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# Feed Outlook

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## Corn Use Projected Higher for 2018/19

U.S. 2018/19 corn use is raised 25 million bushels on higher corn for ethanol, partially offset by lower feed and residual use. With carryin down 80 million bushels, ending stocks are projected down 105 million to 1.6 billion, the lowest since 2013/14. Tighter supplies contributed to an increased price projection for corn of \$0.10 per bushel to \$3.90. For 2017/18, corn exports are increased 75 million bushels to 2.3 billion, bringing total use to 14.8 billion.

U.S. 2018/19 sorghum and 2017/18 corn export prospects are projected higher with a shift among exporting countries. After China declared the end of the prohibitively high sorghum import duty against the United States, global sorghum trade is expected to shift back toward China. U.S. sorghum exports are expected to recover almost to the level of last year. For corn, a sharp reduction in projected corn supplies and exports in Brazil this month are projected to further support U.S. exports during the latter part of 2017/18.

# Domestic Outlook

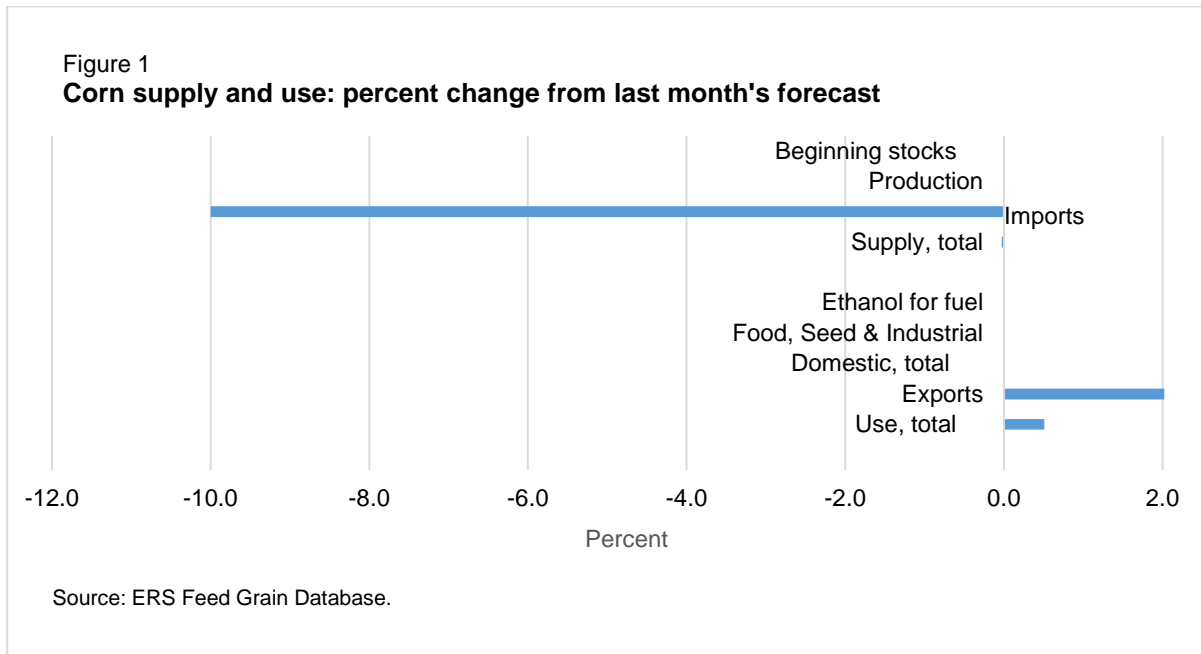
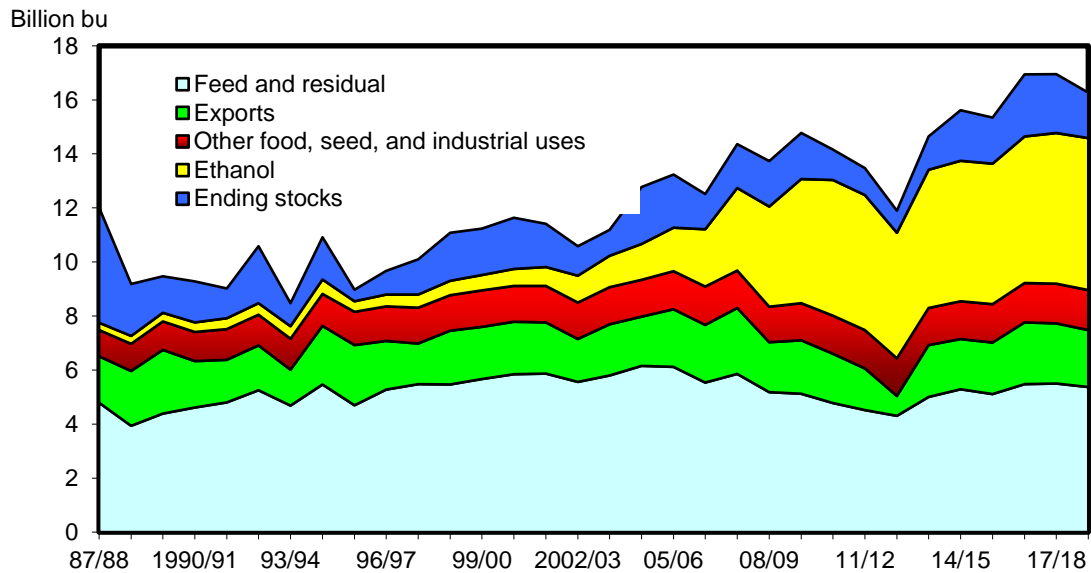


Figure 2  
**U.S. corn utilization**



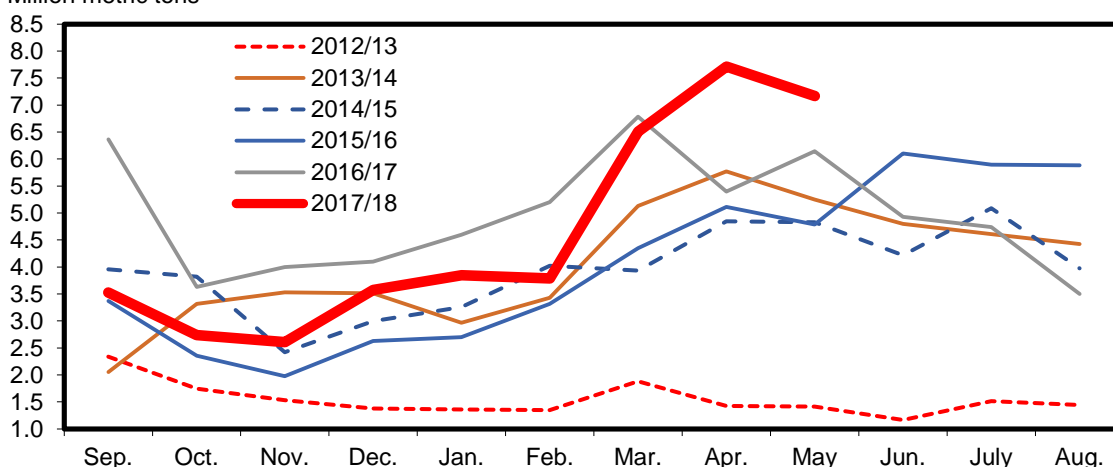
Note: Marketing year 2017/18 is projected.  
 Source: USDA, World Agricultural Outlook Board, WASDE.

## U.S. Feed Grain Supplies Reduced

U.S. feed grain supplies are projected 2 million metric tons lower at 428.8 million due to reduced corn beginning stocks resulting from higher exports and slightly lower imports in the 2017/18 balance sheet. Use during 2018/19 is projected higher due to higher corn for ethanol and sorghum exports partially offset by lower sorghum food, seed, and industrial use and reduced corn feed and residual use. Total use is projected at 386.6 million tons, leaving ending stocks down slightly to 432.2 million.

