

## May 10, 2018 - USDA World Supply and Demand Estimates

### Corn

**Market Reaction:** July 2018 corn futures closed down  $\frac{3}{4}$  cent at \$4.02 with a trading range for the day of \$4.00 to \$4.07. December 2018 corn futures closed unchanged from yesterday at \$4.19  $\frac{1}{2}$  with a trading range for the day of \$4.17 to \$4.23  $\frac{3}{4}$ . At face value, the report was decidedly bullish (U.S. ending stocks down 500 million bushels; global stocks down 905 million bushels; and global consumption up 889 million bushels year-over-year). Unfortunately, futures markets had ending stock reductions and increased demand largely factored into prices before the report release. The market will now wait for revised U.S. acreage and yield estimates.

**USDA Summary:** The U.S. feed-grain outlook for 2018/19 is for lower production, domestic use, exports, and ending stocks. The corn crop is projected at 14.0 billion bushels, down from last year with a lower forecast area and yield. The yield projection of 174.0 bushels per acre is based on a weather-adjusted trend assuming normal planting progress and summer growing season weather, estimated using the 1988-2017 time period. With beginning stocks down from a year ago, total corn supplies at 16.3 billion bushels, if realized would be down 675 million from the prior year. Total U.S. corn use in 2018/19 is forecast to decline modestly from a year ago on reductions in domestic use and exports. Food, seed, and industrial (FSI) use is projected to rise 75 million bushels to 7.1 billion, driven by an expected increase in the amount of corn used to produce ethanol for fuel and growth in non-ethanol FSI. Corn used to produce ethanol is up 50 million bushels mostly reflecting expectations of gasoline consumption growth. Feed and residual use for corn is projected lower as a smaller crop, increased use of ethanol by-products, and higher expected prices more than offset growth in grain consuming animal units. U.S. corn exports are forecast to decline 125 million bushels in 2018/19. Reduced exports out of Argentina and Brazil during 2017/18 (local marketing years beginning March 2018) are expected to boost U.S. exports during the first half of 2018/19. However, a nearly 265-million-bushel increase in the combined corn exports for Ukraine and Russia in 2018/19 will likely increase competition for the United States, reducing the forecast U.S. share of global corn trade from a year ago. With total U.S. corn supply falling faster than use, 2018/19 U.S. ending stocks are down 500 million bushels from last year to 1.7 billion. The season-average farm price is projected at \$3.30 to \$4.30 per bushel, up 40 cents at the midpoint from 2017/18.

The global coarse grain outlook for 2018/19 is for higher production, increased use and lower ending stocks. Corn production is forecast up from a year ago, with the largest increases for China, Brazil, Argentina, Ukraine, and Russia. Global corn use is expected to grow 2 percent, while global corn imports are projected to increase 5 percent. Notable forecast increases in corn imports include Vietnam, China, Bangladesh, Iran, Malaysia, Mexico, and Saudi Arabia. Global corn ending stocks are down 1.409 billion bushels from a year ago, and if realized would be the

lowest since 2012/13. For China, total corn supply is down 433 million bushels in 2018/19, as larger production and imports are more than offset by lower beginning stocks. Corn area is projected higher based on current cash and futures prices that are above a year ago. Total coarse grain imports are forecast down from 2017/18, but still the fourth largest in the world behind Mexico, Japan, and the EU. World market prices for coarse grains are expected to remain below China's domestic corn prices, particularly in the feed deficit south, thus driving expected demand for imported feedstuffs in 2018/19.

	2014/15	2015/16	2016/17	2017/18 Est. April	2017/18 Est. May	2018/19 Projected May	2017/18 Change From Previous Month	Change 2017/18 to 2018/19
<b>Planted and Harvested Acres &amp; Yield</b>								
Acres Planted (Million Acres)	90.6	88	94	90.2	90.2	88	0.0	-2.2
Acres Harvested (Million Acres)	83.1	80.8	86.7	82.7	82.7	80.7	0.0	-2.0
U.S. Average Yield (Bu/Acre)	171.0	168.4	174.6	176.6	176.6	174	0.0	-2.6
<b>Supply (Million Bushels)</b>								
Beg. Stocks	1,232	1,731	1,737	2,293	2,293	2,182	0	-111
Production	14,216	13,602	15,148	14,604	14,604	14,040	0	-564
Imports	32	68	57	50	50	50	0	0
Total Supply	15,479	15,401	16,942	16,947	16,947	16,272	0	-675
<b>Use &amp; Ending Stocks (Million Bushels)</b>								
Feed and Residual	5,280	5,114	5,472	5,500	5,500	5,375	0	-125
Ethanol	5,200	5,224	5,432	5,575	5,575	5,625	0	50
Food, Seed & Industrial	1,401	1,424	1,451	1,465	1,465	1,490	0	25
Exports	1,867	1,901	2,293	2,225	2,225	2,100	0	-125
Total Use	13,748	13,664	14,649	14,765	14,765	14,590	0	-175
U.S. Ending Stocks	1,731	1,737	2,293	2,182	2,182	1,682	0	-500
Foreign Stocks	6,529	6,685	6,664	5,604	5,488	4,583	-116	-905
<b>Price and Stocks to Use Ratio</b>								
U.S. Avg. Season Price (\$/Bu)	\$3.70	\$3.61	\$3.36	\$3.20- \$3.50	\$3.25- \$3.55	\$3.30- \$4.30	\$0.05	\$0.40
U.S. Stocks/Use	12.59%	12.71%	15.65%	14.78%	14.78%	11.53%	0.0%	-3.25%

