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Situation and Outlook

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Country Focus-Russia: "Prospects for Russian Wheat Yields and Yield Volatility" by Olga Liefert

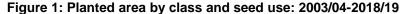
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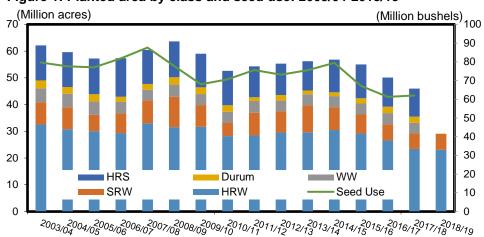
Wheat Outlook

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Sluggish All-Wheat Disappearance Reflects Increasingly Competitive Global Wheat Marketplace

Newly released USDA National Agricultural Statistics Service (NASS) reports inform multiple balance sheet changes this month. The NASS *Grain Stocks* report indicates lighter-than-expected all-wheat disappearance through the first half of the 2017/18 marketing year. Upward revisions to first and second quarter ending stocks imply reduced feed and residual use, lowered 20 million bushels this month to 100 million, and contribute to a 29 million bushel increase in 2017/18 ending stocks. Competition among exporters is increasing, most notably from Russia, for which exports are increased to a record-setting 35.0 million tons this month on larger production, stocks, and pro-export Government policies. Argentina is also proving to be a formidable wheat exporter, with a 500,000 ton export increase this month to 13.0 million. Strengthening global competition has put downward pressure on U.S. production and planted area. The NASS *Winter Wheat and Canola Seedings* report indicates lower winter wheat planted area in 2018 compared to 2017, though seed use is level year-to-year (figure 1).





Sources: USDA, National Agricultural Statistics Service data and USDA, ERS calculations.

Domestic Outlook

Domestic Changes at a Glance

- The latest USDA-NASS *Grain Stocks* report indicates lower-than-expected disappearance through the first half of the marketing year, as reflected in the December 1 stocks and the revised September 1 stocks
- Feed and residual use is cut 20 million bushels on sluggish disappearance through the second quarter.
- U.S. all-wheat ending stocks are raised 29 million bushels on increased supplies, including a 5 million bushel increase in imports, and reduced domestic use.
- Winter wheat seedings for 2018/19 exceeded expectations and are estimated by USDA-NASS in the *Winter Wheat and Canola Seedings* report to total 32.6 million acres.
- Seed use for 2017/18 is lowered 4 million bushels to 62 million on the forecast reduction in planted area and is on par with the 2016/17 seed use estimate.
- The U.S. season average farm price is unchanged and remains at \$4.60 per bushel.

2018 Winter Wheat Seedings Second-Lowest on Record

Winter wheat seedings for the 2018/19 marketing year are estimated at 32.608 million acres, slightly below the 2017/18 seeding estimate of 32.696 million acres. Winter wheat seedings for the next marketing year are projected to be the lowest in 109 years; however, the USDA, NASS estimate, based on 82,000 farmer surveys, generally exceeded industry expectations. The current projection for 2018 is down less than 1 percent and 88,000 acres from 2017 and down 10 percent from 2016. Hard red winter (HRW) wheat planted area is projected to total 23.1 million acres, a decline of 2 percent from 2017, while soft red winter (SRW) planted area is forecast up 4 percent, year-to-year, to nearly 6 million acres.

In mid-to-late December, a snow event increased winter wheat coverage and insulation for Northwestern and Midwestern wheat as well as wheat growing from Nebraska and to the northern border (USDA Weekly Weather and Crop Bulletin). Winter wheat in the southern half of the Plains, however, did not receive additional snow cover, and conditions in Kansas, Colorado, and Oklahoma (Southern Plains) deteriorated in the last month of 2017. When a blast of cold air arrived toward the end of 2017, stress mounted on a Southern Plains winter wheat crop that was already characterized as poorly established. The latest crop progress and condition ratings (released in early January) indicated that between November 26 and December 31, the percent of winter wheat rated very poor to poor increased by 8 percent in Kansas, 14 percent in Colorado, and 32 percent in Oklahoma. For the month of December 2017, 77 percent of topsoil moisture was rated very short to short in Kansas, 84 percent in Oklahoma, and 60 percent in Colorado. States will release updated crop weather reports at the end of January. Weekly updates on the intensifying drought in the South and parts of the High Plains, can be found on the U.S. Drought Monitor website.

Table 1 - U.S. whea	at supply and utili	zation at a glance 2	2017/18, January 2	018
Balance sheet item	2017/18 (December)	2017/18 (January)	2017/18 Change from previous month	2017/18 Comments
Supply, total		Million bushels		May-June Marketing Year (MY)
Beginning stocks	1,180.7	1,180.6	-0.1	Slight reduction in 2016/17 carry-out based on updated NASS data.
Production	1,740.6	1,740.6	0.0	
Imports	150.0	155.0	5.0	Very strong pace of imports from Canada supports a 2 million bushel increase in both hard red spring and durum imports; hard red winter wheat raised 1 million bushels.
Supply, total	3,071.3	3,076.2	4.9	Increased imports lifts total wheat supplies by 5 million bushels.
Demand				
Food	950.0	950.0	0.0	
Seed	66.0	62.0	-4.0	Winter wheat planted area for 2018, as reported by NASS in the <i>Winter Wheat and Canola Seedings</i> report and projections for other spring and durum planted area imply a 4 million bushel reduction in 2017/18 seed use.
Feed and residual	120.0	100.0	-20.0	A 20 million bushel reduction in feed and residual use reflects dissaperance for June-November as reported in the NASS <i>Grain Stocks</i> report.
Domestic, total	1,136.0	1,112.0	-24.0	Reduced seed and feed and redisual use combine to lower domestic use by 24 million bushels.
Exports	975.0	975.0	0.0	
Use, total	2,111.0	2,087.0	-24.0	
Ending stocks	960.3	989.2	28.9	Ending stocks are raised 29 million bushels on higher supplies, due to increased imports, and reduced use for 2017/18 wheat for seed and feed and residual use.
Source: USDA, Worl	d Agricultural Outlo	ok Board.		

