



Economic Research Service

Situation and Outlook

FDS-17f

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Feed Outlook

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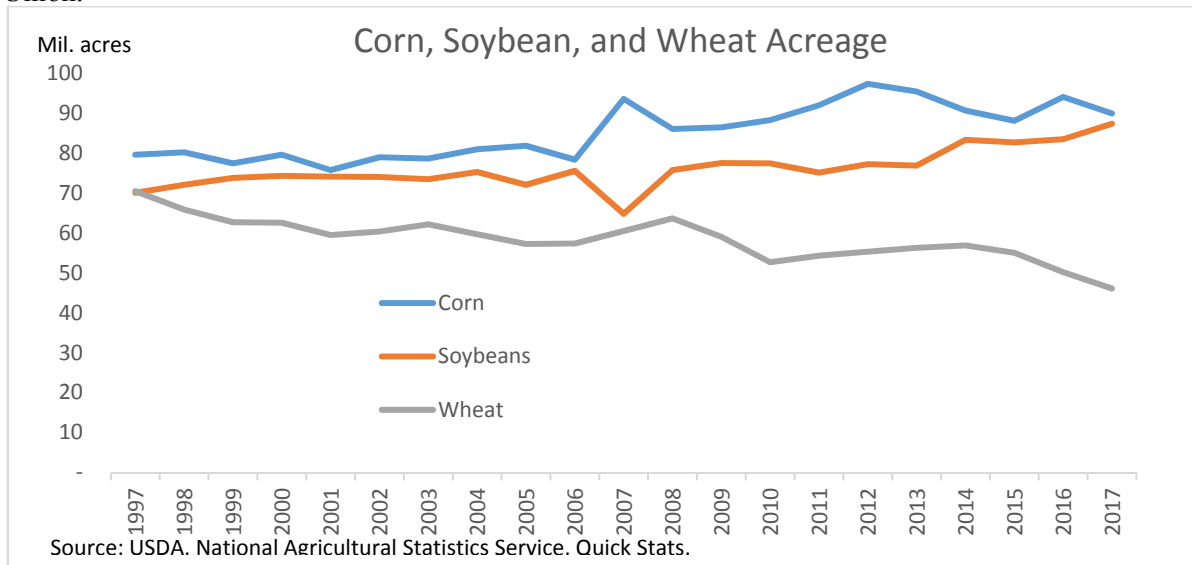
Projected U.S. Corn Price Lowered 5 Cents per Bushel, Global Coarse Grain Production Down

The season-average price of corn is lowered \$0.05 per bushel to \$3.35 for the 2016/17 crop. Sorghum use for 2016/17 is lowered 5 million bushels on lower projected sorghum used for ethanol. The season-average price for barley in 2017/18 is raised \$0.30 per bushel to \$5.15.

Global coarse grain output for 2017/18 is projected lower this month, while 2016/17 production is revised higher (mostly higher second-crop corn in Brazil and a record-high South African corn harvest) boosting beginning stocks. Increased stocks partly offset a decline in 2017/18 production prospects. Small changes in projected coarse grain use and trade leave world ending stocks virtually unchanged. Global corn trade in 2017/18 is projected higher this month, mostly due to increased import demand from the European Union.

The next release is July 14, 2017.

Approved by the World Agricultural Outlook Board.



Domestic Outlook

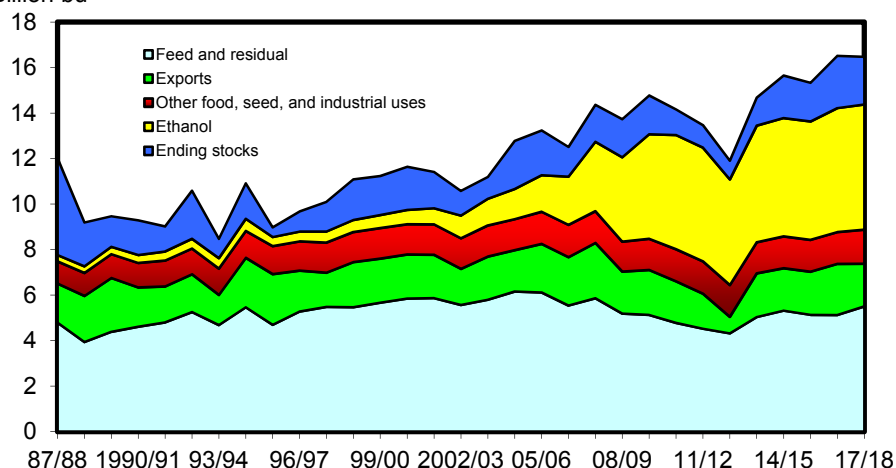
Feed and Residual Use

Projected U.S. 2017/18 feed and residual use for the four feed grains (corn, sorghum, barley, and oats) and wheat is 147.5 million metric tons this month, 0.6 million higher than last month and 3.3 million below last year's revised 150.8 million on a September-August marketing year basis. The monthly change is due to higher wheat feed and residual.

Grain Consuming Animal Units Projected Higher

Grain consuming animal units (GCAU) for 2017/18 are projected at 97.3 million units, 0.7 million above last month's forecast of 96.6 million and 1.3 million higher than the revised 96.0 million for last year. Greater numbers of cattle on feed and dairy cattle drive the increase in animal units. Feed and residual per GCAU is projected at 1.52 tons, 0.05 tons below last year's estimated 1.57 tons.

Figure 1
U.S. corn utilization
Billion bu



Note: Marketing years 2016/17 and 2017/18 are projected.
Source: USDA, World Agricultural Outlook Board, WASDE.

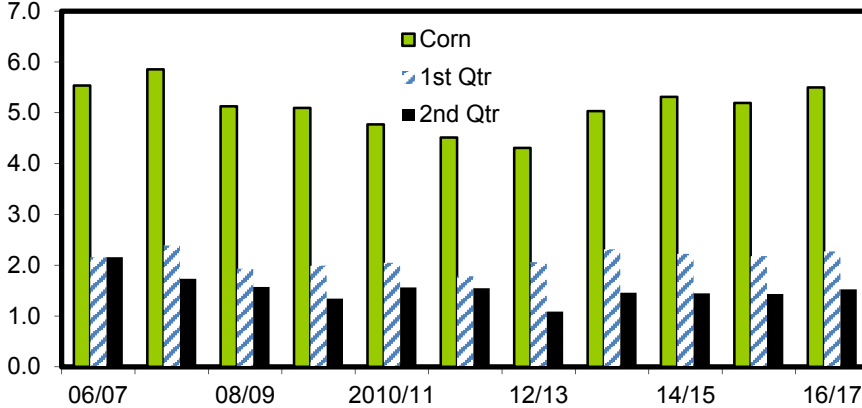
Minimal Balance Sheet Changes This Month

Corn supply and demand projections are unchanged from last month. The projected average price received by farmers for 2016/17 was lowered \$0.10 per bushel on the high end of the range to \$3.35 per bushel, while the lower end of the range remained unchanged at \$3.25 per bushel for a midpoint of \$3.35 per bushel, 5 cents lower than last month's forecast. The reduction was the result of year-to-date marketing activity. The season-average price for 2017/18 is unchanged, with a range of \$3.00 to \$3.80 per bushel and a midpoint price of \$3.40 per bushel.

