#### **United States Department of Agriculture**



#### **Economic Research Service | Situation and Outlook Report**

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## Wheat Outlook

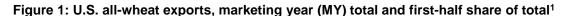
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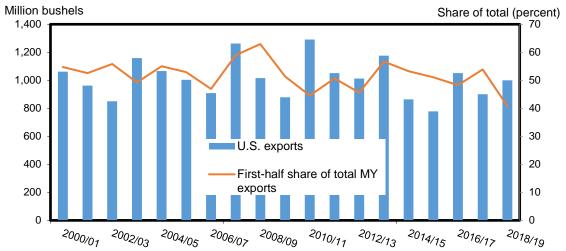
#### In this report:

- Domestic Outlook
- International Outlook
  - o Country Focus-Australia

# U.S. Exports Cut 25 Million Bushels on Sluggish Sales in First Half of 2018/19 Marketing Year

This month, projected U.S. all-wheat exports for the 2018/19 marketing year are trimmed by 25 million bushels to 1,000 million. Export sales through the first 6 months of the marketing year are projected to constitute just 41 percent of the current marketing year total and compare to the 10-year average of 52 percent (fig. 1). Sluggish sales of hard red winter wheat have driven the first-half share of marketing year export sales of this class to historically low levels. U.S. wheat sales are expected to accelerate in the second half of the marketing year. However, the United States will continue to face strong competition in global wheat markets, most notably from Russia. Russian exports for the 2018/19 marketing year are raised 1.5 million tons to 36.5 million on this competitor's still-brisk pace of sales.



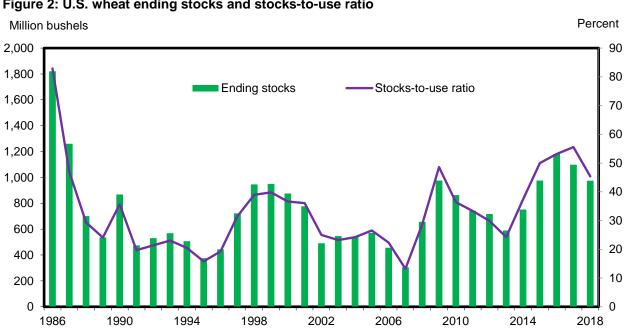


<sup>1</sup> 2018/19 total exports and first-half share are projected. Sources: USDA, World Agricultural Supply and Demand Estimates and USDA, Economic Research Service calculations.

## **Domestic Outlook**

## Domestic Changes at a Glance:

- U.S. ending stocks are raised 25 million bushels this month, to 974 million, on reduced export use.
  - The stock-to-use ratio is now 45 percent and compares to 55 percent for the 2017/18 marketing year (fig. 2).
- A 25 million bushel reduction in U.S. exports, to 1,000 million, coincides with a 1.5 million ton (55.15 million bushel-equivalent) increase in projected Russia exports.
  - U.S. exports for hard red winter wheat in the first half of the marketing year are historically low, leading to a 40 million bushel reduction in the 2018/19 export projection for the class.
- The 2018/19 season-average farm price is raised 5 cents per bushel to \$5.15 at the midpoint; the price range is raised 15 cents on the low end and lowered 5 cents on the high end.
- Three key wheat-related reports will be released in January by USDA, National Agricultural Statistics Service (NASS): Crop Production, Grain Stocks, and Winter Wheat and Canola Seedings.
  - Final estimates of 2018/19 production will also be released in January.



Sources: USDA, World Agricultural Outlook Board and Economic Research Service calculations.

Table 1 - U.S. w	heat supply and	d utilization at	a glance, 2018/	19
Balance sheet item	2018/19 (November)	2018/19 (December)	Change from previous month	Comments
Supply, total				May-June Marketing Year (MY)
Beginning stocks	1,098.9	1,098.9	0.0	
Production	1,884.5	1,884.5	0.0	
Imports	140.0	140.0	0.0	
Supply, total	3,123.3	3,123.3	0.0	
Demand				
Food	970.0	970.0	0.0	Food use will be re- evaluated after the release of the February 1, 2019, USDA, NASS <i>Flour Milling</i> <i>Products</i> report.
Seed	69.0	69.0	0.0	Seed use will be re- evaluated subsequent to updates in projected 2019/20 planted area. The January release of the USDA, NASS Winter Wheat and Canola Seedings report will provide an opportunity to review winter wheat planted area.
Feed and residual	110.0	110.0	0.0	
Domestic, total	1,149.0	1,149.0	0.0	
Exports	1,025.0	1,000.0	-25.0	The hard red winter wheat export projection is cut 40 million bushels to 320 million; soft red winter and hard red spring export projections are raised 10 million and 5 million, respectively.
Use, total	2,174.0	2,149.0	-25.0	Use is decreased on net lower projected exports.
Ending stocks	949.3	974.3	25.0	Ending stocks are raised due to reduced export use, but are down 11 percent from the 2017/18 ending stocks estimate.  ural Supply and Demand

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

#### 2018/19 U.S. Wheat Balance Sheet Minimally Changed From November

Ahead of the January release of USDA, NASS's *Crop Production, Grain Stocks*, and *Winter Wheat and Canola Seedings* reports, 2018/19 supply and use categories for wheat are minimally changed this month. Exports are trimmed 25 million bushels to 1,000 million on historically low exports in the first half of the marketing year. All of the cut is attributed to hard red winter (HRW) wheat. HRW exports for the 2018/19 marketing year are reduced by 40 million bushels this month and are only partly offset by a 10 million bushel increase in projected soft red winter (SRW) exports and a 5 million bushel increase in the hard red spring (HRS) projection. On a market-year basis, U.S. wheat exports are reduced 680,000 tons to 27.9 million, reflecting sluggish sales and strong price competition from Russia in winter wheat markets. Despite the lowered U.S. export projection, USDA, NASS-reported monthly prices and expectations for the remainder of the marketing year support a 5-cent increase in the U.S. season-average midpoint price to \$5.15 per bushel.