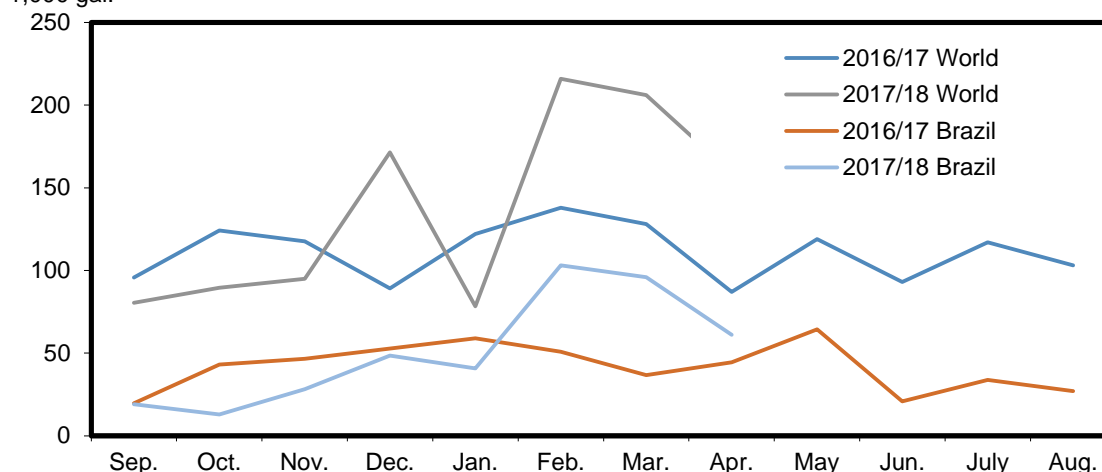
Figure 3  
**Monthly U.S. corn exports**

Million metric tons



Source: USDC, U.S. Census Bureau, May 2018 *Grain Inspections*.

Figure 4  
**U.S. fuel ethanol exports**  
 1,000 gal.



Source: USDC, U.S. Census Bureau.

## Grain Consuming Animal Units

Grain consuming animal units (GCAU) for 2018/19 are projected at 100.1 million units, up incrementally from last month and 1.5 million units higher than last year. Greater broiler inventories drove the increase in animal inventories. Feed and residual use per GCAU is projected at 1.43 tons per GCAU, 0.1 tons lower than last month and 0.05 million below 2017/18.

## Feed and Residual Use

Feed and residual use for the four feed grains (corn, sorghum, barley, and oats) and wheat, on a September-August marketing year basis, for 2018/19 is projected at 143.4 million metric tons, 0.2 million tons below last month's projection and 3.2 million below the 146.6 million in 2017/18.

## Projected 2018/19 Supply Lowered, Use Higher

Projected supply for the 2018/19 U.S. corn crop is lowered 80.0 million bushels this month on lower carryin from the 2017/18 crop. Disappearance is projected 25 million bushels higher as a 50-million-bushel boost in corn for ethanol is offset by a 25-million-bushel cut in feed and residual. Corn for ethanol is projected higher on expectations of lower sorghum used for ethanol with increased demand for U.S. sorghum from China. With no change in other food, seed, and industrial (FSI) use categories, total FSI is projected at 7.165 million bushels, a record high. The decline in feed and residual use is driven by expectations of larger ethanol byproduct production and higher prices. With no change in forecast exports, total disappearance is pegged at 14.615 million bushels, 25 million above last month's forecast.

Resulting ending stocks are projected at 1,577 million bushels, 105 million below last month's forecast. At 10.8, the stocks-to-use ratio is 3.4 below last year and 0.7 below last month's projection of 11.5, making it the lowest since 2013/14.

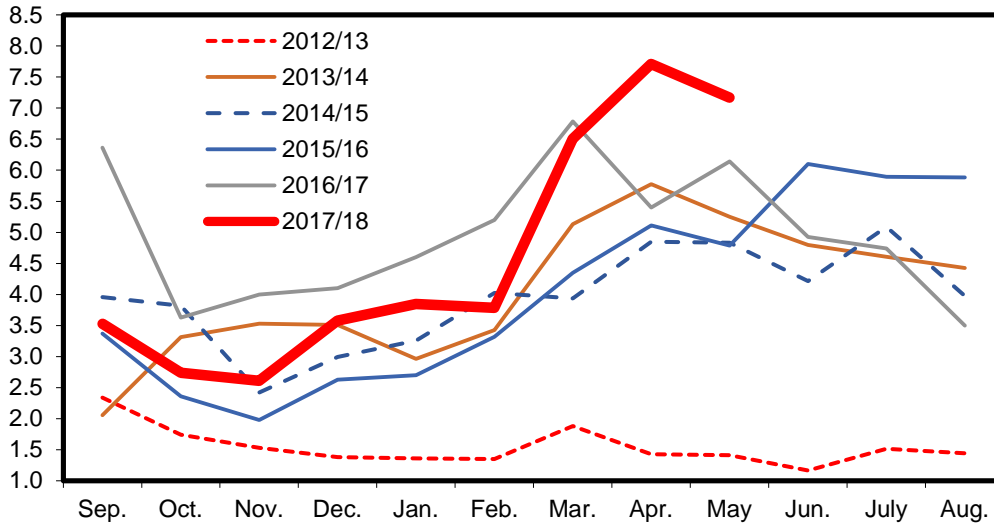
## Revised Trade Forecasts Alter 2017/18 Balance Sheet

U.S. corn supplies for 2017/18 are lowered 5 million bushels to 16.192 million based on the pace of corn imports. Through April, corn imports reached 25.5 million bushels, with Canada, Brazil, and Argentina the major suppliers.

Through April, corn exports totaled 1.351 billion bushels, a robust pace with record-high exports during April that led to a 75-million-bushel boost in projected exports for 2017/18. This month's corn export forecast is 2,300 million bushels, 75 million over last month. Mexico, Japan, Colombia, South Korea, Peru, and Taiwan were major destinations for U.S. corn exports through April.

Figure 5  
**Monthly U.S. corn exports**

Million metric tons

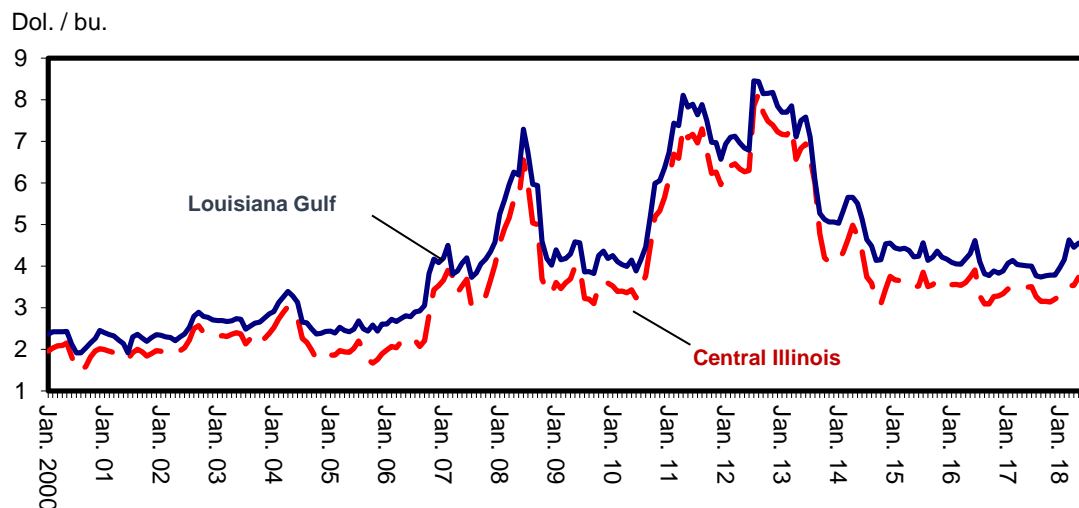


Source: USDC, U.S. Census Bureau, May 2018 *Grain Inspections*.

## 2018/19 Corn Price Projected Higher

The projected average price received by corn farmers for 2018/19 is raised \$0.10 on each end for a range of \$3.40 to \$4.40 per bushel for a midpoint price of \$3.90 per bushel, based on tightening stocks relative to use. For 2017/18, the range is projected at \$3.25 to \$3.55, for a midpoint of \$3.40 per bushel, unchanged from last month.

Figure 6  
**Monthly corn (yellow #2) prices for Central Illinois and Louisiana Gulf**



Sources: USDA, Economic Research Service, *Feed Grains Database* and USDA, Agricultural Marketing Service, <http://marketnews.usda.gov/portal/lg>.

