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Feed Outlook

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Record Yield Projected for 2018/19 Corn Crop

The first survey-based yield forecast for the 2018/19 corn crop indicates a yield gain of 4.4 bushels per acre to a record 178.4 bushels, compared with a weather-adjusted trend yield. If realized, this would produce a crop of 14.6 billion bushels from the forecast 81.8 million acres to be harvested, 356 million bushels over last month's forecast. Feed and residual is projected 100 million bushels over last month at 5.5 billion bushels due to the larger crop, lower expected prices, and higher forecast livestock production for all categories. Corn exports are projected 125 million bushels higher than last month at 2.4 billion, with prospects improved due to increased U.S. competiveness and reduced competition from Brazil. The increases in supply and demand result in ending stocks of 1.7 billion bushels. The season-average price received by farmers is projected down $0.20 per bushel to $3.60.

European weather conditions result in significant revisions down for the production of corn and wheat in 2018/19. The U.S. production increases offset these European reductions for now, backfilling global supplies of coarse grains. As a result of the large U.S. supply of corn, global feeding is increased over last month, especially in Europe, where some of this corn is replacing its own wheat and corn production. Coarse grain trade is shifted as a result of the changing production environment, with the United States increasing shipments along with Ukraine. These increases contribute to a net positive increase in trade for the October-September 2018/19 year.

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Domestic Outlook

U.S. Feed Grain Supplies Raised

U.S. feed grain supplies are raised 9.8 million metric tons this month as higher yields for corn, sorghum, and barley boosted production by 9.6 million tons. With carryin up a quarter million tons, supply is projected at 433.0 million tons, 5.9 million below 2017/18. Projected feed grain use is raised 6.4 million tons this month to 396.6 million, 2.9 million below 2017/18. Feed and residual is raised 2.3 million tons while food, seed, and industrial (FSI) is raised 2.8 million tons to 199.2 million due to greater sorghum grind for ethanol as foreign demand for sorghum wanes. Exports are raised 3.2 million tons to 64.3 million due to improved prospects for U.S. corn exports. Resulting ending stocks are projected 3.5 million tons lower at 46.5 million, which is 8.8 million below 2017/18.

For 2017/18, feed grain use is projected 0.3 million tons lower than last month at 393.7 million due to 0.3 million in increased sorghum ethanol grind offset by a 0.5-million-ton decline in sorghum exports. As a result, carryout is raised 0.3 million tons this month to 46.5 million.

Grain Consuming Animal Units

Grain consuming animal units (GCAU) for 2018/19 are projected at 100.5 million units, up incrementally from last month's 100.2 million and 1.5 million units over last year. Compared with last month, dairy cows, cattle on feed, and poultry contributed to the increase. Feed and residual use is projected at 1.47 tons per GCAU, 0.02 tons higher than last month and 0.02 million below 2017/18.

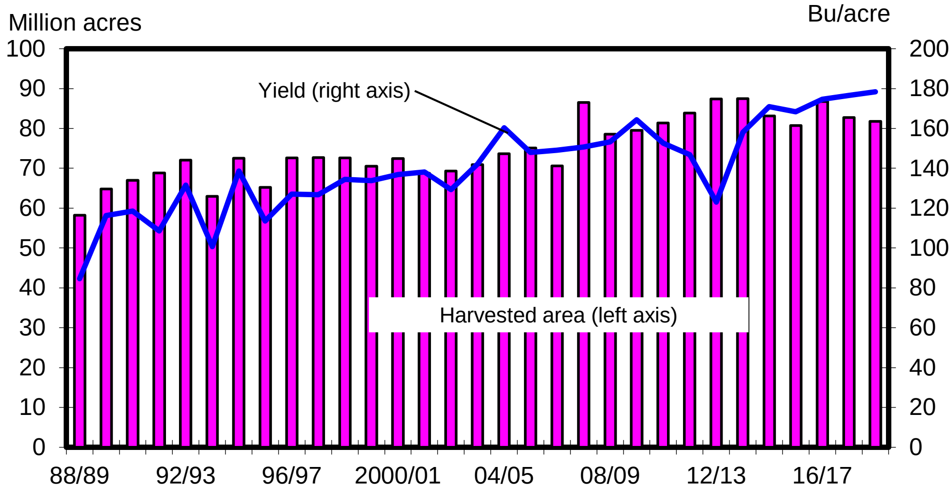
Feed and Residual Use

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 148.0 million metric tons, 0.3 million above last month's projection of 145.7 million and 4.5 million over the 143.5 million for 2017/18. Increased corn feeding combined with a reduction in wheat feeding accounted for the change from last month.

Projected 2018/19 Corn Yield Sets Record

USDA's National Agricultural Statistics Service (NASS) first survey-based yield forecast of the 2018/19 corn crop reported a yield gain of 4.4 bushels per acre to a record 178.4 bushels. If realized, this would produce a crop of 14,586 million bushels from the forecast 81.8 million acres to be harvested, 356 million over last month's forecast. This yield unseats the previous high of 176.6 million bushels in 2018/18. NASS's August 10 *Crop Production* report indicates higher yields in 2018/19 for Illinois, Indiana, Nebraska, Ohio, North Dakota, and South Dakota and lower yields for Missouri and Minnesota.

Figure 1
U.S. corn harvested area and yield



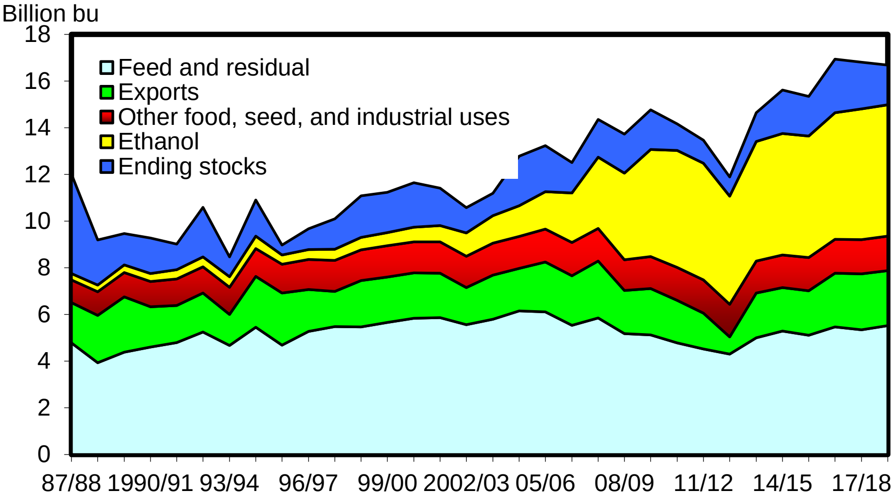
Sources: USDA, National Agricultural Statistics Service, *QuickStats* and USDA, World Agricultural Outlook Board, *Crop Projections, 2018.*

Supplies are projected at 16.664 million bushels with beginning stocks and imports unchanged at 2,027 million and 50 million bushels, respectively. Once again this month, supplies are projected the third highest ever, after 2016 and 2017.

