Jim Hilker

*Professor and MSU Extension Economist
Department of Agricultural, Food, and Resource Economics
Michigan State University*

Market Outlook Reports for May 17, 2017

(Written May 17, 2017 for release in Michigan Farm News May 31)

CORN

The corn all planted? In Michigan and the U.S.? As of Mid-May, 71% of the U.S. corn had been planted, right at the average, with a decent planting week ahead. However, "average" was made up of some states such as Iowa and Minnesota being ahead, and others such as Indiana, Ohio, and Michigan running behind. Michigan at 30% made big gains from the previous week, and was the same as a year ago, but significantly behind the five year average of 47%.

On May 10 the USDA released its first WASDE report, supply and demand projections, for the 2017-18 corn marketing year, Sept 1 - August 31, along with updates for the 2016-17 marketing year. For the 2016-17 year we are presently in, the USDA increased estimated industrial uses other than for ethanol use by 25 million bushels. This is significant for several reasons. It decreased estimated ending stocks by 25 million bushels, this means 25 million less bushels in the 2017-18 supply, and it pushed the 2017-18 projection. We can use all the new use/demand we can get.

The first projections for 2017-18 were not far off from expectations, see Table 1. Projected 2017 production was a product of the USDA weather adjusted trend yield, the same one they used in their February Outlook Forum, and the projected acres planted came from the March Prospective Report. So the 14,065 million bushel projected 2017 U.S. corn production was the same I showed in the last two issues. The next acreage projection will be released June 30, based off an early June survey. The first survey of producers and field samples will not be until August for corn. While the 14,065 production

estimate is significantly below last year's massive 15,148 million bushels, it would still be the third largest production. And when you add the huge projected carry in, the total supply will be the second largest ever, a billion bushels higher than the third largest supply.

Projected 2017-18 domestic use is expected about the same, up 5 million bushels, as this year. Feed and RESIDUAL use is expected to be down 75 million, most of the decrease coming from a projected decrease in residual use given the smaller crop. Animal units will be up, and I suspect actual corn fed will be up. However, as discussed other times, with the huge on farm corn fed, it can't really be estimated, so feed and residual is calculated as what is left over after all the other estimates are made. On the positive side, corn used for ethanol is expected to be up 50 million bushels and other industrial uses for corn up 30 million bushels.

Projected exports were put at 1,875 million bushels, down sharply from this year's 2,225 million bushels due to South America having a great corn crop this year, and a poor corn crop last year. The 1,875 million bushel projection for 2017-18 is about the same as exports from 2013-14 through 2015-16. Despite the projected decrease in total 2017-18 use, it will still be the second largest use on record. And best of all, projected ending stocks, while still huge, are expected to decrease for the first time in five years.

WHEAT

Also on May 10 the USDA/NASS released the first survey based projection of 2017 Winter Wheat Production. The projection was about 75 million bushels less than the average trade estimate, and only 20 million bushels above the lowest estimate. At 25.6 million acres harvested, down 15.4%, and a yield of 48.8, down 11.8%, but near trend yield, total production was projected as 1,250 million bushels, down 25.4%. By the time you read this, we will know, but rough weather was projected through much of the high plains as I write. Probably more downside risk in final production, than upside potential. The next NASS projection will be June 10. And the next planted and harvest acres report will be released June 30.

Michigan's 2017 winter wheat production, all of our wheat, was projected at 34 million bushels, down 33% from last year. The major reason for the decrease was a decrease in planted and therefore harvested acres. Michigan is projected to harvest

400,000 acres, down 30%, and projected to harvest 85 bushels per acre, down 4 bushels from last year's record, but would be the second highest yield on record.

The first release of the 2017-18 USDA/WASDE Wheat Supply/Demand estimates incorporated the new winter wheat production information and the durum and spring wheat prospective planting information using trend yields. Planted acres are projected to be 46.1 million, down 4.1 million acres, 8.2%, and will be the lowest on record. Harvested acres are projected to be 38.5 million, down 5.4 million or 12.3%. The projected yield was put at 47.2, down 5.4 bu/ac, but near trend. This put projected production at 1,820 million bushels, 489 million bushels, and the lowest since 2006, even with a near trend yield. However, given the massive beginning stocks, total supply will still be the basically the second largest since pre 2000.

The good news is, projected 2017-18(June 1 - May31) is projected to be near this year's level, and ending stocks are projected to decrease 246 million bushels to 914 million. And ending stocks as a percent of use, is expected to be 41.7% versus the wheat marketing year we are just finishing, 51.7% over half of what we use left over. This is expected to increase the weighted average price of all wheat \$4.25/bu, from this past year of \$3.90/bu.

SOYBEANS

Are all or most of the soybeans all planted? In Michigan and the U.S.? As of Mid-May, 32% of the U.S. corn had been planted, right at the average, with a decent planting week ahead. However, "average" was made up of some states such as Iowa and Minnesota being ahead, and others such as Illinois, Indiana, Ohio, and Michigan running behind. Michigan at 11% made big gains from the previous week, 1%, and was the same as a year ago, 13%, but significantly behind the five year average of 25%.