## Sorghum: Chinese Policy Reversed

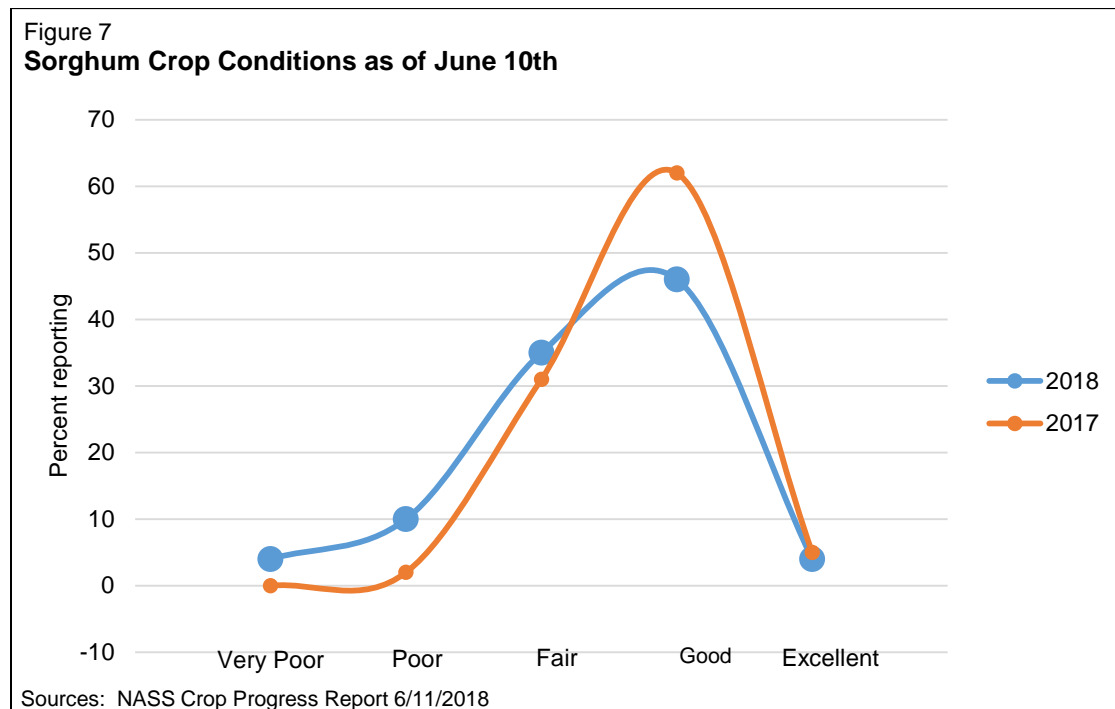
The main driver of many changes to the 2018/19 sorghum balance sheet was the removal of the Chinese duties on May 18 that had been in place since mid-April.

The 2017/18 marketing year saw few changes, however, feed and residual use was revised up by 10.0 million bushels, or roughly 12.5 percent. There was an increase of 5.0 million bushels of sorghum being used for food, seed, and residual use, an 11.1-percent increase over last month. Specifically, these 5.0 million bushels are expected to be used for ethanol production based on reported grain crushing data to date. This would represent an 11.5-percent increase over last month's estimate of sorghum use for ethanol production. These changes led to an increase in domestic disappearance of 12.0 percent, or 15.0 million bushels.

U.S. sorghum exports in 2017/18 are revised down 15.0 million bushels or 6.1 percent, due to slower-than-expected shipments to date.

The June 2018 *Crop Progress Report* from USDA's National Agricultural Statistics Service indicated that the 11 States that produced 99 percent of the U.S. sorghum crop in 2017 reported that 80.0 percent of the crop was planted by June 10. This is considerably higher than the 69.0 percent reported at the same time last year and the 68.0 percent that was the average for the

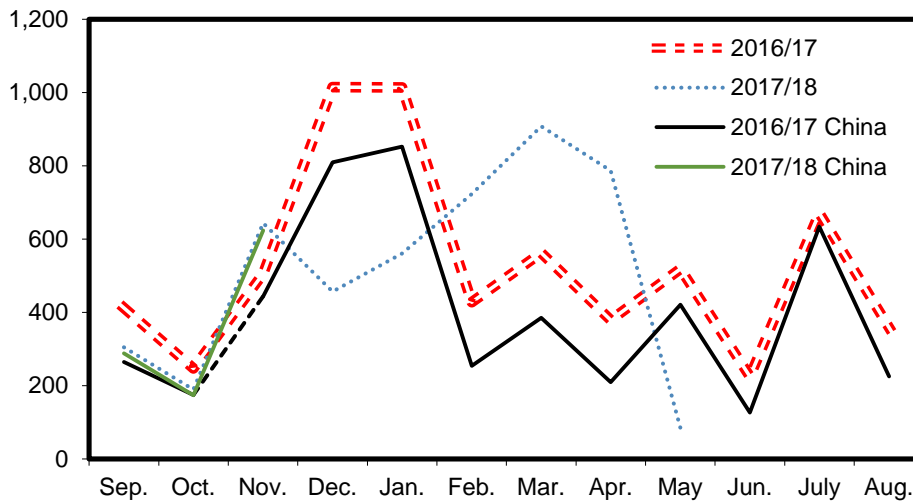
past 5 years. The conditions reported indicated that 14.0 percent of the crop was in poor or very poor condition, and the remaining 86 percent was in the fair to excellent range, skewed in a positive direction.



## 2018/19 Sorghum Export Projection Raised

For the 2018/19 marketing year, U.S. sorghum exports are revised up from 165 million bushels to 215 million, or roughly 30.3 percent. This change was due to the May 18, 2018, decision by the Government of China to end its anti-dumping and countervailing duties investigation into imports of sorghum from the United States. This decision removed the 178.6-percent tax that had previously been imposed on sorghum trade between the United States and China. This increase in forecast exports resulted in domestic disappearance being revised downward by 50.0 million bushels, or 27.8 percent. The divergence from domestic use to exports is coming through a reduction of 51.0 percent, or 50 million bushels, in use for ethanol production, which leads to a 50.0-percent reduction in FSI use in general (again 50 million bushels).

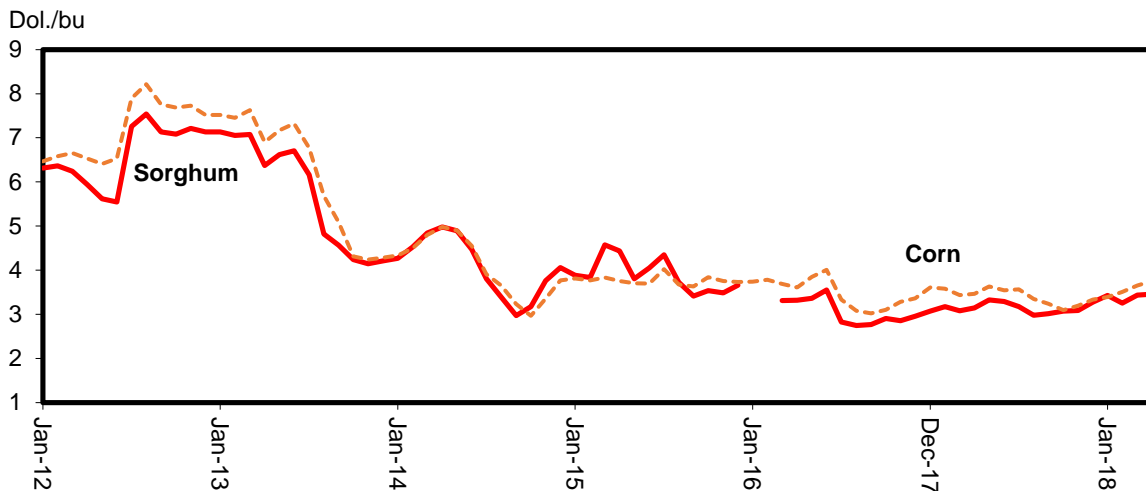
Figure 8  
**U.S. sorghum exports**  
 1,000 metric tons



Source: USDC, U.S. Census Bureau, May 2018 *Grain Inspections*.

Projected prices are revised upward for the 2018/19 marketing year by \$0.10 on both the low and high side of the range. This results in a projection from \$3.20 to \$4.20, with a midpoint of \$3.70 per bushel.

Figure 9  
**Monthly yellow #2 grain sorghum and corn prices for Kansas City**



Sources: USDA, Economic Research Service, *Feed Grains Database* and USDA, Agricultural Marketing Service, <http://marketnews.usda.gov/portal/lg>.



## Oats Supply Increases through Imports

For the 2017/18 marketing year, the oats import estimate is revised upward by 3.0 million bushels to 87.0 million, which represents a 3.4-percent increase over the prior estimate. This, in turn, increases supply by 3.0 million bushels, or 1.6 percent, to 189.7 million bushels. Ending stocks are similarly revised up by 3.0 million bushels.

For the 2018/19 season, beginning stocks are revised upward by 3.0 million bushels from 21.2 million to 24.2 million. This represents a 14.1-percent increase over the prior estimate. This same 3.0-million-bushel increase is passed through to the total supply, increasing supply from 182.2 to 185.2 million bushels; a 1.6-percent increase.

