



Economic Research Service | Situation and Outlook Report

WHS-18e | May 14, 2018

Next release is June 14, 2018

Wheat Outlook

Jennifer K. Bond, coordinator Olga Liefert

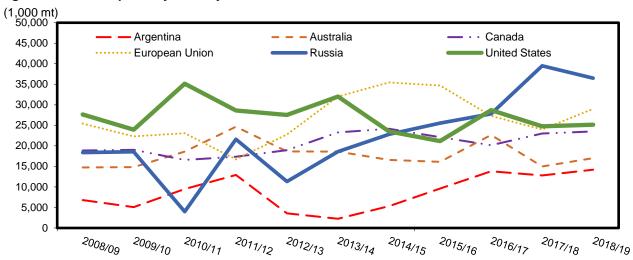
In this report:

- Domestic Outlook
- International Outlook
- International Feature: Major Changes in Russian and Ukrainian Crop Area During Economic Transition. By William Liefert

Russia 2017/18 export projection is raised 1 million tons to 39.5 million, while U.S exports are trimmed

With the pace of sales slowing in recent weeks, U.S. exports for 2017/18 are trimmed 15 million bushels to 910 million. The cut comes as data on shipments of Russian wheat exports reveal a continued surge through March and into April. This pace exceeds the already high expectations for Russian exports for the 2017/18 marketing year. Raised 1 million metric tons this month to 39.5 million, Russian exports are forecast to set a new volume sales record and to firmly establish the country's position as the world's top wheat exporter. Into 2018/19, Russian exports are projected to decline to 36.5 million metric tons, though the nation's status as the globe's top exporting nation remains intact. While U.S. volume exports are slightly up in 2018/19, the European Union is projected to export more wheat, second only to Russia.

Figure 1: Wheat exports by country

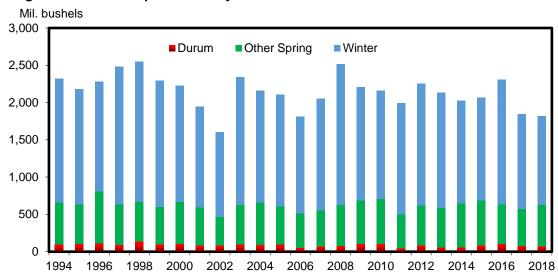


Domestic Outlook

Domestic Changes at a Glance:

- Wheat production for 2018/19 is projected at 1,821 million bushels, up 81 million bushels from the 2017/18 (fig. 2).
 - USDA, National Agricultural Statistics Service (NASS) forecasts winter wheat production at 1,191.5 million bushels, down 6 percent from 2017/18, based on both reduced yields and a lower harvested-to-planted ratio, despite year-to-year growth in area planted to winter wheat.
 - Other spring and durum production in the new marketing year are projected at 558.3 and 71.5 million bushels, respectively.
 - Desert durum production is forecast to expand by 725,000 bushels in 2018/19 due to sizable yield recovery and expanded plantings for the California crop.
- The all-wheat yield for 2018/19 is up fractionally to 46.8 on projections of proportionately higher yielding wheat classes being produced (primarily hard red spring), even with a reduction in the winter wheat yield.
- Despite increased production, year-to-year, total supplies in 2018/19 are projected lower than 2017/18 on lower carryin and imports.
- Total use for the new marketing year is projected up 3 percent on expanded food, feed and residual, and export use.
- Ending stocks are forecast to reach a 4-year low in 2018/19 of 955 million bushels, 115 million below the revised 2017/18 carryout estimate.
- Reflecting a tighter balance sheet, the all-wheat season average farm price (SAFP) for 2018/19 is \$5 per bushel, at the midpoint of the projected range of \$4.50 to \$5.50 and 30 cents above the current 2017/18 midpoint SAFP.
- For 2017/18, food use is raised 8 million bushels, less than one-tenth of 1 percent to 963 million based on updated milling data from USDA, NASS indicating higher-than-expected wheat food use through March.

Figure 2: U.S. wheat production by class



1/2018 production figures are projected.

Source: USDA, National Agricultural Statistics Service. Quick Stats database.

Balance sheet item	2017/18	(April)	2017/18	(May)	2017/18 Change from previous month	2018/19	Comments
Supply, total			Million	n bushel	S		May-June Marketing Year (MY)
Beginning stocks	1,180.6	6	1,180.6		0.0	1,070.2	
Production	1,740.6	6	1,740.6		0.0	1,821.3	
Imports	155.0		155.0		0.0	135.0	2018/19-Expectations of increased supply of spring wheat reduces demand for imported wheat, primarily from Canada.
Supply, total	3,076.2	2	3,076.2		0.0	3,026.5	2018/19-Lower carryin and imports, compared to 2017/18, more than offset projected increasin production resulting in lower total supply for new marketing year.
Demand							
Food	955.0		963.0		8.0	965.0	2017/18-NASS Flour Milling Products report indicates second quarter of strong wheat for flour use. Prospects for growth in Q4 support 8 million-bushel increase in food use. 2018/19-or a favorable outlook for consumer spending on food eaten away from home and a trend of increased per capita wheat flour consumption, food use is projected at 965 million bushels.
Seed	62.0		63.0		1.0	62.0	2017/18-Seed use raised 1 million bushels to reflect expectations of year-to-year growth in planted area.
Feed and residual	70.0		70.0		0.0	120.0	2018/19-On higher production and a more favorable wheat-to-corn price ratio, wheat feed and residual is projected 50 million bushels higher in the new year, compared to 2017/18.
Domestic, total	1,087.0)	1,096.0		9.0	1,147.0	
Exports	925.0		910.0		-15.0	925.0	2018/19-On projected growth in global wheat consumption, forecast at a record 747.8 million tons, U.S. export prospects are 15 million bushels higher than the revised 2017/18 forecast.
Use, total	2,012.0)	2,006.0		-6.0	2,072.0	
Ending stocks	1,064.2	2	1,070.2		6.0	954.5	2018/19-Higher total use and reduced projecte total supplies result in a 115.7-million bushel reduction in ending stocks, compared to 2017/18.

Dry Conditions Drive Winter Wheat Production Down in 2018

This month, USDA-NASS released the first survey-based winter wheat production forecast for the 2018/19 marketing year. Projections of winter wheat area harvested, yields, and production-by-State inform expectations of year-to-year reductions across each category. The previously published all-wheat production forecast for the new marketing year, released at the Agricultural Outlook Forum in February, reflected winter wheat production that was a function of both trend yields and a slightly below-trend harvested-to-planted ratio. The below-trend ratio reflected the dry and droughty conditions in the winter wheat-growing belt. Expectations of drought impacting winter wheat production have been borne out in this NASS 2018/19 winter wheat production

forecast. If realized, the 1,191.5 million bushel U.S. winter wheat crop will be 6 percent below the 2017 estimate and the lowest since 2002. See figure 3 for by-State changes in forecast winter wheat production.

Much of the key U.S. winter wheat production area remains subject to dry to drought conditions, despite some modest, scattered improvements in conditions in the preceding weeks. The *U.S. Drought Monitor* indicates that Kansas, Oklahoma, Colorado, and Texas are still affected by a lack of moisture, and the USDA, World Agricultural Outlook Board reports that approximately 36 percent of winter wheat production is within an area experiencing drought.