#### Winter Wheat

In January 2018, USDA, NASS will release its final wheat estimates for the 2018/19 marketing year and its first official projections for winter wheat by class and desert durum seeded area for 2019. Last year's January *Winter Wheat and Canola Seedings* report projected winter wheat planted area to decline by less than 1 percent from the previous year, to 32.6 million acres. Later, September's *Small Grains Annual* pegged the winter wheat planted area at 32.54 million acres, virtually on par with the earlier projection, providing evidence that the January forecast for winter wheat planted area is an excellent indicator of the final estimate.

In October, the USDA, Office of the Chief Economist released the latest long-term (10-year) commodity balance sheet projections. Inherent in the all-wheat planted area projection was an assumption of essentially normal planting progress. Subsequent to the release of the preliminary estimates, a large swath of winter wheat growing area was beset by poor weather conditions that delayed the old crop (mainly corn and soybean) harvest. Harvest delays and saturated soils, in turn, pushed back the planting of the 2019 winter wheat crop.

By the week ending November 25, USDA, NASS reported that 95 percent of the winter wheat crop had been planted, compared to the 5-year average of 99 percent. With the planting window essentially closed, it is expected that winter wheat sowings—especially in Kansas—will be below initial expectations. Several news outlets have reported that significant delays in winter wheat planting led to some farmers opting out of winter wheat production, which, in turn, is expected to reduce total sowings to lower levels than for the 2018 crop. A direct link between planting progress in fall and ultimate winter wheat yields and production is statistically weak (fig.

3). Nonetheless, significant declines in planted area—signaled by delayed planting progress—may indeed portend reduced year-to-year winter wheat production.

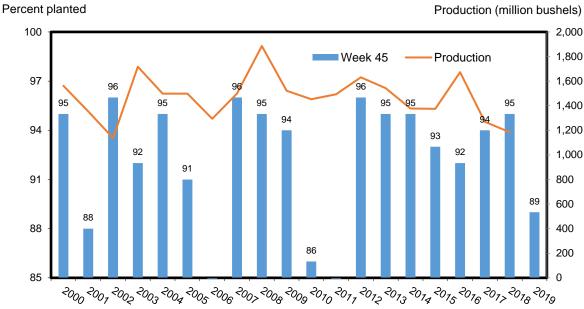


Figure 3: National winter wheat (percent) planted by week 45 and production<sup>1</sup>

<sup>1</sup> Week 45 winter wheat planted share data is not available for 2006 and 2011. Source: USDA, National Agricutural Statistics Service, *Quick Stats Database*.

As the 2019 winter wheat crop heads into dormancy, winter wheat emergence is also reported to be behind schedule. As of the last USDA, NASS *Crop Progress* report on November 25, just 86 percent of the winter wheat crop had emerged, compared to the 5-year average of 92 percent. In Kansas, a key winter wheat-growing State, just 87 percent of the winter wheat crop had emerged, compared to the 5-year average of 96 percent. While maturation of the nascent winter wheat crop is behind the average pace, winter wheat conditions appear to be slightly better than for the same period in 2017. Fifty-five percent of the crop is rated "good" to "excellent," 5 percent higher than a year earlier.

#### Spring Wheat and Durum

No production changes are made this month to spring or durum wheat. Hard red spring (HRS) exports are increased 5 million bushels to 300 million, an increase of 31 percent over last year's projection. This increase is due to growing demand from Southeast Asian markets, which have thus far offset the lack of sales to traditional HRS markets in South America and no sales to China. Durum exports are unchanged and remain at 30 million bushels, up from 17.5 million in 2017/18.

#### Grain Transportation Report Highlights Wheat Transportation and Landed Costs

The December 6 edition of the USDA, Agricultural Marketing Service (AMS) *Grain Transportation* report includes a multi-page feature titled "Third Quarter Wheat Transportation and Landed Costs Mixed." In other forums, the relatively high cost of transporting U.S. wheat has been flagged as contributing to sluggish U.S. wheat export sales. An in-depth review of wheat transportation costs largely affirms that both rail and ocean freight rates are higher year-to-year, as well as higher in the third quarter relative to the second quarter.

The most recent *Grain Transportation* report finds that costs to transport wheat by rail from Kansas to the Pacific Northwest (PNW) for export to Japan increased 2 percent quarter-to-quarter. Similar costs from North Dakota via PNW to Japan are unchanged. Year-to-year, costs to rail wheat from Kansas through the PNW to Japan jumped 7 percent; North Dakota through the PNW to Japan increased 3 percent over the same period. The authors report that ocean rates for shipping wheat from PNW and the Gulf to Japan increased 2 percent and 4 percent, respectively, from the second to the third quarter. Year-to-year, ocean rates in the PNW and the Gulf to Japan increased an average of 21 percent and 15 percent, respectively, due to increasing demand for iron ore and coal. This surge was attributed in a previous *Grain Transportation* report to the re-stocking of iron and coal supplies in Asia and Europe.

On a positive note, the December 6 AMS report found that the average costs of moving wheat from either Kansas or North Dakota by truck to a rail-served grain elevator is down 13 percent in the third quarter and down 19 percent year-to-year—primarily due to less demand for shipping grain by truck. Despite a general inching up of transportation costs, total wheat inspections are indicated to be on the rise, and shipments of wheat to Asia and Latin America continue to increase. Thus, transportation costs, while higher and rising, have not proved to be prohibitive and are not expected to inhibit reaching the current 2018/19 all-wheat export forecast of 1,000 million bushels. Indeed, as the marketing year progresses, competitor wheat stocks are expected to diminish, driving up associated prices and supporting increased U.S. competitiveness in global wheat markets.