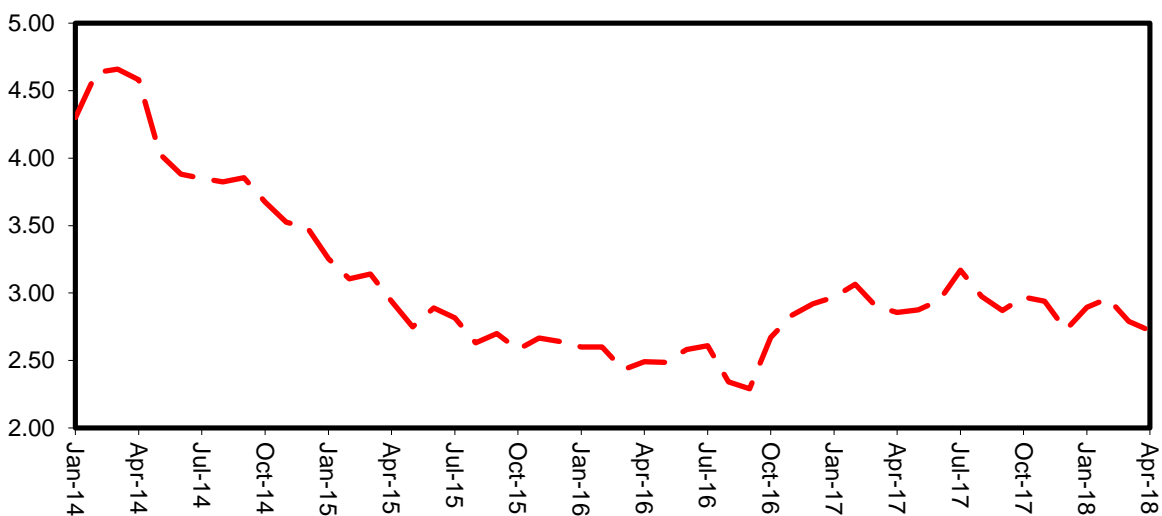
The ending stocks for the 2018/19 season are estimated to be 29.2 million bushels. This represents an increase over the prior projection of 11.4 percent, or 3.0 million bushels

Projected prices are revised upward for the 2018/19 marketing year by \$0.05 on both the low and high side of the range. This results in a projection from \$2.60 to \$3.20, with a midpoint of \$2.90 per bushel.

Figure 10

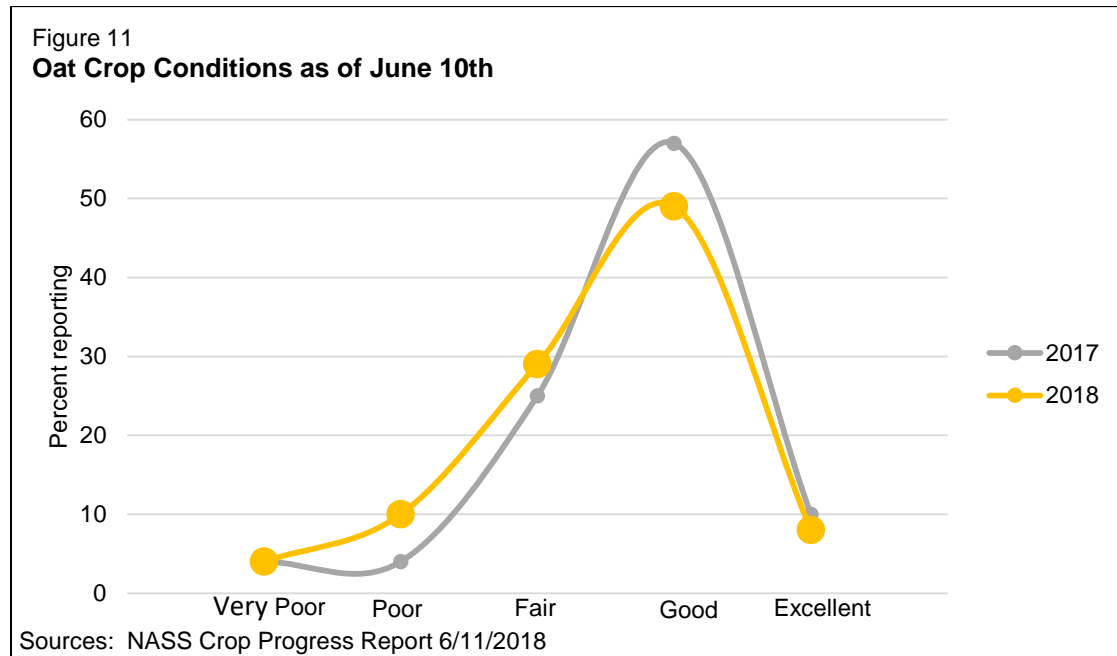
### Monthly average oat price: No. 2 white heavy, Minneapolis, MN

Dol. / bu.



Source: USDA, Economic Research Service, *Feed Grains Database*.

NASS's June *Crop Progress Report*, which tracks the nine oats-producing States that accounted for 67 percent of domestic production in 2017, found that conditions are relatively better than last year and the 5-year average.



# International Outlook

## Foreign Coarse Grain Supplies Are Getting Tighter

World coarse grain production is projected to reach 1,336.8 million tons in 2018/19, a reduction of 4.3 million from last month's forecast. Most of the reduction is for Russia (corn) and Ukraine (barley), with a partly offsetting increase for Argentina (barley). For the 2017/18 projection, coarse grain production is also reduced, down 1.5 million tons, mainly due to a cut in Brazil's second-corn crop. The revisions to 2017/18 supply and demand reduce 2018/19 beginning stocks by 1.6 million tons, thereby decreasing overall coarse grain supplies even more.

For more information and a visual display of this month's changes in coarse grain production, see tables A1 and A2 below.

<b>Table A1 - World and U.S. coarse grain production<sup>1</sup> at a glance (2016/17), June 2018</b>					
	Region or country	Production	Change from previous month <sup>1</sup>	YoY Change <sup>2</sup>	Comments
<i>Million tons</i>					
<b>Coarse grain production (total)</b>					
↓	World	1336.8	-4.3	+21.7	
↓	Foreign	967.0	-4.3	+36.1	Reductions are projected for both 2018/19 and 2017/18 coarse grain production. See table A2.
	United States	369.8	No change	-14.5	See section on U.S. domestic output.
<b>World production of coarse grains by type of grain</b>					
<b>CORN</b>					
↓	World	1052.4	-3.6	+17.6	
↓	Foreign	695.8	-3.6	+32.0	Sharply reduced corn production for Russia. See table A2.
	United States	356.6	No change	-14.3	See section on U.S. domestic output.
<b>BARLEY</b>					
↓	World	147.0	-0.6	+3.6	
↓	Foreign	143.8	-0.6	+3.5	Lower barley production in Ukraine, European Union, and India is partly offset by higher Argentine output. See table A2.
	United States	3.2	No change	+0.1	See section on U.S. domestic output.
<sup>1</sup> Change from previous month. No production changes are made for sorghum, oats, rye, millet, and mixed grains this month.					
<sup>2</sup> YoY: year over year changes. <b>For changes and notes by country, see table A2.</b>					
Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.					

**Table A2 - Coarse grain production by country at a glance, June 2018**

	Type of crop	Crop year	Production	Change in forecast <sup>1</sup>	YoY <sup>2</sup> change	Comments
<i>Million tons</i>						
<b>Coarse grain production changes by country and by type of grain (2018/19)</b>						
<b>RUSSIA</b>						
↓	Corn	Oct-Sep	14.8	-4.0	+2.8	Corn planting in Russia is nearly over, while planting reports suggest lower-than-expected corn area.
<b>UKRAINE</b>						
↓	Barley	July-June	7.0	-0.5	-1.7	Dry conditions are persisting in primary Ukrainian barley areas; VHI (Vegetation Health Index) is declining.
<b>EUROPEAN UNION</b>						
↓	Barley	July-June	62.0	-0.2	+1.3	Persisting dryness in Germany is expected to reduce yields in barley, as well as in wheat and rapeseed.
<b>INDIA</b>						
↓	Barley	Apr-Mar	1.8	-0.2	No change	A revision based on the Government's third advanced estimate.
<b>ARGENTINA</b>						
↑	Barley	Dec-Nov	4.0	+0.3	+0.3	Higher area is projected based on high barley prices and firm demand.
<b>Coarse grain production by country and by type of grain (2017/18)</b>						
<b>BRAZIL</b>						
↓	Corn	Mar-Feb	85.0	-2.0	-13.5	Both corn area and yield are reduced this month. May was the second very dry month in a row. The combined precipitation for April and May turned out to be among the lowest on record. Second-crop — "safrinha" — corn was stressed through its reproductive period and is approaching harvest; yield is expected to be reduced. In Parana, Mato Grosso, and Mato Grosso do Sul and several other states, some fields are damaged to the point they will probably be abandoned, leading to area reduction and supported by reports from Government state agencies.
<b>INDIA</b>						
↓	Corn	Nov-Oct	26.9	-0.3	+1.0	A revision based on the Government estimate.
<b>MEXICO</b>						
↓	Sorghum	Oct-Sep	4.8	-0.1	+0.2	A revision based on official data released by SAGARPA — the Mexican Ministry of Agriculture.
<b>ARGENTINA</b>						
↑	Barley	Dec-Nov	3.7	+0.5	+0.4	A revision based on a higher Government estimate for barley area.
<sup>1</sup> Change from previous month. Smaller changes for coarse grain output are also made for several countries.						
<sup>2</sup> YoY: year over year changes.						
Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.						