Soil moisture levels that are below average are reflected in crop conditions that are well below the previous year's figure. For the week ending April 29, 33 percent of the winter wheat crop growing in the 18 reporting States was rated "good" to "excellent," compared to 54 percent rated similarly for the same week in 2017. Thirty-seven percent of the 2018 winter wheat crop was rated "very poor" to "poor," compared to 13 percent in 2017. In addition, much of the 2018/19 crop is behind average maturity pace. Between 2013 and 2017, 30 percent of the winter wheat crop in the 18 reporting States had headed by week 17 (week ending April 29). Just 19 percent of the winter wheat crop was reported to have headed in the most recent USDA, NASS *Crop Conditions* report.

WA -1,650K MT ND 9,170K 1,785K OR -4.145K WI SD 3,770K 1,510K 20,080K 1,995K NE OH -4.350K 4,000K .510K IN MD CA CO 720K 1.830K -490K KS MO -3.260K KY 2.155K -63,500K -2.800K 430K NC 575K OK 2.350k AR 46.600K 100K MS 720ŀ TX -24,950K **Production Change** (in 1,000 bushels) 501 or more 251 to 500 1 to 250 -1,000 or less -1,001 to -10,000 -10,001 or more No data

Figure 3: Winter wheat production changes, 2018 vs. 2017

Source: USDA, National Agricultural Statistics Service Quick Stats database.

Maturity was well behind in Kansas, with just 2 percent of the crop headed, compared to 41 percent in 2017 and the 5-year average of 24 percent. In Oklahoma, 35 percent of the crop had headed by week 17, a sharp decline from the 74 percent headed in 2017 and the 5-year average of 60 percent. In Texas, USDA, NASS reports that small grains have not shown much damage from a mid-April freeze event, and winter wheat is 70 percent headed. Heading in Texas is ahead of the 5-year average of 60 percent, but behind last year's 76 percent. Despite maturity that is nearly matching last year's progress, the condition of the Texas crop continues to suffer. For the week ending April 29, fully 61 percent of the winter wheat crop was rated "very poor" to "poor." The Southern Plains Regional NASS Field Office reports that some Texas winter wheat producers are cutting wheat for hay based on the poor crop conditions. For the 2017/18 marketing year, Texas contributed about 5 percent of the total U.S. winter wheat crop.

Oklahoma is projected to produce 52.0 million bushels of winter wheat in 2018, a sharp decline from the near 100 million produced in 2017. Reduced production in the State is partially due to a dramatic reduction in harvested area, down 900,000 acres year-to-year to 2.0 million, and a sizable trim to yields-projected, down 8 bushels per acre to 26 bushels. Gains in harvested area for Kansas help to offset losses in these and other key winter wheat-growing States. Kansas is set to harvest 7.3 million acres of winter wheat, which compares to 6.95 million in 2017. Potential production gains are tempered greatly by a sizable reduction in projected yields—down 11 bushels per acre, based on farmer and objective yield surveys. If 37 bushels per acre yields are realized, they will be on par with winter wheat yield from 2015 and 9 bushels per acre above the 2014 estimate.

Other Spring Wheat and Durum Production

In July, USDA-NASS, will release its first projection of other spring wheat and durum production for the 2018/19 marketing year. Current projections are based on plantings intentions reported in the March *Prospective Plantings* report and 10-year trend yields and harvested-to-planted ratios. Since U.S. farmer planting intentions data were collected in early March, Statistics Canada has subsequently released the Canadian plantings intentions report indicating farmer expectations to plant a near-record area of spring wheat and more durum in 2018. In the 2017/18 marketing year, the United States imported above-average volumes of these wheat classes from Canada. Increased demand for Canadian wheat supported farm prices and expectations of robust returns in the new marketing year. The planting window for other spring and durum in the Northern Plains is open until mid-June. With just 30 percent of the 2018 U.S. spring wheat crop reported to have been planted as of the week ending May 6, according to NASS, farmers may have capacity to adjust planting strategies to accommodate evolving market conditions.

Balance Sheet Adjustments for 2017/18

For the 2017/18 marketing year, supply is unchanged this month, while adjustments to use result in a net 6 million bushel increase in ending stocks. Based on the flagging pace of exports in recent weeks, U.S. wheat exports are trimmed by 15 million bushels to 910 million. During April, U.S. wheat prices generally rose on concerns that the persistent drought conditions in the hard red winter growing region would dampen production prospects. Elsewhere, the pace of key competitors' exports accelerated, resulting in a 1 million metric ton increase in projected Russian exports to 39.5 million. Exports from Canada are also raised 300,000 metric tons to 22.8 million. On an international trade year (July/June) basis, U.S. exports are reduced 500,000 metric tons to 24.0 million.

In contrast to the trend of recent years, U.S. food use is raised 8 million bushels this month to 963 million (fig.4). Consecutive USDA, NASS *Flour Milling Products* reports provide ample evidence of increased wheat flour use. Further, rising extraction rates support the notion that the gains in wheat use are attributable to growth in flour production and, hence, consumer demand as opposed to reduced million efficiency. Estimated extraction rates are 77.4 percent between December and March, up from 77.2 percent in the preceding 3 months. Based on NASS data, the third quarter wheat flour use was the strongest since at least 1989/90.

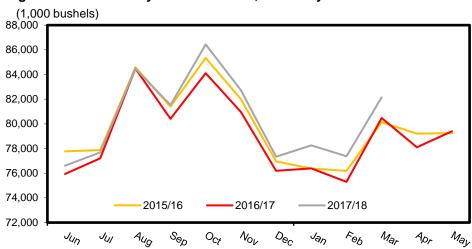


Figure 4: Total monthly wheat food use, June-May: 2015/16-2017/18

Source: USDA, Economic Research Service calculations based on USDA, National Agricultural Statistics Service data.

With data on flour production through March 2018 available, indications are strong that demand will remain robust through the fourth quarter (March-May). Typically, seasonal wheat use for flour surges in the fourth quarter, due in large part to increased grilling activities that complement bakery products (e.g., bun) use. The fourth quarter typically includes an extra day or two, which accounts easily for a 1–2 percent quarter-to-quarter increase in food use. Further, Easter—a traditional roll, cookie, and cake-consuming holiday—was later this year (April 1), providing a boost to March use as families prepared for the holiday.

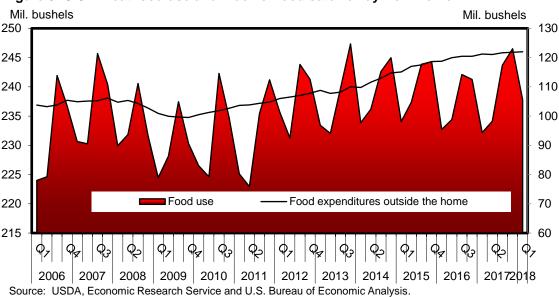


Figure 5: U.S. wheat food use and index of food eaten away from home

Finally, U.S. Bureau of Economic Analysis data indicate that real personal consumption expenditures, driven by rising incomes, have steadily been increasing and have supported growth in food service and accommodations expenditures. Wheat food use tends to increase as expenditures on food eaten away from home rise (fig. 5). Accordingly, the recent lift in wheat food use can, in part, be explained by increased demand for food services such as meals eaten at fast casual restaurants. The restaurant industry is projecting sustained, moderate growth through 2018, which in turn supports the revised 2017/18 food use estimate at 963 million bushels, as well as the updated 2018/19 food use forecast, currently pegged at 965 million.