As of June 4, 96 percent of the U.S. corn crop had been planted in the major producing States according to USDA's National Agricultural Statistics Service (NASS) *Crop Progress* report. This is 1 percentage point below the 5-year average and last year's progress. In Iowa, the leading producing State, plantings were 98 percent complete, just above the 5-year average. Planting progress in Indiana and Ohio rebounded following a slow start at 91 and 82 percent complete, respectively.

Corn emergence reflected the same pattern, with the major producing States lagging the 5-year average by 1 percentage point at 86 percent.

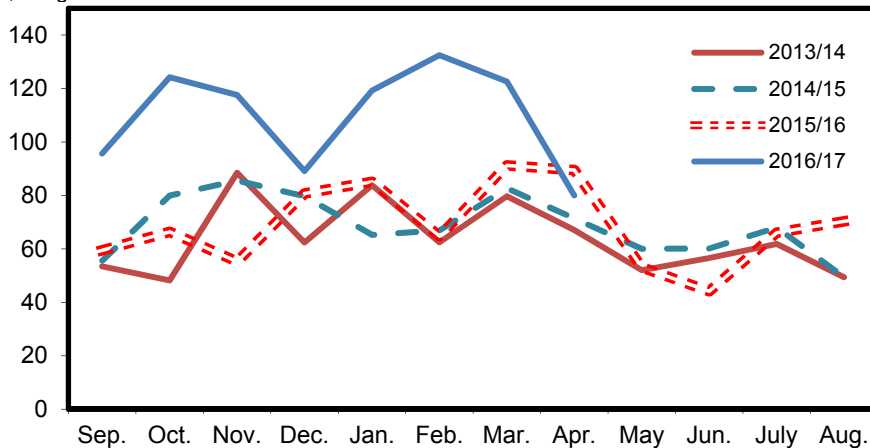
Figure 2
U.S. corn feed and residual use
 Billion bu



Sources: USDA, Economic Research Service, *Feed Grains Database* and USDA, World Agricultural Outlook Board, *WASDE*.

There are no changes on the sorghum supply side. Disappearance is reduced 5 million bushels on lower grind for ethanol as reported in NASS’s *Grain Crushings and Co-Products Production* report. Through April, sorghum used to produce ethanol totaled 76 million bushels, down from 95 million last year. Continued low corn prices and lower sorghum supply have resulted in a sorghum food, seed, and industrial use projection of 110 million bushels this month. As a result, sorghum ending stocks are raised 5 million bushels to 52.9 million, and this increase is carried through the 2017/18 balance sheet to result in ending stocks of 28.9 million bushels for the out year, the lowest since 2014/15.

Figure 3
U.S. fuel ethanol exports
 1,000 gal.

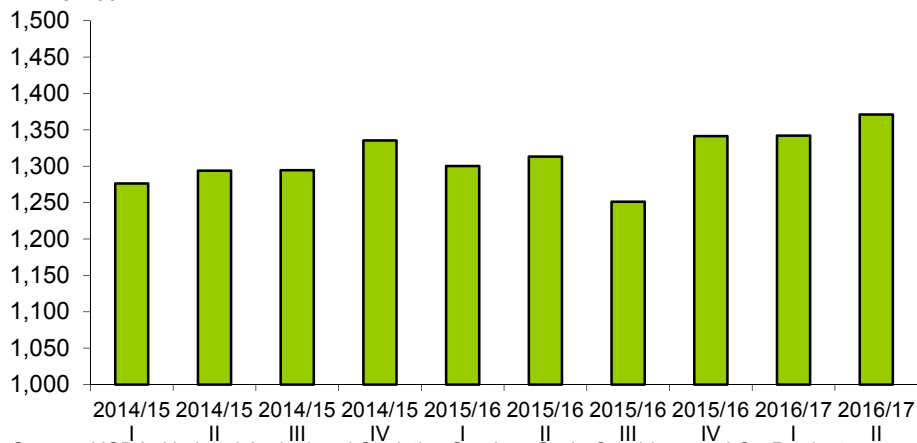


Source: USDC, U.S. Census Bureau.

As of June 4, 55 percent of the crop had been planted in the major producing States, 5 percent below the 5-year average and just behind last year’s pace of 56 percent planted by the same date. In Texas, the leading producing State, plantings were 92 percent complete—well ahead of last year and the 5-year average. Sorghum plantings in

Kansas, the second largest producing State, are lagging at 25 percent complete, 5 percent below this time last year and 14 percent below the 5-year average.

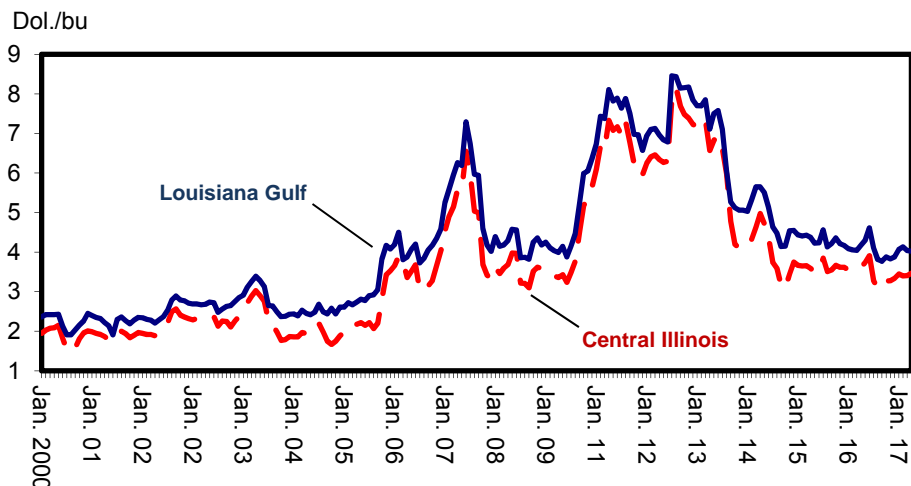
Figure 4
U.S. corn for ethanol use by quarter
 Million bu



Source: USDA, National Agricultural Statistics Service, *Grain Crushings and Co-Products Production*.

A 2-million-bushel reduction in forecast barley imports for 2016/17 lowered supply to 311.4 million bushels. The reduction is passed through to ending stocks which are now projected at 93.4 million bushels. With no changes to the 2017/18 balance sheet, the lower carryin is passed through to ending stocks, which are projected at 74.4 million bushels. The projected season-average price for barley is raised \$0.30 per bushel on both the high and low ends of the range for a midpoint of \$5.15 per bushel on expectations of higher malting barley prices based on current conditions in Northern Plains, which estimated less than 60 percent of the barley crops in Montana and North Dakota to be good to excellent condition, down more than 10 percentage points relative to the same time a year ago.

Figure 5
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>.

As of June 4, 99 percent of the barley crop had been planted in the major producing States, just behind last year's progress at this time but ahead of the 5-year average of 96 percent.