Feed and residual is projected 100 million bushels over last month at 5,525 million due to the larger crop, lower expected prices, and higher forecast livestock production for all categories. Exports are projected 125 million bushels higher than last month at 2,350 million, with prospects improved due to increased U.S. competiveness and reduced competition from Brazil. FSI use is unchanged from last month's forecast, leaving projected disappearance at 14,980 million bushels, 225 million higher than last month's projection and 120 million over 2017/18.

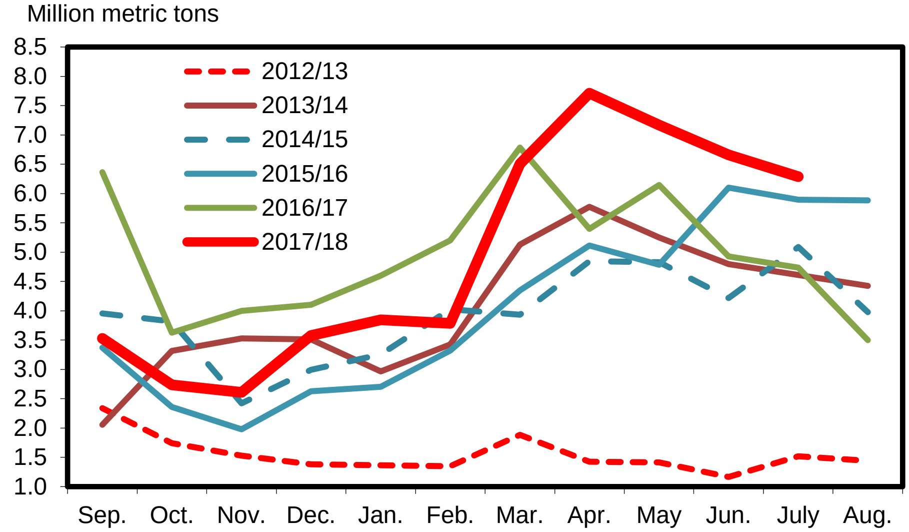
Resulting ending stocks are projected at 1,684 million bushels, 131 million over last month's projection. The stocks-to-use ratio of 11.2 indicates some easing of supply constraints

Figure 2
U.S. corn utilization



Note: Marketing year 2018/19 is projected.
Source: USDA, World Agricultural Outlook Board, *WASDE.*

Figure 3
Monthly U.S. corn exports

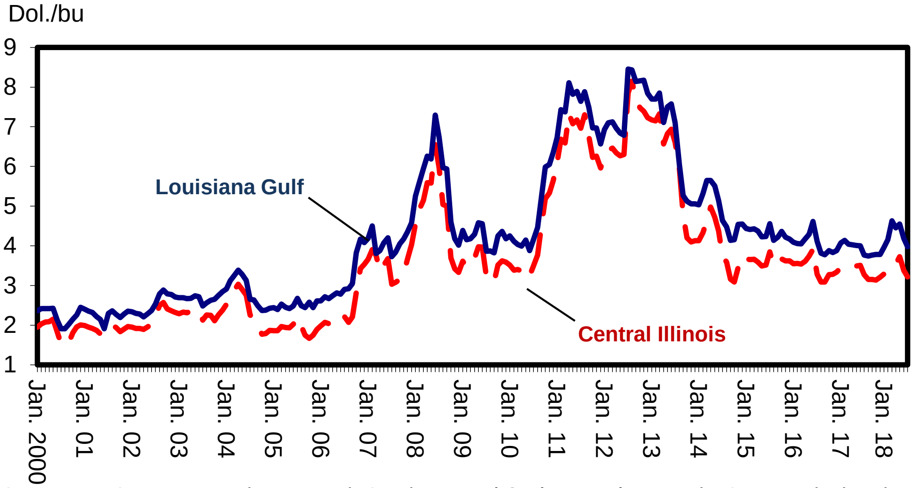


Source: USDC, U.S. Census, July 2018 *Grain Inspections*.

2018/19 Corn Price Projected 20 Cents Per Bushel Lower

The projected average price for corn received by farmers for 2018/19 is lowered $0.20 on each end for a range of $3.10 to $4.10 per bushel for a midpoint price of $3.60 per bushel, based on higher carryout. For 2017/18, the range is narrowed $0.05 on each end to $3.35 to $3.45, leaving the midpoint unchanged at $3.40 per bushel.

Figure 4
Monthly corn (yellow #2) prices for Central Illinois and Louisiana Gulf

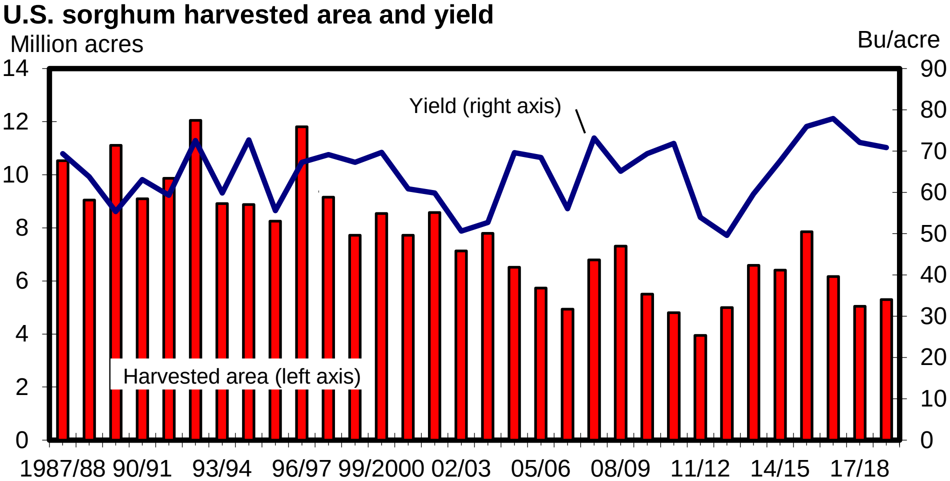


Sources: USDA, Economic Research Service, *Feed Grains Database* and USDA, Agricultural Marketing Service, http://marketnews.usda.gov/portal/lg.

Sorghum: Use Down in 2017/18, Increasing Ending Stocks

Production estimates for U.S. sorghum remain unchanged for the 2017/18 crop year at 363.8 million bushels, with 5.6 million acres dedicated to sorghum production and an expected yield of 72.1 bushels per acre. Sorghum FSI use is revised upward by 10.0 million bushels. This change is due to a 10.0-million-bushel increase in the sorghum use for ethanol fuel production. Additionally, exports are revised downward by 20.0 million bushels from 230.0 million to 210.0 million. This change is based on the lack of reported exports in recent months. Ending stocks are revised up by 10.0 million bushels in the 2017/18 trade year.