Total Wheat Use Projected to Rise in 2018/19

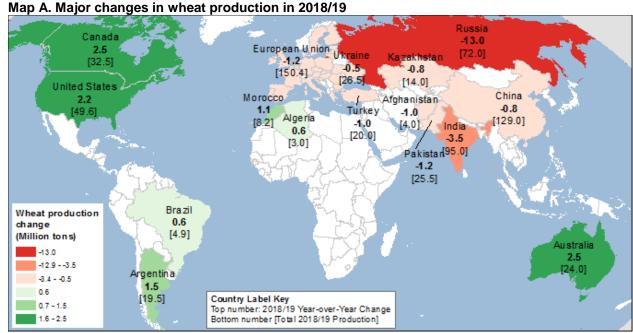
Despite expectations for slightly elevated production (up 81 million bushels) in 2018/19, compared to 2017/18, U.S. wheat supplies are projected to decline nearly 50 million bushels on both smaller carryin and reduced imports. Expectations of increased domestic production of hard red spring wheat are projected to reduce import demand for supplementary supplies from Canada. Forecast use for 2018/19 is projected to rise based on increased food and feed and residual use. A smaller corn crop and expanded wheat production contribute gains in feed and residual use. At 120 million bushels, the 2018/19 forecast is up 50 million from the 70 million bushels estimated for the 2017/18 marketing year. While higher, a feed and residual forecast of 120 million bushels is still well below the 5-year average of 143 million bushels. Total use is also boosted by improving prospects for U.S. exports, up 15 million bushels in the new marketing year to 925 million. The United States will face significant competition in global export markets in 2018/19 as several key competitors are projected to expand production. In contrast, U.S. production is forecast to decline, and hard red winter wheat—for which the U.S. has a competitive production advantage—will constitute a smaller proportion of the harvest than in recent years.

Overall, increased use more than offsets reductions in supply, increasing tightness in the balance sheet via a 115 million bushel reduction in year-to-year ending stocks. The net effect of the balance sheet adjustments is to create support for an increase in the season-average farm price (SAFP), currently projected at \$5 per bushel, at the midpoint for the 2018/19 all-wheat crop. If realized, this will be a 30 cent gain over the 2017/18 SAFP and the highest farm price since 2014/15.

International Outlook

2018/19 Foreign Wheat Production Down From Record High

World wheat production in 2018/19 is projected 10.6 million tons lower than the 2017/18 record. At 747.8 million tons, it is a decline of 1.4 percent but, if realized, still the third-largest wheat harvest in history. Foreign wheat output is projected to decline even more, down 12.8 million tons, or almost 2 percent, as a higher U.S. wheat crop adds to global wheat production.



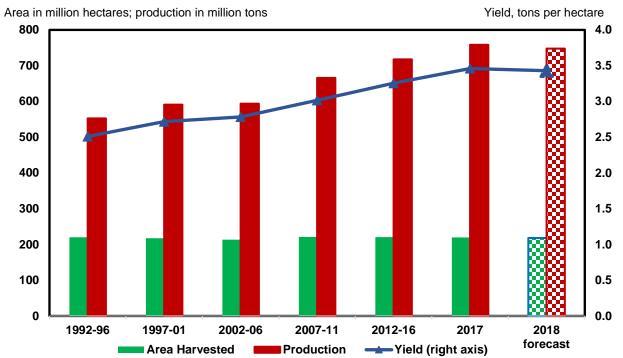
Note: Year-over-year (YoY) changes are in bold under the country name; 2018/19 output forecast is in parentheses below the country name.

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

Foreign wheat area is projected lower by 1.9 million hectares (4.7 million acres; 1 hectare = 2.47 acres), or by almost 1 percent, while a decline in global wheat area is less, given a 0.5-million-hectare increase in the United States.

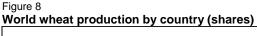
USDA monitors production of various commodities in 80 countries, with data recorded and continuously updated by the Foreign Agricultural Service (FAS) and reflected in the online Production, Supply and Distribution database. The most important developments in the new forecast for major commodities are published in the FAS "World Agriculture Production" report, as well as in the Agency's special articles and features.

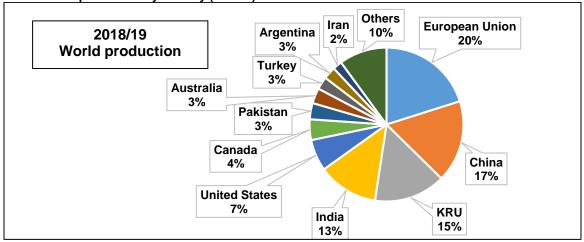
Figure 7
World wheat area, production, and yield: 5-year averages, 2017, and a forecast for 2018



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

World wheat production is dominated by 12 countries (regions) that produce almost 90 percent of the world's wheat. This country wheat production structure was stable for many years, but a shift has developed since 2000 in favor of the KRU region (Kazakhstan, Russia, and Ukraine), mainly at the expense of the United States, and has been expanding. Among other consequences, the shift in wheat production has affected global trade, with the U.S. share of world wheat exports trending lower (see trade section below).



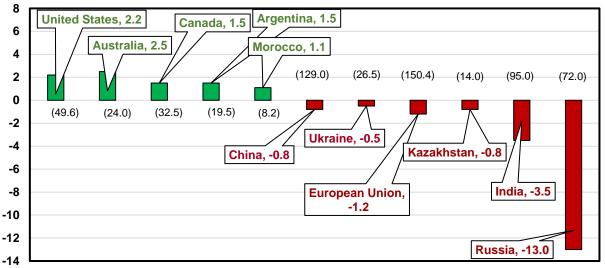


Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution database. Note: 2018/19 wheat output forecast is given in parentheses (*), million tons.

The projected 2018/19 decline in wheat production is mainly driven by Russia and India, though partly offsetting the drop in these two countries is higher wheat output forecast for the United

States, Australia, Canada, Argentina, the North African region, and some countries of the Middle East. Most of the changes are due to projected returns to normal, or trend, yields after the extremes of 2017/18. Russia and India are forecast to retreat from mostly weather-related record yields, while Australia is expected to recover from adverse 2017/18 weather conditions.

Figure 9
Projected wheat output and changes for 2018/19
Million tons



Note: 2018/19 wheat output forecast is given in parentheses (*), million tons. Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution database.

A brief discussion of the major foreign production forecasts for 2018/19 follows:

The European Union (EU), the largest world wheat producer, is projected to have slightly lower output of 150.4 million tons (down 1.2 million) compared to last year. Wheat area is expected to be 0.6 million hectares, down from last year and 3.0 percent lower than the 5-year average. The vast bulk of the wheat crop in the EU is winter wheat, planted in the fall. The smaller reported wheat area for France and Germany—the two largest EU wheat producers— reflects lower wheat prices at the time of planting in the fall, reflecting huge supplies of lower priced Russian wheat.

Across the continent, European countries enjoyed good planting conditions in autumn, especially in Eastern Europe, followed by a mild winter with adequate snow coverage. Although wheat development is currently behind average by 1 to 2 weeks, crop conditions are very good, and the ground is well-saturated. Despite lower projected wheat area, **France**, the largest European wheat producer, is expected to harvest 39.0 million tons, on par with last year. The same scenario is projected for **Germany**, with wheat output at 24.5 million tons. Unlike the **United Kingdom**, where both area and yields are forecast lower, France and Germany's higher wheat yields are expected to offset the effect of lower planting. **Spain** is recovering from last year's drought, with excellent moisture and weather conditions. The countries of **Eastern Europe**, on the whole, have been enjoying especially good weather conditions, although winterkill in some, especially **Poland**, might be higher than average. In **Serbia**, which is not part of the EU, both wheat area and yield are expected to recover from last year's poor harvest with a 35-percent increase in wheat output, reaching 3.1 million tons.