## **International Outlook**

## Australian Wheat Balance Changes

Global wheat production for 2018/19 is lowered this month by 0.1 million tons to 733.4 million, as a reduction for Australian wheat output is almost wholly offset by upward adjustments in production for Canada and Mexico.

Australia is experiencing its worst drought since 2009/10 from the perspective of wheat yields, and since 2007/08 in terms of crop size. The drought also has generated various, and sometimes counterintuitive, changes in the country's wheat balance. For an in-depth discussion of this year's Australian crop situation, see the feature below.

#### **COUNTRY FOCUS: AUSTRALIA**

#### **Unusual Wheat Developments in Australia**

By Olga Liefert

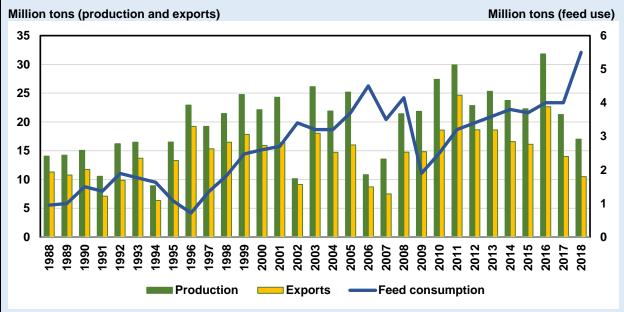
Drought in the eastern Australian States throughout the growing season is reducing the volume of the grain harvest (with obvious consequences for exports). But that's not all. Two of the drought's additional, and rather peculiar, effects are the country's record-high grain feeding (mainly of wheat) and the shipping of grain from the continent's west coast to the eastern States.

Based on the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) preliminary forecasts for area and yields for 2018/19 grains, as well as a complicated mix of favorable (in the west) and drastically unfavorable (in the east) growing conditions, wheat production in Australia is reduced 0.5 million tons to 17.0 million. Wheat area is down 0.8 million hectares to 10.0 million, while yields are projected slightly higher than a month ago. In the east, growing conditions for winter grains were dry in Queensland (QLD) and especially dry in New South Wales (NSW), not only slashing yields, but also reducing harvested area to less than 60 percent of the 5-year average as many wheat fields there were cut for hay. However, in Western Australia (WA), despite early dryness, timely rains helped the crop considerably, and near-record wheat yields are boosting production to above 10 million tons.

Wheat feed use for Australia is projected at a record level of 5.5 million tons, up 0.5 million this month. Drought-devastated pastures in the east of the continent boosted demand for grain feeding (wheat and barley). The number of cattle and sheep on feed is reportedly record-high,

with feed demand driven by strong prices for wool and lamb meat. On the other hand, a non-trivial share of the herds may be culled before the end of 2018/19, with the result that next year's grain feeding may be much lower than average. Higher grain feeding this year in the east of the country is supported in part by the poor milling quality of the local wheat, since grain fields were first hit by the drought during growing season and then rained on during the harvest.



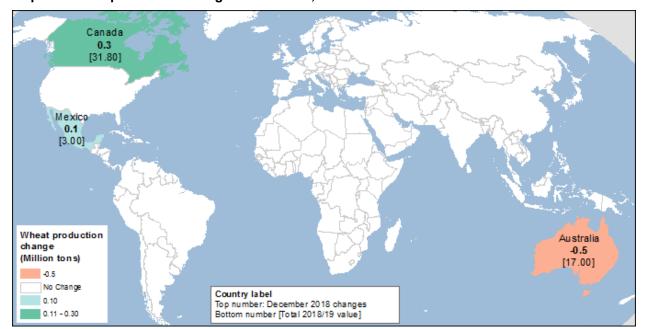


Because grain supplies in the east are limited this year, sizeable amounts of wheat and barley are being shipped from the State of Western Australia to the eastern States of New South Wales and Queensland. Before deregulation in 2008, the Australian Wheat Board could simply redirect grain from exports to intra-country trade. Now the market is the determining force in allocation, and grain transfers will continue as long as the eastern States maintain a price premium over foreign export markets. Grain imports from other countries that would otherwise be very competitive in view of the highly elevated domestic prices in Australia are still an unlikely development because of restrictive Australian biosecurity requirements.

The west-east movement of grain cuts into the export potential of the country's major exporting state of Western Australia. A portion of wheat originating in Western Australia, which under normal conditions would be exported, is going to stay within the country. Consequently, Australian wheat exports are reduced 1.0 million tons this month to 10.5 million (and barley exports are reduced 0.3 million tons to 5.4 million for the same set of reasons). If realized, this would be the lowest Australian wheat export level since 2007/08, following 2 drought years in a row.

Canadian production is increased 0.3 million tons to 31.8 million, which is almost 1 million tons higher than in 2017/18. The increase is driven by larger harvested area, as indicated by a Statistics Canada Farm Survey. Wheat production is also adjusted upward for Mexico this month by 0.1 million tons to 3.0 million, half a million lower than a year ago, based on the data from Mexico's Agricultural Information Service (SIAP).

For a visual display of all changes in wheat production, see map A.



Map A – Wheat production changes for 2018/19, December 2018

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

## Global Wheat Feed Use Is Projected Slightly Lower

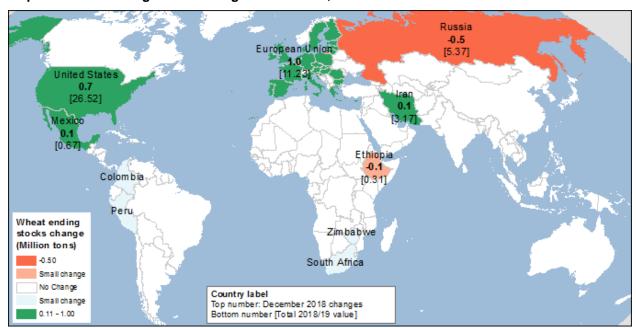
World wheat domestic consumption projected for 2018/19 is marginally down by 0.5 million tons. Global wheat feed and residual use is projected 1.0 million tons higher than last month. Despite lower wheat output, feed use in Australia is increased 0.5 million tons to a record 5.5 million (see the <u>feature on Australia</u> above). With higher wheat production and the lower crop quality in the Prairies because of snow and low temperatures in October, wheat feed use for Canada is projected 0.3 million tons higher. Wheat feed consumption is also increased by 0.2 million tons for Iraq, reflecting its higher pace of wheat imports. For Ethiopia, food, seed, and industrial use is adjusted slightly down because of lower 2017/18 imports.