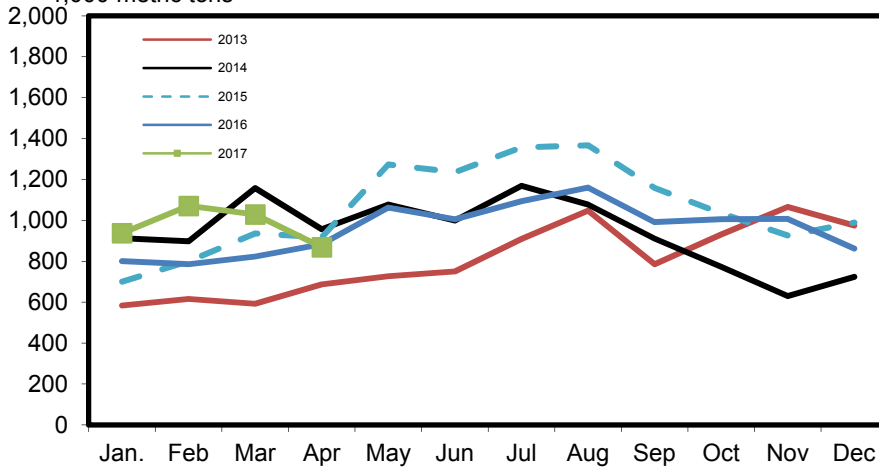
The oats balance sheet follows a similar pattern as barley, with a 4-million-bushel reduction in forecast 2016/17 imports passed through the balance sheet to ending stocks, which are forecast at 41.6 million bushels this month. This change is carried through 2017/18, resulting in projected ending stocks for the out year of 36.6 million bushels. The season-average price range for oats remains at \$1.95 to \$2.45 per bushel, with a midpoint of \$2.20 per bushel.

As of June 4, the oat crop had been planted and 96 percent had emerged in the 9 major producing States, ahead of the 5-year average and slightly behind last year when 98 percent had emerged at this time.

NASS June Surveys Will Impact Next Month’s Report

During the first 2 weeks of June, NASS will gather information about this season’s crop area and supplies of grain in storage as of June 1. The results will be available in the June 30 *Acreage* and *Grain Stocks* reports and incorporated in USDA’s July 12 *World Agricultural Supply and Demand Estimates*.

Figure 6
U.S. dried distillers grains with solubles exports
 1,000 metric tons

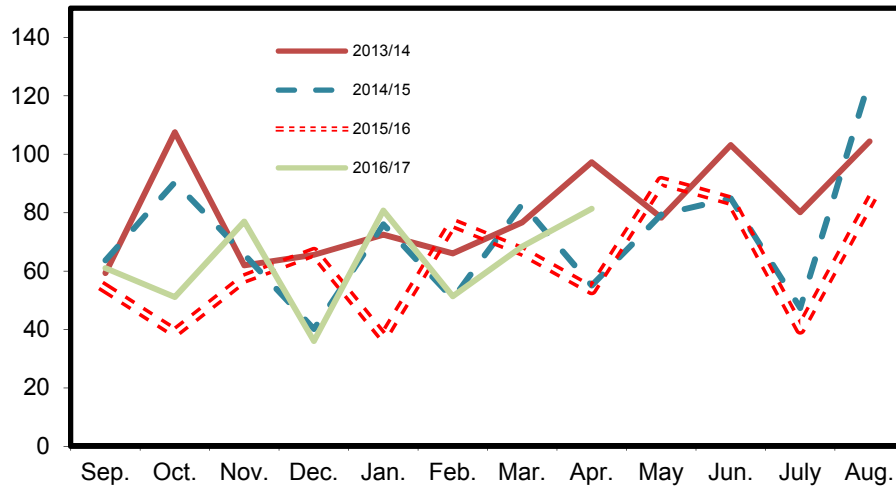


Source: USDC, U.S. Census Bureau.

Figure 7

U.S. corn gluten meal exports

1,000 metric tons

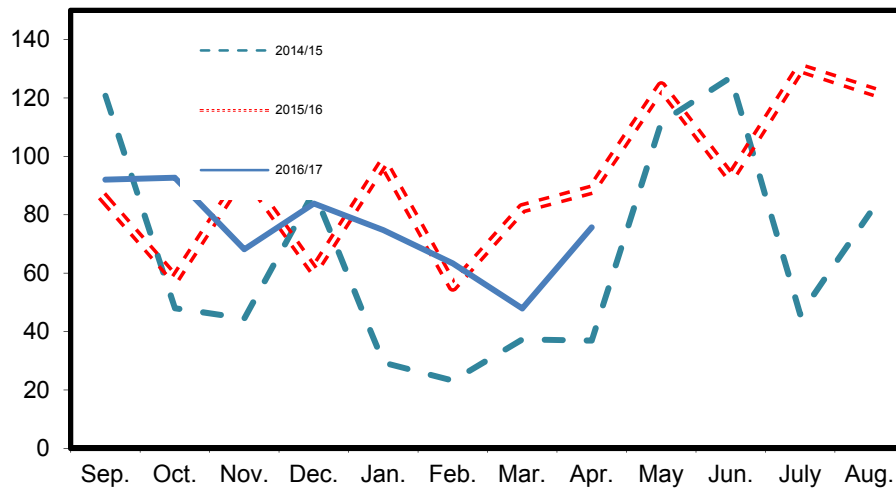


Source: USDC, U.S. Census Bureau.