Balance Sheet Changes

Multiple NASS data releases result in several balance sheet adjustments. For 2016/17, updates are limited to ending stocks, and to quarterly HRW and durum specifically; net reductions lower all-wheat ending stocks to 1,180.6 million bushels, based on the USDA-NASS *Grain Stocks* report. The latest back-year, wheat by class, by quarter changes are documented in the "Historical Tables" located in the Wheat Data section of the USDA-ERS website.

Revised carryout for 2016/17 implies very slightly reduced carry-in for the 2017/18 marketing year. Imports are raised 5 million bushels this month to 155 million, largely based on the strong pace of imports in November, a continuation of a multi-month trend and an indication of tight stocks of milling-quality hard red spring (HRS) and durum wheat in the United States. The current pace of wheat (grain only) imports from Canada exceeds by 20 percent the 4-year average pace with 1.6 million tons imported between June and November of 2017 (figure 2). For the same period in the 2016/17 marketing year, just

.992 million tons were imported. To date, imports of HRS from Canada have constituted about 51 percent of total wheat grain imports, a sharp increase from 27 percent a year ago and the 4-year average of 42 percent. With no changes made to all-wheat production, the combined 5 million bushel increase in imports and slight, 68,000 bushels decrease in carry-in result in a net 4.932 million bushel increase in 2017/18 supplies.

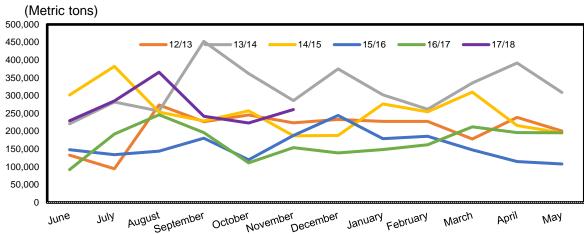


Figure 2: U.S. imports of Canadian wheat (grain only), by month

Source: USDA Foreign Agricultural Service, Global Agricultural Trade System (GATS).

In advance of the February 1 release of the USDA-NASS *Flour Milling Products* report, all-wheat food use is unchanged this month. Following the February 1 NASS report, all-wheat food use, including net trade volumes, will be assessed. Any revision to the marketing-year food use figure will appear in the February 8 WASDE with further explanation published in the February 12 *Wheat Outlook* newsletter.

Elsewhere in use, seed use is lowered 4 million bushels to 62 million on the basis of revised winter wheat planted area expectations and seed use associated with the baseline out-year projections for durum and other spring wheat. The current projection incorporates expectations of proportionally greater SRW wheat seedings, as compared to the previous year. SRW seeding densities are higher than for other wheat varieties and help to support the 2017/18 seed projection at the same level as the previous marketing year, despite expectations of slightly lower all-wheat planted area.

Feed and residual use is lowered 20 million bushels this month to 100 million. Reduced feed and residual use is supported by higher-than-expected stocks for the first 6 months of the marketing year, based on increased September 1 and December 1 stocks estimates from USDA, NASS. The location of stocks, relative prices, and other market factors, provide support for a 10-million bushels reduction in HRW feed and residual use to 45 million. Soft red winter wheat, for which there has recently been an uptick in demand from export markets, has feed and residual use lowered 5 million bushels to 45 million. In light of the improved quality of the 2017/18 durum crop, relative to the previous year when a higher-than-normal share of the crop was graded #4 and #5, durum feed and residual use has been lowered 5 million bushels to zero.

Continued strong imports of durum from Canada are indicative of strong demand for durum in milling (and not feed use) channels. Based on the current projection, fully 90 percent, and 90 million bushels, of the feed and residual forecast are attributed to HRW and SRW. This compares to a 5-year average of 90.5

percent and reflects the relative palatability and economics of feeding these wheat varieties, as compared to other wheat classes (figure 3).

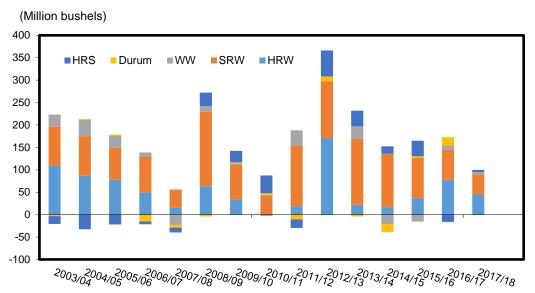


Figure 3: Annual feed and residual use, by class: 2000/01-2017/18

Source: USDA, World Agricultural Supply and Demand Estimates.

U.S. exports on both a marketing-year and trade-year basis are unchanged this month and remain at 975 million bushels and 26.0 million tons, respectively. Pressure from expanding Russian production and exports has dampened U.S. prospects mainly in North African countries such as Egypt and Nigeria. This trend is reflected in the latest forecast, and an increase in Russian exports again this month is not expected to further hinder U.S. market share in the North African region. Please see the Wheat Outlook International section for more detail as well as the USDA, FAS Grain: World Markets and Trade circular.

Approximately 65 percent of the 2017/18 wheat crop has been marketed through November, limiting the impact that minor, month-to-month, price fluctuations have on the all-wheat season-average farm price (SAFP). Modest upward movement in cash and futures prices in the last month were largely anticipated and do not suggest an upward revision to the current SAFP, which remains at \$4.60 per bushel. The price range is also unchanged this month and remains at \$4.50 per bushel on the low end and \$4.70 on the highend.

International Outlook

Russia Drives World Wheat Production Record Further Up

Record-high world wheat production in 2017/18 is projected to reach 757.0 million tons, up 1.8 million this month, surpassing last year's record by 6.6 million tons. In Russia, wheat production for 2017/18 is up 2.0 million tons to 85.0 million, reflecting a Russian Government statistical agency report. The agency actually reported 85.8 million tons of wheat harvested, but this number includes the Crimea, which officially is part of Ukraine, where wheat output is projected to be 0.8 million tons. According to this report, both harvested area and final wheat yield turned out to be higher than was previously suggested by the daily-issued harvest reports. Wheat yield was boosted mainly by an unusual, record-high conversion rate from so-called "bunker" to "clean" weight (adjusted for standard moisture and cleaning), adding another 2 million tons of grain to an already record-large crop. Only the future will show whether this high conversion rate is a sign of permanent improvements (such as in technology), extremely favorable weather, or is just a fortuitous event of this specific year.