Source: USDA-WASDE May10, 2018

**World Corn Supply and Use (Million Bushels) 2018/19 (May)**

<b>Country / Region</b>	<b>Beginning Stocks</b>	<b>Production</b>	<b>Imports</b>	<b>Domestic Feed</b>	<b>Domestic Total</b>	<b>Exports</b>	<b>Ending Stocks</b>
World	7,671	41,575	6,024	26,202	42,981	6,221	6,265
US	2,183	14,040	50	5,375	12,490	2,100	1,682
Foreign	5,488	27,535	5,974	20,827	30,491	4,121	4,583
Argentina	137	1,614	0	315	472	1,063	216
Brazil	371	3,779	28	2,165	2,579	1,220	379
South Africa	96	551	0	260	496	87	65
Egypt	70	252	382	535	634	0	70
EU	320	2,401	630	2,224	3,012	59	281
Japan	48	0	591	453	594	0	44
Mexico	190	1,024	657	984	1,701	59	111
Southeast Asia	98	1,155	669	1,476	1,787	30	105
South Korea	71	3	382	295	386	0	70
Canada	93	602	20	346	559	61	95
China	3,132	8,858	197	6,771	9,803	2	2,382
Ukraine	35	1,181	1	177	228	945	44
ROW	828	6,115	2,417	4,824	8,240	595	723

**World Corn Supply and Use (Million Bushels) 2018/19-2017/18**

<b>Country / Region</b>	<b>Beginning Stocks</b>	<b>Production</b>	<b>Imports</b>	<b>Domestic Feed</b>	<b>Domestic Total</b>	<b>Exports</b>	<b>Ending Stocks</b>
World	-1,419	787	254	611	889	215	-1,521
US	-111	-564	-	-125	-50	-125	-500
Foreign	-1,308	1,351	254	737	939	339	-1,021
Argentina	-71	315	-	59	67	118	59
Brazil	-181	157	12	79	118	-79	-51
South Africa	-35	31	-	12	16	20	-39
Egypt	-4	16	-12	8	8	-	-8
EU	23	-6	-8	8	28	-20	2
Japan	-4	-	-	-	-	-	-4
Mexico	-24	-31	20	28	35	8	-79
Southeast Asia	-27	-2	110	75	79	-4	7
South Korea	-1	-	-	-	-	-	-1
Canada	13	47	-28	8	-	10	23
China	-833	359	39	197	315	-	-750
Ukraine	-26	231	-	39	39	157	9
ROW	-139	233	120	225	234	129	-188

Source: USDA-WASDE May 10, 2018

## Cotton

**Market Reaction:** July 2018 cotton futures closed down 1.3 cents at 84.56 with a trading range for the day of 84.05 to 86.17 cents. December 2018 cotton futures closed down 0.45 cents at 80.11 with a trading range for the day of 79.56 to 80.75 cents. Year-over-year, Chinese cotton ending stocks are projected to drop another 7.55 million bales for the 2018/19 marketing year. Chinese ending stocks have been cut in half since the 2014/15 marketing year or stated in terms of use relative to stocks – Chinese stocks-to-use ratio has decreased from 197% to 81% over the same time. Total global demand is projected up 5.5 million bales year-over-year. The major unknown will be production. In the U.S., the abandonment ratio, driven almost exclusively by Texas, and estimated yield will dictate prices as we move into the summer.

**USDA Summary:** The U.S. cotton projections for 2018/19 include smaller production, unchanged exports, and slightly higher ending stocks compared with 2017/18. Production is forecast at 19.5 million bales, based on 13.5 million planted acres as indicated in the March Prospective Plantings report. While planted area is expected higher in 2018/19, reduced precipitation to date in the Southwest suggests abandonment will likely rise from 2017/18's below-average level. With higher abandonment and the U.S. yield falling from the previous year's record-high, production is projected 7 percent lower than in 2017/18. Domestic mill use in 2018/19 is projected slightly higher at 3.4 million bales, while exports are expected to remain unchanged at 15.5 million. At 5.2 million bales, 2018/19 ending stocks are projected 500,000 bales higher than the year before, and equivalent to 28 percent of total use. The range for the marketing year average price received by producers is 55.0 to 75.0 cents per pound. For 2017/18, U.S. cotton production is reduced marginally from last month. The export forecast is increased 500,000 bales to 15.5 million bales as the expected U.S. share of world trade rises, with ending stocks lowered accordingly.