Figure 8

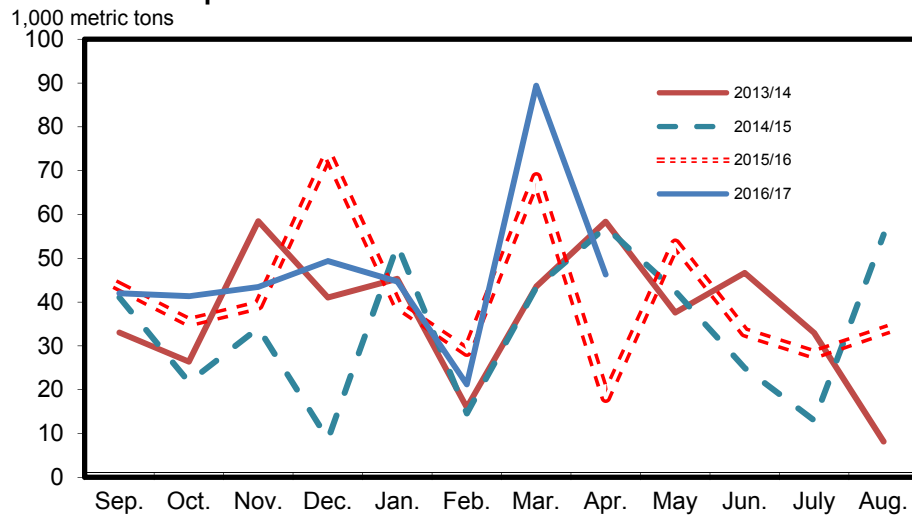
U.S. corn gluten feed exports

1,000 metric tons



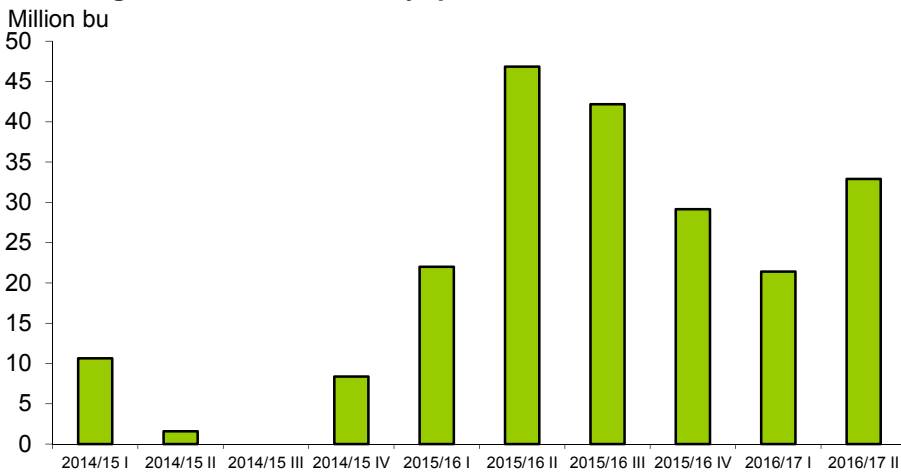
Source: USDC, U.S. Census Bureau.

Figure 9
U.S. corn oil exports



Source: USDC, U.S. Census Bureau.

Figure 10
U.S. sorghum for ethanol use by quarter



Note: 2014/15 II and III contain months for which data were withheld to avoid disclosing data for individual operations.

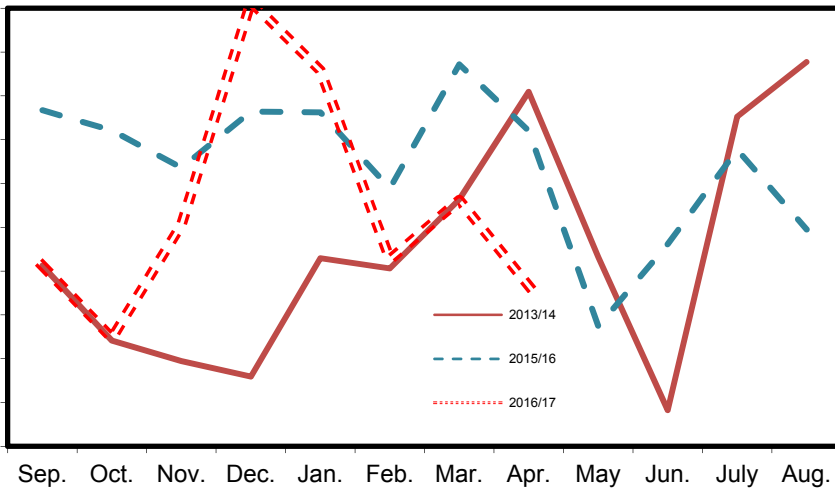
Source: USDA, National Agricultural Statistics Service, *Grain Crushings and Co-Products*.

Figure 11

U.S. sorghum exports

1,000 metric tons

1,000



Source: USDC, U.S. Census Bureau, March 2017 *Grain Inspections*.

International Outlook

A Projected Decline in 2017/18 is Partly Offset by Higher 2016/17 Coarse Grain Production

World coarse grain production is projected to reach 1,310.3 million tons in 2017/18, a reduction of 1.5 million from last month's forecast. Most of the reduction is for the **European Union (EU)** and **Canada**, with partly offsetting increases in **Ukraine** and **Turkey**. At the same time, for the previous 2016/17 projection coarse grain production is forecast up 2.0 million tons due to an increase in **Brazil's** second-crop corn and a record-high **South African** corn harvest. The production change and other revisions to 2016/17 supply and demand boost 2017/18 beginning stocks by 0.7 million tons, partly offsetting the reduction in 2017/18 production.

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

Table A1 - World and U.S. coarse grain production at a glance (2016/17), June 2017					
	Region or country	Production	Change from previous month ¹	YoY Change ²	Comments
<i>Million tons</i>					
Coarse grain production (total)					
↓	World	1310.3	-1.5	-49.8	
↓	Foreign	939.9	-1.5	-17.6	Reductions are projected for 2017/18 coarse grain production, while estimates for 2016/17 are up. See table A2.
	United States	370.4	No change	-32.2	See section on U.S. domestic output.
World production of coarse grains by type of grain					
CORN					
↓	World	1031.9	-1.8	-35.4	
↓	Foreign	674.6	-1.8	-7.8	Reduced corn production for Canada and EU is partly offset by increase in Ukraine. For 2016/17, corn output is projected higher for Brazil and South Africa. See table A2.
	United States	357.3	No change	-27.5	See section on U.S. domestic output.
BARLEY					
↑	World	137.5	+0.5	-9.6	
↑	Foreign	134.0	+0.5	-8.7	Higher projected barley production in Turkey. See table A2.
	United States	3.5	No change	0.9	See section on U.S. domestic output.
OATS					
↑	World	23.0	-0.2	-0.4	
↑	Foreign	22.0	-0.2	-0.4	Lower oats output is projected for Canada. See table A2.
	United States	1.0	No change	No change	
¹ Change from previous month. No production changes are made for sorghum, rye, millet, and mixed grains this month.					
² YoY: year over year changes. For changes and notes by country, see table A2.					
Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.					

Table A2 - Coarse grain production by country at a glance, June 2017

	Type of crop	Crop year	Production	Change in forecast ¹	YoY ² change	Comments
			<i>Million tons</i>			
Coarse grain production by country and by type of grain (2017/18)						
EUROPEAN UNION						
↓	Corn	<i>Oct-Sep</i>	62.0	-1.5	+1.3	Corn area reduction in France and Germany based on data from the national Ministries of Agriculture.
CANADA						
↓	Corn	<i>Aug-July</i>	14.4	-0.8	+1.2	Serious delays in corn planting in Quebec and Ontario caused by wetter than normal conditions in May. Both area and expected yields are projected lower.
↓	Oats	<i>Aug-July</i>	3.3	-0.2	+0.3	Planting delays in Alberta and Saskatchewan.
UKRAINE						
↑	Corn	<i>Oct-Sep</i>	28.5	+0.5	+0.5	Higher corn area is projected based on planting reports.
TURKEY						
↑	Barley	<i>June-May</i>	5.5	+0.5	+0.8	Timely rains and mild temperatures resulted in a marked improvement in the Vegetation Health Index (VHI) in the Anatolia Plateau that looked dry just a month ago.
Coarse grain production by country and by type of grain (2016/17)						
SOUTH AFRICA						
↑	Corn	<i>May-Apr</i>	16.4	+1.1	+8.2	The increase moves production to a new record high, twice as large as the previous (2015/16) crop. This year has been very beneficial for the western part of the corn belt with excellent planting and beneficial rains throughout the entire period of crop development. Harvest of the 2016/17 crop is on the way, and the South African Crop Estimates Committee of the Department of Agriculture, Forestry & Fisheries (CEC) issued a new forecast in line with the increase.
BRAZIL						
↑	Corn	<i>Apr-Mar</i>	97.0	+1.0	+30.0	The increase moves production further to a new record high, 30.0 million tons larger than in the disastrous 2015/16. Abundant May 2017 rains during corn reproductive stages were exceptionally beneficial, and are expected to boost second (summer) crop corn yields further.
¹ Change from previous month. Smaller changes for coarse grain output are made for several countries, see map A for changes in corn .						
² YoY: year over year changes.						
Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.						