For more information and a visual display of this month's changes in wheat production, see table A.

Tal	Table A - Wheat production at a glance (2017/18), January 2018											
	Country or region	Crop year	Production Change from previous month ¹		YoY ² change	Comments						
				Million tons								
1	World	Various	757.0	+1.8 +6.6								
1	Foreign	Various	709.6	+1.8	+22.0							
	United States	June-May	47.4	No change	-15.5	See section on U.S. domestic wheat.						
1	Russia	July-June	85.0	+2.0	+12.5	According to a preliminary report by the Russian Statistical Agency, both harvested area and final wheat yield turned out to be higher than previously suggested by harvest reports. A conversion from "bunker" to "clean" weight this year is reported to be at record-high, raising final yield and output.						
1	Pakistan	May-Apr	26.5	+0.8	+0.9	The wheat crop was harvested a while ago, in April 2017. The increase is based on information from the Government, which came out with a new official estimate.						
1	EU ³	July-June	151.6	-0.9	+6.4	The individual country harvest reports continue to arrive. The Farm Ministry of France came out with an estimate of 39.5 million tons, or 0.6 million tons lower than before. The official estimate is also lowered for the United Kingdom , down 0.3 million tons to 14.8 million.						
1	South Africa	Oct-Sep	1.5	-0.1	-0.4	Based on latest publication of the South African Crop Estimates Committee (CEC) on January 2.						

¹Change from previous month's forecast. Changes of less than 0.1 million tons are also made for several countries.

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

YoY: year-over-year changes. 3 EU: European Union.

COUNTRY FOCUS: Russia

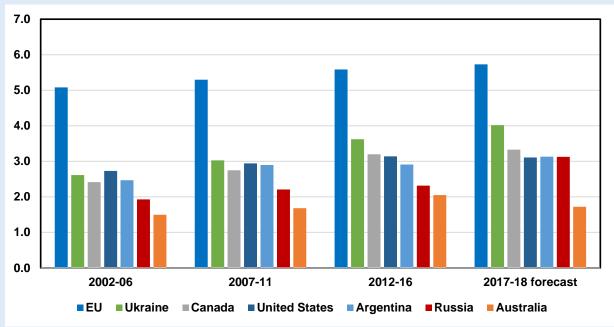
Prospects for Russian Wheat Yields and Yield Volatility

By Olga Liefert, ERS/USDA, oliefert@ers.usda.gov

Although Russian wheat yields this year reached a remarkably high level for the country, this record is still lower than the world average, lags behind such major exporters as the European Union, Ukraine, Canada, and Argentina, and has just caught up to this year's average U.S. wheat yield.

Figure A1: Wheat yield in Russia is lagging behind major exporters

Thousand tons per hectare



Note: Except for the 2017-18 forecast, the figures give average annual values over the 5-year periods. Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.

Given that Russia has a vast amount of agricultural land, its yields should be compared not with the top-yielding countries/regions such as the EU, where the relative scarcity of land generates high amounts of material inputs (such as fertilizer) per unit of land used in production. Rather, Russian yields should be compared to those in other land-rich countries such as the United States, Canada, and Australia. The current record wheat harvest in Russia has raised yields to a level just below that forecast for Canada in 2017/18, equal to that in the United States, and above that in Australia (see figure A1).

Russia grows two varieties of wheat—winter and spring. Winter wheat can be grown in the central-southern parts of European Russia, while spring wheat grows in the east of the country (in the Volga and Ural districts and Western Siberia). Yields for these two types of wheat differ greatly. Winter wheat yields in Russia have always been higher than spring yields, and the gap is increasing. Winter wheat yields have a strong growth trend, while the trend for spring wheat yield is virtually flat, and the share of winter wheat in Russian wheat output is increasing (see figure A2).

Figure A2: Gap between winter and spring wheat yields is growing Thousand tons per hectare 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0 1996-00 2001-05 2006-10 2011-15 2016 2017 ■ Winter wheat ■Spring wheat

Source: Russian State Statistical Service.

An expansion of farm-level improvements—better technology and business practices and, most importantly, higher fertilizer application—should continue to boost grain yields in a process of catching up with the yield potential in a given region. In the foreseeable future, this yield growth will occur in the winter wheat regions of European Russia. Higher yields will increase winter wheat production in Russia, further raising its share in total wheat output. This share increased from less than 50 percent in the 1990s to around 70 percent, on average, over the last 5 years.

Current Russian wheat yield performance is a combination of the above-described farm-level improvements that lead to higher efficiency and productivity and very favorable weather for crop development during the last 4 straight bumper years. However, an examination of the Russian regional data show that Russian winter wheat yields are substantially more volatile than spring wheat yields. The data also suggest that yield volatility has been increasing over the last 20 years. As the share of winter wheat in total Russian wheat output continues to increase, yield volatility should rise further. Hence, higher yields can be expected to come at the expense of greater yield volatility.

As ample wheat supplies, low production costs, and beneficial market location have made Russia the top world wheat exporter with an almost 20-percent share of global trade, the issue of yield volatility is becoming increasingly important for world markets. Russia's large wheat export share could lead to major world price fluctuations and market disruptions when poor weather (which is inevitable in certain years) reduces Russian wheat output. Reduced production can motivate Government policies in Russia—as has happened before in poor crop years—to restrict exports (such as an export tax or quota) in order to keep the crop in the country. These policies benefit domestic consumers (of both food and feed grain), but further lower the amount of Russian grain supplied to the world market. Right now, the Russian regions where winter wheat was planted in the fall of 2017 lack snow cover, leaving the crops exposed to potential freeze damage.

See also three special features on Russia in this month's circular "Grain: World Markets and Trade" https://apps.fas.usda.gov/psdonline/circulars/grain.pdf, pp. 1, 5, and 20.