The world 2018/19 cotton projections show a decline in stocks of 4.5 million bales, as consumption once again exceeds production. Global production is expected to fall marginally, as area declines 1 percent. Expected production in India—the world's largest producer—is unchanged from 2017/18. Lower production in the United States, Australia, and China is nearly offset by higher expected crops in Pakistan, Turkey, and Brazil. Global consumption is projected to rise 3.9 percent to a new record high, as a growing world economy drives mill use higher around the world. Projected world trade is raised from 2017/18, as import-oriented consumers such as Vietnam and Bangladesh are accounting for a larger share of world consumption, and China's imports rise. Ending stocks are projected down 4.5 million bales year to year, at 83.8 million bales, 67 percent of world consumption. An even larger decline is expected in China's stocks, and stocks outside of China are expected to rise for the third consecutive year.

For 2017/18, both world production and consumption is increased about 300,000 bales from last month, leaving ending stocks virtually unchanged. Production is higher in Uzbekistan and Australia and consumption is higher in Turkey and Uzbekistan. Australia's expected exports are 300,000 bales lower, while higher exports are now expected for the United States, Chad, Benin, and Uzbekistan.

	2014/15	2015/16	2016/17	2017/18 Est. April	2017/18 Est. May	2018/19 Projected May	2017/18 Change From Previous Month	Change 2017/18 to 2018/19
<b>Planted and Harvested Acres &amp; Yield</b>								
Acres Planted (Million Acres)	11.04	8.58	10.07	12.61	12.61	13.47	0	0.86
Acres Harvested (Million Acres)	9.35	8.07	9.51	11.35	11.1	11.13	-0.25	0.03
U.S. Average Yield (lbs/acre)	838	766	867	889	905	841	16	-64
<b>Supply (Million Bales)</b>								
Beg. Stocks	2.35	3.65	3.8	2.75	2.75	4.7	0	1.95
Production	16.32	12.89	17.17	21.03	20.92	19.5	-0.11	-1.42
Imports	0.01	0.03	0.01	0.01	0.01	0.01	0	0
Total Supply	18.68	16.57	20.98	23.79	23.68	24.21	-0.11	0.53
<b>Use &amp; Ending Stocks (Million Bales)</b>								
Domestic	3.58	3.45	3.25	3.35	3.35	3.4	0	0.05
Exports	11.25	9.15	14.92	15	15.5	15.5	0.5	0
Total Use	14.82	12.6	18.17	18.35	18.85	18.9	0.5	0.05
U.S. Ending Stocks	3.65	3.8	2.75	5.3	4.7	5.2	-0.6	0.5
Foreign Stocks	108.09	91.11	84.17	82.99	83.51	83.75	0.52	0.24
Chinese Stocks	66.92	58.2	48.42	40.97	40.97	33.42	0	-7.55
<b>Price and Stocks to Use Ratio</b>								
U.S. Avg. Season Price (\$/lb)	\$0.613	\$0.612	\$0.68	\$0.67- \$0.69	\$0.67- \$0.69	\$0.55- \$0.75	\$0.000	-\$0.030
U.S. Stocks/Use	25%	30%	15%	29%	25%	28%	-3.95%	2.58%
Chinese Stocks/Use	197%	166%	129%	102%	102%	81%	0.00%	-21.89%

Source: USDA-WASDE May 10, 2018

**World Cotton Supply and Use (Million 480 lb Bales) 2018/19 (May)**

<b>Country / Region</b>	<b>Beginning Stocks</b>	<b>Production</b>	<b>Imports</b>	<b>Domestic Use</b>	<b>Exports</b>	<b>Loss</b>	<b>Ending Stocks</b>
World	88.21	121.19	41.12	125.44	41.12	0.22	83.75
US	4.7	19.5	0.01	3.4	15.5	0.11	5.2
Foreign	83.51	101.69	41.12	122.04	25.62	0.11	78.55
Central Asia	2.77	6.52	0	3.66	2.57	0	3.06
Afr. Fr. Zone	2.57	5.21	0	0.14	4.73	0	2.91
Australia	3.06	4	0	0.04	4.5	0	2.52
Brazil	8.08	8.8	0.08	3.45	4.8	0	8.7
India	12.63	28.5	1.5	25.2	4.25	0	13.18
Mexico	0.8	1.6	0.9	1.85	0.55	0.03	0.88
China	40.97	27	7	41.5	0.05	0	33.42
EU	0.38	1.56	0.71	0.74	1.48	0	0.42
Turkey	1.98	4.3	3.6	7.4	0.35	0	2.13
Pakistan	2.78	8.8	2.1	10.5	0.25	0.03	2.91
Indonesia	0.62	0	3.5	3.5	0.01	0	0.62
Thailand	0.18	0	1.08	1.05	0	0.03	0.18
Bangladesh	1.88	0.14	7.9	7.8	0	0.01	2.11
Vietnam	1.09	0	7.7	7.4	0	0	1.39
ROW	3.72	5.26	5.04	7.81	2.08	0.01	4.12