China is expected to be the second-largest wheat producer in 2018/19, reaching 129.0 million tons, a slight decline from last year. Area planted is slightly down, mainly because some marginal land is reportedly being taken out of production. A recent 2.5-percent reduction in the minimum support price for wheat came too late to affect fall planting. Winter wheat is the main

class produced in China, and planting was completed in October 2017. Some winter dryness is unlikely to affect the country's aggregate wheat yield, and trend yields are expected. Since the Chinese Government eliminated its control on prices for all crops except wheat, rice, soybean, and sorghum and allowed them to be determined by the market, wheat remains at abovemarket prices.

Kazakhstan, Russia, and Ukraine (KRU), the three main grain producers and exporters of the region of the former Soviet Union, are projected to harvest a combined 112.5 million tons of wheat, down 14.3 million tons from the previous year's record-high yields. Wheat harvested area is slightly up in Ukraine, but down in Russia and Kazakhstan. In Ukraine, winter wheat is by far the dominant class (97 percent of area), and the fall planted area was officially reported. Winter grain planting in Russia, about 90 percent of which is winter wheat, is reportedly lower than last year. (Russia does not publish fall planted area by type of grain.) Spring planting in Russia is underway, and current relative grain prices decisively favor barley and corn over wheat, with feed barley prices being on par with milling wheat. Wheat area in Russia is forecast to decline at the expense of increased barley and corn planting. There are not many cropping areas in Russia where a farmer can easily switch from wheat to barley or, especially, to corn, though the Volga district is one; thus, the main shift in area away from wheat is anticipated to happen there.

In Kazakhstan, in addition to prices favoring barley and oilseeds over wheat, the Government is attempting to move away from wheat, seeing it as a monoculture. Therefore, it is supporting and subsidizing diversification toward coarse grains and oilseeds. Crop conditions have been very good for winter grains in both Russia and Ukraine, with virtually no winterkill but with slightly delayed crop development. Overall conditions in the spring wheat areas of the Volga, Siberia, and Kazakhstan are good for fieldwork, and soil moisture levels in these areas are high. Wheat yields are projected roughly the same as last year for Ukraine and Kazakhstan, though Russian yields are down 11 percent, which nonetheless is still above the trend.

(See the feature below for an examination of how crop area and mix have changed in Russia and Ukraine since these countries began the move to market economies in the early 1990s.)

COUNTRY FOCUS: Russia and Ukraine

Major Changes in Russian and Ukrainian Crop Area During Economic Transition

By William Liefert

From the beginning of **Russia's** transition to a market economy in the early 1990s through 2001–05, Russian crop planted area fell substantially. Although area for wheat and corn remained fairly steady, and that for oilseeds rose, area for other grains and crops other than oilseeds dropped considerably. A key reason for the area decrease was the major contraction of the livestock sector, which reduced the country's demand for animal feed (Liefert and Liefert, 2012). During the 1990s, a severe drop in agricultural subsidies, which favored the livestock sector, led to a decline of more than half in both livestock herds and product output (meat and dairy goods).

Since 2005, both total area and total grain area (planted) have changed only modestly. However, changes involving specific crop groupings occurred. Area for other grains and other crops (that is, not covering wheat, corn, or oilseeds) continued to fall, area for wheat rose moderately, and area for oilseeds (mainly sunflowerseed) and corn more than doubled (from 2001–05 to 2016–17).

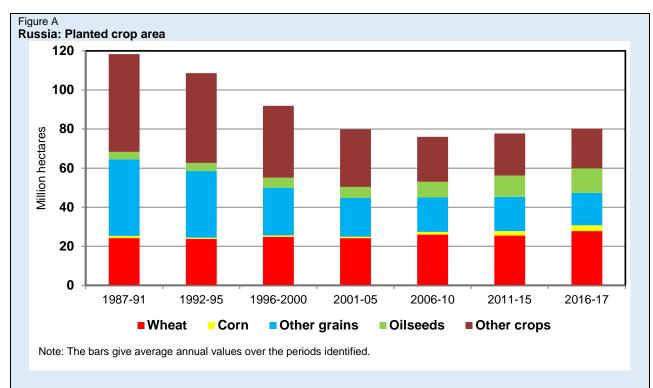
A major reason for the area growth for corn and oilseeds is the revival of the livestock sector, especially poultry, which has increased domestic demand for feed. From 2000 to 2017, Russian total meat output rose by almost 150 percent to 8.3 million metric tons (mmt), and poultry broiler production increased by 875 percent. The increase in wheat area can be largely attributed to the country becoming a major exporter, with its main foreign markets in the Middle East and North Africa. In 2016–17, Russia exported on annual average 33 mmt of wheat, accounting for 18 percent of total world sales.

Since 2000, Russia's production of wheat, corn, and oilseeds (again mainly sunflowerseed, though soybean and rapeseed output is also increasing) has grown substantially, fueled by growth in not only area but also yield. The rise of "new operators" in Russian agriculture (see Rylko et al., 2008), including large vertically integrated agroholdings, has apparently helped generate farm-level improvements in management and adoption of superior technology and production practices, including the use of imported machinery and seeds (such as hybrid corn and sunflower seed). Superior farm management also played a role in the reallocation of area to more profitable crops, almost extinguishing oats and rye.

Russian grain area in 2016–17 was 27 percent below the level in 1987–2001 (average annual), and 41 percent below that in 1961–65 (after Russia expanded cultivation under its "Virgin Lands" campaign). Some observers, both inside and outside Russia, argue that the country could return much of that abandoned land to grain production and, thereby, further increase output and exports considerably. However, Uzun et al. (2014), Liefert and Liefert (2015), and Meyfroidt et al. (2016) counter argue that most of the abandoned land was in marginal regions in the north and east of the country with high production costs, while some of the previous grain area in the country's better agricultural districts has been switched to oilseeds production. Although there is probably some potential for Russian grain area to increase somewhat (some additional area can still go to corn production), a return to the area level of the late Soviet period, much less to that of the early 1960s, would require that world grain prices rise substantially (probably more than double) to cover the high cost of producing in those remote and marginal regions.

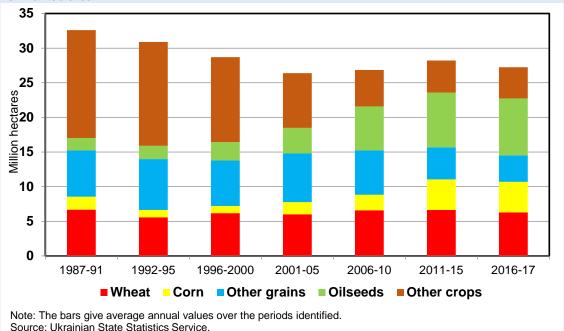
As in Russia, total planted crop area in Ukraine fell from the late Soviet period to the early 2000s, though not by as much. Most of the decline came in crops other than grain and oilseeds (potatoes, beets, vegetables). Area for wheat, corn, and other grains changed only modestly, while area for oilseeds about doubled.

Since 2005, area in Ukraine for grain other than wheat and corn, as well as for crops other than grain and oilseeds, both dropped considerably. On the other hand, area for oilseeds (again mainly sunflowerseed) and corn has more than doubled since 2001–05. Since the move to a market economy in the early 1990s, Ukrainian wheat area has been fairly stable, not straying far from 6 million hectares.



As in Russia, rising crop production since 2000 has made Ukraine a major grain exporter—the fourth largest of corn (on par with Argentina), the fifth or sixth in the world (depending on the year) of wheat, and a top exporter of sunflowerseed oil. In 2016 and 2017 Ukraine exported an annual average of 21 mmt of corn, 14 percent of the world total. Although area expansion has been a factor behind the increase in Ukraine's production and exports of corn and oilseeds, the main driver of the large growth in Ukrainian crop output since 2005 has been yields.