Australia Reduces 2016/17 Output Number

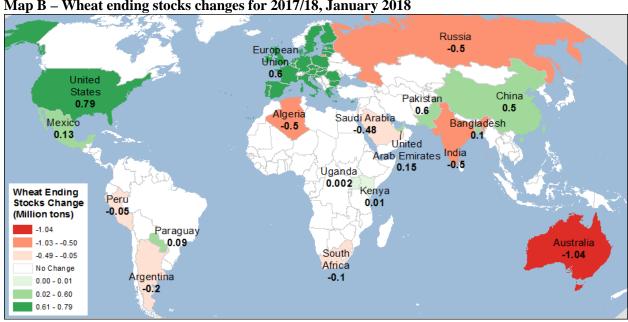
For the previous year of 2016/17, wheat output is sharply reduced for Australia, down 3.1 million tons to 30.4 million, which is still the country record. The Australian Bureau of Statistics (ABS) routinely publishes final results about a year after the harvest is completed. In the interim, the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), which follows up-to-date developments in grain production and trade, was maintaining until recently a wheat production estimate of 35.0 million tons. This 2016/17 wheat output reduction affected Australian and global wheat supply and use for both the 2016/17 and 2017/18 years, leading to reduced stocks, domestic consumption, and exports.

Wheat Use and Global Stocks Slightly Down

World consumption of wheat in 2017/18 is down fractionally this month by 0.4 million tons to 741.7 million. Global feed and residual wheat use is forecast up 0.7 million tons this month, with its foreign component increasing by 1.2 million tons, Higher feed use is projected for Russia, up 1.0 million tons, as large supplies of low-quality, competitively priced wheat encourage additional feeding. Higher projected wheat output also merits increased feeding for Pakistan, up 0.2 million tons, while reduced wheat supplies reduce Australian feeding for both 2016/17 and 2017/18.

The projected expansion of world wheat production is more than offset by lower beginning stocks stemming from the 2016/17 production cut for Australia. A projected reduction in wheat supplies exceeds a small consumption decline, such that estimates for ending stocks are down. Record-large global stocks are reduced just 0.4 million tons to 268.0 million tons, while foreign wheat stocks are down 1.2 million tons this month. Multiple changes in stocks are made this month as a result of specific countries' production and trade revisions.

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 2017/18, January 2018

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

World Wheat Record Trade Is Slightly Trimmed

Projected record world wheat trade for the international 2017/18 July-June trade year is reduced slightly this month by 0.9 million tons to 182.9 million. Competition among exporters is increasing, and **Russia** and **Argentina** are gaining market share.

The wheat export projection for Russia is up 2.0 million tons this month to 35.0 million, as increased production, large stocks, and policies push the export projection further into uncharted territory. Although extraordinarily high wheat supplies are stretching Russian grain handling and export infrastructure thin, the country is making every effort to maximize the amount of grain exported. Russia is using policy measures, international agreements, and investment to expand its foreign market outreach and thereby boost grain exports, which are expected to reach almost 45 million tons this year (35 million tons of wheat, 4.8 million tons of both corn and barley, plus small amounts of oats and rye). The weather also seems to cooperate as unseasonably warm temperatures that allow navigation in the Sea of Azov—which feeds into the Black Sea—continued later than usual, enhancing export potential.

Here are some recent Russian activities aimed at export expansion:

- The Government has just begun to offer subsidies for grain transported by rail that originates in 13 regions in the Central, Volga, Ural, and Siberian districts. The subsidies will boost export cost and price competitiveness for these districts and generate an estimated 3.0 million tons of additional grain exports.
- A number of investment projects are on the way that are expected to increase Russian port capacity. One example is the expansion by July 2018 of the port in Novorossiysk, which should boost daily rail intake and add about 3 million tons a year to transshipment capacity.
- Russia has negotiated acceptance of its milling-quality wheat in Brazil, which could make that country (if realized) a new destination for Russian grain. Russia is also planning to develop a grain hub in the United Arab Emirates (UAE) to ensure a steady supply of grain to the Persian Gulf region.

Wheat exports are also projected higher for **Argentina**, up 0.5 million tons to 13.0 million, the highest since the record of 2004. The Argentine peso recently experienced a substantial drop of 4 percent. Although stemming from a worsening economic situation in the country, the currency devaluation further increases Argentine export price competitiveness and improves farmers' and traders' bottom lines.

Lower wheat supplies and escalating competition in Asia push the **Australian** export projection for 2017/18 down 1.5 million tons to 17.5 million. Local marketing year (October-September) exports are reduced by the same quantity to 16.0 million tons.

Wheat exports for the **European Union** (EU) are also projected down 1.5 million tons to 27.0 million. Lower supplies and the strength of the euro weaken the competitiveness of European wheat in global markets, particularly in Algeria, Egypt, and Saudi Arabia.

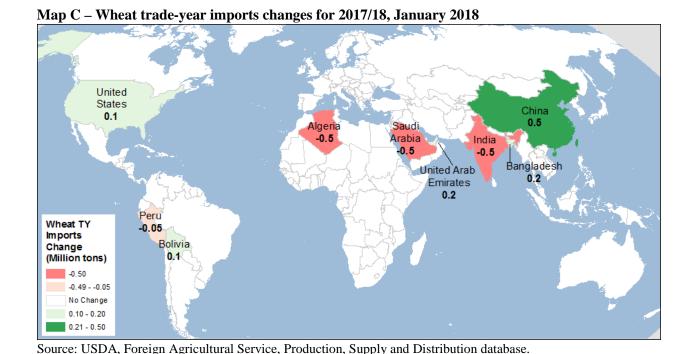
Wheat import projections are adjusted for a number of countries this month, reflecting wheat availability, logistics, policies, and recent sales (see map C).

U.S. Wheat Exports Unchanged, Imports Up This Month

The July-June trade-year forecast for U.S. wheat exports is left unchanged at 26.0 million tons (975 million bushels for the June-May local marketing year). U.S. wheat imports are projected up 0.1 million tons (or 5.0 million bushels for the local year) to 4.2 million (and 0.9 million tons higher than last year), because of the higher-than-expected pace of shipments from Canada.