**World Cotton Supply and Use (Million 480 lb Bales) 2018/19-2017/18**

<b>Country / Region</b>	<b>Beginning Stocks</b>	<b>Production</b>	<b>Imports</b>	<b>Domestic Use</b>	<b>Exports</b>	<b>Loss</b>	<b>Ending Stocks</b>
World	1.41	-0.99	2.07	5.05	2.06	-0.08	-4.54
US	1.95	-1.53	-	0.05	0.5	-0.03	-0.1
Foreign	-0.54	0.54	2.08	5	1.56	-0.05	-4.44
Central Asia	0.33	0.32	-	0.46	-0.19	-	0.38
Afr. Fr. Zone	0.8	0.05	-	0.01	0.54	-	0.29
Australia	0.87	-0.7	-	-	0.3	-	-0.14
Brazil	1.22	0.1	0.03	0.05	0.6	-	0.69
India	1.5	-	-0.2	1	-0.25	-	0.55
Mexico	0.36	0.06	-0.08	-	0.2	-	0.15
China	-7.45	-0.5	1.9	1.5	-	-	-7.55
EU	0.11	0.04	-	-	0.07	-	0.06
Turkey	0.4	0.3	-0.2	0.3	-	-	0.2
Pakistan	0.51	0.6	-0.8	0.1	0.05	-	0.17
Indonesia	-	-	0.1	0.15	-	-	-0.05
Thailand	-0.02	-	0.08	0.05	-	-	-
Bangladesh	0.22	-	0.5	0.5	-	-	0.23
Vietnam	0.21	-	0.9	0.85	-	-	0.25
ROW	0.4	0.27	-0.16	0.03	0.24	-0.05	0.33

Source: USDA-WASDE May 10, 2018

## Soybeans

***Futures Market Reaction:*** July 2018 soybean futures were up 5 ½ cents at \$10.21 ¼ with a trading range for the day of \$10.14 ¼ to \$10.33 ¾. November 2018 soybean futures closed up 6 ¾ cents at \$10.31 with a trading range for the day of \$10.23 ½ to \$10.40. Immediately following the report soybean futures spiked 15 cents as algorithmic traders liked the reduction in domestic and foreign soybean stocks. However, prices retreated minutes after the report release. Increased South American production in 2018/19, primarily due to Argentina's recovery from this year's drought, provides the potential to assist in meeting global demand increases. Moving forward US acreage and the potential for trade disruptions with China will move prices.

***USDA Summary:*** The 2018/19 outlook for U.S. soybeans is for higher supplies, crush, exports, and lower ending stocks compared to 2017/18. The soybean crop is projected at 4,280 million bushels, down 112 million from last year's record crop on lower harvested area and trend yields. With higher beginning stocks, soybean supplies are projected at 4,835 million bushels, up 2 percent from 2017/18. Total U.S. oilseed production for 2018/19 is forecast down from 2017/18 mainly on lower soybean production. The U.S. soybean crush for 2018/19 is projected at 1,995 million bushels, up slightly from the revised 2017/18 forecast with higher soybean meal disappearance offset by lower projected soybean meal exports. Soybean meal exports are forecast lower as Argentina's export share recovers from the effects of drought in 2017/18. U.S. soybean exports are forecast at 2,290 million bushels for 2018/19, up 225 million from 2017/18. With forecast global soybean import growth of 5 percent, the U.S. soybean export share is projected at 39 percent, up from 2017/18 but otherwise the lowest since 2012/13. Reduced stocks in South America this fall will limit export competition during the first half of the 2018/19 marketing year. U.S. ending stocks for 2018/19 are projected at 415 million bushels, down 115 million from the revised 2017/18 forecast. The 2018/19 U.S. season-average soybean price range is forecast at \$8.75 to \$11.25 per bushel compared with \$9.35 per bushel in 2017/18. Soybean meal prices are forecast at \$330 to \$370 per short ton, compared with \$360 per ton for 2017/18. Soybean oil prices are forecast at 29.5 to 33.5 cents per pound compared with 30.5 cents for 2017/18.

The 2018/19 global oilseed supply and demand forecasts include higher production, crush, exports, and lower ending stocks compared to 2017/18. Global soybean production is projected up 654 million bushels to 13.026 billion bushels mostly due to recovery from drought in Argentina. Soybean production for Argentina is projected up 625 million bushels to 2.058 billion. Production for Brazil is flat with the revised 2017/18 crop at 4.299 billion bushels as a 4 percent increase in harvested area is offset with a return to trend yields. The 2018/19 soybean crop for China is down 4 million bushels to 518 million with a lower yield and flat harvested area as producers expand area in more profitable crops. Global protein meal consumption is projected to increase 4 percent in 2018/19, with China accounting for the largest share of the

increase despite below-average growth in protein meal consumption. Global vegetable oil consumption is projected up led by increases for China, India, and Indonesia. Soybean oil production gains are forecast for China and palm oil gains for Indonesia and Malaysia. Global vegetable oil ending stocks are projected up nearing levels seen prior to the impact of El Niño on vegetable oil production in 2015/16. Global oilseed exports are up in 2018/19, with soybeans accounting for most of the increase. Soybean exports for Argentina and the United States are expected to regain global market share after declining in 2017/18. China soybean imports are forecast to reach a record 3.785 billion bushels, up 220 million from 2017/18. With higher soybean crush and exports, global soybean ending stocks are down 202 million bushels to 3.186 billion bushels.