Figure 5
U.S. sorghum harvested area and yield



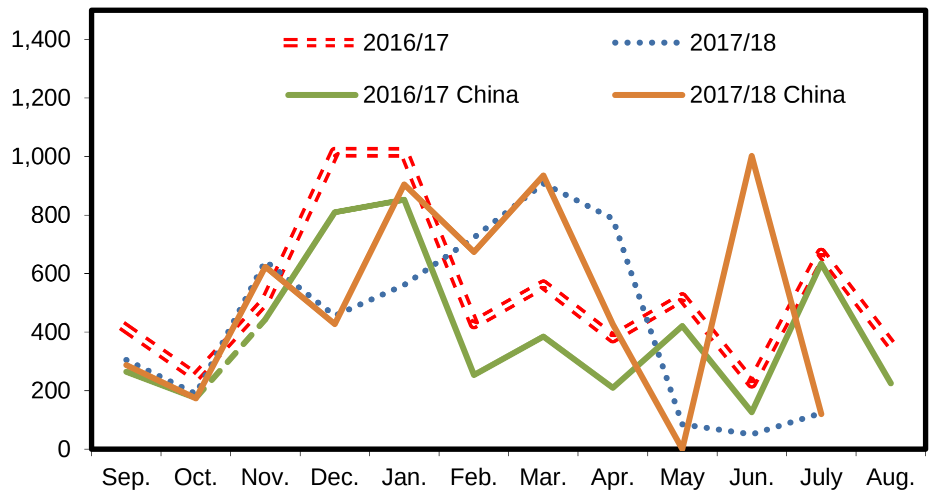
Sources: USDA, National Agricultural Statistics Service, *Quick Stats* and USDA, World Agricultural Outlook Board, *WASDE.*

Sorghum: Yield Projected Higher

NASS's first survey-based yield forecast of the 2018/19 sorghum crop reported a yield gain of 3.6 bushels per acre, compared with the trend yield to 70.9 bushels. If realized, this would produce a crop of 375.4 million bushels from the forecast 2.1 million acres harvested, 19.4 million over last month's forecast. NASS's August 10 *Crop Production* report indicates higher yields in 2018/19 (compared with 2017/18) for Kansas, Arkansas, Mississippi, Nebraska, South Dakota and lower yields for Texas, Colorado, Louisiana, Missouri, and Oklahoma.

Total supply is projected 29.4 million bushels higher to 419.7 million bushels, given the production increase and a 10-million-bushel increase in beginning stocks.

Figure 6
U.S. sorghum exports
1,000 metric tons

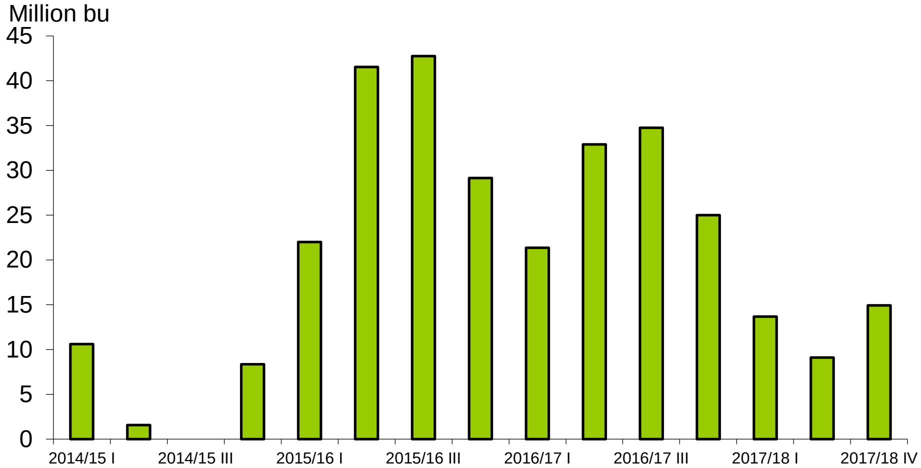


Source: USDC, U.S. Census Bureau, February 2018 *Grain Inspections.*

Total projected use is revised upward by 25.0 million bushels for the 2018/19 marketing year. The change this month is due to a 25-million-bushel increase in sorghum FSI use based on larger sorghum grind for ethanol, given expectations of reduced shipments to China.

Figure 7

U.S. sorghum for ethanol use by quarter



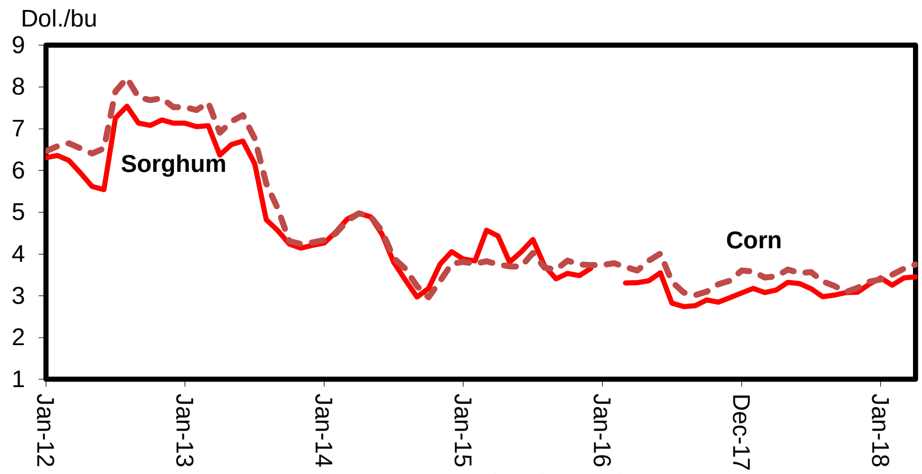
Note: Some quarters contain months for which data were withheld to avoid disclosing data for individual operations.

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

Projected ending stocks are 39.7 million bushels, 4.4 million greater than last month's forecast. The projected average price for sorghum received by farmers for 2018/19 is lowered $0.20 on each end for a range of $2.90 to $3.90 per bushel for a midpoint price of $3.40 per bushel, based on higher carryout. For 2017/18, the range is unchanged at $3.15 to $3.25, with the midpoint unchanged at $3.20 per bushel.

Figure 8

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

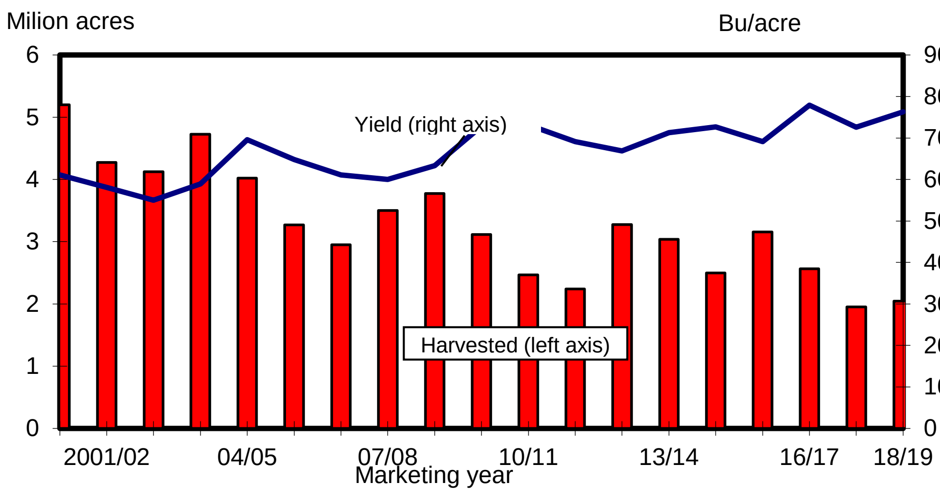


Sources: USDA, Economic Research Service, *Feed Grains Database* and USDA, Agricultural Marketing Service, http://marketnews.usda.gov/portal/lg.