As they did in Russia, new types of agricultural producers (operators) have apparently played a key role in the rise in farm productivity, yields, and output in Ukraine, taking advantage of new

technologies (seeds, fertilizer, machinery) and the best black soil in the world. These producers recognized that higher profit could be earned by switching to such crops, procured the inputs (such as seeds and machinery, again often imported), and made the farm level adjustments necessary to change their crop area and production mix.

Liefert, W.M., and O. Liefert. 2012. "Russian Agriculture during Transition: Performance, Global Impact, and Outlook," *Applied Economic Perspective and Policy* 34(1): 37–75.

Liefert, W.M., and O. Liefert. 2015. "Russia's Potential to Increase Grain Production by Expanding Area," *Eurasian Geography and Economics* 56(5): 505–23.

Meyfroidt, P., F. Schierhorn, A.V. Prishchepov, D. Müller, and T. Kuemmerle. 2016. "Drivers, Constraints and Trade-offs Associated with Recultivating Abandoned Cropland in Russia, Ukraine and Kazakhstan," *Global Environmental Change* 37: 1–5.

Rylko, D., I. Khramova, V. Uzun, and R. Jolly. 2008. "Agroholdings: Russia's New Agricultural Operators, in *Russia's Agriculture in Transition: Factor Markets and Constraints on Growth*, Z. Lerman, ed., 95–133. Lanham, MD: Lexington Books.

Uzun, V., V. Saraikin, E. Gataulina, N. Shagayda, R. Yanbykh, S. Mary, and S. Gomez y Paloma. 2014. *Prospects of the Farming Sector and Rural Development in View of Food Security: The Case of the Russian Federation,* Scientific and Technical Research Reports, European Commission.

For more information on changing crop area in Russia and Ukraine, see Liefert, W., and O. Liefert, "Changing Crop Area in the Former Soviet Union Region." Outlook Report FDS17b-01, USDA, ERS 2017.

India is projected to produce 95.0 million tons in 2018/19, down 3.5 million tons, or 3.5 percent, from a year earlier. Low soil moisture and high temperatures during the planting season reduced wheat harvested area (down 2.5 percent). Although growing conditions have been mostly favorable, wheat yield is projected to retreat slightly from the last year's record. Harvesting of India's wheat crop is underway. **Pakistan** is also reporting good crop conditions but with lower planted area, and the 2018/19 wheat crop is forecast at 25.5 million tons, 1.2 million tons smaller than last year's record.

North Africa's wheat production is projected to reach 21.1 million tons, up 1.9 million tons from a year earlier. Though fall dryness delayed winter grain planting in Morocco this year, abundant rains arrived in the whole region in December, providing the crop with plentiful moisture throughout the reproductive stages of wheat development. As soil moisture is the primary determinant for area and yield gains in the region, record yields are expected in Algeria, Morocco, and Tunisia.

Surveys of planting intentions in **Canada** indicate wheat planting area will be higher than last year, at the expense of canola and soybeans. After adjusting April planting intentions for statistically significant overestimation and for average abandonment, Canadian wheat harvested area is forecast at 9.8 million hectares, with an increase in sowings of both Canadian Western Red Spring wheat and durum. Yields are currently expected to be at the trend level, increasing wheat production by 8.3 percent to 32.5 million tons.

For **Argentina**, 2018/19 wheat production is projected to be 1.5 million tons higher than last year, reaching 19.5 million, due to further expected expansion in planted area. Removing export

taxes for wheat exports and a shift away from regulation toward a market economy two years ago enhanced producer incentives to expand wheat and corn planting. Several factors are expected to support higher wheat planting. Weather conditions have been favorable, as rains continue to benefit wheat planting in the eastern part of the country. And the terms of trade for wheat (output versus input prices) have been improving, boosting farmers' expected returns. In addition, strong depreciation of the domestic currency will support Argentine price competitiveness in world markets, thereby supporting strong wheat export.

In **Australia**, a return to trend yields is forecast. Normal weather instead of the previous year's drought will result in an increase in yield. Wheat area harvested is projected only slightly lower despite higher local prices, as relative prices favor barley and sorghum due to strong demand from China. Wheat output is projected at 24.0 million tons, up 2.5 million from last year. Winter wheat will be planted from May through July.

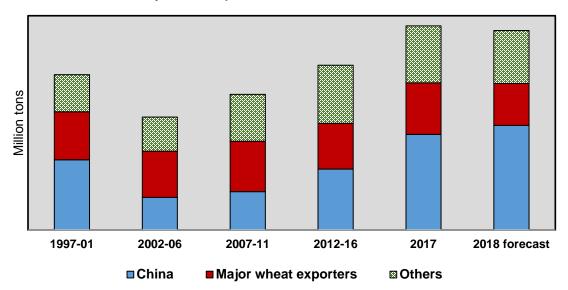
Wheat Ending Stocks Are Down for the First Time in 6 Years

Foreign wheat beginning stocks for 2018/19 are forecast up 17.6 million tons to 241.3 million, but the majority of this increase is projected for China (up 15.8 million tons). The Chinese Government continues to support wheat (and rice) prices that keep wheat area and production high and result in additional wheat stock accumulation. In Russia, India, and Turkey, beginning stocks are also up following record-high production. Partly offsetting these increases, the estimates for beginning stocks are reduced for Australia and Brazil, following their drought-affected wheat harvests. For the European Union, which had an average wheat harvest last year, beginning stocks are up. European wheat was largely unable to compete with abundant and lower priced Russian wheat, and EU exports are projected lower than previously forecast. Some of the surplus wheat was reallocated to feed markets within the EU, but most went into stocks.

The increase in beginning stocks more than offsets the projected 12.8-million-ton reduction in the foreign 2018/19 wheat output, and foreign supplies are projected slightly up (less than 1 percent) year-to-year. However, without China, foreign wheat supplies are down for 2018/19. Foreign wheat consumption is projected up by 1.2 percent, at 722.7 million tons. Foreign wheat feed and residual use is almost unchanged, down 1.1 million tons. However, with a projected increase in Chinese feeding (up 1.5 million tons), which is driven by policies rather than by global prices, foreign feed use (less China) is reduced 2.7 million tons from last year. One reason for the reduction is worldwide abundance of low-quality wheat in 2017/18 that boosted not only wheat feeding but also led to unusually high residual losses, especially in countries with substandard storage facilities (such as Russia). Foreign food, seed, and industrial use of wheat is expected to increase by about 1 percent following population growth.

With marginally larger foreign wheat supplies and higher use, foreign ending stocks are projected to decrease for the first time in 6 years, down 3.0 million tons to 238.4 million. With higher projected policy-driven Chinese stocks (up 11.8 million tons), the reduction in wheat foreign stocks less China is higher, down 14.8 million tons. Without the Chinese growth, stocks are projected lower for the majority of countries, especially for the major wheat exporters, which are expected to use up accumulated supplies to maintain high export levels (see fig.10).

Figure 10 World stocks: China and major wheat exporters



Note: Major exporters include the United States, Argentina, Australia, Canada, the European Union, Kazakhstan, Russia, and Ukraine.

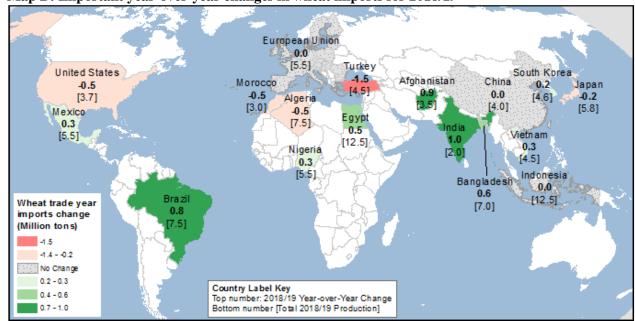
Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution database.