	2014/15	2015/16	2016/17	2017/18 Est. April	2017/18 Est. May	2018/19 Projected May	2017/18 Change From Previous Month	Change 2017/18 to 2018/19
<b>Planted and Harvested Acres &amp; Yield</b>								
Acres Planted (Million Acres)	83.3	82.7	83.4	90.1	90.1	89	0.0	-1.1
Acres Harvested (Million Acres)	82.6	81.7	82.7	89.5	89.5	88.2	0.0	-1.3
U.S. Average Yield (Bu/Acre)	47.5	48	52	49.1	49.1	48.5	0.0	-0.6
<b>Supply (Million Bushels)</b>								
Beg. Stocks	92	191	197	302	302	530	0	228
Production	3,927	3,926	4,296	4,392	4,392	4,280	0	-112
Imports	33	24	22	25	25	25	0	0
Total Supply	4,052	4,140	4,515	4,718	4,718	4,835	0	117
<b>Use &amp; Ending Stocks (Million Bushels)</b>								
Crushing	1,873	1,886	1,901	1,970	1,990	1,995	20	5
Exports	1,842	1,942	2,174	2,065	2,065	2,290	0	225
Seed and Residual	146	115	139	133	133	135	0	2
Total Use	3,862	3,944	4,213	4,168	4,188	4,420	20	232
U.S. Ending Stocks	191	197	302	550	530	415	-20	-115
Foreign Stocks	2,658	2,687	3,240	2,786	2,856	2,771	70	-85
<b>Price and Stocks to Use Ratio</b>								
U.S. Average Season Price (\$/Bu)	\$10.10	\$8.95	\$9.47	\$9.10- \$9.50	\$9.35	\$8.75- \$11.25	\$0.05	\$0.65
U.S. Stocks/Use	4.95%	4.99%	7.17%	13.20%	12.66%	9.39%	-0.54%	-3.27%

Source: USDA-WASDE May 10, 2018



**World Soybean Supply and Use (Million Bushels) 2018/19 (May)**

<b>Country / Region</b>	<b>Beginning Stocks</b>	<b>Production</b>	<b>Imports</b>	<b>Domestic Crush</b>	<b>Domestic Total</b>	<b>Exports</b>	<b>Ending Stocks</b>
World	3,386	13,027	5,862	11,513	13,144	5,946	3,186
US	530	4,280	25	1,995	2,130	2,290	415
Foreign	2,856	8,747	5,837	9,518	11,014	3,656	2,771
Argentina	1,057	2,058	68	1,617	1,798	294	1,091
Brazil	840	4,299	15	1,587	1,719	2,657	779
Paraguay	10	360	0	145	148	217	6
China	758	518	3,785	3,748	4,350	6	705
EU	39	101	522	547	608	11	43
Japan	8	10	119	85	128	0	10
Mexico	3	18	171	186	187	0	5
ROW	139	1,384	1,157	1,603	2,076	472	133

**World Soybean Supply and Use (Million Bushels) 2018/19-2017/18**

<b>Country / Region</b>	<b>Beginning Stocks</b>	<b>Production</b>	<b>Imports</b>	<b>Domestic Crush</b>	<b>Domestic Total</b>	<b>Exports</b>	<b>Ending Stocks</b>
World	-168	725	288	519	577	420	-151
US	229	-112	-	25	28	225	-135
Foreign	-396	837	288	493	549	195	-15
Argentina	-273	588	-20	102	114	140	41
Brazil	-96	73	7	7	10	-29	5
Paraguay	-14	22	-	9	9	4	-5
China	9	-4	220	257	279	-	-53
EU	-1	9	7	11	11	-	4
Japan	-	-	-	-2	-2	-	2
Mexico	-2	-	9	7	7	-	1
ROW	-19	147	64	103	121	81	-10

Source: USDA-WASDE May 10, 2018

## Wheat

**Futures Market Reaction:** July 2018 wheat futures closed down 4 cents at \$5.06 ½ with a trading range for the day of \$5.00 ¼ to \$5.15. July 2019 wheat futures closed down 4 ½ cents at \$5.74 ¾ with a trading range for the day of \$5.70 ¼ to \$5.83 ¼. The good news on the May WASDE was that wheat stocks were projected to decline year-over-year. The bad news was the declines were not as substantial as many pre-report estimates. Still, compared to 2017/18, improved price prospects for the 2018/19 marketing should persist.

**USDA Summary:** The 2018/19 U.S. wheat crop is projected at 1,821 million bushels, up 5 percent from the prior year. The year-over-year increase is due to greater harvested area and slightly higher yield. Reduced beginning stocks and imports bring total supplies down 49 million bushels from the previous year. The all wheat yield is projected at 46.8 bushels per acre, up slightly from 2017/18. Winter wheat yields are below average in the drought affected states of Kansas, Oklahoma, and Texas. Combined spring wheat and Durum production for 2018/19 is projected to increase 34 percent from the previous year's low, which is due to both increased area and yield. Total 2018/19 use is projected up 3 percent on higher food, feed and residual, and exports. Food use is projected at a record 965 million bushels, up 2.0 million bushels from the previous year's revised estimate. U.S. feed and residual use is projected at 120 million bushels, up 50 million bushels from last year's low level but still below the 5-year-average. Exports are projected at 925 million bushels, up 15 million bushels from the revised 2017/18 total. Ending stocks for 2018/19 are projected down 115 million bushels to 955 million, which if realized would be a 4-year-low. The season-average farm price is projected at a range of \$4.50 to \$5.50 per bushel. The midpoint of this range is up \$0.30 per bushel from the previous year and the highest since 2014/15.

