United States Department of Agriculture

Economic Research Service

Situation and Outlook

WHS-17i

September 14, 2017

Wheat Outlook

Jennifer Bond
jkbond@ers.usda.gov
Olga Liefert
oliefert@ers.usda.gov

Brighter Yield Outlook for Black Sea Drives Global Wheat Up

The next release is October 16, 2017.

Domestic Feature: "Hurricane Harvey Interrupts Texas Gulf Rail Service, Port Loadings" By Jennifer Bond

Country Focus–Russia: "Is Favorable Weather Entirely Responsible for Skyrocketing Crop Yields in Russia?" by Olga Liefert

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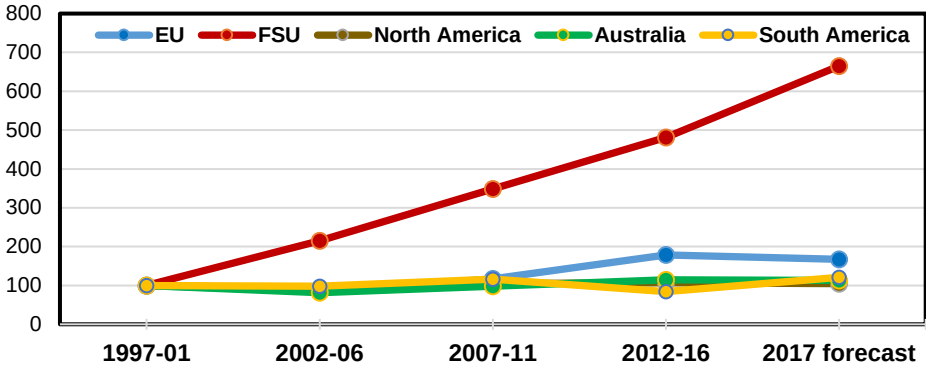
Approved by the World Agricultural Outlook Board.

World wheat production in 2017/18 is forecast higher, getting closer to last year's record. Weather conditions have generally been beneficial for grain in the Black Sea countries, but Russia has enjoyed truly remarkable weather. Russia is expected to extend its all-time wheat production record, thereby pushing its trade share up and widening the gap between its exports and those of other major exporters.

Figure 1: Russia leads wheat exporters' growth 1/



1/ Growth reported as index of average annual export values over the 5-year periods with 1997-01=100. FSU – Former Soviet Union; EU – European Union.
Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.

The U.S. 2017/18 wheat supply and demand estimates are unchanged. The midpoint season-average farm price is lowered 20 cents to $4.60 per bushel. From late August through early September, record-setting rain and widespread flooding, resulting from Hurricane Harvey, inhibited rail transportation and reduced export shipments from the Gulf Coast region of the United States.

Domestic Outlook

Domestic Highlights

- The U.S. 2017/18 wheat supply and demand estimates are unchanged from the August projections.
- On September 29, USDA, National Agricultural Statistics Service (NASS) will release the 2017 *Small Grains Summary*.
    - This report will contain any production revisions for aggregate winter, other spring, and durum wheat categories, as well as individual wheat classes.
- Adjustments to the U.S. all-wheat balance sheet will be reflected in the October release of the *World Agricultural Supply and Demand Estimates (WASDE)*.
- Also on September 29, NASS will publish the latest edition of the *Grain Stocks* report, providing data on first-quarter wheat disappearance and informing potential updates to quarterly stocks and feed and residual use projections.
- The all-wheat price is lowered by 20 cents this month to $4.60 per bushel, based on weakening cash wheat prices.
- Hurricane Harvey temporarily curtailed rail transport and export of grains, including wheat in the Gulf Coast region. Regional grain transportation is resuming and any hurricane-related delays are not projected to impact the current export forecast of 975 million bushels.

All-Wheat Balance Sheet Unchanged, Midpoint Price Lowered 20 Cents

Ahead of the September 29 release of USDA, National Agricultural Statistics Service's (NASS's) *Small Grains Summary* report, the current winter, other spring, and durum wheat production forecasts for 2017 are unchanged. Total supplies and total use are also unchanged, though shifts in trade projections across classes are made, in accordance with U.S. Census Bureau data and the pace of trade to date. No changes are made to the all-wheat ending stocks this month; the NASS *Grain Stocks* report, also to be released on September 29, will give indications of implied disappearance during the first quarter of the wheat marketing year (June-August, 2017) and inform potential updates to quarterly feed and residual use and stocks by class. While the 2017/18 all-wheat balance sheet is unchanged this month, market conditions continue to evolve and influence the all-wheat season-average price projection, lowered 20 cents from the August forecast to a midpoint of $4.60 per bushel. Buoyed by protein premiums, cash wheat prices rose as the 2017 crop matured and was harvested before softening in recent weeks.