The first soybean supply/demand projections for 2017-18 were very near expectations. Projected 2017 production was a product of the USDA weather adjusted trend yield, the same one they used in their February Outlook Forum, and the projected acres planted came from the March Prospective Report. As shown on Table 3, this put projected 2017 soybean production at 4,255 million bushels, only 52 million bushels less than last year's massive record crop. This year we are expected to reach that

level by planting 6 million more acres, 89.5 million, than last year's record plantings. What if we have a better than trend yield, or versus?

Total 2017-19 projected supply was put at 4,715 million bu, up 187 million, due to the massive beginning stocks from last year's massive crop. However, soybean demand is expected to stay very strong and continue to grow. Expected use was put at 4,235 million bushels, up 142 million bushel. Crush is projected to be up 25 million bushels over last year's record crush that was up 40 million bushels over the previous year. And exports are expected to be up 100 million bushels, as with each of the past two years, 200 million the year before that. And this year's increase is despite the record crop coming out of South America.

But.... 2017-18 ending stocks and ending stocks to use are expected to still grow marginally... See table 3. The USDA put the weighted average price expected to be \$9.30, down from the estimated 2016-17 price of \$9.55. Yes, we have a long way to go, things will chance, but it helps to have a staring place, and we know close to what the buyers know.

Balance Sheets Follow on Next Three Pages

**TABLE 1
SUPPLY/DEMAND BALANCE SHEET FOR CORN**

	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	2015- 2016	Est. 2016- 2017	Proj. 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	2295
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	16410
Use:																
Feed & Residual	5563	5798	6158	6155	5591	5913	5182	5125	4795	4557	4315	5040	5280	5123	5500	5425
Food, Seed & Ind	2340	2537	2686	2981	3490	4387	5025	5961	6426	6428	6038	6493	6601	6643	6920	7000
Ethanol for fuel	996	1168	1323	1603	2119	3049	3709	4591	5019	5000	4641	5124	5200	5224	5450	5500
Total Domestic	7903	8335	8844	9136	9081	10300	10207	11086	11221	10985	10353	11534	11881	11766	12420	12425
Exports	1588	1897	1818	2134	2125	2437	1849	1980	1834	1543	730	1920	1867	1898	2225	1875
Total Use	9491	10232	10662	11270	11206	12737	12056	13066	13055	12528	11083	13454	13748	13664	14645	14300
Ending Stocks	1087	958	2114	1967	1304	1624	1673	1708	1128	989	821	1232	1731	1737	2295	2110
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	15.7	14.8
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	\$3.40

Source: USDA/WASDE and Jim Hilker. (5 - 10 - 17)

**TABLE 2
SUPPLY/DEMAND BALANCE SHEET FOR WHEAT**

	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	Est. 2016- 2017	Proj. 2017- 2018
(Million Acres)															
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	46.1
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	38.5
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	47.2
(Million Bushels)															
Beginning Stocks	491	546	540	571	456	306	657	976	862	743	718	590	752	976	1159
Production	2345	2158	2105	1808	2051	2499	2218	2207	1999	2252	2135	2026	2062	2310	1820
Imports	68	71	82	122	113	127	119	97	112	123	173	151	113	115	125
Total Supply	2904	2775	2727	2501	2620	2932	2993	3279	2974	3118	3026	2768	2927	3400	3105
Use:															
Food	907	910	915	938	948	927	919	926	941	951	955	958	957	955	955
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	190	170
Total Domestic	1194	1169	1152	1137	1051	1260	1138	1128	1180	1388	1260	1151	1177	1206	1191
Exports	1159	1066	1003	908	1263	1015	879	1289	1051	1012	1176	864	775	1035	1000
Total Use	2353	2235	2155	2045	2314	2275	2018	2417	2231	2400	2436	2015	1952	2241	2191
Ending Stocks	546	540	571	456	306	657	976	862	743	718	590	752	976	1159	914
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	51.7	41.7
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	\$3.90	\$4.25

Source: USDA/WASDE and Jim Hilker (5 - 10 - 2017)

**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	2015- 2016	2016- 2017	Est. 2017	Proj. 2018
(Million Acres)																	
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	89.5	
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	88.6	
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	
(Million Bushels)																	
Beginning Stocks	208	178	112	256	449	574	205	138	151	215	169	141	92	191	197	435	
Production	2756	2454	3124	3063	3197	2677	2967	3359	3329	3094	3042	3358	3927	3926	4307	4255	
Imports	5	6	6	3	9	10	13	15	14	16	41	72	33	24	25	25	
Total Supply	2969	2638	3242	3322	3656	3261	3185	3512	3495	3325	3252	3570	4052	4140	4528	4715	
Use:																	
Crushings	1615	1530	1696	1739	1808	1803	1662	1752	1648	1703	1689	1734	1873	1886	1925	1950	
Exports	1045	885	1097	940	1116	1159	1279	1499	1501	1365	1317	1638	1842	1936	2050	2150	
Seed	89	92	88	93	80	93	90	90	87	90	89	97	96	97	104	101	
Residual	41	19	105	101	77	0	16	20	43	-2	16	10	50	25	14	34	
Total Use	2791	2526	2986	2873	3081	3056	3047	3361	3280	3155	3111	3478	3862	3944	4093	4235	
Ending Stocks	178	112	256	449	574	205	138	151	215	169	141	92	191	197	435	480	
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	10.6	11.3	
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	\$9.55	\$9.30	

Source: USDA/WASDE and Jim Hilker. (5 - 10 - 17)