Brazil's second-crop corn production for 2016/17 will be harvested in June through December 2017. Crucial May rainfall in the Central-West of the country – in Mato Grosso, Mato Grosso do Sul, Goias, and Mina-Geraias – was considerably above normal (normally, precipitation fades in May), boosting corn yields. The rains were frequent and abundant, supporting flowering and grain fill in the largest producing states of second-crop corn. These developments support an increase in yield forecast to a new record of 5.54 tons per hectare. The corn production forecast is increased further to 97.0 million tons, 30.0 million

tons higher than the previous paltry harvest of 2015/16. Brazil's projected 2017/18 corn crop, with first-crop corn planting beginning mostly in September-October 2017, remains projected at 95.0 million tons.

South African 2016/17 corn production is increased to a record-high of 16.4 million tons based on data published by the Crop Estimates Committee of the Department of Agriculture, Forestry & Fisheries (CEC). In addition to exceptional weather conditions throughout the whole growing period, South African farmers are advancing their cultivating practices using improved seeds, higher density planting, and better fertilizers to boost corn yields.

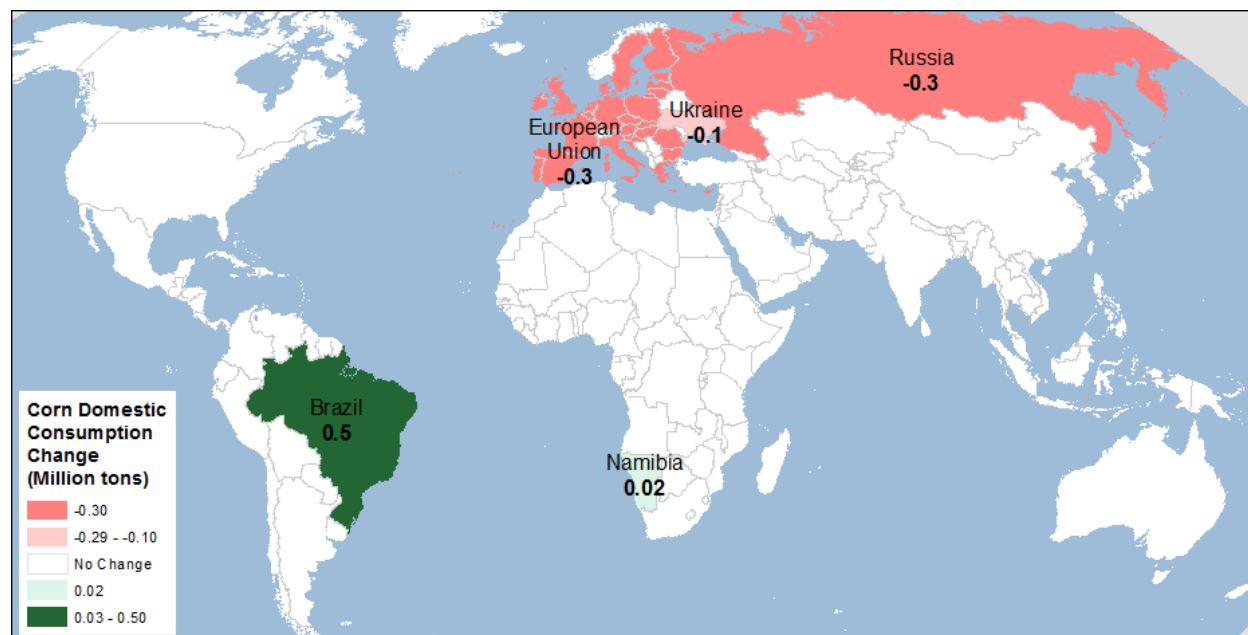
Coarse Grain Use Projected Up for 2016/17 and Down for 2017/18

World coarse grain use forecast for 2016/17 is increased this month by 1.1 million tons to 1,348.9 million tons, with several partly offsetting changes. The largest change is for increased corn use in **South Africa**, up 0.7 million tons due to increased production. **Brazil**, with higher corn output in 2016/17, is expected to increase corn industrial use by 0.5 million tons to 10.5 million – reflecting the completion of an ethanol production facility in Mato Grosso. With Brazilian corn supplies getting larger, the biofuel producers are turning increasingly to corn, considered a more reliable alternative for ethanol production than traditional sugarcane. While corn is available throughout the year, the sugarcane-based biofuel plants face a shortage of raw material during the off-season for sugarcane. During this period, the sugarcane-based ethanol plants would be virtually idle for about 4 months.

Global coarse grain use for 2017/18 is projected down 0.4 million tons this month to 1,349.5 million. The two largest changes are an increase of corn industrial use for Brazil in line with the change for 2016/17 and lower barley and corn feed use in Russia resulting from expectation of higher exports and lower domestic availability.

For a visual display of this month's changes in corn domestic use, see map B.

Map B – Corn domestic consumption changes for 2017/18, June 2017



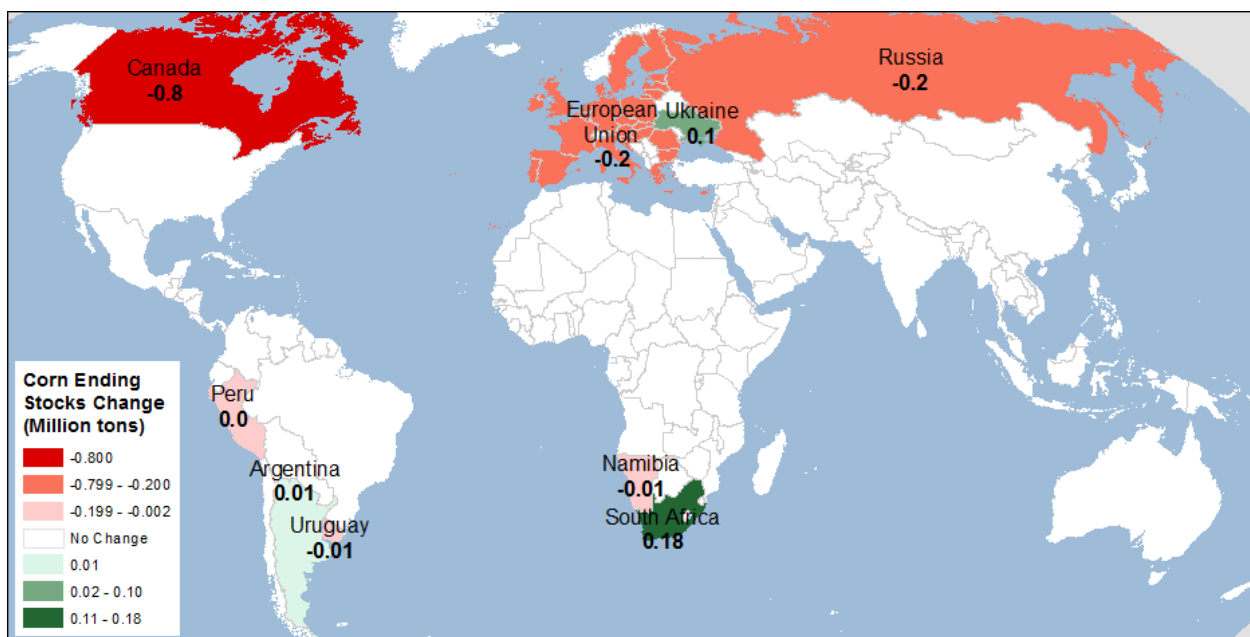
Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution online database.