Global wheat supplies for 2018/19 are projected to increase fractionally as higher beginning stocks are partially offset by a production decline following last year's record. Global wheat production is projected at 27.477 billion bushels, down 389 million from the previous year's record. Most of the year-over-year production decline stems from a 478-million-bushel reduction for Russia. Global wheat consumption is projected at a record 27.701 billion bushels, up 371 million from 2017/18. Global imports are expected to increase 129 million bushels in 2018/19 for the sixth consecutive record. With total use rising faster than supplies, global ending stocks are projected to decline 224 million bushels to 9.711 billion bushels.

	2014/15	2015/16	2016/17	2017/18 Est. April	2017/18 Est. May	2018/19 Projected May	2017/18 Change From Previous Month	Change 2017/18 to 2018/19
--	---------	---------	---------	--------------------------	---------------------	-----------------------------	--	------------------------------------

**Planted and Harvested Acres & Yield**

Acres Planted (Million Acres)	56.8	55	50.1	46	46	47.3	0	1.3
Acres Harvested (Million Acres)	46.4	47.3	43.9	37.6	37.6	38.9	0	1.3
U.S. Average Yield (Bu/Acre)	43.7	43.6	52.7	46.3	46.3	46.8	0	0.5

**Supply (Million Bushels)**

Beg. Stocks	590	752	976	1,181	1,181	1,070	0	-111
Production	2,026	2,062	2,309	1,741	1,741	1,821	0	80
Imports	151	113	118	155	155	135	0	-20
Total Supply	2,768	2,927	3,402	3,076	3,076	3,027	0	-49

**Use & Ending Stocks (Million Bushels)**

Food	958	957	949	955	963	965	8	2
Seed	79	67	61	62	63	62	1	-1
Feed	114	149	156	70	70	120	0	50
Exports	864	778	1,167	925	910	925	-15	15
Total Use	2,015	1,951	2,222	2,012	2,006	2,072	-6	66
U.S. Ending Stocks	752	976	1,181	1,064	1,070	955	6	-115
Foreign Stocks	7,243	7,944	8,222	8,902	8,868	8,758	-34	-110

**Price and Stocks to Use Ratio**

U.S. Avg. Season Price (\$/Bu)	\$5.99	\$4.89	\$3.89	\$4.60- \$4.70	\$4.70	\$4.50- \$5.50	\$0.05	\$0.30
U.S. Stocks/Use	37.32%	50.03%	53.15%	52.88%	53.34%	46.09%	0.46%	-7.25%

Source: USDA-WASDE May 10, 2018

**World Wheat Supply and Use (Million Bushels) 2018/19 (May)**

<b>Country / Region</b>	<b>Beginning Stocks</b>	<b>Production</b>	<b>Imports</b>	<b>Domestic Feed</b>	<b>Domestic Total</b>	<b>Exports</b>	<b>Ending Stocks</b>
World	9,938	27,475	6,792	5,350	27,701	6,924	9,712
US	1,070	1,821	135	120	1,147	925	955
Foreign	8,868	25,654	6,657	5,229	26,554	5,999	8,758
Argentina	9	717	0	4	195	522	10
Australia	155	882	6	140	265	625	153
Canada	196	1,194	18	165	353	863	193
EU	480	5,526	202	2,094	4,758	1,066	385
Brazil	49	180	276	22	448	11	45
China	4,660	4,740	147	551	4,409	44	5,093
Sel. Mideast	458	693	689	176	1,437	42	361
N. Africa	520	775	966	83	1,682	25	554
Pakistan	179	937	1	44	930	37	150
Southeast Asia	215	0	1,025	347	1,001	40	199
India	432	3,491	73	184	3,601	15	380
Russia	431	2,646	18	698	1,543	1,341	210
Kazakhstan	104	514	2	70	246	294	80
Ukraine	62	974	1	125	353	625	60
ROW	917	2,386	3,233	527	5,333	450	884

**World Wheat Supply and Use (Million Bushels) 2018/19-2017/18**

<b>Country / Region</b>	<b>Beginning Stocks</b>	<b>Production</b>	<b>Imports</b>	<b>Domestic Feed</b>	<b>Domestic Total</b>	<b>Exports</b>	<b>Ending Stocks</b>
World	583	-441	112	-4	395	236	-253
US	-110	81	-20	50	60	-	-109
Foreign	694	-521	132	-55	335	236	-144
Argentina	-	55	-	-	4	51	-
Australia	-6	92	-	15	15	37	35
Canada	-55	92	-	37	33	37	-33
EU	85	-44	-	-55	-51	184	-92
Brazil	-35	24	7	4	7	-	-11
China	579	-28	-	55	110	7	434
Sel. Mideast	-90	-17	20	-21	-21	5	-72
N. Africa	9	78	-39	-	26	-4	24
Pakistan	19	-40	-	7	11	-7	-25
Southeast Asia	9	-	18	11	42	1	-16
India	72	-129	18	-	25	-4	-61
Russia	33	-477	4	-92	-110	-73	-257
Kazakhstan	-19	-29	-	-7	-7	-	-42
Ukraine	-3	-18	-	-4	-11	-7	-2
ROW	96	-78	104	-4	263	10	-26