Brazil's second-crop corn production for 2017/18 will be harvested in June through August 2018. April 2018 was extremely dry with virtually no precipitation in either Parana or Mato Grosso do Sul, the two southern states that produce about a third of second-crop corn in the

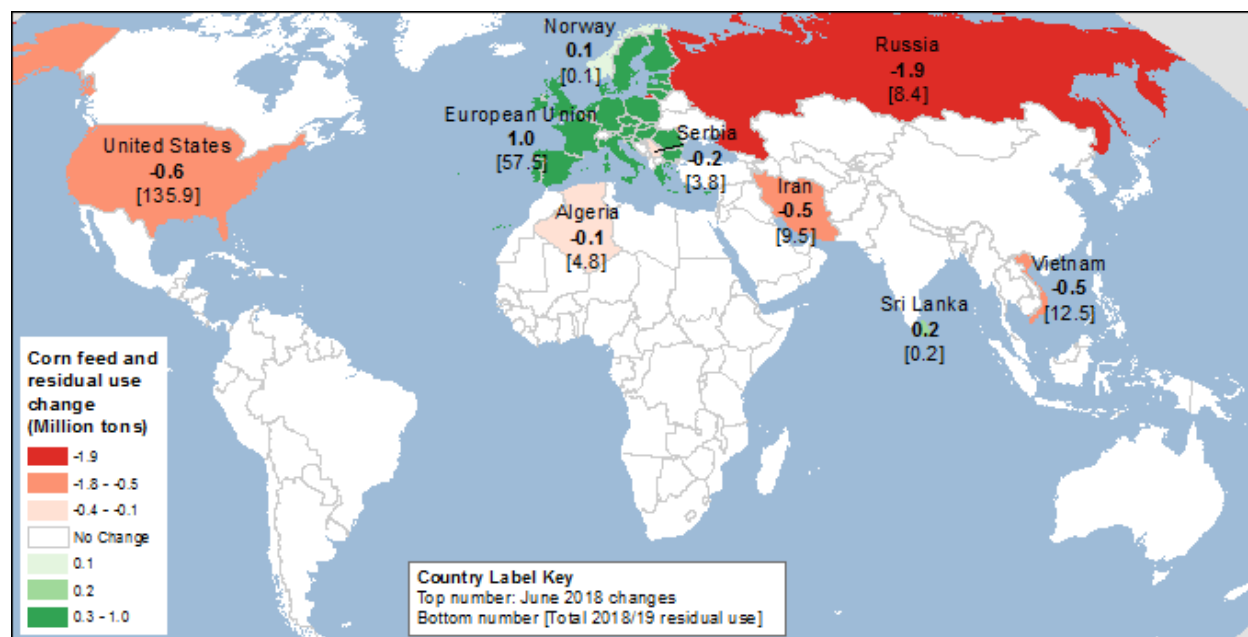
country. On top of that, the following month of May turned out to be dry as well, such that the combined precipitation for 2 months — April and May — that are crucial for corn development in Brazil, is the lowest on record. As corn in most places in Brazil is already beyond the reproductive period, the damage to the crop appears to be definite. These developments support a reduction in the yield as well as area forecast, since some of the damaged fields will likely be abandoned or used for cattle grazing. The crop ratings continue to drop weekly, the forecast for the average corn yield is reduced further by 1.2 percent, and corn production is cut 2.0 million tons to 85.0 million, 13.5 million tons lower than the previous record-high harvest of 2017/18. Brazil's 2018/19 corn crop, with the first-crop corn planting beginning in September-October 2018, remains projected at 96.0 million tons.

USDA monitors production of various commodities in more than 200 countries, the data being recorded and continuously updated by the Foreign Agricultural Service (FAS) and reflected in the Production, Supply, and Distribution database. This month, still another country was added to the database — Sri Lanka — with the data going back to 2000.

## Coarse Grain Use Projected Down for 2018/19

The world coarse grain use forecast for 2018/19 is reduced this month by 2.0 million tons to 1,376.3 million, with several partly offsetting changes across crops and countries. The largest change is for lower corn use in Russia, down 2.0 million tons due to smaller production. Reduced corn imports push down corn feeding in Vietnam and Iran, while in the EU, corn feeding is up, offsetting a reduction in wheat. Changes in sorghum feeding stem from a reversal of the Chinese anti-dumping measures and the import duty for sorghum from the United States, and are up 1.2 million tons. Sorghum feeding in China is projected up 3.4 million tons, while feeding in Mexico and Japan — the alternative destinations for the U.S. sorghum exports — are down 1.5 and 0.8 million tons, respectively (see section on sorghum trade below). For a display of the changes in corn feed and residual use changes, see map A.

Map A – Corn feed and residual use changes for 2018/19, June 2018

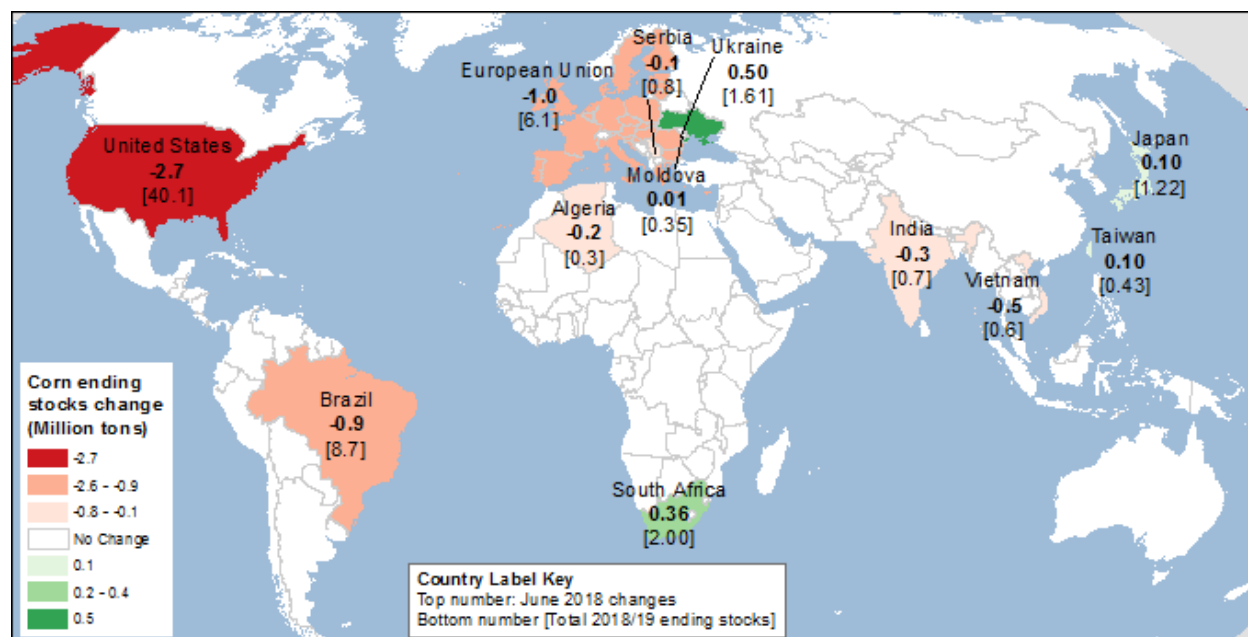


Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.

## Projected Global Ending Stocks Reduced

World coarse grain ending stocks for 2018/19 are projected down 3.9 million tons this month to 181.6 million (the lowest in 5 years), with most of the reduction for the United States, Brazil (lower corn output) and the European Union (higher corn feeding). For the United States, stocks are reduced for corn (higher 2017/18 exports producing a drop in 2018/19 beginning stocks in addition to increased 2018/19 projected corn use for ethanol partially offset by lower feed and residual use) and increased for oats (see the section on domestic grains). For a visual display of the changes in corn ending stocks, see map B.