Projected Global Ending Stocks Reduced

World coarse grain ending stocks for 2017/18 are projected down 0.4 million tons this month to 221.0 million, with most of the reduction in Canadian corn and oats stocks partly offset by increases in corn stocks in Turkey and Ukraine. For the United States, stocks are reduced for barley and oats and increased for sorghum (see the section on domestic grains above). Corn ending stocks are forecast down 0.9 million tons this month to 194.3 million, mainly reflecting the Canadian reduction with several offsetting country adjustments. Barley stocks are increased by 0.3 million tons (Turkey) to 17.7 million (U.S. barley stocks are adjusted slightly down), while oat stocks are down 0.1 million tons to 2.3 million (half of the reduction is in the United States); rye stocks are fractionally down at 1.3 million tons.

For a visual display of the changes in corn ending stocks, see map C.

Map C – Corn ending stocks changes for 2017/18, June 2017



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

World Corn Trade Increased, U.S. Export Prospects Stay Unchanged

Global corn trade for the international 2017/18 October-September trade year is projected up 1.0 million tons this month to 150.7 million. A 1.0-million-ton increase is projected in EU corn imports. Demand for corn in two major EU feed-importing countries – Spain and Italy – is expected to be met by increases in grain imports from outside the EU, as French and German corn output is reduced (see above).

Ukraine and Russia are expected to equally share the opportunity offered by the projected increase in EU corn imports; for both countries, corn exports are projected up 0.5 million tons to reach 20.5 and 6.0 million tons, respectively.

Corn export prospects for Brazil are unchanged this month at 33 million tons. Exports in the month of May are usually fairly low in Brazil. And although May corn exports this year were at an all-time record-high level, they are not a good predictor of further export volume.

For the current 2016/17 trade year, the global corn trade is projected slightly higher at 146.2 million tons with a 0.2-million-ton increase in South African exports (higher output), which is partly offset by a 0.1-million-ton reduction for Mexico (smaller expected shipments of white corn to South Africa).

U.S. 2016/17 corn exports are forecast unchanged this month at 56.0 million tons (2.225 billion bushels for the September-August local marketing year, up 17 percent from the previous year). Note that this forecast has not changed since October 2016, at a time when the pace of U.S. corn exports was very high. Currently U.S. corn exports are slowing down as competitors – corn producers in the Southern Hemisphere – enter the market and expand their exports, which supports an assumption of declining U.S. exports in the last quarter of the marketing year. This leaves U.S. corn exports on track to reach the forecast.

Contacts and Links

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(<http://ers.usda.gov/data-products/feed-grains-database.aspx>) is a queryable database that contains monthly, quarterly, and annual data on prices, supply, and use of corn and other feed grains. This includes data published in the monthly Feed Outlook and the annual Feed Yearbook reports.

Related Websites

Feed Outlook

(<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1273>
WASDE)

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Table 1--Feed grains: U.S. quarterly supply and disappearance (million bushels), 6/13/2017

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	2014/15	Sep-Nov	1,232	14,216	5	15,452	1,615	2,225	401	4,241	11,211	3.57	
		Dec-Feb	11,211		6	11,217	1,622	1,445	400	3,468	7,750	3.80	
		Mar-May	7,750		10	7,760	1,675	1,092	540	3,307	4,453	3.75	
		Jun-Aug	4,453		11	4,464	1,690	517	526	2,733	1,731	3.69	
		Mkt yr	1,232	14,216	32	15,479	6,601	5,280	1,867	13,748	1,731	3.70	
	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	340	3,431	7,822	3.64	
		Mar-May	7,822		20	7,842	1,657	914	561	3,131	4,711	3.60	
		Jun-Aug	4,711		17	4,728	1,703	592	695	2,991	1,737	3.55	
		Mkt yr	1,731	13,602	67	15,401	6,643	5,123	1,898	13,664	1,737	3.61	
	2016/17	Sep-Nov	1,737	15,148	14	16,899	1,691	2,272	551	4,514	12,386	3.25	
		Dec-Feb	12,386		12	12,398	1,712	1,525	544	3,781	8,616	3.39	
		Mkt yr	1,737	15,148	55	16,940	6,920	5,500	2,225	14,645	2,295	3.25-3.45	
	2017/18	Mkt yr	2,295	14,065	50	16,410	7,000	5,425	1,875	14,300	2,110	3.00-3.80	
	Sorghum	2014/15	Sep-Nov	34.03	432.58	0.21	466.82	10.60	149.98	83.64	244.23	222.59	3.63
			Dec-Feb	222.59		0.12	222.71	1.80	2.37	98.69	102.86	119.86	4.17
			Mar-May	119.86		0.00	119.86	1.43	-14.99	99.13	85.57	34.29	4.41
			Jun-Aug	34.29		0.04	34.33	1.18	-55.54	70.28	15.92	18.41	
			Mkt yr	34.03	432.58	0.38	466.98	15.01	81.82	351.75	448.57	18.41	4.03
		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	-6.17	86.33	121.93	201.58	3.17	
Mar-May			201.58		0.01	201.59	43.31	-5.55	73.47	111.24	90.35	3.10	
Jun-Aug			90.35		0.01	90.36	29.73	-40.35	64.35	53.73	36.63	3.33	
Mkt yr			18.41	596.75	4.59	619.75	136.95	107.58	338.59	583.12	36.63	3.31	
2016/17		Sep-Nov	36.63	480.26	0.00	516.90	21.65	141.24	45.86	208.75	308.15	2.62	
		Dec-Feb	308.15		0.00	308.15	33.06	4.14	90.62	127.81	180.34	2.69	
		Mkt yr	36.63	480.26	1.00	517.89	110.00	130.00	225.00	465.00	52.89	2.60-2.70	
2017/18		Mkt yr	52.89	331.00		383.89	100.00	55.00	200.00	355.00	28.89	2.60-3.40	

Table 1--Feed grains: U.S. quarterly supply and disappearance, cont. (million bushels), 6/13/2017