It is important to recognize that in USDA's World Agricultural Supply and Demand Estimates (WASDE), world use is not a simple sum of all countries' domestic consumption. Rather, it is adjusted for global net trade, with local marketing-year exports added to use and imports

deducted. Often a change in projected world use is the result of changes in local marketing-year trade (see a detailed explanation in ERS's February 2011 *Feed Outlook*, p. 7).

## Wheat Stocks Are Projected Higher

Beginning stocks are revised higher this month, supported by a downward revision in Russian 2017/18 wheat feed and residual use. With higher wheat supplies and lower global domestic disappearance, projected 2018/19 wheat ending stocks are up 1.4 million tons. The largest increase is for the European Union (EU), where wheat exports are projected lower and stocks are up 1.0 million tons to 11.2 million. Stocks in the United States are also higher this month (see the domestic section of this report). Multiple changes in stocks are made this month, because of revisions in production, consumption, and trade for various countries. At-a-glance information for this month's changes in wheat ending stocks is presented in map B.



Map B - Wheat ending stocks changes for 2018/19, December 2018

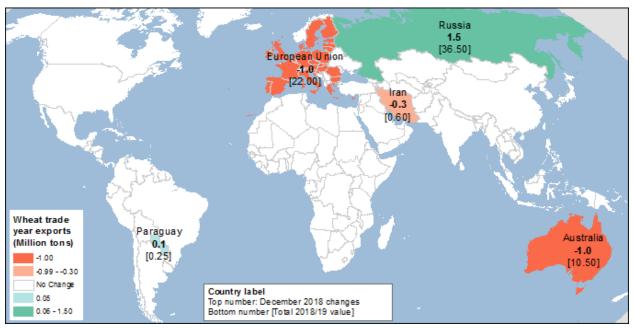
Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.

## Australia and the European Union Drive Wheat Exports Down

Wheat trade for the 2018/19 international trade year (July-June) is projected down a further 0.8 million tons this month to 178.4 million.

This month's export projection for Australia is down 1.0 million tons to 10.5 million. See a discussion of Australian wheat production, consumption, and trade developments in the <u>feature</u> above.

Wheat exports are reduced another 1.0 million tons for the European Union to reach 22.0 million, the lowest since 2011/12. The pace of EU exports is extremely slow and can be partly explained by a problem similar to that in Australia: drought-damaged pastures in Northern Europe (Germany and France) and intra-EU in-flows of grain from the southeast of the region (Bulgaria, Romania, and others). Exports are also projected 0.3 million tons lower for Iran. Russian wheat exports are projected 1.5 million tons higher this month, to reach 36.5 million. The pace of exports is formidable, and Russia is likely to export this volume of wheat even with the expectation of a slowdown of shipments from shallow-water ports in the Sea of Azov in the winter season. At-a-glance information for this month's changes in wheat trade year exports is presented in map C. U.S. marketing year changes are discussed below and in the domestic section.



Map C – Wheat trade year export changes for 2018/19, December 2018

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

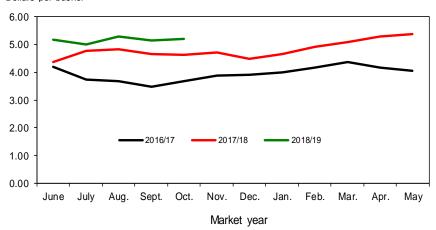
This month, there are only two small, offsetting wheat import revisions. Both are based on the pace of imports: for Iraq, imports are projected 0.2 million tons higher, while for Iran, imports are expected to be 0.2 million lower.

The pace of U.S. wheat export sales and shipments is still slow and will have to accelerate considerably to reach the current projection of 29.0 million tons for the July-June international trade year. For the June-May local marketing year, the export projection is reduced 25.0 million

bushels to 1,000 million this month. These projections assume high U.S. wheat exports in the month of June. Although June exports will not affect the local 2018/19 marketing year, they are expected to boost exports for the international trade year. Another assumption is that as the season progresses and competitors deplete their wheat stocks, the United States will pick up the export pace and make use of this year's high supplies. Prices of the major wheat exporters have been on the rise, boosting U.S. price competitiveness over the world.

Figure 1
All wheat average prices received by farmers

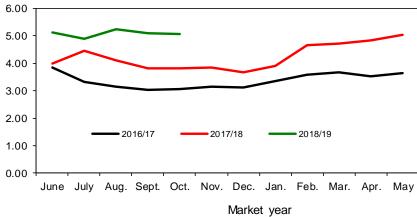
Dollars per bushel



Source: USDA, National Agricultural Statistics Service, Agricultural Prices.

Figure 2
Hard red winter wheat average prices received by farmers

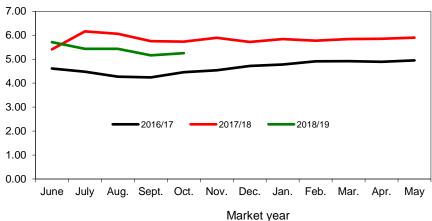




Source: USDA. National Agricultural Statistics Service. Agricultural Prices.

Figure 3
Hard red spring wheat average prices received by farmers

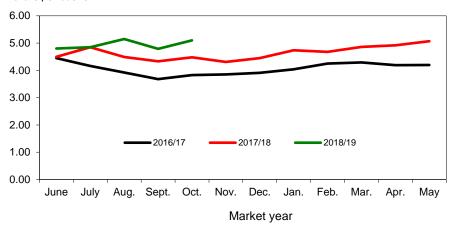
Dollars per bushel



Source: USDA, National Agricultural Statistics Service, Agricultural Prices.