Barley Yield Projected Higher

NASS's *Crop Production* reports a projected barley yield of 76.3 bushels per acre, 0.7 bushels higher than last month and 3.7 bushels higher than last year. If realized, this would produce a crop of 156.2 million bushels. Combined with carryin of 94.7 million bushels and imports pegged at 20 million, supplies are projected at 270.9 million bushels, 1.6 million higher than last month's forecast.

Figure 9
U.S. barley harvested acres and yields



Source: USDA, National Agricultural Statistics Service, *QuickStats.*

Compared with last month's forecast, yields were higher in California, Idaho, and Virginia. Yields fell in California, Montana, North Dakota, and Wyoming. Arizona and Minnesota saw no change. The largest barley-producing States are Idaho, Montana, and North Dakota. There were no changes to the 2017/18 balance sheet.

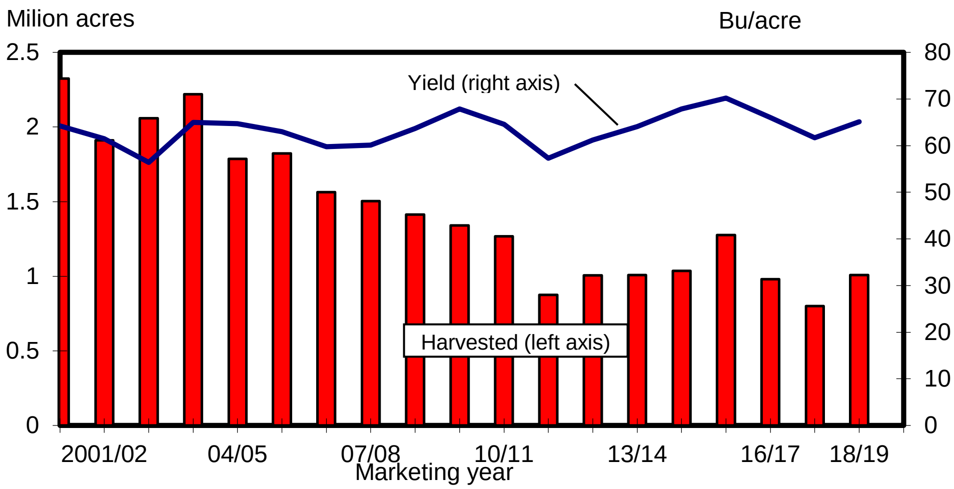
The season-average farm price is is projected with a range of $4.00 to $5.20 per bushel and a midpoint of $4.60 per bushel, unchanged from last month.

Projected Oats Yield Lowered

NASS's *Crop Production* reports a projected oats yield of 65.1 bushels per acre, 0.7 bushels below the July projection. If realized, this would produce a crop of 65.7 million bushels, 0.7 below last month's expectations. Projected oats supplies are lowered by the same amount to 201.7 million bushels, 12.6 higher than 2017/18. With no changes in the use categories, the balance sheet ends down 0.7 million bushels at 40.7 million, not enough of a change to affect the projected season average price received by farmers, which ranges from $2.40 to $3.10 per bushel with a midpoint of $2.80, unchanged from last month's forecast.

South Dakota, Minnesota, and North Dakota are the largest oats-producing States. Compared with July, yields increased in South Dakota and North Dakota and were steady in Minnesota.

Figure 10
U.S. oats harvested acres and yields



Source: USDA, National Agricultural Statistics Service, *QuickStats.*

International Outlook

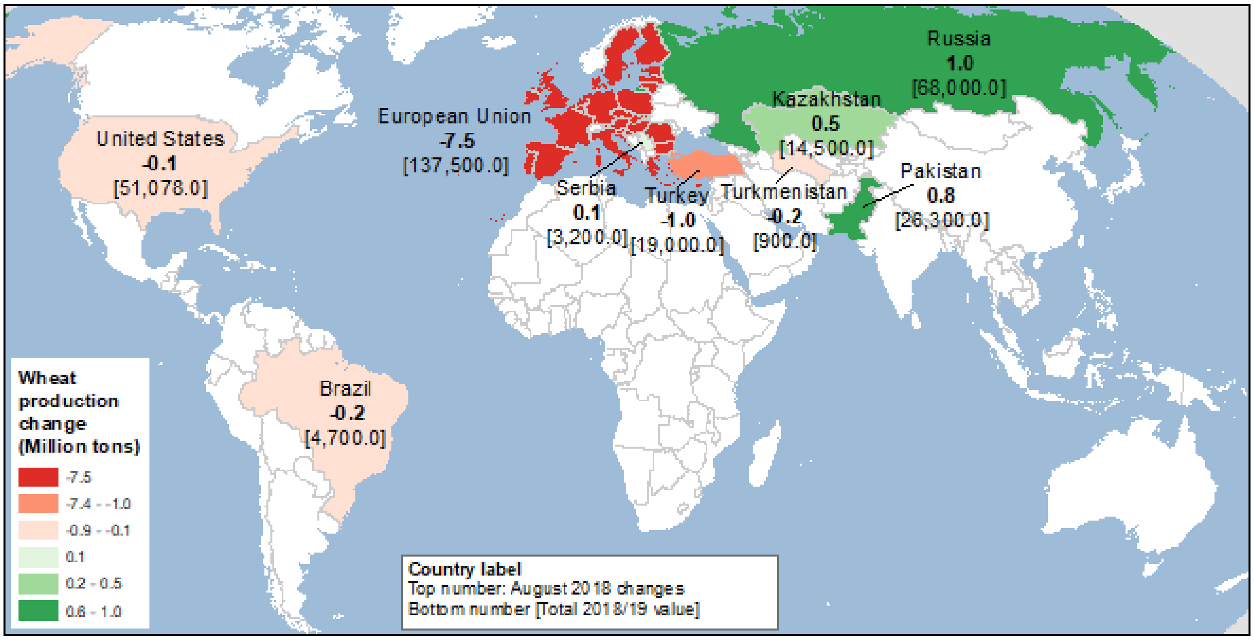
EU’s Production Declines Offset by U.S. Gains

World coarse grain production in 2018/19 has several sizable adjustments this month, with a large increase in 2018/19 production of 5.2 million tons. Much of this is driven by a 9.6-million-ton increase in U.S. production due to favorable growing conditions and a projected record corn yield, offset by a 4.2-million-ton projected decline in EU coarse grain production. Additionally, Zambia has experienced poor growing conditions, leading to projected production declines of 1.1 million tons; however, elsewhere in Africa, Zimbabwe has a production increase of 0.7 million tons. Production in 2017/18 is only fractionally revised, mostly due to new data becoming available in Brazil and other countries.

Most of the changes this month in projected world coarse grain production for 2018/19 are driven by unusually high temperatures and a lack of rainfall leading to a production decreases in Germany and France, reflected in the EU’s production decrease of 4.2 million tons over last month. The EU is now expected to produce 150.4 million tons of coarse grains, down from 154.7 million last month. However, the EU can be thought of as a tale of two regions, with the west (Germany and France) performing poorly, while at the same time, projections for several countries in the east are adjusted higher this month over last month, especially Ukraine due to favorable growing conditions. Similarly positive growing conditions were experienced in Serbia. Additionally, wheat production in the EU has been cut by 7.5 million tons for the 2018/19 trade year due to the same dry and hot conditions. In addition to the EU, Brazil is projected to see a decrease in corn production for the second-season crop due to a smaller projected area, although the area is still expected to be up year over year. The United States, however, more than reverses world losses with a 9.6-million-ton increase in its production alone, making projected global production of coarse grains for the 2018/19 season up 5.2 million tons to 1,342.1 million for the trade year.