U.S wheat exports have been in line with the current projection in the first half of the season, supported by the weakening U.S. dollar, while ample wheat supplies in major wheat-exporting countries are expected to limit the U.S. pace of exports. A special challenge is coming from Argentina, which is becoming the most price competitive wheat supplier in all parts of the world, and from Russia with its ample low-cost wheat supplies. Both countries are gaining world market share.

For at-a-glance visual information on this month's changes in wheat TY imports, see map C (wheat imports).



Contacts and Links

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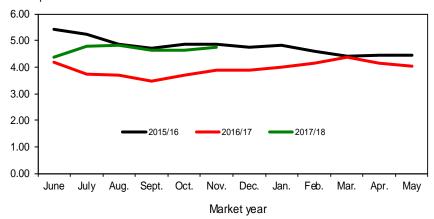
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Figure 1
All wheat average prices received by farmers

Dollars per bushel



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

Figure 2
Hard red winter wheat average prices received by farmers

Dollars per bushel

6.00

5.00

4.00

3.00

2.00

1.00

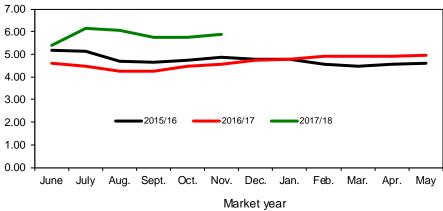
June July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May

Market year

 $Source: USDA, \ National \ Agricultural \ Statistics \ Service, \ \textit{Agricultural Prices}.$

Figure 3 Hard red spring wheat average prices received by farmers

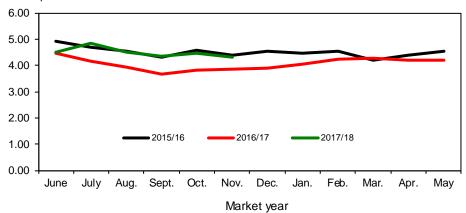
Dollars per bushel



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

Figure 4
Soft red winter wheat average prices received by farmers

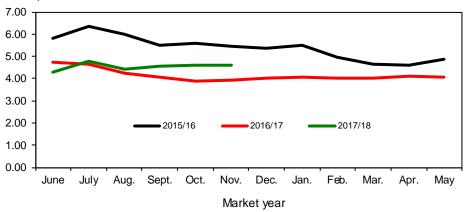
Dollars per bushel



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

Figure 5
Soft white wheat average prices received by farmers

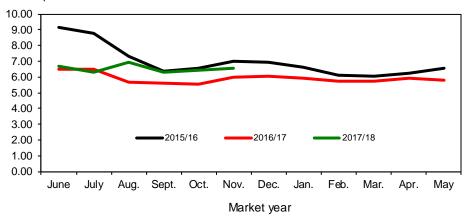
Dollars per bushel



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

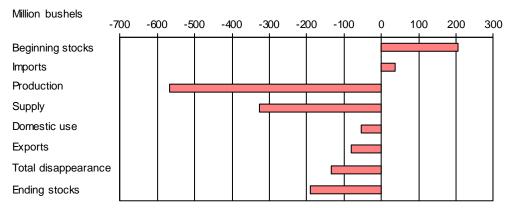
Figure 6 **Durum wheat average prices received by farmers**

Dollars per bushel



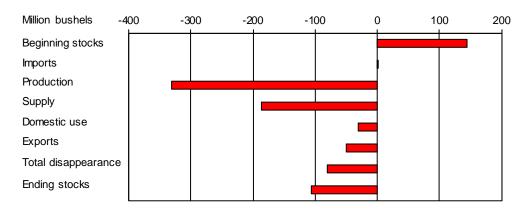
Source: USDA, National Agricultural Statistics Service, Agricultural Prices.

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



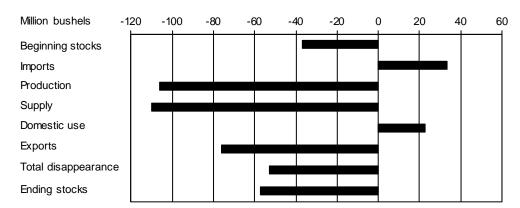
Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates.

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



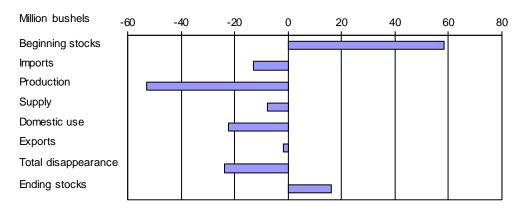
Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates.

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



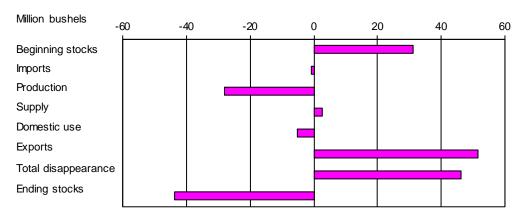
 $Source: USDA, World\ Agricultural\ Outlook\ Board,\ World\ Agricultural\ Supply\ and\ Demand\ Estimates.$

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



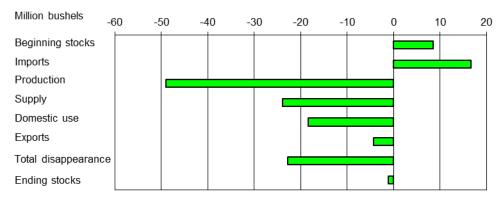
Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates.