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	2014/15	Jun-Aug	82	182	7	271	39	48	4	91	180	5.69	
		Sep-Nov	180		5	184	38	-14	4	28	156	5.25	
		Dec-Feb	156		6	163	37	5	3	44	118	5.07	
		Mar-May	118		6	124	37	4	4	45	79	4.86	
		Mkt yr	82	182	24	287	152	43	14	209	79	5.30	
	2015/16	Jun-Aug	79	218	4	301	40	38	3	82	219	5.39	
		Sep-Nov	219		4	223	38	0	4	43	180	5.52	
		Dec-Feb	180		7	187	37	10	3	50	138	5.66	
		Mar-May	138		4	141	38	1	1	39	102	5.43	
		Mkt yr	79	218	19	315	153	50	11	213	102	5.52	
	2016/17	Jun-Aug	102	199	2	304	40	32	1	73	230	4.99	
		Sep-Nov	230		2	232	39	0	1	40	193	4.73	
		Dec-Feb	193		2	195	37	10	1	48	147	5.04	
		Mkt yr	102	199	10	311	153	60	5	218	93	4.95	
	2017/18	Mkt yr	93	159	15	267	153	35	5	193	74	4.65-5.65	
	Oats	2014/15	Jun-Aug	25	70	27	122	18	30	1	48	74	3.34
			Sep-Nov	74		25	99	18	14	0	32	67	3.16
			Dec-Feb	67		32	99	17	22	0	40	59	3.08
			Mar-May	59		25	84	24	6	1	31	54	2.89
			Mkt yr	25	70	109	204	77	71	2	150	54	3.21
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	24	10	1	34	57	2.11	
		Mkt yr	54	90	86	229	77	93	2	172	57	2.12	
2016/17		Jun-Aug	57	65	21	142	18	45	1	64	79	1.86	
		Sep-Nov	79		28	106	19	12	1	31	75	2.03	
		Dec-Feb	75		24	100	18	18	1	37	63	2.35	
		Mkt yr	57	65	91	213	78	90	3	171	42	2.05	
2017/18		Mkt yr	42	67	100	209	80	90	2	172	37	1.95-2.45	

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.

Table 2--Feed and residual use of wheat and coarse grains, 6/13/2017

Market year and quarter 1/		Corn (million metric tons)	Sorghum (million metric tons)	Barley (million metric tons)	Oats (million metric tons)	Feed grains (million metric tons)	Wheat (million metric tons)	Energy feeds (million metric tons)	Grain consuming animal units (millions)	Energy feeds per grain consuming animal unit (tons)
2015/16	Q1 Sep-Nov	55.3	4.1	0.0	0.3	59.7	-2.9	56.8		
	Q2 Dec-Feb	36.5	-0.2	0.2	0.3	36.9	-0.0	36.9		
	Q3 Mar-May	23.2	-0.1	0.0	0.2	23.3	-1.0	22.3		
	Q4 Jun-Aug	15.0	-1.0	0.7	0.7	15.4	7.3	22.7		
	MY Sep-Aug	130.1	2.7	1.0	1.5	135.3	3.3	138.6	94.2	1.5
2016/17	Q1 Sep-Nov	57.7	3.6	0.0	0.2	61.5	-0.8	60.7		
	Q2 Dec-Feb	38.7	0.1	0.2	0.3	39.4	-0.4	38.9		
	MY Sep-Aug	139.7	3.3	1.3	1.5	145.8	5.0	150.8	96.0	1.6
2017/18	MY Sep-Aug	137.8	1.4	1.1	1.6	141.8	5.7	147.5	97.3	1.5

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, 6/13/2017

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)		
	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17
Sep	3.16	3.55	3.09	4.14	4.22	3.78	7.91	8.08	
Oct	3.09	3.67	3.27	4.15	4.36	3.88	8.52	8.23	
Nov	3.45	3.62	3.28	4.54	4.22	3.83	9.04	7.89	
Dec	3.75	3.62	3.34	4.55	4.17	3.88	9.85		
Jan	3.67	3.55	3.45	4.44	4.09	4.07	10.41		
Feb	3.65	3.56	3.51	4.41	4.06	4.14	10.70		
Mar	3.66	3.54	3.40	4.43	4.05	4.04			
Apr	3.59	3.61	3.41	4.38	4.17	3.98	9.97		
May	3.49	3.74	3.47	4.23	4.30	4.03	7.44		
Jun	3.52	3.91		4.24	4.62				
Jul	3.85	3.28		4.56	4.11				
Aug	3.51	3.09		4.14	3.82		8.09		
Mkt year	3.53	3.56		4.35	4.18		9.10	8.07	

	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)		
	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17
Jun	3.49	2.59	2.36	5.71			3.88	2.89	2.58
Jul	3.01	2.70	2.33	5.62			3.85	2.82	2.61
Aug	2.58	2.41	2.08	5.79			3.83	2.63	2.34
Sep	2.30	2.39	1.95	5.98	4.95		3.86	2.70	2.29
Oct	2.44	2.57	2.00	7.28	4.95		3.68	2.58	2.67
Nov	2.48	2.60	2.00	7.35			3.53	2.67	2.84
Dec	2.68	2.60	2.00	7.35			3.49	2.64	2.92
Jan	2.79	2.58	2.00	7.10			3.26	2.60	2.97
Feb	2.73	2.50	2.00	6.75			3.11	2.60	3.07
Mar	2.75	2.46	2.02			4.70	3.14	2.43	2.90
Apr	2.81	2.45	2.05	6.35			2.94	2.49	2.86
May	2.76	2.44	2.05	6.23			2.75	2.49	2.88
Mkt year	2.74	2.52	2.07	6.50	4.95		3.44	2.63	2.74

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>.

Table 4--Selected feed and feed byproduct prices (dollars per ton), 6/13/2017

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		
	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17
Oct	381.50	327.97	323.26	346.88	292.50	241.88	90.13	96.00	77.00	549.38	509.38	466.13
Nov	441.40	308.60	322.42	313.13	291.88	221.00	105.13	109.63	83.50	581.88	477.50	477.50
Dec	431.74	289.78	321.03	334.38	265.00	217.50	143.30	113.13	92.83	613.50	482.25	501.67
Jan	380.03	279.57	332.34	313.75	248.75	223.50	135.25	109.63	97.50	632.50	452.50	502.50
Feb	370.39	273.61	334.32	302.50	238.13	221.88	117.25	102.38	88.13	631.25	457.50	516.50
Mar	357.83	276.23	320.34	310.50	216.50	210.63	107.20	87.00	87.13	613.00	445.50	505.63
Apr	336.61	303.81	305.67	288.13	207.50	195.00	83.13	73.25	75.00	575.63	434.00	501.13
May	320.23	376.36	293.68	274.38	242.50	179.50	72.25	87.00	71.00	549.38	464.10	485.30
Jun	335.03	408.58		281.00	284.00		74.40	107.13		571.60	568.13	
Jul	375.48	371.49		299.38	280.00		91.25	95.01		560.00	573.13	
Aug	357.85	340.80		295.63	280.00		88.75	90.30		550.63	507.20	
Sep	333.63	337.95		293.50	285.00		95.50	85.38		525.00	469.38	
Mkt yr	368.48	324.56		304.43	260.98		100.29	96.32		579.48	486.71	