Source: USDA-WASDE May 10, 2018

## **2018 Estimated Returns – Non-Irrigated**

The profitability outlook has been updated after the release of the May 10, 2018 World Agricultural Supply & Demand Estimates reports. Yields used for non-irrigated estimates are a 5 year Tennessee state average year plugging in the 2017 state average projection of 171 bushels per acre for corn, 51 bushels per acre for soybeans, and 1031 pounds per acre cotton. Wheat yields for 2018 in Tennessee are projected at 72 bushels per acre based on producer surveys. Prices used for 2018 are current forward prices for 2018 harvest. This is the first USDA yield survey based report for the 2018-2019 or new crop marketing year. Since the April 10<sup>th</sup> report cotton profitability is up \$15 per acre, corn up \$13 per acre, and soybeans profitability is down \$13 per acre, while wheat/soybeans increased \$1 per acre. Costs are based on the 2018 UT Extension Row Crop budgets with adjustments made where warranted. Milo prices are an estimate as very few quotes are available. It depends on a producer's situation on what is showing to be the most profitable crop. Producers with cash rent or owned ground will want to look at Returns Over Variable Expenses as their land cost will be fixed and if their machinery cost are truly fixed and no equipment changes will be made. Producers with share rent will want to plug in their appropriate share rent if their equipment cost are fixed. Producers who may be making some equipment changes may want to look at Net Returns. Visit with your supplier on input cost expectations. Please contact your local County Extension office or Area Specialist – Farm Management for assistance in developing your own budget or farm financial plan. This table below should be used as a guide as yields, prices, and expenses will vary among producers and locations. Expenses will vary among producers and production systems. I would like to point out the cotton price of 78 cents that is being used in the profitability outlook. The price of 78 cents is made up of a cash price of 74 cents and gin rebates (seed & hauling) of 4 cents. Gin rebates for seed and hauling are an estimate as those are generally not known until harvest time and could be in the range of 0 -5 cents. Producers should look at these returns as what could be if no adjustments are made in their operation and consider it a warning sign that adjustments will need to be made in 2018 to be sustainable. These estimates do not consider any USDA or crop insurance payments from the new farm bill. Please contact your local County Extension office or Area Specialist – Farm Management for assistance in developing your own budget or farm financial plan. This table below should be used as a guide as yields, prices, and expenses will vary among producers and locations. Expenses will vary among producers and production systems. Cotton prices include revenue for cottonseed and hauling. For reference, in variable expenses below, fertilizer expense per acre is estimated as follows: Cotton - \$ 94, Soybeans - \$35, Corn - \$128 (includes 170 units of N), Milo - \$86, and Wheat/Soybeans - \$94. Cost of production will continue to be adjusted as information becomes available. Weed control costs with resistant weeds have also been difficult to estimate. These costs will vary greatly among producers and individual fields. Production costs are estimates based on the 2018 University of Tennessee Crop Budgets with adjustments made where needed. Please visit with your farm supplier on estimated cost in your area. Producers with owned land and or cash rent can use Returns Over Variable as a guide in decision making. Producers with share rent ground should

use Returns Over Variable and Land Costs as a guide with their appropriate share rent calculated. A land cost of 25% of revenue minus 25% of crop insurance cost is used in the table as a guide or method of comparison and should not be construed as the appropriate rent for a particular area. Producers who are not making major equipment changes can use UT budgets and this table as a guide in developing their own cropping decision budgets. If equipment changes are being made, then a whole farm financial plan would be better suited as a decision aid.

<b>2018 Estimated Returns – Non-Irrigated</b>					
	<b>Cotton</b>	<b>Soybeans</b>	<b>Corn</b>	<b>Milo</b>	<b>Wheat/Soybeans</b>
Yield	<b>982 lbs.</b>	<b>47 bu.</b>	<b>161 bu.</b>	<b>90 bu.</b>	<b>72 bu./35 bu.</b>
Price (as of 5/10/18)	\$0.78 lb.	\$10.24 bu.	\$4.04 bu.	\$3.74 bu.	\$5.17 bu./\$10.24 bu.
Revenue	\$766	\$481	\$650	\$337	\$731
Variable Expenses	\$428	\$224	\$347	\$239	\$417
Returns Over Variable	<b>\$338</b>	<b>\$258</b>	<b>\$304</b>	<b>\$98</b>	<b>\$314</b>
Land Costs (25% of Revenue-25% crop insurance)	\$189	\$118	\$160	\$83	\$179
Returns Over Variable and Land Costs	<b>\$149</b>	<b>\$140</b>	<b>\$144</b>	<b>\$15</b>	<b>\$135</b>
Fixed Costs Depreciation & interest on machinery	\$134	\$64	\$57	\$64	\$111
Returns Over Specified Costs	\$15	\$76	\$87	-\$49	\$24cotton,
Breakeven Price at Average Yield and Specified Cost	\$0.76	\$8.63	\$3.50	\$4.29	\$5.24/\$9.40