For projected 2017/18 production of coarse grains, marginal adjustments down are made by 0.7 million tons. The majority of this decrease is due to new data coming from Brazil’s Companhia Nacional de Abastecimento (CONAB), which showed a 0.5-million-ton decrease in the country’s 2017/18 corn production.

Map A1 – Wheat production changes for 2018/19, August 2018



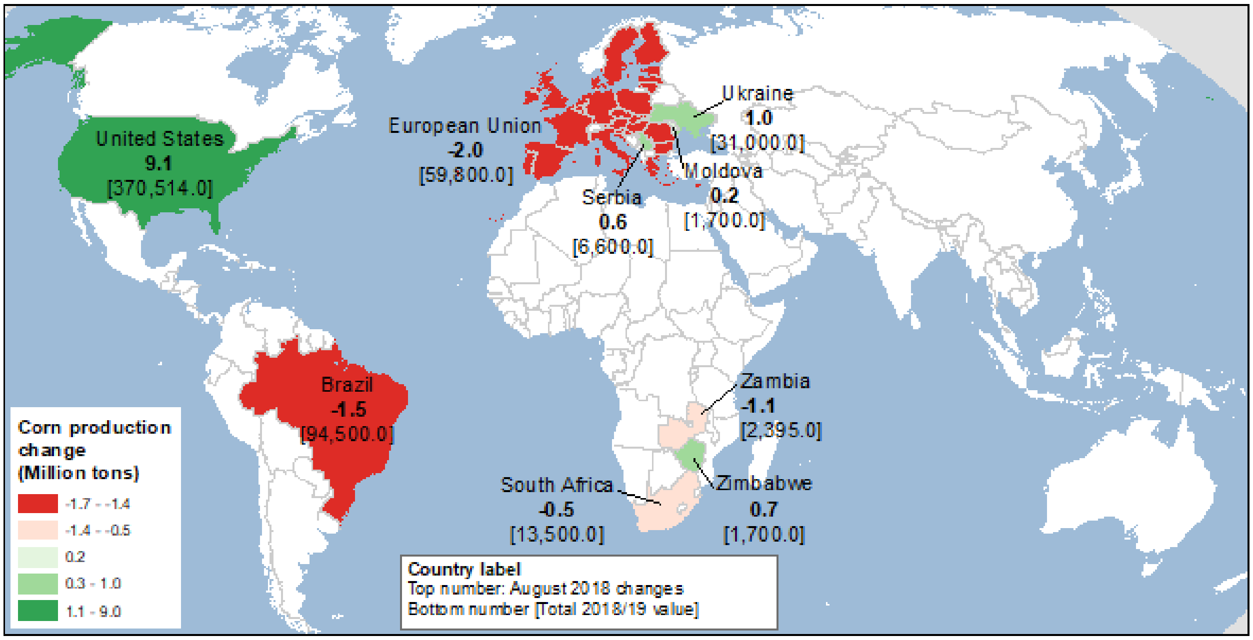
Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution online database.

Coarse Grain Use Increases Driven by U.S. Gains

Projected world coarse grain use in 2018/19 is up fractionally this month by 3.6 million tons to 1,381.7 million, with most of the increase coming from the United States.

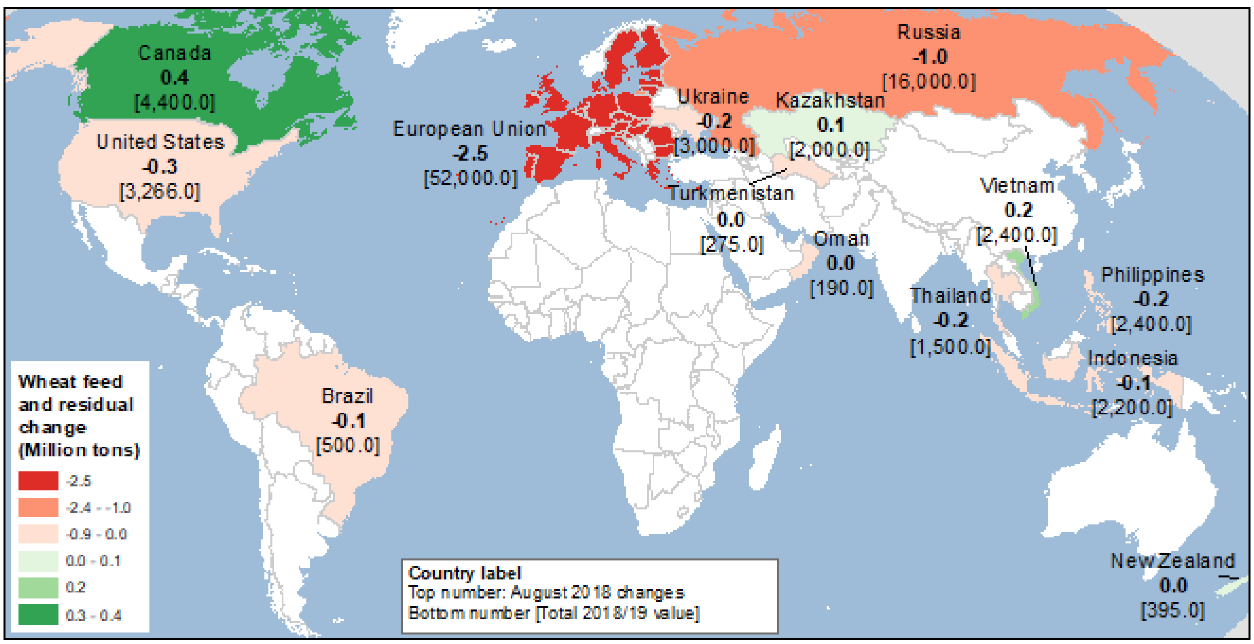
The largest change in foreign coarse grain use is increased corn use in the EU, up 1.0 million tons due to increased imports. Additionally, Brazil feeding is increased by 1.0 million tons in 2017/18 and 1.0 million tons in 2018/19 due to the country's supplies not being competitive for the export market and expected growth in domestic meat production. U.S. feed use is revised up by 2.5 million tons for 2018/19 due to a large boost in production, with food, seed, and industrial use also increasing 0.6 million tons, mostly due to use of sorghum for ethanol production.