Winter Wheat

Winter wheat production is unchanged this month and remains at 1,287 million bushels, 23 percent below last year's estimate. Last month, NASS raised the winter wheat yield 0.3 bushel per acre to 50.0 bushels, which compares to the record-setting yield of 55.3 bushels per acre realized for the 2016 crop. Winter wheat production by class will be updated following NASS's September 29 release of its *Small Grains* report. By class projections for hard red winter (HRW), soft red winter (SRW), and hard and soft white winter (HWW, SWW) follow.

2016/17	**HRW**	**SRW**	**HWW**	**SWW**
Planted area (million acres)	26.59	6.02	0.515	3.016
Harvested area (million acres)	21.86	4.98	0.474	2.908
Production (million bushels)	1,081.69	345.23	25.476	219.136
2017/18				
Planted area (million acres)	23.82	5.61	0.469	2.946
Harvested area (million acres)	18.09	4.44	0.409	2.823
Production (million bushels)	758.37	306.12	18.807	203.836

Winter wheat planting has begun in 11 of the 18 reporting States. Colorado, Montana, and Washington are furthest along, with 11, 13, and 16 percent of the 2018 winter wheat crop planted by September 10. At 5 percent planted as of the week ending September 10, the pace is on par with 2016 and the 5-year average.

Table 1 - U.S. wheat supply and utilization at a glance (2016/17 and 2017/18), September 2017

Balance Sheet Item	2017/18 (August)	2017/18 (September)	2017/18 Change from previous month	2017/18 Comments
Supply, Total				***May-June Marketing Year (MY)***
Beginning Stocks	1,184.4	1,184.4	**0.0**	
Production	1,739.2	1,739.2	**0.0**	NASS will provide a production update in the September *Small Grains Summary.*
Imports	150.0	150.0	**0.0**	Based on pace of trade, hard red spring (HRS) imports are raised 5 million bushels. Durum is raised 2 million bushels, while soft red winter (SRW) imports are lowered 7 million bushels.
Supply, Total	3,073.6	3,073.6	**0.0**	
Demand				
Food	950.0	950.0	0.0	Food use will be reassessed following the November release of the NASS *Flour Milling Products* report.
Seed	66.0	66.0	0.0	
Feed and Residual	150.0	150.0	**0.0**	Use will be assessed following the release of the NASS *Grain Stocks* report on September 29.
Domestic, Total	1,166.0	1,166.0	**0.0**	
Exports	975.0	975.0	**0.0**	All-wheat exports unchanged this month. Surging white wheat commitments result in 20 million bushel increase to 205 million. Exports of HRS and hard red winter are lowered 10 million bushels each.
Use, Total	2,141.0	2,141.0	**0.0**	
Ending Stocks	932.6	932.6	**0.0**	

Source: USDA, World Agricultural Outlook Board.