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, 1/17/2018

Item and unit		2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Area:								
Planted	Million acres	54.3	55.3	56.2	56.8	55.0	50.1	46.0
Harvested	Million acres	45.7	48.8	45.3	46.4	47.3	43.9	37.6
Yield	Bushels per acre	43.6	46.2	47.1	43.7	43.6	52.7	46.3
Supply:								
Beginning stocks	Million bushels	863.0	742.6	717.9	590.3	752.4	975.6	1,180.6
Production	Million bushels	1,993.1	2,252.3	2,135.0	2,026.3	2,061.9	2,308.7	1,740.6
Imports ¹	Million bushels	113.1	124.3	172.5	151.2	112.7	118.1	155.0
Total supply	Million bushels	2,969.2	3,119.2	3,025.3	2,767.8	2,927.1	3,402.5	3,076.2
Disappearance:								
Food use	Million bushels	941.4	950.8	955.1	958.3	957.1	949.0	950.0
Seed use	Million bushels	75.6	73.1	75.6	79.4	67.2	61.3	62.0
Feed and residual use	Million bushels	158.5	365.3	228.2	113.4	149.4	156.5	100.0
Total domestic use	Million bushels	1,175.5	1,389.3	1,258.8	1,151.1	1,173.7	1,166.7	1,112.0
Exports ¹	Million bushels	1,051.1	1,012.1	1,176.2	864.3	777.8	1,055.1	975.0
Total disappearance	Million bushels	2,226.6	2,401.4	2,435.1	2,015.4	1,951.5	2,221.9	2,087.0
Ending stocks	Million bushels	742.6	717.9	590.3	752.4	975.6	1,180.6	989.2
CCC inventory	Million bushels						.0	
Stocks-to-use ratio		33.4	29.9	24.2	37.3	50.0	53.1	47.4
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	73.80	73.70	72.80	56.40	56.40	56.50	56.50
Farm price ²	Dollars per bushel	7.24	7.77	6.87	5.99	4.89	3.89	4.50-4.70
Market value of production	Million dollars	14,269	17,383	14,604	11,915	10,203	8,981	8,007

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, 1/17/2018

Area:		All wheat	winter ¹	spring ¹	winter ¹	White ¹	Durum
-							
Planted acreage	Million acres	50.11	26.58	10.90	6.02	4.20	2.41
Harvested acreage	Million acres	43.85	21.87	10.62	4.98	4.03	2.36
Yield	Bushels per acre	52.65	49.47	46.28	69.37	71.08	44.03
Supply:	Million hushels	975 60	445 53	271 07	156 63	73.68	27.80
•							103.91
		-					30.38
Total supply	Million bushels	3,402.47	1,532.58	805.07	535.05	367.67	162.10
Disappearance:							
Food use	Million bushels	948.98	384.71	250.00	150.00	85.00	79.27
Seed use	Million bushels	61.27	26.20	15.48	11.02	5.17	3.40
Feed and residual use	Million bushels	156.49	77.64	-16.27	67.34	9.04	18.74
Total domestic use	Million bushels	1,166.73	488.55	249.21	228.36	99.21	101.41
Exports ²	Million bushels	1,055.13	454.74	320.86	91.69	163.46	24.38
Total disappearance	Million bushels	2,221.86	943.28	570.07	320.05	262.67	125.79
Ending stocks	Million bushels	1,180.60	589.30	235.00	215.00	105.00	36.30
Area:							
_							2.31
Harvested acreage	Million acres	37.59	17.64	9.67	4.32	3.82	2.14
Yield	Bushels per acre	46.31	42.54	39.82	67.66	67.53	25.71
Supply:							
		-					36.30
		,					54.91
•							47.00
Total supply	Million bushels	3,076.18	1,345.63	695.01	527.16	370.18	138.21
Disappearance:	Million hushels	950.00	385.00	250.00	150.00	85.00	80.00
							3.00
							.00
							83.00
		-					20.00
•							103.00
		·					
Ending stocks	Million bushels	989.18	483.63	178.01	231.16	61.18	35.21
	Yield Supply: Beginning stocks Production Imports² Total supply Disappearance: Food use Seed use Feed and residual use Total domestic use Exports² Total disappearance Ending stocks Area: Planted acreage Harvested acreage Yield Supply: Beginning stocks Production Imports² Total supply	Harvested acreage Yield Bushels per acre Supply: Beginning stocks Production Imports2 Million bushels Million acres Million acres Million acres Million bushels Million bus	Harvested acreage Million acres 43.85 Yield Bushels per acre 52.65 Supply: Beginning stocks Million bushels 975.60 Production Million bushels 2,308.72 Imports² Million bushels 118.14 Total supply Million bushels 948.98 Seed use Million bushels 156.49 Total domestic use Million bushels 1,166.73 Exports² Million bushels 1,055.13 Total disappearance Million bushels 2,221.86 Ending stocks Million bushels 1,180.60 Area: Planted acreage Million acres 46.01 Harvested acreage Million bushels 1,740.58 Imports² Million bushels 1,740.58 Million bushels 1,740.58 Million bushels 1,55.00 Total supply Million bushels 155.00 Total supply Million bushels 990.00 Seed use Million bushels 990.00 Seed use Million bushels 100.00 Total domestic use Million bushels 100.00 Total domestic use Million bushels 100.00 Total domestic use Million bushels 1,112.00 Exports² Million bushels 1,112.00 Exports² Million bushels 975.00 Total disappearance Million bushels 1,112.00 Exports² Million bushels 975.00 Total disappearance Million bushels 975.00	Harvested acreage Million acres 43.85 21.87 Yield Bushels per acre 52.65 49.47 Supply: Beginning stocks Million bushels 975.60 445.53 Production Million bushels 2,308.72 1,082.01 Imports² Million bushels 118.14 5.05 Total supply Million bushels 3,402.47 1,532.58 Disappearance: Food use Million bushels 948.98 384.71 Seed use Million bushels 61.27 26.20 Feed and residual use Million bushels 1,56.49 77.64 Total domestic use Million bushels 1,055.13 454.74 Total disappearance Million bushels 1,180.60 589.30 Area: Planted acreage Million bushels 1,180.60 589.30 Area: Planted acreage Million bushels 1,180.60 589.30 Yield Bushels per acre 46.01 23.43 Harvested acreage Million bushels 1,740.58	Harvested acreage Million acres 43.85 21.87 10.62 Yield Bushels per acre 52.65 49.47 46.28 Supply: Beginning stocks Million bushels 975.60 445.53 271.97 Production Million bushels 2,308.72 1,082.01 491.33 Imports2 Million bushels 118.14 5.05 41.78 Total supply Million bushels 3,402.47 1,532.58 805.07 Disappearance: Food use Million bushels 61.27 26.20 15.48 Feed and residual use Million bushels 156.49 77.64 -16.27 Total domestic use Million bushels 1,166.73 488.55 249.21 Exports2 Million bushels 1,055.13 454.74 320.86 Total disappearance Million bushels 1,180.60 589.30 235.00 Area: Planted acreage Million bushels 1,180.60 589.30 235.00 Yield Bushels per acre 46.31	Harvested acreage Million acres 43.85 21.87 10.62 4.98 Yield Bushels per acre 52.65 49.47 46.28 69.37 Supply: Beginning stocks Million bushels 975.60 445.53 271.97 156.63 Production Million bushels 2,308.72 1,082.01 491.33 345.23 Imports2 Million bushels 118.14 5.05 41.78 33.19 Total supply Million bushels 3,402.47 1,532.58 805.07 535.05 Disappearance: Food use Million bushels 61.27 26.20 15.48 11.02 Seed use Million bushels 61.27 26.20 15.48 11.02 Feed and residual use Million bushels 1,166.73 488.55 249.21 228.36 Exports2 Million bushels 1,055.13 454.74 320.86 91.69 Total disappearance Million bushels 1,180.60 589.30 235.00 215.00 Area:	Harvested acreage Million acres 43.85 21.87 10.62 4.98 4.03