With a 3.1-million-tons decline in projected stocks in the United States, global ending 2018/19 stocks are projected 6.1 million tons lower.

Record World Wheat Trade Projected for 2018/19, With Russia Again as the Leading Exporter

World wheat trade (on a July-June trade year) is projected to reach 187.6 million tons, up 39 million in 2018/19, an increase of 2.1 percent over last year. However, the volumes of imports and exports by country are expected to shift. Despite higher wheat output in a number of importing countries and expected reduction in wheat feeding in response to higher wheat prices, wheat demand and imports are supported by growing population, mostly in the low-income countries, along with a growing share of wheat food use in countries that traditionally consume rice. The map below provides a quick look at the size and the year-over-year changes in wheat imports. For a short overview of specific countries' imports, see "Grain: World Markets and Trade," p.6, issued by USDA's Foreign Agricultural Service.

World demand for wheat has been growing at a steady, robust pace, mainly in line with population growth, but the corresponding rise in trade has been increasingly captured by the Black Sea region countries Russia and Ukraine --and, since 2015, by Argentina. For the last several years, the EU countries (especially France, the EU's top wheat producer) have seen shipments curtailed by abundant supplies of lower priced Russian and Ukrainian wheat. Meanwhile, the **United States** continues to export a fairly steady amount of around 25-27 million tons of wheat a year, with some variation depending on competitors' weather conditions, restrictive policies, and currency fluctuations.

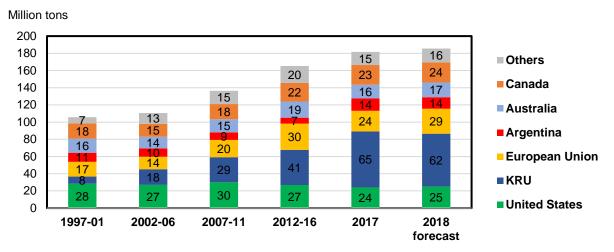


Map B: Important year-over-year changes in wheat imports for 2018/19

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

Russia and Ukraine have been gaining wheat export share since the beginning of the 2000s, alongside the EU, its main competitor and the world's top exporter in 2013/14 through 2015/16. In 2018/19, the EU is projected to boost its lackluster export performance of the current 2017/18 year and at least partly regain its former status. Benefitting from 4 consecutive bountiful production years, Russia became by far the largest global wheat exporter in 2017/18 and is projected to maintain this status in 2018/19. In Argentina, the recent 2015/16 elimination of taxes and quotas for wheat exports, which had burdened farmers for the past 15 years, and a strong depreciation of its currency (the peso) are expected to boost its wheat output and exports further in 2018/19. The gains by the EU, Argentina, Russia, and Ukraine in the global wheat market in recent years come mainly at the expense of the **United States**, whose share of world wheat trade is trending lower.

Figure 11
Wheat exports of major competitors, 5-year averages and a 2018 forecast



Note: KRU includes Kazakhstan, Russia, and Ukraine

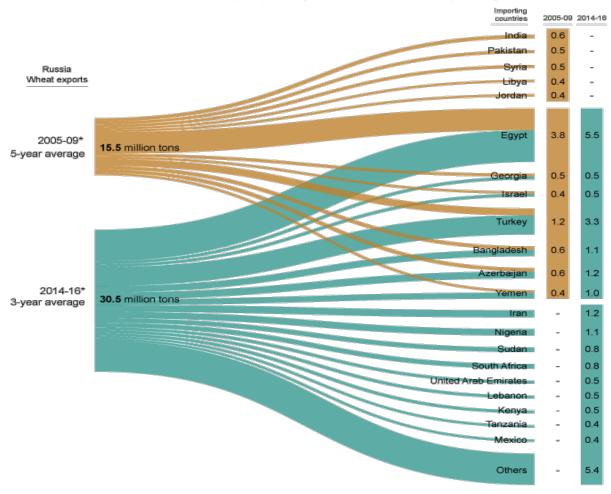
Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution database.

Higher export volumes come with a redistribution of importers. During the past several years, Russia and Ukraine expanded their outreach to partly (and sometimes fully) replace the United States, Australia, and Canada in several markets. The striking example is Egypt, one of the world's leading wheat importers. Egypt used to import the majority of its wheat from the United States, but for the past several years has imported virtually no wheat from the United States, shifting its source of most of its imports to Russia and Ukraine. A similar shift is now happening with Nigeria.

To get a better picture of the important changes and the world wheat trade, see the diagrams below of wheat trade export flows from Russia, Ukraine, and the United States since 2005. The diagrams depict the 5-year average trade flows for the 2005/06 –2009/10 trade years (July-June), overlaying them with the average flows for the recent 3 years, 2014/15–2016/17. The current 2017/18 year is not yet over, and the final results will become available in the fall. The diagrams visually convey the changes that took place in the wheat export markets: the volume and destinations (importers) of wheat as well as the importers' mix.

Diagram 1

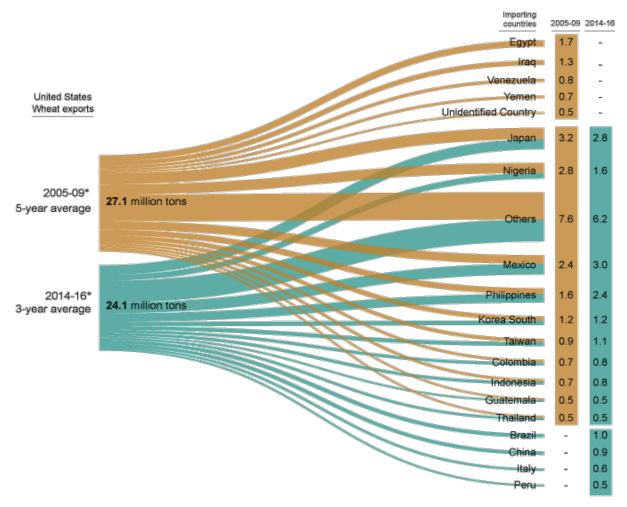
Russia: Wheat export flows for 2005–09 (yearly average) and for 2014–16 (yearly average)



Note: Flow diagrams created by David Nulph (USDA, Economic Research Service, Information Services Division) using SankeyMATIC.

Source: Global Trade Atlas (GTA).

Diagram 2
United States: Wheat export flows for 2005–09 (yearly average) and for 2014–16 (yearly average)



Note: Flow diagrams created by David Nulph (USDA, Economic Research Service, Information Services Division) using SankeyMATIC.

Source: Global Trade Atlas (GTA).

U.S. exports in 2018/19 are projected at 25.0 million tons, up 1.0 million from the previous year, providing a 13.3-percent share in world wheat trade. U.S. wheat 2018/19 supplies, although projected slightly lower with reduced beginning stocks but a larger 2018 crop, are expected to be sufficient for exports to reach the forecast level.

The map below provides a quick look at the projected size and the year-over-year changes in wheat exports for major wheat exporters.

Russia Canada -3.0 0.7 [36.5] European Union Ukraine [23.5]azakhsta -0.2 -0.5United States [8.0] 1.0 [25.0] Wheat trade year exports change Australia (Million tons) 1.0 -3.0 [17.0] rgentina -2.9 - -0.2 -0.8 0.7 Country Label Key Top number: 2018/19 Year-over-Year Change [13.5] 0.8 - 1.0 Bottom number [Total 2018/19 Production] 1.1 - 5.0

Map C: Changes for major wheat exporters for 2018/19

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

United States Exports for 2017/18 Are Reduced

For the current 2017/18 international July-June marketing year, U.S. wheat exports are projected 0.5 million tons lower this month to 24.0 million, based on recent shipments and expectations of higher competition during June 2018. The June-May local marketing year forecast for 2017/18 U.S. exports is down 10 million bushels this month to 910 million bushels, as the slow pace of recent shipments supports a reduction.