Durum

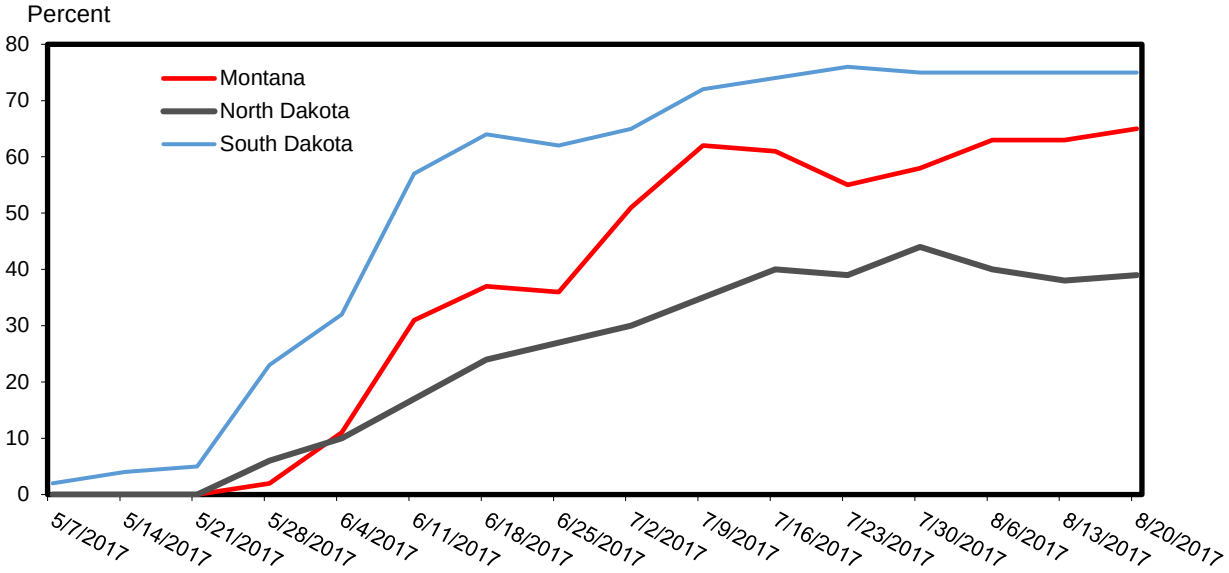
After a sharp cut in August, durum production is unchanged this month and remains at 50.5 million bushels. Drought conditions persist in key durum-producing States. As of September 7, when the most recent edition of the U.S. Drought Monitor was published, exceptional drought had moved out of the Dakotas and into Montana, where a large portion of the north central and northwest portions of the State are experiencing D4- and D3-intensity drought. All of North Dakota is experiencing abnormally dry to extreme drought conditions. Areas of western and southeastern South Dakota saw a one-category recovery following rain events in the last 30 days. The NASS *Small Grains Summary* will update U.S. durum estimates of area planted and harvested, yields, and production.

Durum	**2016**	**2017**
Harvested area (million acres)	2.365	1.858
Yield (bushels/acre)	44.0	27.2
Production (million bushels)	104.116	50.535

Other Spring Wheat

No changes are made to the other spring wheat production forecast this month. In August, the forecast for other spring wheat production was lowered 5 percent to 402 million bushels, following a 2-bushel-per-acre decrease in the yield projection. The NASS's other spring wheat yield forecast is projected at 38.3 bushels per acre, nearly 9 bushels per acre below the 2016 estimate and a reflection of abnormally dry to extreme drought conditions in key spring wheat-growing States. From early May and through July, the proportion of the spring wheat crop rated poor to very poor has generally increased in Montana, North Dakota, and South Dakota as the regional drought deepened (figure 2). In August, conditions leveled off with only a slight worsening in Montana (increase of 2 percent from Week 31-33).

Figure 2: Spring wheat condition (percent rated poor to very poor in weeks 18-31)

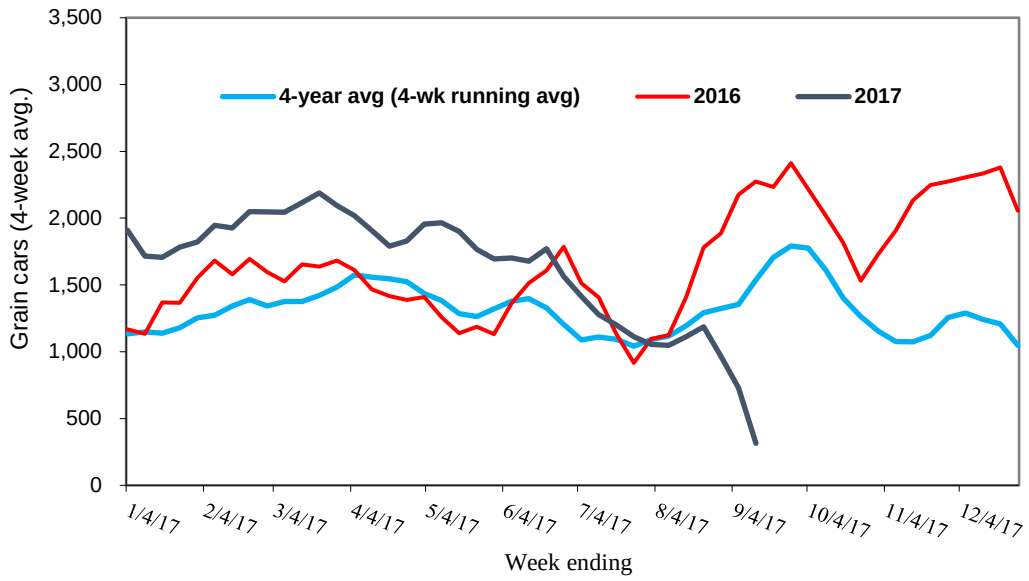


Source: USDA, National Agricultural Statistics Service. *Quickstats database.*

Domestic Feature: Hurricane Harvey Interrupts Texas Gulf Rail Service, Port Loadings
By Jennifer Bond