Figure 4
Soft red winter wheat average prices received by farmers

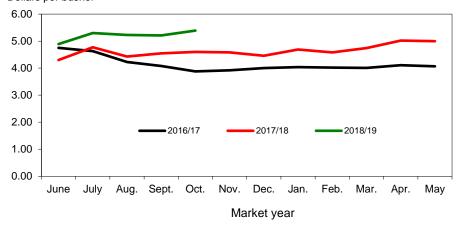
Dollars per bushel



Source: USDA, National Agricultural Statistics Service, Agricultural Prices.

Figure 5
Soft white wheat average prices received by farmers

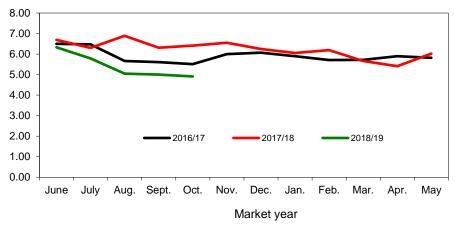




Source: USDA, National Agricultural Statistics Service, Agricultural Prices.

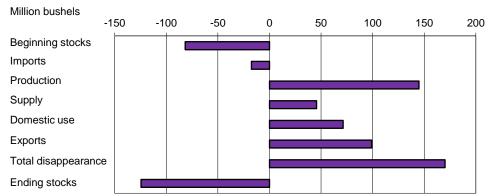
Figure 6 **Durum wheat average prices received by farmers** 

Dollars per bushel



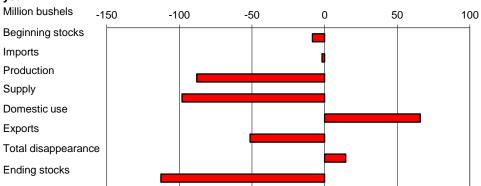
Source: USDA, National Agricultural Statistics Service, Agricultural Prices.

Figure 7
All wheat: U.S. supply and disappearance change from prior market year



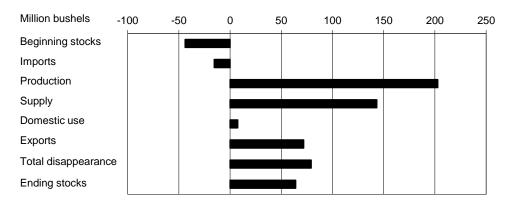
Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates.

Figure 8
Hard red winter wheat: U.S. supply and disappearance change from prior market year



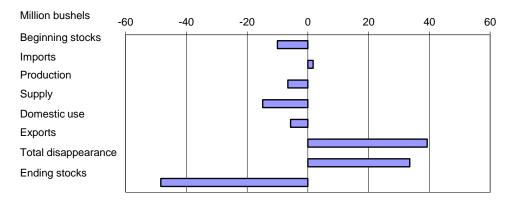
Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates.

Figure 9
Hard red spring wheat: U.S. supply and disappearance change from prior market



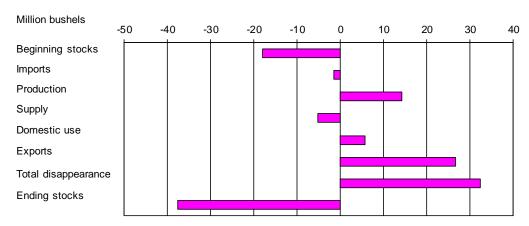
Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates.

Figure 10
Soft red winter wheat: U.S. supply and disappearance change from prior market



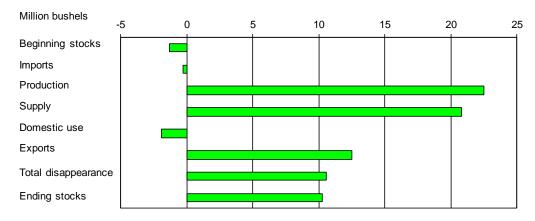
Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates.

Figure 11
White wheat: U.S. supply and disappearance change from prior market year



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

Figure 12 **Durum: U.S. supply and disappearance change from prior market year** 



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

Table 1--Wheat: U.S. market year supply and disappearance, 12/13/2018

Item and unit		2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Area:								
Planted	Million acres	55.3	56.2	56.8	55.0	50.1	46.0	47.8
Harvested	Million acres	48.8	45.3	46.4	47.3	43.9	37.5	39.6
Yield	Bushels per acre	46.2	47.1	43.7	43.6	52.7	46.3	47.6
Supply:								
Beginning stocks	Million bushels	742.6	717.9	590.3	752.4	975.6	1,180.6	1,098.9
Production	Million bushels	2,252.3	2,135.0	2,026.3	2,061.9	2,308.7	1,739.6	1,884.5
Imports <sup>1</sup>	Million bushels	124.3	172.5	151.2	112.8	118.0	157.4	140.0
Total supply	Million bushels	3,119.2	3,025.3	2,767.8	2,927.1	3,402.4	3,077.7	3,123.3
Disappearance:								
Food use	Million bushels	950.8	955.1	958.3	957.1	949.0	964.4	970.0
Seed use	Million bushels	73.1	75.6	79.4	67.2	61.3	63.4	69.0
Feed and residual use	Million bushels	365.3	228.2	113.4	149.5	160.6	50.0	110.0
Total domestic use	Million bushels	1,389.3	1,258.8	1,151.1	1,173.8	1,170.8	1,077.7	1,149.0
Exports <sup>1</sup>	Million bushels	1,012.1	1,176.2	864.3	777.8	1,050.9	901.1	1,000.0
Total disappearance	Million bushels	2,401.4	2,435.1	2,015.4	1,951.5	2,221.8	1,978.8	2,149.0
Ending stocks	Million bushels	717.9	590.3	752.4	975.6	1,180.6	1,098.9	974.3
CCC inventory	Million bushels					.0		
Stocks-to-use ratio		29.9	24.2	37.3	50.0	53.1	55.5	45.3
Loan rate	Dollars per bushel	2.94	2.94	2.94	2.94	2.94	2.94	2.94
Contract/direct payment rate	Dollars per bushel	73.70	72.80	56.40	56.40	56.50	56.50	56.50
Farm price <sup>2</sup>	Dollars per bushel	7.77	6.87	5.99	4.89	3.89	4.72	5.05-5.25
Market value of production	Million dollars	17,383	14,604	11,915	10,203	8,981	8,211	9,705