Map B – Corn ending stocks changes for 2018/19, June 2018



Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.

## World Coarse Grain Trade Lower in 2018/19

The June forecast for world coarse grain exports in trade year 2018/19 is lower than the May forecast, down 1.2 million tons. Global corn and barley exports are reduced by 2.0 and 0.4 million tons, respectively, while sorghum exports are projected 1.2 million tons higher (see section on sorghum trade below).

A sizeable decline in projected Russian corn supplies this month point toward lower exports, down 2.0 million tons to 5.5 million. Among the countries likely to be affected by this reduction are Vietnam and Iran, where corn imports are projected down 1.0 and 0.5 million tons, respectively.

Barley trade is adjusted reflecting this month's changes in production for Ukraine, the European Union, and Argentina.

For a short overview of changes in specific countries' imports, see "Grain: World Markets and Trade," p.11, issued by USDA's Foreign Agricultural Service.

## U.S. 2017/18 Corn Export Prospects Up, Export Shares Shift

For the 2017/18 international October-September trade year, U.S. corn grain exports are projected higher, a 1.5- million-ton increase to 58.5 million from the month before. This is attributable to both unexpected record-high outstanding sales and shipments and continued reduction in the expected size of Brazil's 2017/18 crop. (U.S. exports are up 75 million bushels to 2,300 million for the September-August marketing year.) The revised exports are 3.0 million higher than in 2016/17. The pace of U.S. corn shipments during the first months of 2017/18 has been robust, though not particularly strong compared to the (very good) previous year. Census export data indicate October-April corn exports reached 30.7 million tons, 8 percent lower than in 2016/17. However, exports for both April and May exceeded 7 million tons — with April record high — and as of May 31, 2018, outstanding U.S. export sales of corn were 50 percent above that of last year. A sharp reduction in projected corn supplies and exports in Brazil this month and a slower-than-expected pace of shipments from Ukraine, whose corn exports are currently uncompetitive vis-a-vis Argentina and the United States, are projected to further support U.S. exports during the latter part of 2017/18, when Southern Hemisphere countries start exporting new crop.

## Changes in Global Sorghum Trade Reversed This Month

The announcement by China's Ministry of Commerce on April 17, 2018, of anti-dumping measures against sorghum originating from the United States was expected to shift Chinese demand for imported energy feedstuffs and alter the structure of global sorghum trade. With the policy in place, China was expected to increase imports of substitutes such as barley and corn, while sorghum imports were presumably taking a cut, driving the sorghum trade down. The United States was anticipated to redirect part of its sorghum exports to Mexico and Japan and to substantially increase domestic use of sorghum. However, the policy turned out to be brief, and on May 18, China declared the end to the prohibitively high sorghum import duty against the United States. Without this policy in place, global sorghum trade is expected to shift back to China where sorghum is an attractive energy feedstuff compared to domestic corn that is currently running nearly \$300 per ton in feed-deficit South China.

The changes this month include a partial reversal of the adjustments made last month in response to the policy announcement. The changes include an increase in global sorghum trade, up 1.3 million tons, that can be broken down into three parts: a 3.6-million-ton increase in Chinese sorghum imports, that is partially offset by reductions for Mexico (down 1.5 million tons)



and Japan (down 0.8 million tons). U.S. sorghum exports for the October-September international trade year are expected to recover almost to the level of last year, up 1.2 million tons to 5.4 million. For the local September-August marketing year, sorghum exports are up 50 million bushels to 215 million.

For the 2017/18 international trade year, sorghum exports from the United States are reduced by 0.5 million tons to 5.9 million (down 15 million bushels to 230 million for the local marketing year), as the May inspection data confirmed seasonally lower exports before new crop supplies become available in July.

## Suggested Citation

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Table 1--Feed grains: U.S. quarterly supply and disappearance (million bushels), 6/14/2018

Commodity, market year, and quarter 1/			Beginning stocks	Production	Imports	Total supply	Food, seed, and industrial use	Feed and residual use	Exports	Total disappear- ance	Ending stocks	Farm price 2/ (dollars per bushel)	
Corn	2015/16	Sep-Nov	1,731	13,602	13	15,346	1,631	2,178	301	4,111	11,235	3.65	
		Dec-Feb	11,235		18	11,253	1,652	1,438	341	3,431	7,822	3.64	
		Mar-May	7,822		21	7,843	1,655	914	563	3,132	4,711	3.60	
		Jun-Aug	4,711		16	4,727	1,710	584	696	2,990	1,737	3.55	
		Mkt yr	1,731	13,602	68	15,401	6,648	5,114	1,901	13,664	1,737	3.61	
	2016/17	Sep-Nov	1,737	15,148	14	16,899	1,689	2,277	548	4,514	12,386	3.26	
		Dec-Feb	12,386		12	12,398	1,712	1,527	537	3,776	8,622	3.39	
		Mar-May	8,622		17	8,639	1,740	981	689	3,410	5,229	3.46	
		Jun-Aug	5,229		14	5,243	1,743	688	518	2,949	2,293	3.40	
		Mkt yr	1,737	15,148	57	16,942	6,883	5,472	2,293	14,649	2,293	3.36	
	2017/18	Sep-Nov	2,293	14,604	11	16,908	1,745	2,248	349	4,342	12,567	3.22	
		Dec-Feb	12,567		9	12,575	1,737	1,508	441	3,687	8,888	3.30	
		Mkt yr	2,293	14,604	45	16,942	7,040	5,500	2,300	14,840	2,102	3.25-3.55	
	2018/19	Mkt yr	2,102	14,040	50	16,192	7,165	5,350	2,100	14,615	1,577	3.40-4.40	
	Sorghum	2015/16	Sep-Nov	18.41	596.75	3.60	618.76	22.14	159.65	114.44	296.23	322.54	3.54
			Dec-Feb	322.54		0.98	323.51	41.77	-6.14	86.30	121.93	201.58	3.17
			Mar-May	201.58		0.01	201.59	43.31	-5.53	73.46	111.24	90.35	3.10
			Jun-Aug	90.35		0.01	90.36	29.73	-41.39	65.38	53.73	36.63	3.33
			Mkt yr	18.41	596.75	4.59	619.75	136.95	106.58	339.58	583.12	36.63	3.31
		2016/17	Sep-Nov	36.63	480.26	0.00	516.90	21.65	142.68	44.43	208.75	308.15	2.62
Dec-Feb			308.15		0.00	308.15	33.06	3.56	90.79	127.41	180.75	2.69	
Mar-May			180.75		0.00	180.75	34.62	3.95	57.48	96.04	84.71	2.79	
Jun-Aug			84.71		1.73	86.44	25.30	-20.19	47.87	52.98	33.46	3.53	
Mkt yr			36.63	480.26	1.74	518.63	114.61	129.99	240.57	485.18	33.46	2.79	
2017/18		Sep-Nov	33.46	363.83	1.91	399.20	13.92	112.19	45.60	171.71	227.49	3.10	
		Dec-Feb	227.49		0.05	227.55	9.30	8.56	71.42	89.27	138.27	3.19	
		Mkt yr	33.46	363.83	2.00	399.29	50.00	90.00	230.00	370.00	29.29	3.10-3.30	
2018/19		Mkt yr	29.29	343.00		372.29	50.00	80.00	215.00	345.00	27.29	3.20-4.20	

Table 1--Feed grains: U.S. quarterly supply and disappearance, cont. (million bushels), 6/14/2018