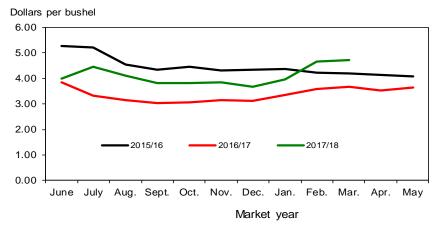
Additional trade data have become available as the 2017/18 wheat international marketing year is entering its last 2 months. Several countries' export forecasts were adjusted, resulting in a small trade reduction of less than a million tons, but with sizeable changes in market shares. Exports for Australia are reduced 1.0 million tons to 16.0, reflecting the pace of shipments and high domestic prices for wheat. Exports are also projected 0.3 million tons lower for Uruguay, and 0.2-million-ton reductions were applied to Argentina and Mexico. Partly offsetting are a1.0-million-ton increase for Russia to a whopping 39.5 million, and a 0.5-million-ton increase for Kazakhstan, as March exports were larger than previously expected in the forecast.

Figure 1
All wheat average prices received by farmers

Dollars per bushel 6.00 5.00 4.00 3.00 2.00 2015/16 2016/17 2017/18 1.00 0.00 June July Sept. Oct. Nov. Dec. Feb. Mar. Apr. May Market year

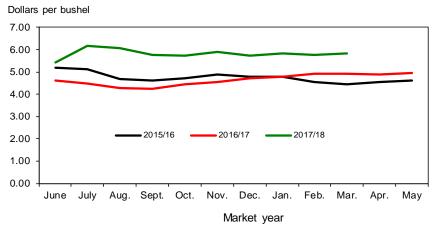
Source: USDA, National Agricultural Statistics Service, Agricultural Prices.

Figure 2
Hard red winter wheat average prices received by farmers



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

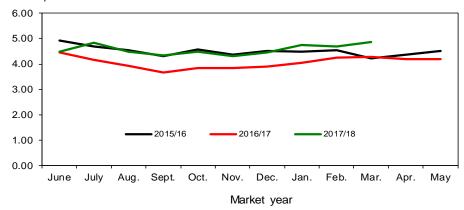
Figure 3 Hard red spring wheat average prices received by farmers



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

Figure 4
Soft red winter wheat average prices received by farmers

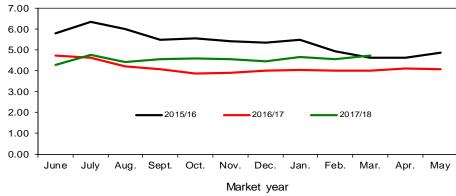
Dollars per bushel



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

Figure 5
Soft white wheat average prices received by farmers



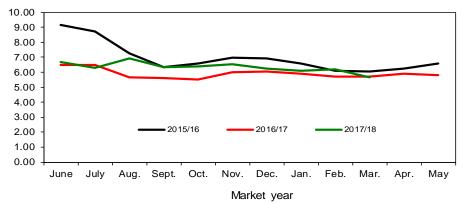


Source: USDA, National Agricultural Statistics Service, Agricultural Prices.

Figure 6

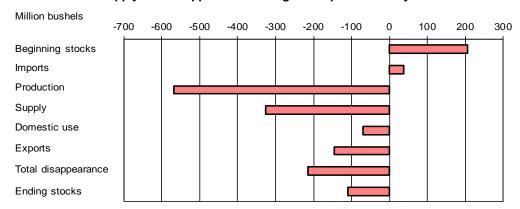
Durum wheat average prices received by farmers

Dollars per bushel



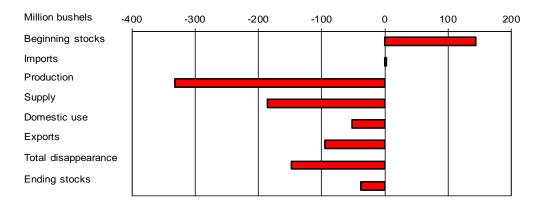
Source: USDA, National Agricultural Statistics Service, Agricultural Prices.

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



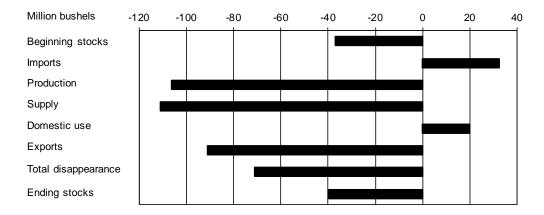
Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates.

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



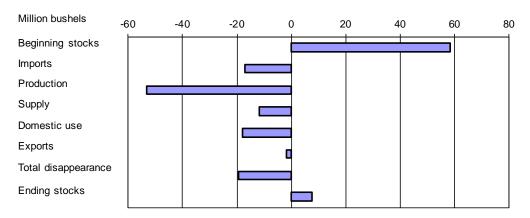
Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates.

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



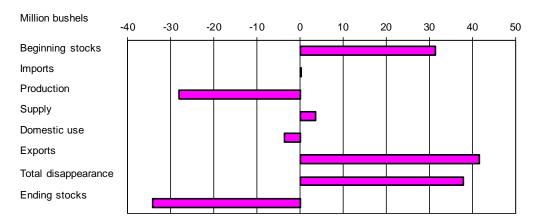
Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates.

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



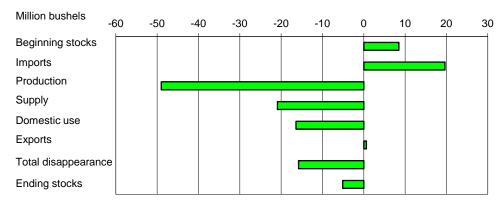
Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates.

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, 5/14/2018

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	47.3
Harvested	Million acres	48.8	45.3	46.4	47.3	43.9	37.6	38.9
Yield	Bushels per acre	46.2	47.1	43.7	43.6	52.7	46.3	46.8
Supply:								
Beginning stocks	Million bushels	742.6	717.9	590.3	752.4	975.6	1,180.6	1,070.2
Production	Million bushels	2,252.3	2,135.0	2,026.3	2,061.9	2,308.7	1,740.6	1,821.3
Imports ¹	Million bushels	124.3	172.5	151.2	112.7	118.1	155.0	135.0
Total supply	Million bushels	3,119.2	3,025.3	2,767.8	2,927.1	3,402.5	3,076.2	3,026.5
Disappearance:								
Food use	Million bushels	950.8	955.1	958.3	957.1	949.0	963.0	965.0
Seed use	Million bushels	73.1	75.6	79.4	67.2	61.3	63.0	62.0
Feed and residual use	Million bushels	365.3	228.2	113.4	149.4	156.5	70.0	120.0
Total domestic use	Million bushels	1,389.3	1,258.8	1,151.1	1,173.7	1,166.7	1,096.0	1,147.0
Exports ¹	Million bushels	1,012.1	1,176.2	864.3	777.8	1,055.1	910.0	925.0
Total disappearance	Million bushels	2,401.4	2,435.1	2,015.4	1,951.5	2,221.9	2,006.0	2,072.0
Ending stocks	Million bushels	717.9	590.3	752.4	975.6	1,180.6	1,070.2	954.5
CCC inventory	Million bushels					.0		
Stocks-to-use ratio		29.9	24.2	37.3	50.0	53.1	53.3	46.1
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 ²	Dollars per bushel	7.77	6.87	5.99	4.89	3.89	4.70	4.50-5.50
Market value of production	Million dollars	17,383	14,604	11,915	10,203	8,981	8,181	9,107