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

Includes flour and selected other products expressed in grain-equivalent bushels.
 U.S. season-average price based on monthly prices weighted by monthly marketings. Prices do not include an allowance for loans outstanding and Government purchases.
 Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates and supporting materials.

Table 2--Wheat by class: U.S. market year supply and disappearance, 12/13/2018

Market y	ear, item, and unit		All wheat	Hard red winter <sup>1</sup>	Hard red spring <sup>1</sup>	Soft red winter <sup>1</sup>	White <sup>1</sup>	Durum
2017/18								
	Planted acreage	Million acres	46.02	23.43	10.51	5.73	4.05	2.31
	Harvested acreage	Million acres	37.54	17.64	9.65	4.32	3.83	2.11
	Yield	Bushels per acre	46.34	42.54	39.80	67.66	67.50	26.01
	Supply: Beginning stocks	Million bushels	1,180.60	589.30	235.00	215.00	105.00	36.30
	Production	Million bushels	1,739.65	750.33	384.19	292.16	258.19	54.78
	Imports <sup>2</sup>	Million bushels	157.43	6.75	87.59	4.28	7.50	51.31
	Total supply	Million bushels	3,077.68	1,346.39	706.78	4.26 511.44	370.68	142.39
	Disappearance:							
	Food use	Million bushels	964.39	391.71	254.00	154.00	85.00	79.68
	Seed use	Million bushels	63.35	25.58	17.98	11.58	5.26	2.96
	Feed and residual use	Million bushels	49.95	-23.16	15.62	50.12	.07	7.31
	Total domestic use	Million bushels	1,077.69	394.13	287.60	215.70	90.32	89.94
	Exports <sup>2</sup>	Million bushels	901.10	371.31	228.18	90.74	193.36	17.51
	Total disappearance	Million bushels	1,978.79	765.44	515.78	306.44	283.68	107.44
	Ending stocks	Million bushels	1,098.89	580.94	191.00	205.00	87.00	34.95
2018/19								
	Planted acreage	Million acres	47.80	22.92	12.69	6.08	4.05	2.07
	Harvested acreage	Million acres	39.61	16.95	12.40	4.47	3.82	1.97
	Yield	Bushels per acre	47.58	39.08	47.33	63.90	71.32	39.29
	Supply:							
	Beginning stocks	Million bushels	1,098.89	580.94	191.00	205.00	87.00	34.95
	Production	Million bushels	1,884.46	662.25	587.01	285.56	272.36	77.29
	Imports <sup>2</sup>	Million bushels	140.00	5.00	72.00	6.00	6.00	51.00
	Total supply	Million bushels	3,123.35	1,248.19	850.01	496.56	365.36	163.23
	Disappearance: Food use	Million bushels	970.00	392.00	260.00	153.00	85.00	80.00
	Seed use	Million bushels	69.00	28.00	20.00	12.00	6.00	3.00
	Feed and residual use	Million bushels	110.00	40.00	15.00		5.00	5.00
	Total domestic use	Million bushels	1,149.00	460.00	295.00	45.00 210.00	96.00	5.00 88.00
	Exports <sup>2</sup>	Million bushels	1,000.00	320.00	300.00	130.00	220.00	30.00
		Million bushels	•	780.00	595.00	340.00	316.00	118.00
	Total disappearance	WIIIIOH DUSHEIS	2,149.00	700.00	393.00	340.00	310.00	110.00

production, are approximations.

Includes flour and selected other products expressed in grain-equivalent bushels.

Source: USDA, National Agricultural Statistics Service, Crop Production and unpublished data; and USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates and supporting materials.

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

<sup>1</sup> Area and yield data are unpublished National Agricultural Statistics Service data. Supply and disappearance data, except

Table 3--Wheat: U.S. quarterly supply and disappearance (million bushels), 12/13/2018