On August 25, Hurricane Harvey made landfall on the Texas coast, bringing record levels of rainfall to the Houston metropolitan area and nearby counties. After Hurricane Harvey moved offshore, it returned as a tropical storm, bringing yet more precipitation to Texas and Louisiana. Rainfall totals in some areas of Texas exceeded 50 inches—the greatest rainfall measured for a single storm in the continental United States. Not surprisingly, the resulting widespread—and in some cases catastrophic—flooding reduced rail service along the Gulf Coast and all but halted regional grain exports through the first week of September (figure 3).

Figure 3: Rail grain deliveries to Texas Gulf ports



Source: USDA, Transportation and Marketing Programs, *Grain Transportation* Report.

Interruptions in grain transportation in the Gulf region have the potential to be particularly impactful on shipments of the U.S. wheat crop. The Federal Grain Inspection Service reports that an average of 46 percent of total U.S. wheat exports ship from Gulf ports in Texas and Louisiana; export elevators in the acutely affected cities of Houston, Galveston, and Corpus Christi account for 56 percent of total wheat exports from the Gulf region. Nearly all shipments from Texas are HRW; restoration of rail and port services, even if limited, is crucial for HRW movement out of the winter wheat production belt and into export markets.

For the week ending August 31, there were virtually no wheat inspections reported for Gulf ports due to the shutdown of rail and port operations. For the week ending September 7, no wheat was inspected for export at either South Texas or East Gulf ports, while North Texas inspected a relatively modest 50,318 metric tons of HRW, down from 160,512 metric tons for the same week in 2016. An indicator of the resilience of the regional transportation system, inspections at the Mississippi River ticked up to near pre-storm levels for the week ending September 7 and aided to lift cumulative Gulf area inspections to 132,792 metric tons.

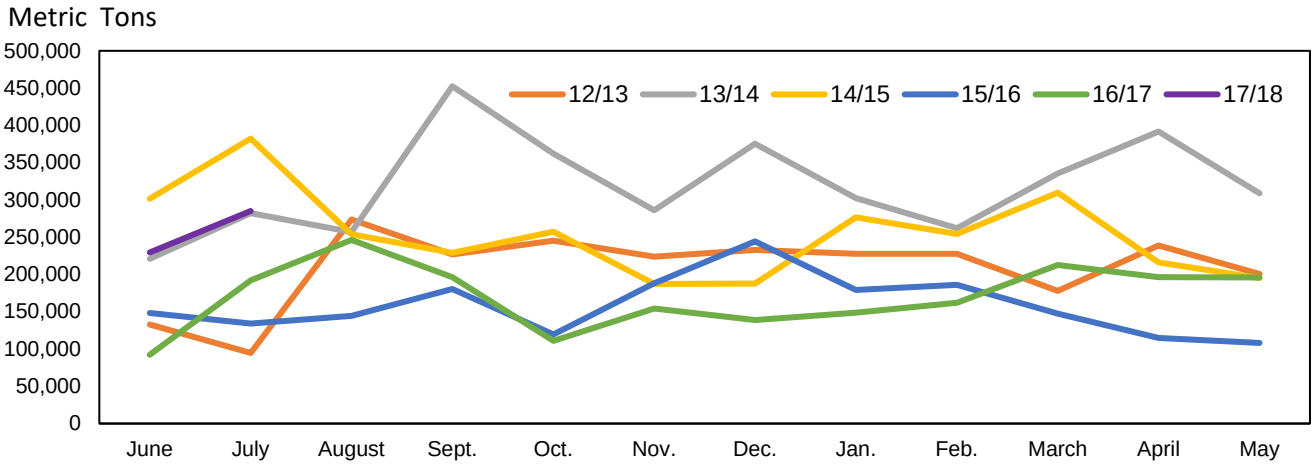
Wheat export inspections are anticipated to continue to accelerate as rail service that provides access to Gulf loading facilities is restored. BNSF Railway reported that rail access to the Houston complex from the north and west was fully functional as of September 5, while rerouting is providing a work-around for portions of the network that are damaged. In their most recent statement (dated September 7) Union Pacific officials note that tracks remain out of service in some areas of Texas due to high water and washouts. Repairs, particularly to bridges, are anticipated to require months to be completed and inspected.