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.

¹ 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), 1/17/2018

							Feed and		Ending
Market ve	ar and quarter	Production	Imports1	Total supply	Food use	Seed use	residual use	Exports ¹	stocks
2009/10	Jun-Aug	2,209	28	2,893	231	1	251	200	2,209
	Sep-Nov	,	24	2,234	237	44	-81	252	1,782
	Dec-Feb		30	1,812	222	1	31	201	1,356
	Mar-May		37			21	-59	227	976
	,	0.000		1,393	229				
	Mkt. year	2,209	119	2,984	919	68	142	879	976
2010/11	Jun-Aug	2,163	27	3,166	235	1	215	265	2,450
2010/11	Sep-Nov	2,100	24	2,473	242	51	-63	311	1,933
	•			-	221	1	-03	308	
	Dec-Feb		23	1,956			07		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
	Sep-Nov	.,	32	2,179	244	51	-16	238	1,663
	Dec-Feb		30	1,693	231	1	44	217	1,199
	Mar-May		30		236	19	-70	301	743
	,	4.000		1,229					
	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	1,765	238	15	-20	315	718
	•	2,252	124	3,119	951	73	365	1,012	718
	Mkt. year	2,252	124	3,119	951	73	303	1,012	710
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
	wiki. year	2,133	172	3,023	933	70	220	1,170	330
2014/15	Jun-Aug	2,026	44	2,661	239	6	256	253	1,907
	Sep-Nov		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	1,396	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		30	2,575	245	41	-30	239	2,079
	Dec-Feb		25	2,104	228	1	-22	238	1,659
	Mar-May		31	1,690	238	19	-58	310	1,181
	Mkt. year	2,309	118	3,402	949	61	156	1,055	1,181
2047/40	lum A	4 744	40	0.000	000	2	470	000	0.000
2017/18	Jun-Aug	1,741	42	2,963	239	2	170	286	2,266
	Sep-Nov		36	2,302	246	40	-50	193	1,874
	Mkt. year	1,741	155	3,076	950	62	100	975	989

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

¹ 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), 1/17/2018

Mkt year a month 1/	and	Wheat ground for flour	+	Food imports ²	+ Nonmilled food use ³ -	Food exports ² =	Food use
2015/16	Jun	74,155		3,369	2,000	1,760	77,764
	Jul	74,749		2,987	2,000	1,850	77,887
	Aug	81,695		2,782	2,000	1,889	84,588
	Sep	78,556		2,768	2,000	1,928	81,396
	Oct	82,604		2,855	2,000	2,119	85,340
	Nov	79,065		2,989	2,000	2,050	82,005
	Dec	74,215		2,867	2,000	2,118	76,964
	Jan	73,645		2,769	2,000	2,032	76,383
	Feb	73,061		2,753	2,000	1,623	76,191
	Mar	77,514		2,842	2,000	2,220	80,135
	Apr	74,777		4,199	2,000	1,765	79,210
	May	76,456		2,832	2,000	2,026	79,262
2016/17	Jun	73,149		2,933	2,000	2,150	75,932
	Jul	74,237		2,639	2,000	1,665	77,212
	Aug	81,136		3,198	2,000	1,856	84,478
	Sep	78,018		2,537	2,000	2,140	80,415
	Oct	81,469		2,968	2,000	2,325	84,111
	Nov	77,978		3,191	2,000	2,201	80,968
	Dec	73,195		2,863	2,000	1,868	76,190
	Jan	73,561		2,858	2,000	2,027	76,392
	Feb	72,977		2,301	2,000	1,978	75,300
	Mar	77,425		2,840	2,000	1,789	80,477
	Apr	74,812		2,828	2,000	1,534	78,105
	May	76,492		2,818	2,000	1,914	79,396
2017/18	Jun	73,183		3,248	2,000	1,822	76,610
	Jul	74,520		2,966	2,000	1,795	77,691
	Aug	81,444		3,151	2,000	2,107	84,488
	Sep	78,315		2,622	2,000	1,411	81,526
	Oct			3,243	2,000	1,133	4,109
	Nov			3,219		1,285	1,935

¹ Current year is preliminary. Previous year is preliminary through August of current year, estimated afterwards.
² 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.

3 Wheat prepared for food use by processes other than milling.

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. See http://www.ers.usda.gov/Briefing/Wheat/wheatfooduse.htm for more information.