Commodity, market year, and quarter 1/		Beginning stocks	Production	Imports	Total supply	Food, seed, and industrial use	Feed and residual use	Exports	Total disappear- ance	Ending stocks	Farm price 2/ (dollars per bushel)		
Barley	2015/16	Jun-Aug	79	218	4	301	41	38	3	82	219	5.39	
		Sep-Nov	219		4	223	37	1	4	43	180	5.52	
		Dec-Feb	180		7	187	36	11	3	50	138	5.66	
		Mar-May	138		4	141	44	-5	1	39	102	5.43	
		Mkt yr	79	218	19	315	158	44	11	213	102	5.52	
	2016/17	Jun-Aug	102	200	2	304	41	32	1	74	230	4.99	
		Sep-Nov	230		2	232	39	-0	1	40	193	4.78	
		Dec-Feb	193		2	195	37	12	1	50	145	5.04	
		Mar-May	145		3	148	45	-6	2	41	106	4.96	
		Mkt yr	102	200	10	312	162	39	4	205	106	4.96	
	2017/18	Jun-Aug	106	142	2	251	42	27	2	71	180	4.52	
		Sep-Nov	180		2	182	40	-19	2	23	159	4.43	
		Dec-Feb	159		2	161	39	-9	1	31	129	4.47	
		Mkt yr	106	142	10	258	162	25	6	193	65	4.50	
	2018/19	Mkt yr	65	147	20	232	155	25	5	185	47	4.00-5.20	
	Oats	2015/16	Jun-Aug	54	90	18	161	18	49	0	68	94	2.15
			Sep-Nov	94		26	120	18	19	1	37	83	2.08
			Dec-Feb	83		25	108	17	15	0	33	75	2.09
			Mar-May	75		16	91	23	10	1	34	57	2.11
			Mkt yr	54	90	86	229	77	94	2	172	57	2.12
2016/17		Jun-Aug	57	65	21	142	19	44	1	64	79	1.87	
		Sep-Nov	79		28	106	18	12	1	31	75	2.03	
		Dec-Feb	75		24	100	17	18	1	36	63	2.35	
		Mar-May	63		18	81	22	8	1	31	50	2.42	
		Mkt yr	57	65	90	212	76	82	3	162	50	2.06	
2017/18		Jun-Aug	50	49	19	119	18	28	1	47	72	2.35	
		Sep-Nov	72		30	102	19	17	1	36	66	2.58	
		Dec-Feb	66		20	86	18	13	1	31	55	2.97	
		Mkt yr	50	49	90	190	78	85	3	166	24	2.55	
2018/19		Mkt yr	24	66	95	185	79	75	2	156	29	2.60-3.20	

Latest market year is projected; previous market year is estimated. Totals may not add due to rounding.

1/ Corn and sorghum, September 1-August 31 marketing year; Barley and oats, June 1-May 31 marketing year.

2/ Average price received by farmers based on monthly price weighted by monthly marketings. For the latest market year, quarterly prices are calculated by using the current monthly prices weighted by the monthly marketings for those months for the previous 5 years divided by the sum of marketings for those months.

Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates and supporting materials.

Data run: 6/13/2018

Table 2--Feed and residual use of wheat and coarse grains, 6/14/2018

Market year and quarter 1/	Corn	Sorghum	Barley	Oats	Feed grains	Wheat	Energy feeds	Grain consuming	per grain
	(million metric tons)	(million metric tons)	(million metric tons)	(million metric tons)	(million metric tons)	(million metric tons)	(million metric tons)	animal units (millions)	consuming animal unit (tons)
2016/17 Q1 Sep-Nov	57.8	3.6	-0.0	0.2	61.7	-0.8	60.9		
Q2 Dec-Feb	38.8	0.1	0.3	0.3	39.5	-0.6	38.9		
Q3 Mar-May	24.9	0.1	-0.1	0.2	25.1	-1.6	23.5		
Q4 Jun-Aug	17.5	-0.5	0.6	0.5	18.0	4.6	22.6		
MY Sep-Aug	139.0	3.3	0.7	1.2	144.2	1.6	145.9	95.6	1.5
2017/18 Q1 Sep-Nov	57.1	2.8	-0.4	0.3	59.9	-1.5	58.3		
Q2 Dec-Feb	38.3	0.2	-0.2	0.2	38.6	-0.5	38.1		
MY Sep-Aug	139.7	2.3	0.5	1.6	144.0	2.5	146.6	98.5	1.5
2018/19 MY Sep-Aug	135.9	2.0	0.9	1.3	140.2	3.3	143.5	100.1	1.4

1/ Corn and sorghum, September 1-August 31 marketing year; Barley and oats, June 1-May 31 marketing year.

Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates and supporting materials.

Table 3--Cash feed grain prices, 6/14/2018

Mkt year and month 1/	Corn, No. 2 yellow, Central IL (dollars per bushel)			Corn, No. 2 yellow, Gulf ports, LA (dollars per bushel)			Sorghum, No. 2 yellow, Gulf ports, LA (dollars per cwt)		
	2015/16	2016/17	2017/18	2015/16	2016/17	2017/18	2015/16	2016/17	2017/18
Sep	3.55	3.09	3.15	4.22	3.78	3.74	8.08		
Oct	3.67	3.27	3.15	4.36	3.88	3.77	8.23		
Nov	3.62	3.28	3.14	4.22	3.83	3.78	7.89		
Dec	3.62	3.34	3.21	4.17	3.88	3.79			
Jan	3.55	3.45	3.29	4.09	4.07	3.96			
Feb	3.56	3.51	3.45	4.06	4.14	4.15			
Mar	3.54	3.40	3.52	4.05	4.04	4.36			
Apr	3.61	3.41	3.54	4.17	3.98	4.46			
May	3.74	3.47	3.73	4.30	4.03	4.55			
Jun	3.91	3.49		4.62	4.01			7.56	
Jul	3.28	3.51		4.11	4.00				
Aug	3.09	3.27		3.82	3.77				
Mkt year	3.56	3.37		4.18	3.95		8.07	7.56	
	Barley, No. 2 feed, Minneapolis, MN (dollars per bushel)			Barley, No. 3 malting, Minneapolis, MN (dollars per bushel)			Oats, No. 2 white heavy, Minneapolis, MN (dollars per bushel)		
	2015/16	2016/17	2017/18	2015/16	2016/17	2017/18	2015/16	2016/17	2017/18
Jun	2.59	2.36	2.05			4.70	2.89	2.58	2.95
Jul	2.70	2.33	2.05			4.67	2.82	2.61	3.17
Aug	2.41	2.08	2.10			4.70	2.63	2.34	2.98
Sep	2.39	1.95	2.10	4.95		4.70	2.70	2.29	2.87
Oct	2.57	2.00	2.10	4.95		4.70	2.58	2.67	2.97
Nov	2.60	2.00	2.36				2.67	2.84	2.94
Dec	2.60	2.00	2.61			4.85	2.64	2.92	2.73
Jan	2.58	2.00	2.65			4.85	2.60	2.97	2.90
Feb	2.50	2.00	2.81			4.85	2.60	3.07	2.96
Mar	2.46	2.02	2.85		4.70	4.50	2.43	2.90	2.79
Apr	2.45	2.05	2.85				2.49	2.86	2.72
May	2.44	2.05	2.85				2.49	2.88	2.89
Mkt year	2.52	2.07	2.45	4.95	4.70		2.63	2.74	2.90

1/ Corn and sorghum, September 1-August 31 marketing year; Barley and oats, June 1-May 31 marketing year. Simple average of monthly prices for the marketing year.

Source: USDA, Agricultural Marketing Service, <http://marketnews.usda.gov/portal/lg>.

Data run: 6/13/2018

Table 4--Selected feed and feed byproduct prices (dollars per ton), 6/14/2018

Mkt year and month 1/	Soybean meal, high protein, Central Illinois, IL			Cottonseed meal, 41% solvent, Memphis, TN			Corn gluten feed, 21% protein, Midwest			Corn gluten meal, 60% protein, Midwest		
	2015/16	2016/17	2017/18	2015/16	2016/17	2017/18	2015/16	2016/17	2017/18	2015/16	2016/17	2017/18
Oct	327.97	323.26	319.24	292.50	241.88	229.00	96.00	77.00	80.70	509.38	466.13	469.30
Nov	308.60	322.42	313.52	291.88	221.00	228.75	109.63	83.50	93.00	477.50	477.50	487.24
Dec	289.78	321.03	327.17	265.00	217.50	232.50	113.13	92.83	96.25	482.25	501.67	482.88
Jan	279.57	332.34	322.60	248.75	223.50	259.00	109.63	97.50	98.80	452.50	502.50	477.60
Feb	273.61	334.32	362.85	238.13	221.88	303.13	102.38	88.13	106.25	457.50	516.50	483.13
Mar	276.23	320.34	379.85	216.50	210.63	323.13	87.00	87.13	105.50	445.50	505.63	524.75
Apr	303.81	305.67	385.85	207.50	195.00	263.13	73.25	75.00		434.00	501.13	
May	376.36	293.68	393.55	242.50	179.50	262.50	87.00	71.00		464.10	485.30	
Jun	408.58	258.75		284.00	179.38		107.13	68.38		568.13	475.75	
Jul	371.49	326.04		280.00	200.84		95.01	71.35		573.13	467.88	
Aug	340.80	301.05		280.00	198.50		90.30	73.10		507.20	475.50	
Sep	337.95	307.70		285.00	213.75		85.38	75.00		469.38	469.25	
Mkt yr	324.56	312.22		260.98	208.61		96.32	79.99		486.71	487.06	
	Meat and bone meal, Central US			Distillers dried grains, Central Illinois, IL			Wheat middlings, Kansas City, MO			Alfalfa hay, weighted-average farm price 2/		
	2015/16	2016/17	2017/18	2015/16	2016/17	2017/18	2015/16	2016/17	2017/18	2016/17	2017/18	
Oct	291.88	237.50	228.00	123.13	116.25	117.30	105.93	79.43	70.36	135.00	152.00	
Nov	266.25	229.00	219.38	132.63	111.70	123.13	106.53	85.53	86.85	130.00	148.00	
Dec	221.67	211.67	221.67	133.13	104.84	143.75	99.55	101.62	107.88	127.00	148.00	
Jan	200.13	255.60	220.00	132.50	96.30	155.50	104.16	98.25	123.68	126.00	152.00	
Feb	193.75	285.00	225.84	136.63	98.88	158.88	97.89	84.66	114.61	127.00	155.00	
Mar	261.00	284.38	275.00	134.50	98.25	164.13	68.64	80.76	99.69	134.00	166.00	
Apr	316.25	266.25	316.25	122.38	99.25	174.38	65.12	58.03	100.22	150.00	183.00	
May	310.10	245.50	293.00	141.10	100.50	174.90	60.72	48.41	98.90	157.00		
Jun	345.00	248.13		170.50	105.25		57.94	60.39		154.00		
Jul	381.67	276.25		149.38	110.63		61.48	67.10		152.00		
Aug	347.00	318.50		130.90	110.00		60.61	63.15		147.00		
Sep	285.63	301.88		127.75	111.63		64.43	67.48		149.00		
Mkt yr	285.03	263.31		136.21	105.29		79.42	74.57		136.00	152.00	