	•		* *	•	-		Feed and		Ending
	ar and quarter	Production	Imports <sup>1</sup>	Total supply	Food use	Seed use	residual use	Exports <sup>1</sup>	stocks
2010/11	Jun-Aug	2,163	27	3,166	235	1	215	265	2,450
	Sep-Nov		24	2,473	242	51	-63	311	1,933
	Dec-Feb		23	1,956	221	1		308	1,425
	Mar-May		22	1,448	228	16	-67	407	863
	Mkt. year	2,163	97	3,236	926	71	85	1,291	863
2011/12	Jun-Aug	1,993	21	2,877	230	5	201	295	2,147
2011/12	Ū	1,993		•	230				1,663
	Sep-Nov		32	2,179		51	-16	238	
	Dec-Feb		30	1,693	231	1	44	217	1,199
	Mar-May	4.000	30	1,229	236	19	-70	301	743
	Mkt. year	1,993	113	2,969	941	76	159	1,051	743
2012/13	Jun-Aug	2,252	26	3,020	238	1	403	264	2,115
	Sep-Nov	•	33	2,148	247	55	-22	198	1,671
	Dec-Feb		35	1,705	229	1	5	235	1,235
	Mar-May		31	1,266	238	15	-20	315	718
	Mkt. year	2,252	124	3,119	951	73	365	1,012	718
2013/14	Jun-Aug	2,135	36	2,889	235	4	422	358	1,870
	Sep-Nov		48	1,918	249	53	-168	309	1,475
	Dec-Feb		42	1,517	231	2	-1	228	1,057
	Mar-May		47	1,104	240	17	-25	282	590
	Mkt. year	2,135	172	3,025	955	76	228	1,176	590
2014/15	Jun-Aug	2,026	44	2,661	239	6	256	253	1,907
2011/10	Sep-Nov	2,020	35	1,942	248	49	-93	208	1,530
	Dec-Feb		37	1,566	231	2	8	185	1,140
	Mar-May		36	1,176	240	22	-58	219	752
	Mkt. year	2,026	151	2,768	958	79	113	864	752
2015/16	Jun-Aug	2,062	27	2,841	240	1	298	205	2,097
	Sep-Nov		27	2,124	249	44	-107	192	1,746
	Dec-Feb		34	1,780	230	2	2	175	1,372
	Mar-May		25	1,397	239	20	-43	205	976
	Mkt. year	2,062	113	2,927	957	67	149	778	976
2016/17	Jun-Aug	2,309	33	3,317	238	1	266	268	2,545
	Sep-Nov	_,	29	2,575	245	41	-30	239	2,079
	Dec-Feb		25	2,104	228	1	-13	229	1,659
	Mar-May		31	1,690	238	19	-62	315	1,181
	Mkt. year	2,309	118	3,402	949	61	161	1,051	1,181
2017/18	Jun-Aug	1,740	42	2,962	239	1	165	292	2,266
	Sep-Nov		36	2,302	251	40	-56	194	1,873
	Dec-Feb		37	1,911	233	2	-14	195	1,495
	Mar-May		42	1,537	242	21	-45	221	1,099
	Mkt. year	1,740	157	3,078	964	63	50	901	1,099
2018/19	Jun-Aug	1,884	42	3,025	243	2	198	203	2,379
_0.0/10	Mkt. year	1,884	140	3,123	970	69	110	1,000	974
	wikt. year	1,004	140	5,125	310	09	110	1,000	314

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

<sup>1</sup> Includes flour and selected other products expressed in grain-equivalent bushels.

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

Table 4--Wheat: Monthly food disappearance estimates (1,000 grain-equivalent bushels), 12/13/2018

Mkt year a month <sup>1</sup>	and	Wheat ground for + flour	Food imports <sup>2</sup>	+ Nonmilled food use <sup>3</sup> -	Food exports <sup>2</sup> =	Food use <sup>4</sup>
2016/17	Jun	73,149	2,933	2,000	2,150	75,932
	Jul	74,237	2,637	2,000	1,666	77,208
	Aug	81,136	3,198	2,000	1,855	84,479
	Sep	78,018	2,533	2,000	2,142	80,409
	Oct	81,469	2,966	2,000	2,325	84,109
	Nov	77,978	3,189	2,000	2,201	80,967
	Dec	73,195	2,860	2,000	1,862	76,192
	Jan	73,561	2,858	2,000	2,026	76,393
	Feb	72,977	2,296	2,000	1,974	75,299
	Mar	77,425	2,830	2,000	1,803	80,452
	Apr	74,812	2,822	2,000	1,548	78,085
	May	76,492	2,809	2,000	1,973	79,328
2017/18	Jun	73,183	3,242	2,000	1,849	76,576
	Jul	74,520	2,964	2,000	1,794	77,689
	Aug	81,444	3,148	2,000	2,088	84,505
	Sep	78,315	2,620	2,000	1,462	81,473
	Oct	82,325	3,239	2,000	1,167	86,397
	Nov	78,798	3,218	2,000	1,301	82,714
	Dec	73,964	2,934	2,000	1,569	77,329
	Jan	74,607	3,075	2,000	1,423	78,259
	Feb	74,014	2,948	2,000	1,589	77,374
	Mar	78,526	3,197	2,000	1,571	82,152
	Apr	75,525	3,259	2,000	1,432	79,351
	May	77,221	3,087	2,000	1,742	80,566
2018/19	Jun	73,881	2,921	2,000	1,689	77,113
	Jul	74,084	2,968	2,000	1,346	77,706
	Aug	80,968	3,103	2,000	1,584	84,487
	Sep	77,857	2,626	2,000	1,675	80,808
	Oct		3,361		1,779	1,582

<sup>&</sup>lt;sup>1</sup> Current year is preliminary. Previous year is preliminary through August of current year, estimated afterwards.
<sup>2</sup> Food imports and exports used to calculate total food use. Includes all categories of wheat flour, semolina, bulgur, and couscous and selected categories of pasta.

Wheat prepared for food use by processes other than milling.
 Estimated food use equals wheat ground for flour plus food imports plus nonmilled food use minus food exports. Source: Data through the 2nd quarter of 2011 was calculated using data from U.S. Department of Commerce, Bureau of the Census' Flour Milling Products (MQ311A) and U.S. Department of Commerce, Bureau of Economic Analysis' Foreign Trade Statistics. Subsequent flour milling calculations are based on data from the North American Millers Association.

Table 5--Wheat: National average price received by farmers (dollars per bushel), 12/13/2018

Month	All wheat		Wi	Winter		Durum		Other spring	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19	
June	4.37	5.17	4.11	5.05	6.69	6.33	5.35	5.66	
July	4.77	5.00	4.56	4.92	6.30	5.79	6.08	5.41	
August	4.84	5.30	4.27	5.23	6.89	5.05	5.86	5.40	
September	4.65	5.15	4.11	5.14	6.31	5.00	5.62	5.16	
October	4.64	5.22	4.17	5.21	6.41	4.91	5.56	5.26	
November	4.72		4.07		6.55		5.78		
December	4.50		3.89		6.25		5.62		
January	4.65		4.15		6.05		5.72		
February	4.92		4.63		6.19		5.66		
March	5.10		4.73		5.66		5.74		
April	5.28		4.90		5.41		5.78		
May	5.39		5.05		6.02		5.84		

Source: USDA, National Agricultural Statistics Service, Agricultural Prices.