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, 5/14/2018

Market y	ear, item, and unit		All wheat	Hard red winter ¹	Hard red spring ¹	Soft red winter ¹	White ¹	Durum
2016/17								
	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: Beginning stocks	Million bushels	975.60	445.53	271.97	156.63	73.68	27.80
	Production	Million bushels	2,308.72	1,082.01	491.33	345.23	286.25	103.91
	Imports ²	Million bushels	118.14	5.05	41.78	33.19	7.74	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
2017/18	Area:							
	Planted acreage	Million acres	46.01	23.43	10.50	5.73	4.05	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:							
	Beginning stocks	Million bushels	1,180.60	589.30	235.00	215.00	105.00	36.30
	Production	Million bushels	1,740.58	750.33	385.01	292.16	258.18	54.91
	Imports ²	Million bushels	155.00	7.00	74.00	16.00	8.00	50.00
	Total supply	Million bushels	3,076.18	1,346.63	694.01	523.16	371.18	141.21
	Disappearance: Food use	Million bushels	063.00	390.00	252.00	154.00	85.00	82.00
	Seed use	Million bushels	963.00 63.00	26.00	17.00	154.00 11.50	5.50	3.00
	Feed and residual use	Million bushels	70.00	20.00	.00 269.00	45.00	5.00	.00 85.00
	Total domestic use	Million bushels	1,096.00	436.00		210.50	95.50	
	Exports ²	Million bushels	910.00	360.00	230.00	90.00	205.00	25.00
	Total disappearance	Million bushels	2,006.00	796.00	499.00	300.50	300.50	110.00
	Ending stocks	Million bushels	1,070.18	550.63	195.01	222.66	70.68	31.21

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), 5/14/2018

							Feed and		Ending
	r and quarter	Production	Imports ¹	Total supply	Food use	Seed use	residual use	Exports ¹	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	Sep-Nov	1,000	32	2,179	244	51	-16	238	1,663
	Dec-Feb		30	1,693	231	1	44	217	1,199
	Mar-May		30	1,229	236	19	-70	301	743
	Mkt. year	1,993	113	2,969	941	76	159	1,051	743
	iviki. yeai	1,993	113	2,909	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	lun Aug	2,135	36	2 990	235	4	422	358	1,870
2013/14	Jun-Aug	2,133		2,889					-
	Sep-Nov		48	1,918	249	53	-168	309	1,475
	Dec-Feb		42	1,517	231	2	-1 25	228	1,057
	Mar-May	0.405	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
	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
2010/10	Sep-Nov	2,002	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
2017/18	Jun-Aug	1,741	42	2,963	239	2	170	286	2,266
	Sep-Nov	•	36	2,302	251	41	-55	193	1,873
	Dec-Feb		37	1,911	233	1	-19	201	1,494
	Mkt. year	1,741	155	3,076	963	63	70	910	1,070
2018/19	Mkt. year	1,821	135	3,027	965	62	120	925	955
_0.0/10	, oui	1,021	.50	0,027	000	32	.25	020	000

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), 5/14/2018

Mkt year a month 1/	and	Wheat ground for + flour	Food imports ²	+ Nonmilled food use ³ -	Food exports ² =	Food use
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	82,325	3,243	2,000	1,133	86,434
	Nov	78,798	3,219	2,000	1,285	82,732
	Dec	73,964	2,941	2,000	1,563	77,341
	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

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

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.

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.

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.

Table 5--Wheat: National average price received by farmers (dollars per bushel), 5/14/2018

Month	All wheat		Wii	nter	Du	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	4.51	3.40	3.91	6.07	6.25	4.66	5.61
January	4.01	4.69	3.53	4.19	5.90	6.12	4.74	5.72
February	4.16	4.92	3.77	4.63	5.71	6.20	4.83	5.65
March	4.37	5.10	3.82	4.73	5.72	5.67	4.86	5.74
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), 5/14/2018

Month	Hard red winter		Coff ro	durintor	Lord ro		14/1	nito
WOTH			Soft red winter		паготе	d 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	3.66	3.91	4.45	4.72	5.72	4.00	4.47
January	3.35	3.95	4.04	4.74	4.78	5.84	4.04	4.68
February	3.59	4.65	4.25	4.68	4.91	5.76	4.02	4.58
March	3.66	4.71	4.29	4.86	4.92	5.84	4.01	4.74
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 o	rrain	hids at	nrincina	l markets	5/14/2018
i abie i vviieai.	Average	casiic	ai aii i	Dius at	principa	i illainets,	3/14/2010

Table 7Wilea	(ordinary Kansas	I red winter y protein) City, MO er bushel)	No. 1 hard (13% إ Kansas	red winter protein) City, MO er bushel)	er No. 1 hard red winter (ordinary protein) Portland, OR		(ordinar Texas 0	red winter y protein) Gulf, TX ¹ r metric ton)
Month	2016/17	2017/18	` .	2017/18	2016/17	2017/18	2016/17	2017/18
Month June	5.04	5.24	2016/17 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	5.73	6.03	6.94	4.34	5.03	153.22	192.17
February	5.04	5.73	6.08	6.89	4.54 4.58	5.03 5.41	155.24	192.17
March	4.80	6.05	5.53	6.70	4.54	5.52	153.24	
April								
	4.37		5.08		4.23		165.90	
May	4.80	orthern spring	5.89	orthern spring	4.31 No. 1 dark no	 orthorn coring	180.04	amber durum
	(13%)	orotein) ago, IL	(14%)	orotein) ago, IL	(14% բ	orotein) nd, OR	Minnear	oolis, MN er bushel)
		er bushel)		er bushel)	(dollars per bushel)		(40 por 200)	
	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	7.42		
February					6.81	7.29		
March					6.60	7.40		
April					6.45			
May					6.64			
	No. 2 soft	red winter	No. 2 soft	red winter	No. 2 soft	red winter	No. 1 s	oft white
		uis, MO er bushel)		ago, IL er bushel)		lo, OH er bushel)		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	4.38	4.16	4.27	4.09	4.22	4.63	5.30
February	4.38	4.65	4.26	4.55	4.28	4.54	4.74	5.39
•	4.24	4.76	4.06	4.69	4.14	4.75	4.70	5.64
March						-	-	-
March April	4.14		3.93		4.08		4.61	

-- = 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), 5/14/2018

		Oct	Nov	Dec	Jan	Feb	Mar
Item		2017	2017	2017	2018	2018	2018
Exports	All wheat grain	51,022	51,641	79,137	65,821	51,423	78,069
	All wheat flour ¹	707	866	1,073	964	1,094	1,157
	All wheat products ²	454	435	566	473	523	456
	Total all wheat	52,183	52,942	80,776	67,258	53,040	79,682
Imports	All wheat grain	8,285	9,640	9,389	9,775	9,137	10,243
	All wheat flour ¹	1,554	1,499	1,253	1,446	1,301	1,547
	All wheat products ²	1,717	1,777	1,720	1,680	1,657	1,676
	Total all wheat	11,556	12,915	12,362	12,901	12,095	13,466

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 USDA, ERS calculations using Census trade statistics.

Suggested Citation
Bond, Jennifer K. and Olga Liefert., <i>Wheat Outlook</i> , WHS-18e, U.S. Department of Agriculture, Economic Research Service, May 14, 2018.
25