Supply and Demand Estimates Unchanged

As noted previously, the U.S. 2017/18 wheat supply and demand estimates are unchanged from the August projections. NASS will release production revisions for aggregate winter, other spring, and durum wheat categories, as well as individual wheat classes, in the September 29 *Small Grains* report, which will be reflected in the U.S. all-wheat balance sheet to be published in the October *World Agricultural Supply and Demand Estimates (WASDE)*. Also on September 29, NASS will release the *Grain Stocks* report and provide data on first-quarter wheat disappearance, informing potential updates to quarterly stocks and feed and residual projections.

U.S. Census Bureau data indicate shifts of imports and exports by class. However, these by-class adjustments offset, and the all-wheat import and export projections remain unchanged. All-wheat import projections remain at 150 million bushels. These updates, and their implications for each by-class balance sheet, are available in the ERS yearbook tables. Imports of hard red spring (HRS) wheat are raised 5 million bushels to 73 million and imports of durum are raised 2 million bushels to 45 million. In the first quarter of the 2017/18 marketing year, HRS grain imports—nearly all from Canada—are 13.1 million bushels and nearly double the volume from 2016. For the first 2 months of the new marketing year, U.S. imports of Canadian wheat (grain only) have exceeded the pace of the last 2 years and are 80 percent higher than for the same period in 2016/17 (figure 4). Domestic buyers are seeking to augment U.S.-grown supplies of durum and spring wheat that are forecast to be significantly smaller in 2017 than for the prior year. Soft red winter (SRW) imports are lowered 7 million bushels, based on the sluggish pace of imports to date.

Figure 4: U.S. imports of Canadian wheat (grain only), by month



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

All-wheat exports are unchanged this month and remain at 975 million bushels. Exports of hard red winter (HRW) wheat are lowered 10 million bushels to 400 million based on the pace of trade to date and increasing global competition. HRS exports are also lowered 10 million bushels on expectations of strong domestic demand for high protein wheat and the pace of trade. White wheat exports are raised 20 million bushels this month on exceptionally strong exports thus far in the first quarter. Robust demand from Asian countries and Mexico have helped to boost white wheat shipments. Please see the USDA, Foreign Agricultural Service *Wheat World Markets and Trade* circular feature on U.S. exports for additional information.

As with the local marketing year, the U.S. wheat trade-year-basis (July-June) export forecast for 2017/18 is unchanged this month and remains at 26 million metric tons. Declining domestic wheat prices provide a partial buffer against increased production and competition from Russia and the Ukraine. A weakening U.S. dollar also

provides support for the current export forecast and has helped to bolster U.S. commitments in the first 3 months of the new marketing year. Shipments, of white wheat in particular, to Japan and Mexico have been significant. However, as new crop wheat from the EU and Black Sea regions becomes more widely available in the market, it is expected that the pace of U.S. wheat shipments will slow.