Table 6--Wheat: National average prices received by farmers by class (dollars per bushel), 12/13/2018

		<u> </u>		` `	. ,.			
Month	Hard re	ed winter	Soft re	d winter	Hard re	d spring	WI	nite
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
June	4.00	5.12	4.50	4.80	5.41	5.71	4.30	4.89
July	4.46	4.90	4.85	4.85	6.16	5.43	4.77	5.30
August	4.10	5.24	4.49	5.15	6.06	5.43	4.43	5.23
September	3.82	5.10	4.33	4.79	5.75	5.16	4.55	5.21
October	3.81	5.06	4.48	5.10	5.73	5.25	4.60	5.39
November	3.84		4.31		5.89		4.58	
December	3.66		4.45		5.72		4.46	
January	3.91		4.74		5.84		4.69	
February	4.65		4.68		5.77		4.58	
March	4.71		4.86		5.84		4.74	
April	4.83		4.92		5.85		5.02	
May	5.05		5.07		5.90		5.00	

Source: USDA, National Agricultural Statistics Service, Agricultural Prices.

Table 7Wheat: Average	cach grain hide at pri	incinal markets	12/13/2018
Table 7VVIItal. Average	casii uraiii bius at bii	ncibai markets.	12/13/2010

Table 7VVhea	at: Average cash	· ·						
	(ordinar	I red winter y protein) City, MO	(13%)	red winter protein) City, MO	(ordinary	red winter / protein) nd, OR	(ordinary	red winter protein) Gulf, TX <sup>1</sup>
		er bushel)		er bushel)		er bushel)		metric ton)
Month	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
June	5.24	6.35	6.65	6.79	4.53	5.58	189.60	213.85
July	5.65	6.20	7.22	6.66	5.12	5.24	203.74	214.58
August	4.80	6.61	6.28	6.86	4.22	6.25	171.41	230.75
September	5.07	6.03	6.52	6.18	4.81	5.93	178.76	212.93
October	5.11	6.11	6.24	6.26	5.03	6.14	175.82	213.66
November	5.30	6.18	6.84	6.38	4.96	6.14	179.49	203.56
December	5.38		6.72		4.84		183.90	
January	5.73		6.94		5.03		192.17	
February	5.93		6.89		5.41			
March	6.05		6.70		5.52			
April	6.09		6.67		5.64		213.48	
May	6.56		7.03		5.93			
		orthern spring	No. 1 dark no	orthern spring	No. 1 dark no	orthern spring	No. 1 hard a	amber durum
		protein)		orotein)		orotein)		oolis, MN
		Chicago, IL		ago, IL		nd, OR	(dollars p	er bushel)
	(dollars p	er bushel)	(dollars p	er bushel)	(dollars p	er bushel)		
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
June					7.50	6.98		
July					8.77	6.58		
August					7.74	7.15		
September					7.40	6.62		
October					7.39	6.76		
November					7.52	6.82		
December					7.38			
January					7.42			
February					7.29			
March					7.40			
April					7.06			
May					7.51			
	No. 2 soft	red winter	No. 2 soft	red winter		red winter	No. 1 so	oft white
	St. Lo	uis, MO	Chica	ago, IL	Toled	lo, OH	Portlai	nd, OR
	(dollars p	er bushel)	(dollars p	er bushel)	(dollars p	er bushel)	(dollars p	er bushel)
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
June	4.66	5.16	4.41	4.92	4.44	5.15	4.91	5.92
July	5.15	5.16	4.41	4.98	4.44	5.15	5.40	5.88
August	5.15 4.31	5.21 5.34	4.96 4.12	4.96 5.32	4.94 4.20		5.40 5.13	5.00 6.18
September	4.31	5.34 4.79	4.12	5.32 4.81	4.20 4.27	5.48 5.04	5.13 5.19	5.98
October								
November	4.16	4.94 5.19	4.22	4.88 5.01	4.24	5.04	5.30 5.36	6.11
December	4.34	5.18	4.13	5.01	4.18	5.00	5.26	6.25
	4.28		4.12		4.04		5.22	
January	4.38		4.27		4.22		5.30	
February	4.65		4.55		4.54		5.39	
March	4.76		4.69		4.75		5.64	
April	4.75		4.74		4.85		5.63	
May	5.19		5.08		5.24		5.79	

-- = Not available or no quote.

1 Free on board.

Source: USDA, Agricultural Marketing Service, State Grain Reports.

Table 8--Wheat: U.S. exports and imports for last 6 months (1,000 bushels), 12/13/2018

		May	Jun	Jul	Aug	Sep	Oct
Item		2018	2018	2018	2018	2018	2018
Exports	All wheat grain	66,391	56,270	65,187	76,846	67,192	70,050
	All wheat flour <sup>1</sup>	1,360	1,365	940	1,097	1,269	1,373
	All wheat products <sup>2</sup>	401	370	452	559	435	432
	Total all wheat	68,151	58,006	66,580	78,501	68,896	71,856
Imports	All wheat grain	10,584	11,425	10,363	10,701	7,719	7,455
	All wheat flour <sup>1</sup>	1,429	1,285	1,447	1,452	1,425	1,723
	All wheat products <sup>2</sup>	1,713	1,679	1,541	1,672	1,243	1,701
	Total all wheat	13,726	14,390	13,352	13,825	10,387	10,880

Totals may not add due to rounding.

<sup>1</sup> Expressed in grain-equivalent bushels. Includes meal, groats, and durum.

<sup>2</sup> Expressed in grain-equivalent bushels. Includes bulgur, couscous, and selected categories of pasta.

Source: U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Statistics; and USDA, Economic Research Service calculations using Census trade statistics.

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