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) , 1/17/2018

Month	All wheat		Wii	Winter		rum	Other spring	
	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18
June	4.20	4.37	3.97	4.11	6.50	6.69	4.61	5.35
July	3.75	4.77	3.56	4.56	6.47	6.30	4.48	6.09
August	3.68	4.83	3.41	4.27	5.66	6.93	4.26	5.87
September	3.48	4.65	3.25	4.11	5.61	6.32	4.22	5.62
October	3.68	4.64	3.37	4.17	5.51	6.41	4.38	5.55
November	3.88	4.73	3.41	4.07	6.00	6.53	4.48	5.78
December	3.90		3.40		6.07		4.66	
January	4.01		3.53		5.90		4.74	
February	4.16		3.77		5.71		4.83	
March	4.37		3.82		5.72		4.86	
April	4.16		3.70		5.90		4.83	
May	4.05		3.77		5.82		4.81	

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

Table 6--Wheat: National average prices received by farmers by class (dollars per bushel), 1/17/2018

	<u> </u>		, , , , , , , , , , , , , , , , , , , ,					
Month	Hard red winter		Soft re	d winter	Hard red spring		White	
	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18
June	3.84	3.99	4.45	4.50	4.61	5.41	4.75	4.30
July	3.32	4.45	4.16	4.84	4.48	6.16	4.63	4.77
August	3.15	4.10	3.92	4.49	4.27	6.07	4.23	4.43
September	3.02	3.82	3.68	4.33	4.24	5.75	4.08	4.55
October	3.07	3.82	3.83	4.48	4.46	5.73	3.88	4.59
November	3.16	3.84	3.85	4.31	4.54	5.89	3.92	4.58
December	3.11		3.91		4.72		4.00	
January	3.35		4.04		4.78		4.04	
February	3.59		4.25		4.91		4.02	
March	3.66		4.29		4.92		4.01	
April	3.52		4.19		4.89		4.11	
May	3.65		4.20		4.95		4.07	

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

Table 7Wheat: Average	cash grain	bids at principal	markets	1/17/2018
Table 1 Wileat. Average	casii ulali	Dius at Dillicipa	illainets.	1/11/2010

Table 7villea		red winter	No. 1 hard	red winter		red winter		red winter
	Kansas	y protein) City, MO er bushel)	Kansas	orotein) City, MO er bushel)	Portla	y protein) nd, OR er bushel)	Texas C	y protein) Gulf, TX ¹ r metric ton)
Month	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18
June	5.04	5.24	5.54	6.65	5.18	4.53	176.55	189.60
July	4.24	5.65	5.18	7.22	4.66	5.12	151.57	203.74
August	4.15	4.80	5.32	6.28	4.62	4.22	149.18	171.41
September	4.24	5.07	5.36	6.52	4.41	4.81	150.47	178.76
October	4.40	5.11	5.58	6.24	4.20	5.03	152.12	175.82
November	4.64	5.30	5.70	6.84	4.12	4.96	150.28	179.49
December	4.56	5.38	5.76	6.72	4.03	4.84	141.83	183.90
January	4.91		6.03		4.34		153.22	
February	5.04		6.08		4.58		155.24	
March	4.80		5.53		4.54		154.32	
April	4.37		5.08		4.23		165.90	
May	4.80		5.89		4.31		180.04	
	No. 1 dark northern spring (13% protein) Chicago, IL (dollars per bushel)		(14%) Chica	orthern spring orotein) ago, IL er bushel)	Portla	orthern spring protein) nd, OR er bushel)	Minnear	amber durum polis, MN er bushel)
	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18
June					6.35	7.50		
July					5.82	8.77		
August					5.97	7.74		
September					5.98	7.40		
October					6.34	7.39		
November					6.28	7.52		
December					6.49	7.38		
January					6.80			
February					6.81			
March					6.60			
April					6.45			
May					6.64			
	St. Lo	No. 2 soft red winter St. Louis, MO (dollars per bushel)		No. 2 soft red winter Chicago, IL (dollars per bushel)		No. 2 soft red winter Toledo, OH (dollars per bushel)		oft white nd, OR er bushel)
	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18
June	4.74	4.66	4.70	4.41	4.69	4.44	5.46	4.91
July	4.23	5.15	4.12	4.96	4.22	4.94	5.07	5.40
August	3.90	4.31	3.99	4.12	4.03	4.20	4.89	5.13
September	3.89	4.30	3.76	4.23	3.72	4.27	4.77	5.19
October	3.89	4.16	3.82	4.22	3.90	4.24	4.65	5.30
November	4.04	4.34	3.88	4.13	3.92	4.18	4.64	5.26
December	3.91	4.28	3.94	4.12	3.80	4.04	4.57	5.22
January	4.17		4.16		4.09		4.63	
February	4.38		4.26		4.28		4.74	
March	4.24		4.06		4.14		4.70	
April	4.14		3.93		4.08		4.61	
May	4.20		4.08		4.19		4.77	

-- = Not available or no quote.

1 Free on board.

Source: USDA, Agricultural Marketing Service, State Grain Reports, http://www.ams.usda.gov/AMSv1.0/ams.fetchTemplateData.do?
template=TemplateS&navID=MarketNewsAndTransportationData&leftNav=MarketNewsAndTransportationData&page=LSMarketNewsPageStateGrainReports.

Date run: 1/16/2018 Date run: 1/16/2018

Table 8--Wheat: U.S. exports and imports for last 6 months (1,000 bushels), 1/17/2018

		Jun	Jul	Aug	Sep	Oct	Nov
Item		2017	2017	2017	2017	2017	2017
Exports	All wheat grain	111,472	83,974	85,175	86,268	51,022	51,641
	All wheat flour ¹	1,456	1,438	1,661	909	707	866
	All wheat products ²	393	385	474	542	454	435
	Total all wheat	113,322	85,797	87,310	87,719	52,183	52,942
Imports	All wheat grain	8,438	10,481	13,734	8,920	8,285	9,640
	All wheat flour ¹	1,416	1,339	1,349	1,231	1,554	1,499
	All wheat products ²	1,858	1,652	1,834	1,409	1,717	1,777
	Total all wheat	11,712	13,472	16,917	11,560	11,556	12,915

Totals may not add due to rounding.

1 Expressed in grain-equivalent bushels. Includes meal, groats, and durum.

2 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 ERS calculations using Census trade statistics.