All-Wheat Price Lowered 20 Cents

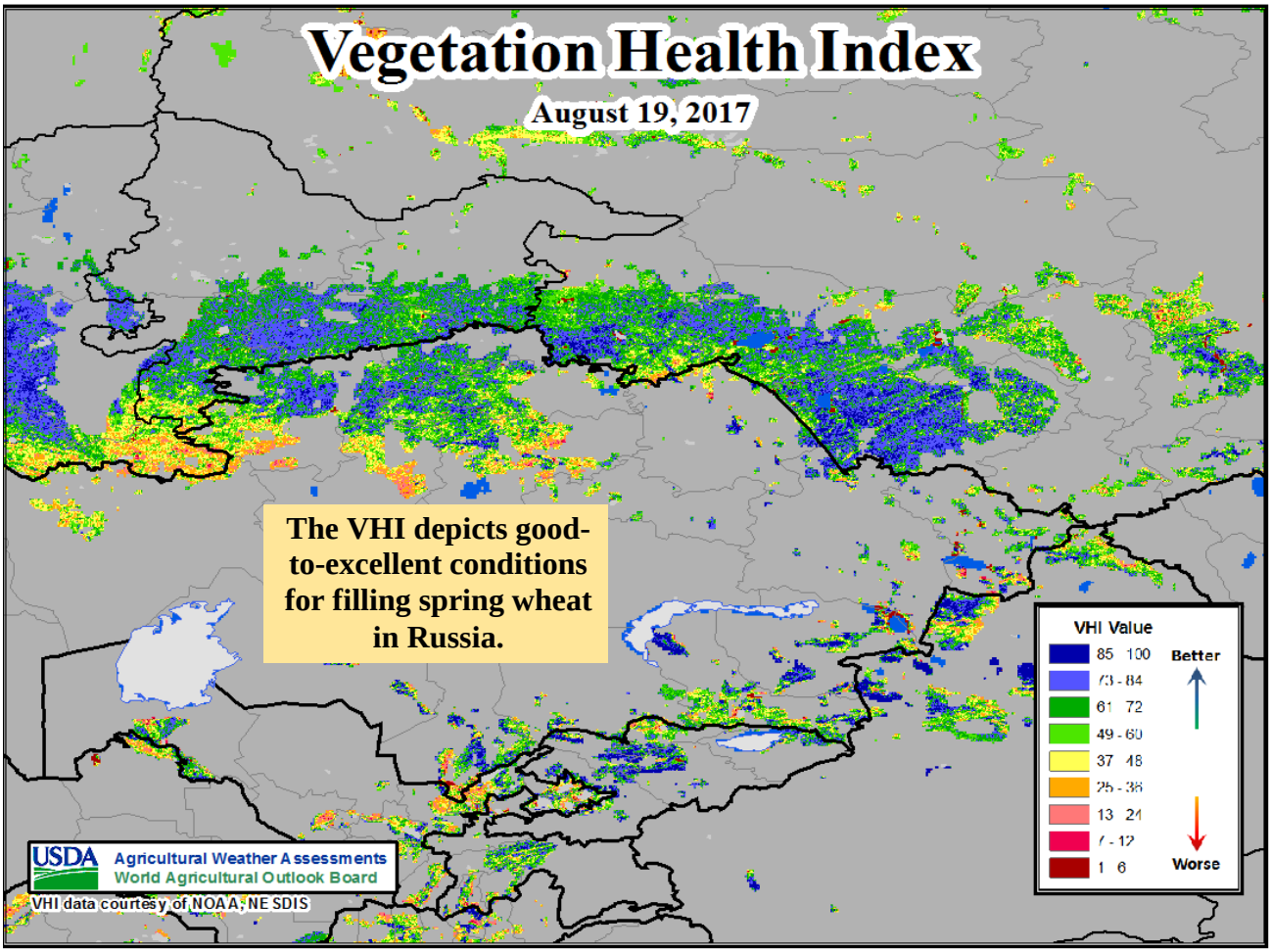
The 2017/18 season average farm price (SAFP) is lowered 10 cents on the low end and 30 cents on the high end of the range, now projected at $4.30 and $4.90 per bushel. This month's price decline reflects expectations of growing world production and increased price competition. The midpoint price is $4.60 per bushel and compares to the 2016/17 SAFP of $3.89. Following this month's midpoint 10-cent decrease in the 2017/18 SAFP for U.S. corn, the corresponding wheat-to-corn price ratio is virtually unchanged from 1.45 in August to 1.44 in September and supports maintenance of the wheat feed and residual value at the current projection.