Map A2 – Corn production changes for 2018/19, August 2018



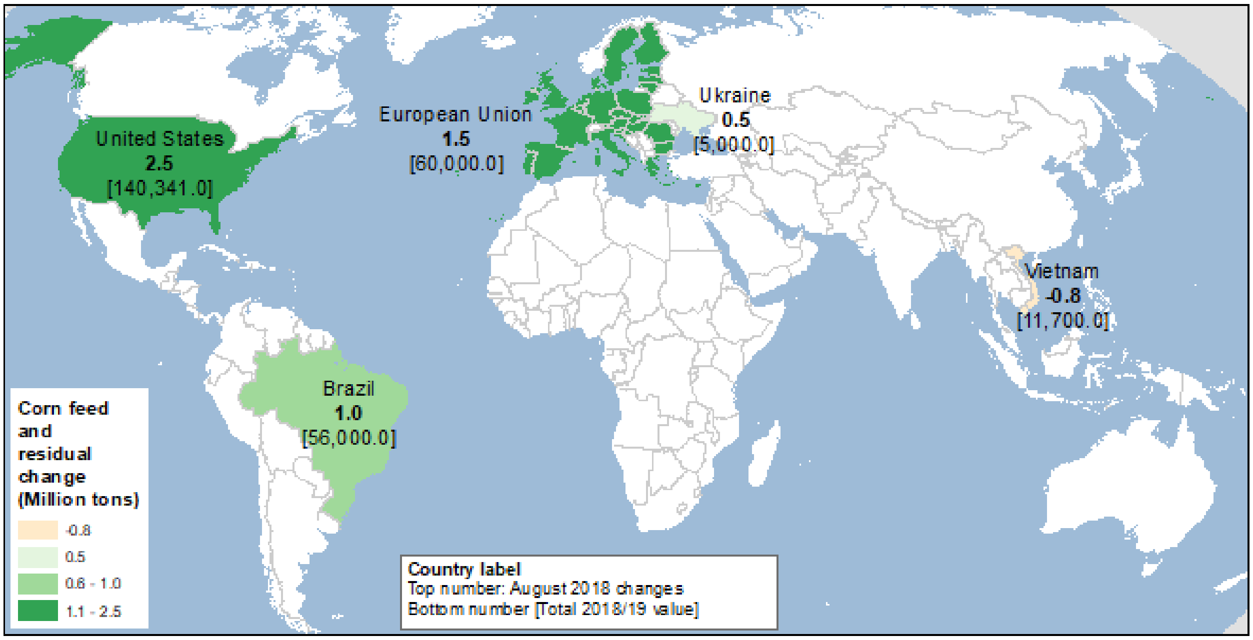
Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution online database.

Map A3 – Wheat feed and residual changes for 2018/19, August 2018



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

Map A4 – Corn feed and residual changes for 2018/19, August 2018



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

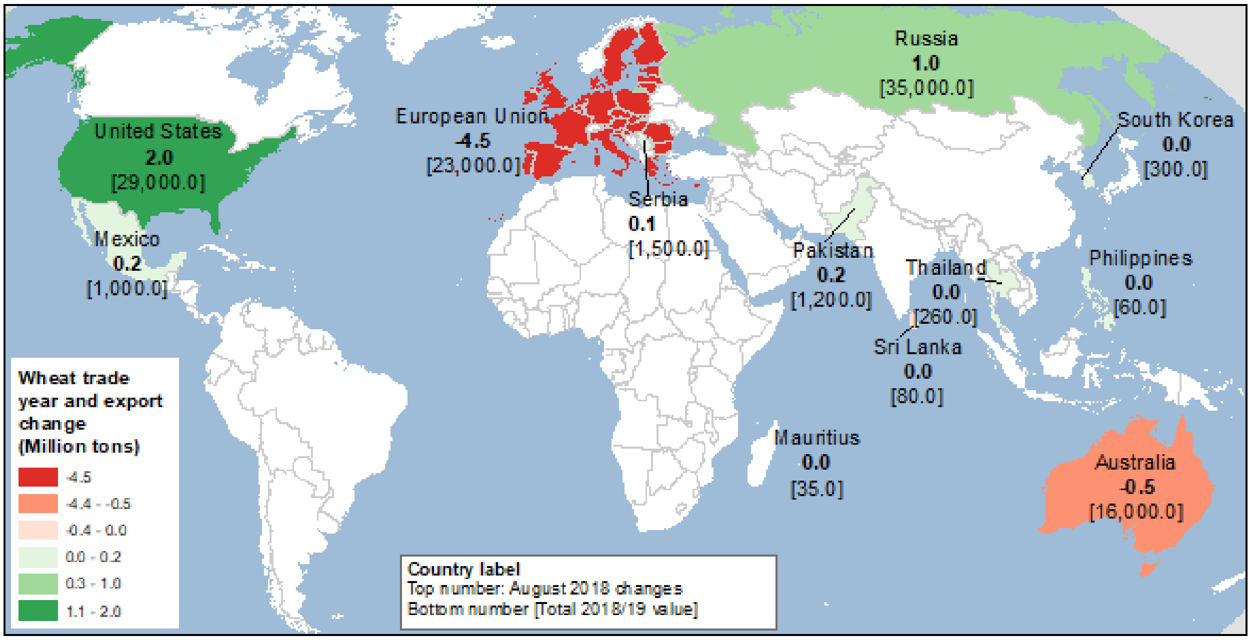
Projected Global Ending Stocks Up Due to U.S. Production

Increased supplies led to an increase in coarse grain stocks. World coarse grain ending stocks for 2018/19 are projected up 3.3 million tons this month to 183.1 million, with corn stocks increased by 3.5 million tons, while sorghum and oats stocks are projected fractionally down since last month. The largest stocks' changes other than for the United States are for Brazil (up 1.0 million tons, less exports and production) and Zambia (down 0.6 million tons, lower corn production). Many smaller changes are made for other countries.

World Coarse Grain Trade Lower in 2018/19

The August forecast for world coarse grain exports in the October-September international trade year 2018/19 is higher than the July forecast by 2.0 million tons. This global export figure is driven down by a 3.0-million-ton decrease in Brazil's expected exports due to lower production. Similarly, with poor production in the EU, its exports are similarly reduced by 0.8 million tons, while at the same time its imports are increased by 2.3 million tons to make up for the production reduction.

Map A5 – Wheat trade changes for 2018/19, August 2018



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

U.S. Corn Export Prospects Up With Boost in Production

World corn trade for 2018/19 is increased this month, up 0.9 million tons to 156.0 million. A contributing factor is a large decrease in the Brazilian corn crop, with Brazil alone reducing its exports by 3.0 million tons. To reverse this trend, the United States, with its increased production estimate, backfills trade with an increase of 2.5 million tons of corn. EU imports of corn, to make up for the EU’s deteriorating wheat and corn supplies, are offset by a 2.0-million-ton increase in its corn imports. Additionally, Ukraine corn exports are adjusted up by 0.5 million tons, with a larger crop expected in 2018/19.

World sorghum trade for 2017/18 is projected slightly down by 0.7 million tons, with the United States being the main driver. The United States reduced its 2017/18 export figures due to lower than anticipated shipments to China in June and July. Prospects for 2018/19 world sorghum trade are marginally reduced by 0.1 million tons.