## **2018 Estimated Returns – Irrigated**

Considering irrigation, profitability is positive for cotton, corn and soybeans over variable, land and fixed cost. Returns Over Variable and Land Costs are positive for wheat/soybeans, but not enough to cover fixed costs. An individual producer's machinery and equipment costs will have a strong influence on profitability. Since the April 10<sup>th</sup> report cotton profitability is up \$18 per acre, corn up \$16 per acre, and soybeans profitability is down \$9 per acre, while wheat/soybeans increased \$1 per acre Producers should look at these returns as what could be if no adjustments are made in their operation and consider that adjustments may need to be made in 2018 to be sustainable. The table below is an estimate of returns for crops under irrigation. Since irrigated yields are not as of yet kept separate in Tennessee, yields below are an estimate of irrigated yields. Note that due to an increase in dryland cotton and corn 5 year state average yields, irrigated yields have been increased in this projection. Irrigation fixed costs and energy costs will vary greatly among producers and systems. These projections include in variable expenses energy costs for irrigation of \$30 per acre for corn, \$26 per acre for cotton, and \$20 per acre for soybeans. Irrigation repairs and maintenance are estimated at \$16 per acre for corn, \$14 per acre for cotton and milo, and \$10 per acre for soybeans. Fixed costs of \$86 per acre for irrigation equipment are used. Please contact your local County Extension office or Area Specialist – Farm Management for assistance in developing your own budget or farm financial plan. This table below should be used as a guide as yields, prices, and expenses will vary among producers and locations. Expenses will vary among producers and production systems. For reference, in variable expenses below, fertilizer expense per acre is estimated as follows: Cotton - \$101, Soybeans - \$37, Corn - \$159 (includes 240 units of N), Milo - \$103, and Wheat/Soybeans - \$93. Cost of production will continue to be adjusted as information becomes available. Hopefully, we will see costs reduced or possibly suitable generic products available. Weed control costs with resistant weeds have also been difficult to estimate. These costs will vary greatly among producers and individual fields. Production costs are estimates based on the 2018 University of Tennessee Crop Budgets with adjustments made where needed. Please visit with your farm supplier on estimated cost in your area. Producers with owned land and or cash rent can use Returns Over Variable and Fixed IR Costs as a guide in decision making. Producers with share rent ground should use Returns Over Variable, Fixed IR Costs and Land Costs as a guide with their appropriate share rent calculated. A land cost of 25% of revenue minus 25% of crop insurance cost minus 25% of the irrigation equipment fixed cost is used in the table as a guide or method of comparison and should not be construed as the appropriate rent for a particular area. A management cost of \$30 per acre is included in Fixed Costs – management labor, depreciation & interest on machinery. This is an additional \$15 above the dryland crop management labor. Producers who are not making major equipment changes can use UT budgets and this table as a guide in developing their own cropping decision budgets. If equipment changes are being made, then a whole farm financial plan would be better suited as a decision aid.

### 2018 Estimated Returns – Irrigation

	<b>Cotton</b>	<b>Soybeans</b>	<b>Corn</b>	<b>Milo</b>	<b>Wheat/Soybeans</b>
Yield	<b>1200 lbs.</b>	<b>60 bu.</b>	<b>210 bu.</b>	<b>130 bu.</b>	<b>70 bu./45 bu.</b>
Price (as of 5/10/18)	\$0.78 lb.	\$10.24 bu.	\$4.04 bu.	\$3.74 bu.	\$5.17 bu./\$10.24 bu.
Revenue	\$936	\$614	\$848	\$486	\$833
Variable Expenses( include energy cost)	\$477	\$255	\$445	\$298	\$447
Fixed Irrigation Costs per Acre	<b>\$86</b>	<b>\$86</b>	<b>\$86</b>	<b>\$86</b>	<b>\$86</b>
Returns Over Variable & Fixed IR Costs	<b>\$373</b>	<b>\$274</b>	<b>\$317</b>	<b>\$102</b>	<b>\$299</b>
Land Costs (25% of Revenue-25% crop insurance-25% fixed irrigation costs)	\$210	\$130	\$187	\$99	\$183
Returns Over Variable, IR Fixed Cost and Land Costs	<b>\$163</b>	<b>\$144</b>	<b>\$129</b>	<b>\$3</b>	<b>\$117</b>
Fixed Costs- management labor, depreciation & interest on machinery	\$149	\$79	\$72	\$79	\$126
Returns Over Specified Costs	\$14	\$65	\$57	-\$75	-\$9
Breakeven Price at Average Yield and Specified Cost	\$0.77	\$9.15	\$3.77	\$4.32	\$5.24/\$10.34