International Outlook

Brighter Yield Outlook for Black Sea Drives Global Wheat Up

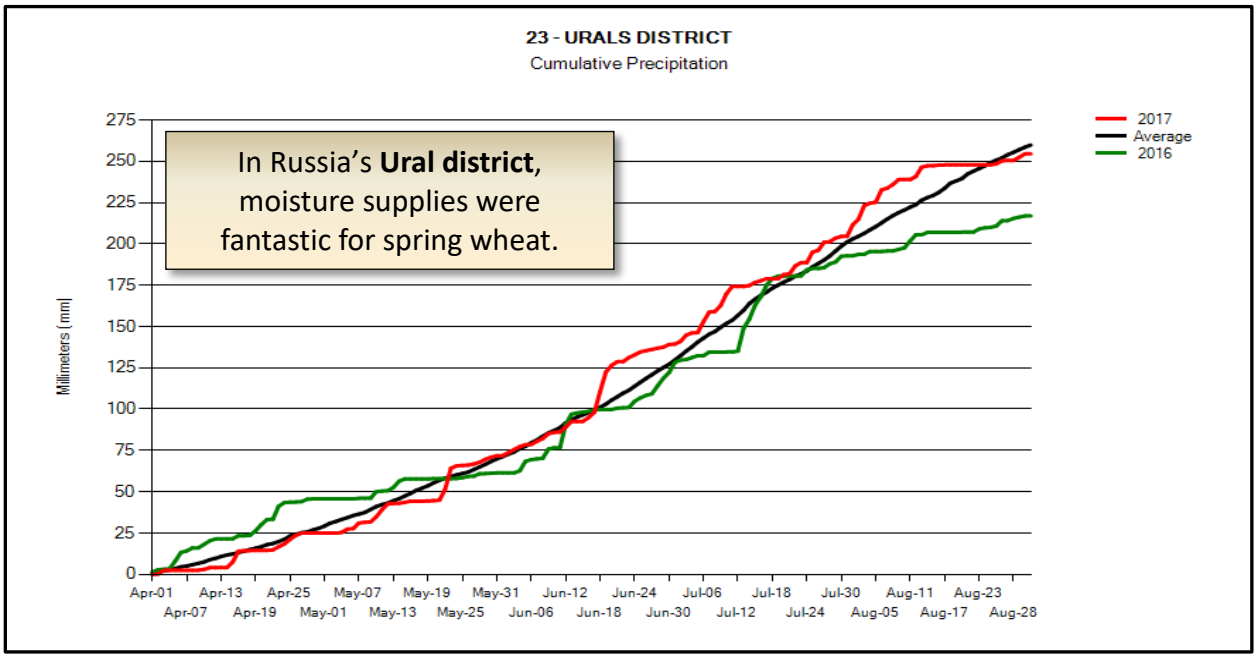
World wheat production in 2017/18 is forecast at 744.9 million tons, up 1.7 million tons this month, getting closer to last year's revised record of 753.3 million tons. These developments can be viewed as a continuation of the previously observed trend. Weather conditions have been very favorable for grain production in the ***Black Sea*** countries, but ***Russia*** has enjoyed truly remarkable weather. Winter wheat (about 70 percent of the total Russian wheat crop) has already been harvested with yields that have exceeded even optimistic expectations. The spring wheat harvest is currently underway, and growing conditions in the major spring wheat producing area are outstanding.

Figure 5: Vegetation Health Index (VHI) is excellent in the Russian spring wheat areas



Source: USDA, World Agricultural Outlook Board.

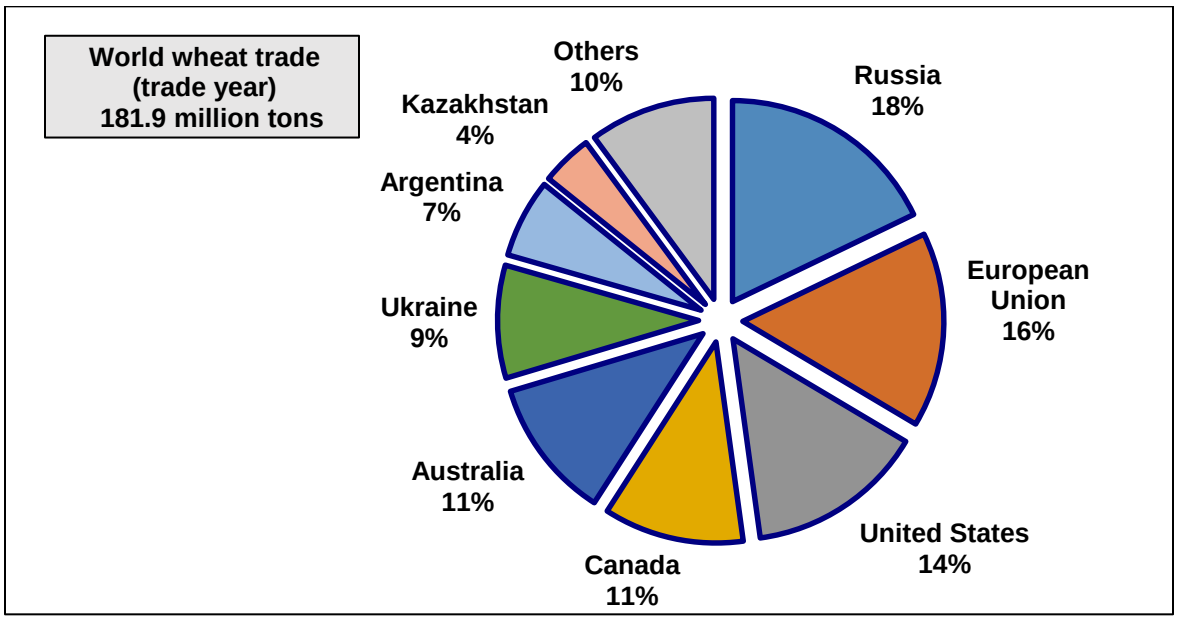
Figure 6: Cumulative precipitation in the Ural region



Source: USDA, World Agricultural Outlook Board.