1/ October 1-September 30 except for hay. Simple average of monthly prices for the marketing year except for hay.

Source: USDA, Agricultural Marketing Service, <http://marketnews.usda.gov/portal/lg>, and USDA, National Agricultural Statistics Service, [http://www.nass.usda.gov/Data\\_and\\_Statistics/Quick\\_Stats/index.asp](http://www.nass.usda.gov/Data_and_Statistics/Quick_Stats/index.asp).

Table 5--Corn: Food, seed, and industrial use (million bushels), 6/14/2018

Mkt year and qtr 1/		High-fructose corn syrup (HFCS)	Glucose and dextrose	Starch	Alcohol for fuel	Alcohol for beverages and manufacturing	Cereals and other products	Seed	Total food, seed, and industrial use
2016/17	Q1 Sep-Nov	113.14	88.81	58.20	1,343.08	35.78	49.92	0.00	1,688.93
	Q2 Dec-Feb	106.75	88.53	56.36	1,371.21	36.35	52.33	0.00	1,711.53
	Q3 Mar-May	119.64	96.14	59.72	1,346.10	36.72	54.45	27.25	1,740.02
	Q4 Jun-Aug	126.35	97.09	61.18	1,371.56	37.15	47.60	2.05	1,742.99
	MY Sep-Aug	465.88	370.56	235.46	5,431.95	146.00	204.30	29.30	6,883.46
2017/18	Q1 Sep-Nov	112.55	93.62	59.71	1,391.29	36.30	51.50	0.00	1,744.97
	Q2 Dec-Feb	105.21	87.91	56.87	1,397.46	38.10	51.60	0.00	1,737.15
	MY Sep-Aug	460.00	380.00	240.00	5,575.00	149.00	207.10	28.90	7,040.00
2018/19	MY Sep-Aug	460.00	400.00	240.00	5,675.00	150.00	210.10	29.90	7,165.00

1/ September-August. Latest data may be preliminary or projected.

Source: Calculated by USDA, Economic Research Service.

Date run: 6/13/2018

Table 6--Wholesale corn milling product and byproduct prices, 6/14/2018

Mkt year and month 1/	Corn meal, yellow, Chicago, IL (dollars per cwt)		Corn meal, yellow, New York, NY (dollars per cwt)		Corn starch, Midwest 3/ (dollars per cwt)		Dextrose, Midwest (cents per pound)		High-fructose corn syrup (42%), Midwest (cents per pound)	
	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18
Sep	16.71	16.01	18.38	17.68	13.21	14.41	39.00	39.00	26.75	28.25
Oct	17.06	15.94	18.73	17.61	13.39	13.87	39.00	39.00	26.75	28.25
Nov	16.89	15.78	18.56	17.45	13.87	13.90	39.00	39.00	26.75	28.25
Dec	16.84	15.69	18.51	17.35	14.23	13.75	39.00	39.00	26.75	28.25
Jan	17.07	15.75	18.74	17.42	14.05	13.81	39.00	39.25	28.25	28.25
Feb	17.13	16.09	18.80	17.76	14.20	14.08	39.00	39.25	28.25	
Mar	17.06	16.13	18.40	17.80	14.41	14.53	39.00	39.25	28.25	
Apr	16.99	16.23	18.58	17.90	14.29	14.65	39.00	39.25	28.25	
May	16.91	16.41	18.58	18.08	14.38	14.44	39.00	39.25	28.25	
Jun	16.89		18.56		14.74		39.00		28.25	
Jul	16.89		18.56		15.04		39.00		28.25	
Aug	16.25		17.92		14.98		39.00		28.25	
Mkt year 2/	16.89		18.53		14.23		39.00		27.75	

1/ September-August. Latest month is preliminary.

2/ Simple average of monthly prices for the marketing year.

3/ Bulk-industrial, unmodified.

Source: Milling and Baking News, except for corn starch which is from private industry.

Date run: 6/13/2018

Table 7--U.S. feed grain imports by selected sources (1,000 metric tons) 1/, 6/14/2018

Import and country/region	----- 2015/16 -----		----- 2016/17 -----		2017/18	
	Mkt year	Jun-Apr	Mkt year	Jun-Apr	Jun-Apr	
Oats	Canada	1,378	1,306	1,508	1,445	1,394
	Sweden	62	62	27	5	41
	Finland	34	27	21	21	16
	All other countries	0	0	0	0	0
	Total 2/	1,475	1,396	1,556	1,472	1,451
Malting barley	Canada	285	280	103	95	78
	All other countries	0	0	17	17	1
	Total 2/	285	280	119	112	79
Other barley 3/	Canada	116	109	89	79	103
	All other countries	4	4	2	2	1
	Total 2/	119	113	90	81	103

1/ Grain only. Market year (June-May) and market year to date.

2/ Totals may not add due to rounding.

3/ Grain for purposes other than malting, such as feed and seed use.

Source: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Statistics.

Date run: 6/13/2018

Table 8--U.S. feed grain exports by selected destinations (1,000 metric tons) 1/, 6/14/2018

Export and country/region	----- 2015/16 -----		----- 2016/17 -----		2017/18
	Mkt year	Sep-Apr	Mkt year	Sep-Apr	Sep-Apr
Corn					
Mexico	13,337	8,431	13,916	8,628	9,298
Japan	10,439	5,232	13,527	8,816	7,006
Colombia	4,548	3,919	4,730	3,809	3,704
South Korea	2,964	1,028	5,601	4,121	2,913
Peru	2,383	1,463	2,986	2,114	2,119
China (Taiwan)	2,038	811	2,966	2,333	1,090
Saudi Arabia	1,389	489	2,138	1,734	720
Venezuela	1,155	393	419	200	375
Canada	1,014	668	704	494	959
Guatemala	906	554	993	632	469
Egypt	852	275	323	277	397
Algeria	663		91	91	48
El Salvador	631	380	593	360	223
Costa Rica	552	281	819	511	537
Honduras	550	334	505	326	348
Morocco	450	87	871	753	349
European Union-27	413	29	843	223	1,021
Vietnam	413	70	200	199	720
Panama	392	203	504	357	349
Israel	388	6	83	0.054	132
Chile	353	0.586	543	543	0.574
China (Mainland)	321	262	807	32	239
Jamaica	283	185	275	169	197
Nicaragua	258	109	329	205	144
Dominican Republic	253	37	807	629	231
All other countries	1,342	560	2,670	2,162	725
Total 2/	48,288	25,805	58,242	39,717	34,313
Sorghum					
China (Mainland)	7,034	5,476	4,801	3,394	4,152
Mexico	625	400	585	413	61
Sub-Saharan Africa	593	454	475	389	182
Pakistan	205	205	0.466	0.466	
All other countries	170	103	250	180	354
Total 2/	8,626	6,638	6,111	4,376	4,749
Barley					
Mexico	142	141	2	2	0.542
Canada	52	50	63	54	66
Morocco	14	14			
China (Taiwan)	7	6	4	4	4
All other countries	21	19	26	19	35
Total 2/	235	230	95	77	105

1/ Grain only. Market year (September-August for corn and sorghum, June-May for barley) and market year to date.

2/ Totals may not add due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Statistics.

Date run: 6/13/2018