Table A1 - World and U.S. coarse grain production[1] at a glance (2018/19), August 2018					
	Region or country	Production	Change from previous month[1]	YoY Change[2]	Comments
		Million tons			
Coarse grain production (total)					
	World	1342.1	+5.2	+27.7	
	Foreign	957.4	-4.3	+27.3	Production in Europe is revised down due to poor conditions.
	United States	384.7	+9.6	+0.4	US production is increased on record corn yield.
World production of coarse grains by type of grain					
CORN					
	World	1,033.3	+6.8	+27.8	
	Foreign	662.3	-2.3	+28.2	Europe experiencing poor conditions and Brazilian expectations for their second season crop are reduced due to anticipated lower area
	United States	371.0	+9.1	-0.5	Record yield projected
BARLEY					
	World	144.3	-0.3	+0.1	
	Foreign	141.2	-0.3	-0.2	Europe experiencing poor growing conditions, but Ukraine production is up
	United States	3.1	Small positive change	+0.3	
SORGHUM					
	World	59.2	+0.5	+1.7	
	Foreign	49.7	Small negative change	+1.4	
	United States	9.5	+0.5	+0.2	
OATS					
	World	23.5	Small positive change	Small positive change	
	Foreign	22.6	Small positive change	-0.2	
	United States	1.0	Small negative change	+0.2	
RYE					
	World	11.0	-1.3	-1.2	Due to European weather conditions
	Foreign	10.8	-1.3	-1.3	
	United States	0.3	No change	Small change	
MIXED GRAIN					
	World/Foreign	15.5	-0.3	-0.2	

[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, August 2018

	Type of crop	Crop year	Production	Change in forecast[1]	YoY[2] change	Comments
			Million tons			
Coarse grain production changes by country and by type of grain (2018/19)						
RUSSIA						
↓	**Corn**	*Oct-Sep*	**12.0**	**No change**	**-1.2**	
↓	**Barley**	*July-June*	**17.0**	**No change**	**-3.2**	
EUROPEAN UNION						
↓	**Barley**	*July-June*	**59.2**	**-1.4**	**+0.1**	
↑	**Corn**	*Oct-Sep*	**69.8**	**-1.7**	**-2.5**	
↑	**Oats**	*July-June*	**8.6**	Small change	**+0.5**	
↑	**Mixed grain**	*July-June*	**15.2**	**-0.3**	**-0.2**	
↑	**Rye**	*July-June*	**7.0**	**-1.0**	**-0.4**	
AUSTRALIA						
↓	**Barley**	*Nov-Oct*	**8.8**	**No change**	**-0.1**	
↓	**Oats**	*Nov-Oct*	**1.1**	**No change**	Small change	
CANADA						
↑	**Barley**	*Aug-July*	**8.8**	**No change**	**+0.9**	Barley area is projected higher based on the recently published June Statistics Canada report.
↓	**Corn**	*Oct-Sep*	**14.8**	**No change**	**+0.7**	A small decrease in corn area is based on the June Statistics Canada report.
↓	**Oats**	*Aug-July*	**3.5**	**No change**	**-0.2**	Smaller oats area is based on the June Statistics Canada report.

[1]Change from previous month. Smaller changes are also made for several countries, see maps A1 and A2 for corn and barley production changes.

[2] YoY: year over year changes. [3] ABARES: the Australian Bureau of Agricultural and Resource Economics and Sciences.

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

Contacts & Additional Information

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Data

Tables from the *Sugar and Sweeteners Yearbook* are available in the Sugar and Sweeteners Topics at http://www.ers.usda.gov/topics/sugar/. They contain the latest data and historical information on the production, use, prices, imports, and exports of sugar and sweeteners.

Related Websites

Feed Grains Database https://www.ers.usda.gov/data-products/feed-grains-database.aspx
Feed Grains Yearbook Tables https://www.ers.usda.gov/data-products/feed-grains-database/feed-grains-yearbook-tables/
U.S. Bioenergy Statistics https://www.ers.usda.gov/data-products/us-bioenergy-statistics.aspx
Sugar and Sweeteners Outlook http://www.ers.usda.gov/Publications/SSS/
WASDE http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documented=1194

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Table 1--Feed grains: U.S. quarterly supply and disappearance (million bushels), 8/14/2018

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	1,709	587	694	2,990	1,737	3.55
		Mkt yr	1,731	13,602	68	15,401	6,647	5,118	1,899	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	1,711	1,525	539	3,776	8,622	3.39
		Mar-May	8,622		17	8,639	1,741	982	687	3,410	5,229	3.46
		Jun-Aug	5,229		14	5,243	1,743	687	520	2,949	2,293	3.40
		Mkt yr	1,737	15,148	57	16,942	6,885	5,470	2,294	14,649	2,293	3.36
	2017/18	Sep-Nov	2,293	14,604	11	16,908	1,745	2,247	349	4,342	12,567	3.22
		Dec-Feb	12,567		9	12,575	1,737	1,505	441	3,683	8,892	3.30
		Mar-May	8,892		8	8,900	1,779	944	871	3,594	5,306	3.58
		Mkt yr	2,293	14,604	40	16,937	7,060	5,450	2,400	14,910	2,027	3.35-3.45
	2018/19	Mkt yr	2,027	14,586	50	16,664	7,105	5,525	2,350	14,980	1,684	3.10-4.10
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	-43.65	67.65	53.73	36.63	3.33
		Mkt yr	18.41	596.75	4.59	619.75	136.95	104.32	341.85	583.12	36.63	3.31
	2016/17	Sep-Nov	36.63	480.26	0.00	516.90	21.65	145.29	41.81	208.75	308.15	2.62
		Dec-Feb	308.15		0.00	308.15	33.06	5.04	89.32	127.41	180.75	2.69
		Mar-May	180.75		0.00	180.75	34.62	2.41	59.02	96.04	84.71	2.79
		Jun-Aug	84.71		1.73	86.44	25.30	-19.99	47.67	52.98	33.46	3.53
		Mkt yr	36.63	480.26	1.74	518.63	114.61	132.75	237.82	485.18	33.46	2.79
	2017/18	Sep-Nov	33.46	363.83	1.91	399.20	13.92	112.09	45.71	171.71	227.49	3.10
		Dec-Feb	227.49		0.05	227.55	9.24	6.72	71.33	87.29	140.26	3.19
		Mar-May	140.26		0.01	140.27	15.93	-14.55	73.58	74.95	65.31	3.40
		Mkt yr	33.46	363.83	2.00	399.29	60.00	85.00	210.00	355.00	44.29	3.15-3.25
	2018/19	Mkt yr	44.29	375.39		419.68	125.00	80.00	175.00	380.00	39.68	2.90-3.90

Table 1--Feed grains: U.S. quarterly supply and disappearance, cont. (million bushels), 8/14/2018

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	41	29	2	71	180	4.52
		Sep-Nov	180		2	182	38	-17	2	23	159	4.43
		Dec-Feb	159		2	161	35	-6	1	31	130	4.47
		Mar-May	130		3	133	43	-6	1	38	95	4.45
		Mkt yr	106	142	9	257	157	0	5	163	95	4.47
	2018/19	Mkt yr	95	156	20	271	155	15	5	175	96	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	161	50	2.06
	2017/18	Jun-Aug	50	49	19	119	18	28	1	47	72	2.35
		Sep-Nov	72		30	102	18	17	1	36	66	2.58
		Dec-Feb	66		20	86	18	13	1	31	55	2.97
		Mar-May	55		20	75	24	10	1	34	41	2.93
		Mkt yr	50	49	89	189	78	68	2	148	41	2.58
	2018/19	Mkt yr	41	66	95	202	79	80	2	161	41	2.50-3.10