Mkt year and month 1/	Meat and bone meal, Central US			Distillers dried grains, Central Illinois, IL			Wheat middlings, Kansas City, MO			Alfalfa hay, weighted-average farm price 2/	
	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	2015/16	2016/17
Oct	385.00	291.88	237.50	96.00	123.13	116.25	111.48	105.93	79.43	155.00	135.00
Nov	383.79	266.25	229.00	113.13	132.63	111.70	106.87	106.53	85.53	147.00	130.00
Dec	424.22	221.67	211.67	159.30	133.13	104.84	135.83	99.55	101.62	149.00	129.00
Jan	382.49	200.13	255.60	186.50	132.50	96.30	140.93	104.16	98.25	141.00	128.00
Feb	370.63	193.75	285.00	187.13	136.63	98.88	124.85	97.89	84.66	137.00	129.00
Mar	376.00	261.00	284.38	189.50	134.50	98.25	1,118.55	68.64	80.76	139.00	135.00
Apr	390.63	316.25	266.25	191.00	122.38	99.25	81.93	65.12	58.03	154.00	148.00
May	368.75	310.10	245.50	178.50	141.10	100.50	64.25	60.72	48.41	147.00	
Jun	313.50	345.00		157.50	170.50		60.27	57.94		142.00	
Jul	333.75	381.67		153.50	149.38		77.96	61.48		140.00	
Aug	388.75	347.00		115.13	130.90		92.72	60.61		138.00	
Sep	344.00	285.63		139.30	127.75		112.67	64.43		137.00	
Mkt yr	371.79	285.03		155.54	136.21		185.69	79.42		158.00	138.00

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

2/ May 1-April 30 marketing year. U.S. season-average price based on monthly price received by farmers weighted by monthly marketings.

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.

Table 5--Corn: Food, seed, and industrial use (million bushels), 6/13/2017

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
2015/16	Q1 Sep-Nov	110.81	72.34	62.30	1,300.20	34.89	50.62	0.00	1,631.16
	Q2 Dec-Feb	108.82	81.40	58.34	1,316.28	36.58	50.43	0.00	1,651.84
	Q3 Mar-May	125.19	90.02	59.43	1,264.80	38.27	50.92	27.93	1,656.55
	Q4 Jun-Aug	127.31	85.13	61.67	1,342.34	33.27	51.13	2.63	1,703.48
	MY Sep-Aug	472.13	328.89	241.74	5,223.61	143.00	203.10	30.56	6,643.03
2016/17	Q1 Sep-Nov	113.16	88.84	59.90	1,343.08	35.78	49.92	0.00	1,690.67
	Q2 Dec-Feb	106.39	90.20	56.08	1,371.14	36.35	52.33	0.00	1,712.49
	MY Sep-Aug	480.00	360.00	250.00	5,450.00	146.00	204.60	29.40	6,920.00
2017/18	MY Sep-Aug	490.00	370.00	255.00	5,500.00	149.00	206.50	29.50	7,000.00

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

Source: Calculated by USDA, Economic Research Service.

Table 6--Wholesale corn milling product and byproduct prices, 6/13/2017

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)	
	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17
Sep	17.80	16.71	19.47	18.38	14.20	13.21	37.00	39.00	23.25	26.75
Oct	17.96	17.06	19.63	18.73	14.29	13.39	37.00	39.00	23.25	26.75
Nov	17.53	16.89	19.20	18.56	14.95	13.87	37.00	39.00	23.25	26.75
Dec	17.50	16.84	19.17	18.51	14.80	14.23	37.00	39.00	23.25	26.75
Jan	17.42	17.07	19.09	18.74	14.62	14.05	39.00	39.00	26.75	28.25
Feb	17.44	17.13	19.11	18.80	14.35	14.20	39.00	39.00	26.75	28.25
Mar	17.13	17.06	18.92	18.40	14.71	14.41	39.00	39.00	26.75	28.25
Apr	17.70	16.99	19.37	18.58	14.71	14.29	39.00	39.00	26.75	28.25
May	18.21	16.91	19.88	18.58	15.10	14.38	39.00	39.00	26.75	28.25
Jun	18.27		19.94		15.40		39.00		26.75	
Jul	17.03		18.70		15.43		39.00		26.75	
Aug	16.64		18.31		13.63		39.00		26.75	
Mkt year 2/	17.55		19.23		14.68		38.33		25.58	

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: 6/11/2017

Table 7--U.S. feed grain imports by selected sources (1,000 metric tons) 1/, 6/13/2017

Import and country/region	----- 2014/15 -----		----- 2015/16 -----		2016/17	
	Mkt year	Jun-Apr	Mkt year	Jun-Apr	Jun-Apr	
Oats	Canada	1,731	1,639	1,379	1,307	1,451
	Sweden	72	72	62	62	5
	Finland	62	62	34	27	21
	All other countries	12	12	0	0	0
	Total 2/	1,876	1,785	1,475	1,396	1,477
Malting barley	Canada	334	315	283	279	94
	All other countries	28	28	0	0	17
	Total 2/	362	343	284	279	111
Other barley 3/	Canada	147	137	116	109	79
	All other countries	4	4	4	4	2
	Total 2/	152	141	119	113	81

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: 6/11/2017

Table 8--U.S. feed grain exports by selected destinations (1,000 metric tons) 1/, 6/13/2017

		----- 2014/15 -----		----- 2015/16 -----		2016/17
Export and country/region		Mkt year	Sep-Apr	Mkt year	Sep-Apr	Sep-Apr
Corn	Japan	12,003	7,330	10,392	5,234	8,925
	Mexico	11,333	6,888	13,337	8,431	8,757
	Colombia	4,371	3,005	4,548	3,876	3,779
	South Korea	3,934	2,314	2,964	1,028	4,121
	Peru	2,555	1,781	2,383	1,463	2,114
	China (Taiwan)	1,839	1,037	2,049	815	2,336
	Canada	1,490	1,027	1,006	667	493
	Egypt	1,235	642	852	275	332
	Saudi Arabia	1,185	661	1,389	489	1,734
	Guatemala	852	488	883	554	622
	Costa Rica	774	488	552	281	511
	China (Mainland)	747	309	321	262	32
	Venezuela	710	485	1,155	393	200
	Dominican Republic	607	382	253	37	629
	El Salvador	538	343	654	380	360
	Panama	450	295	392	203	357
	Honduras	428	256	550	334	326
	European Union-27	361	151	417	29	223
	Morocco	298	288	450	87	753
	Jamaica	282	190	283	185	169
	Algeria	239	180	663		91
	Nicaragua	191	114	258	109	205
Iran	138	73	0.095	0.075	0.031	
New Zealand, No Islands	106	52	55	28	12	
Trinidad And Tobago	89	45	92	66	46	
All other countries	666	394	2,305	535	2,852	
Total 2/	47,421	29,219	48,202	25,759	39,978	
Sorghum	China (Mainland)	8,328	6,125	7,008	5,525	3,380
	Sub-Saharan Africa	486	378	593	459	434
	Japan	83	73	79	58	158
	Mexico	21	15	625	400	414
	All other countries	17	12	296	250	22
	Total 2/	8,935	6,603	8,600	6,692	4,408
		----- 2014/15 -----		----- 2015/16 -----		2016/17
		Mkt year	Jun-Apr	Mkt year	Jun-Apr	Jun-Apr
Barley	Mexico	99	94	142	141	2
	Japan	90	73	5	4	16
	Canada	52	46	52	50	53
	China (Taiwan)	32	32	7	6	4
	All other countries	38	37	30	29	3
	Total 2/	311	282	235	230	77

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.