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: 8/12/2018

Table 2--Feed and residual use of wheat and coarse grains, 8/14/2018

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)
2016/17	Q1 Sep-Nov	57.8	3.7	-0.0	0.2	61.8	-0.8	60.9		
	Q2 Dec-Feb	38.7	0.1	0.3	0.3	39.5	-0.4	39.1		
	Q3 Mar-May	24.9	0.1	-0.1	0.2	25.0	-1.7	23.3		
	Q4 Jun-Aug	17.4	-0.5	0.6	0.5	18.0	4.5	22.5		
	MY Sep-Aug	138.9	3.4	0.8	1.2	144.3	1.6	145.9	95.7	1.5
2017/18	Q1 Sep-Nov	57.1	2.8	-0.4	0.3	59.9	-1.5	58.4		
	Q2 Dec-Feb	38.2	0.2	-0.1	0.2	38.5	-0.4	38.1		
	Q3 Mar-May	24.0	-0.4	-0.1	0.2	23.7	-1.2	22.4		
	MY Sep-Aug	138.4	2.2	-0.3	1.4	141.7	1.8	143.5	98.7	1.5
2018/19	MY Sep-Aug	140.3	2.0	0.9	1.4	144.7	3.3	148.0	100.5	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, 8/14/2018

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
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	3.38	4.62	4.01	4.19		7.56
Jul	3.28	3.51	3.22	4.11	4.00	3.98		
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)		
	2016/17	2017/18	2018/19	2016/17	2017/18	2016/17	2017/18	2018/19
Jun	2.36	2.05	2.85		4.70	2.58	2.95	2.88
Jul	2.33	2.05	2.85		4.67	2.61	3.17	2.86
Aug	2.08	2.10			4.70	2.34	2.98	
Sep	1.95	2.10			4.70	2.29	2.87	
Oct	2.00	2.10			4.70	2.67	2.97	
Nov	2.00	2.36				2.84	2.94	
Dec	2.00	2.61			4.85	2.92	2.73	
Jan	2.00	2.65			4.85	2.97	2.90	
Feb	2.00	2.81			4.85	3.07	2.96	
Mar	2.02	2.85		4.70	4.50	2.90	2.79	
Apr	2.05	2.85				2.86	2.72	
May	2.05	2.85				2.88	2.89	
Mkt year	2.07	2.45		4.70		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.

Table 4--Selected feed and feed byproduct prices (dollars per ton), 8/14/2018

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	355.71	284.00	179.38	257.50	107.13	68.38		568.13	475.75	
Jul	371.49	326.04	341.08	280.00	200.84	253.13	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	189.00
Jun	345.00	248.13	288.75	170.50	105.25	158.50	57.94	60.39	89.50	154.00	181.00
Jul	381.67	276.25	283.75	149.38	110.63	139.30	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.

2/ [illegible]

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), 8/14/2018

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	113.13	88.81	58.20	1,343.08	35.78	49.92	0.00	1,688.92
	Q2 Dec-Feb	106.71	88.53	56.36	1,371.21	36.35	52.33	0.00	1,711.49
	Q3 Mar-May	120.23	96.89	59.70	1,346.10	36.72	54.45	27.25	1,741.34
	Q4 Jun-Aug	126.36	97.04	61.20	1,371.56	37.15	47.60	2.05	1,742.96
	MY Sep-Aug	466.43	371.26	235.45	5,431.95	146.00	204.30	29.30	6,884.70
2017/18	Q1 Sep-Nov	112.55	93.67	59.72	1,391.29	36.30	51.50	0.00	1,745.03
	Q2 Dec-Feb	105.21	87.91	56.87	1,397.46	38.10	51.60	0.00	1,737.15
	Q3 Mar-May	117.97	94.42	58.56	1,388.64	39.90	52.00	27.80	1,779.30
	MY Sep-Aug	460.00	375.00	240.00	5,600.00	149.00	206.70	29.30	7,060.00
2018/19	MY Sep-Aug	460.00	390.00	240.00	5,625.00	150.00	210.10	29.90	7,105.00

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

Source: Calculated by USDA, Economic Research Service.

Date run: 8/12/2018

Table 6--Wholesale corn milling product and byproduct prices, 8/14/2018

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	15.64	18.56	17.31	14.74	14.77	39.00	39.25	28.25	
Jul	16.89	15.28	18.56	16.95	15.04	14.20	39.00	39.25	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: 8/12/2018

Table 7--U.S. feed grain imports by selected sources (1,000 metric tons) 1/, 8/14/2018

Import and country/region		---------- 2016/17 ---------- Mkt year	Jun	---------- 2017/18 ---------- Mkt year	Jun	2018/19 Jun
Oats	Canada	1,507	100	1,483	81	97
	Sweden	27		41		
	Finland	21		16		
	All other countries	0	0	0	0	0
	Total 2/	1,556	100	1,540	81	97
Malting barley	Canada	102	10	87	9	3
	All other countries	17	0	1	0	0
	Total 2/	119	10	88	9	3
Other barley 3/	Canada	89	6	109	11	7
	All other countries	2	0	1	0	0
	Total 2/	90	6	110	11	7

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: 8/12/2018

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

Export and country/region		---------- 2015/16 ---------- Mkt year	Sep-Jun	---------- 2016/17 ---------- Mkt year	Sep-Jun	2017/18 Sep-Jun
Corn	Mexico	13,337	11,005	13,932	11,373	12,389
	Japan	10,439	7,731	13,557	11,501	9,942
	Colombia	4,548	4,019	4,733	3,984	4,360
	South Korea	2,964	1,677	5,601	5,332	4,432
	Peru	2,379	1,906	2,989	2,472	2,683
	China (Taiwan)	2,040	1,357	2,962	2,735	1,801
	Saudi Arabia	1,389	1,049	2,163	2,092	1,162
	Venezuela	1,155	822	419	325	405
	Canada	1,014	827	704	588	1,288
	Guatemala	906	738	993	803	709
	Egypt	852	520	323	277	1,015
	Algeria	663	346	91	91	48
	El Salvador	631	530	593	491	368
	Costa Rica	552	416	819	665	713
	Honduras	550	452	506	397	490
	Morocco	450	272	871	871	710
	European Union-27	413	226	843	648	1,904
	Vietnam	413	315	200	200	1,774
	Panama	392	303	504	423	411
	Israel	388	139	84	68	359
	Chile	353	224	543	543	0.595
	Jamaica	283	225	275	223	251
	China (Mainland)	264	262	807	364	305
	Nicaragua	258	190	329	266	228
	Dominican Republic	253	197	807	762	455
	All other countries	1,342	943	2,621	2,500	1,111
	Total 2/	48,229	36,688	58,270	49,994	49,313
Sorghum	China (Mainland)	7,091	6,079	4,740	3,880	4,153
	Mexico	625	511	585	537	68
	Sub-Saharan Africa	593	480	467	390	273
	Pakistan	205	205	0.466	0.466	
	All other countries	170	131	248	247	393
	Total 2/	8,683	7,406	6,041	5,055	4,886
		---------- 2016/17 ---------- Mkt year	Jun	---------- 2017/18 ---------- Mkt year	Jun	2018/19 Jun
Barley	Canada	63	7	69	8	3
	Japan	23	1	31	4	3
	China (Taiwan)	4	0.735	5	0.383	0.252
	Mexico	2		0.542		0.002
	All other countries	3	0.147	6	0.870	1
	Total 2/	95	10	111	13	8

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: 8/12/2018