As harvest results continue to arrive and confirm significantly higher yields, ***Russia*** is expected to extend its all-time wheat production record to 81.0 million tons, surpassing last year's previous record by 8.5 million, thereby pushing its trade share higher and widening the gap between its exports and those of other major exporters.

Figure 7: World 2017/18 countries' shares in wheat exports



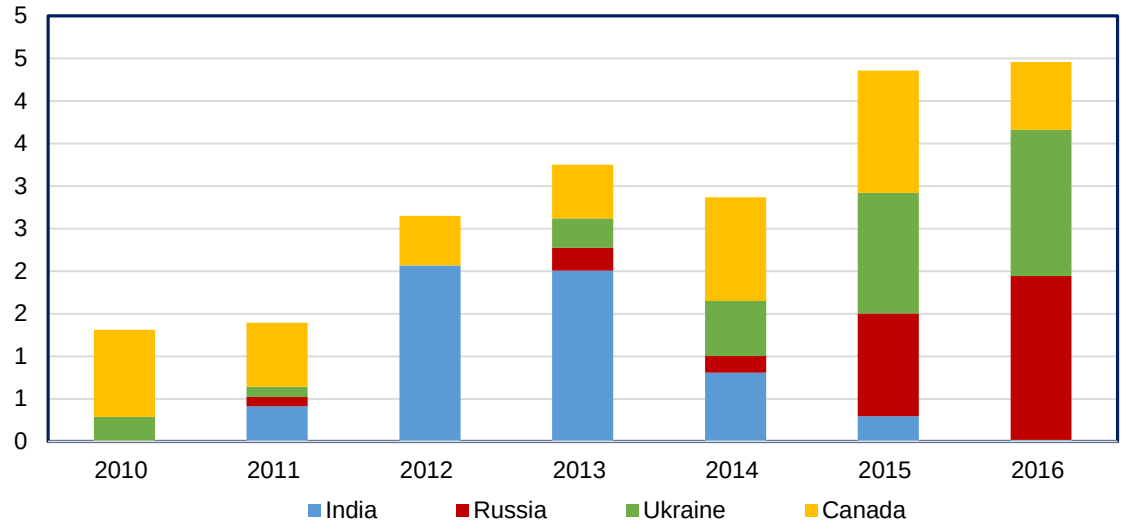
Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.

With a giant wheat crop, export prospects for ***Russia*** are raised further this month, up 1.0 million tons, and exports are now forecast at 32.5 million. Wheat stocks climbed to a record of 16.8 million tons, amid plummeting domestic prices. This year, Russia will test the limits of its export infrastructure. In addition to wheat, Russia also exports significant volumes of corn and barley. Total projected 2017/18 grain exports are forecast to reach 43.0 million tons, which is close to the estimated higher bound of Russia's current grain export capacity. Russia is continually expanding its export outreach, becoming one of the major exporters to ***Bangladesh, Indonesia***, countries of the ***African West Coast***, and even targeting ***South America***.

Exports are also forecast higher for ***Ukraine***, up 0.5 million tons to 16.5 million, recognizing its increasing competitiveness, broadening outreach, and the brisk current pace of shipments. Larger exports lowered Ukrainian projected ending wheat stocks for 2017/18 by 0.4 million tons, reducing them to 1.8 million—a relatively low level that is apparently becoming a normal situation for the country.

Figure 8: Russia and Ukraine have become the major wheat exporters to Bangladesh

Million tons



Source: Global Trade Atlas.

Turkey—another Black Sea country— also had its 2017/18 wheat output increased by 0.5 million tons to 20.0 million this month. The remaining major wheat producers and exporters are currently facing average or below average production and trade prospects.

Exporters' Supply Reductions to Limit Wheat Trade

The largest reductions in wheat output this month are made for ***Australia*** and the ***European Union (EU)***.

Australian 2017/18 wheat production is reduced 1.0 million tons this month to 22.5 million. There are indications that low precipitation and higher temperatures in the northern part of Western Australia (WA), several frosts in the northwest of New South Wales (NSW), and below average rainfall and record-high temperatures in Queensland (QL) affected crop development. Some fields in the above States are likely not to be harvested. Area and yield prospects have been reduced, but rainfall during the months of September and October will still be critical in determining yields. Wheat output for 2016/17 is also reduced 1.6 million tons to 33.5 million (which nonetheless remains an all-time record), following the reports and evidence of lower domestic supplies. The Australian Bureau of Statistics (ABS) released its

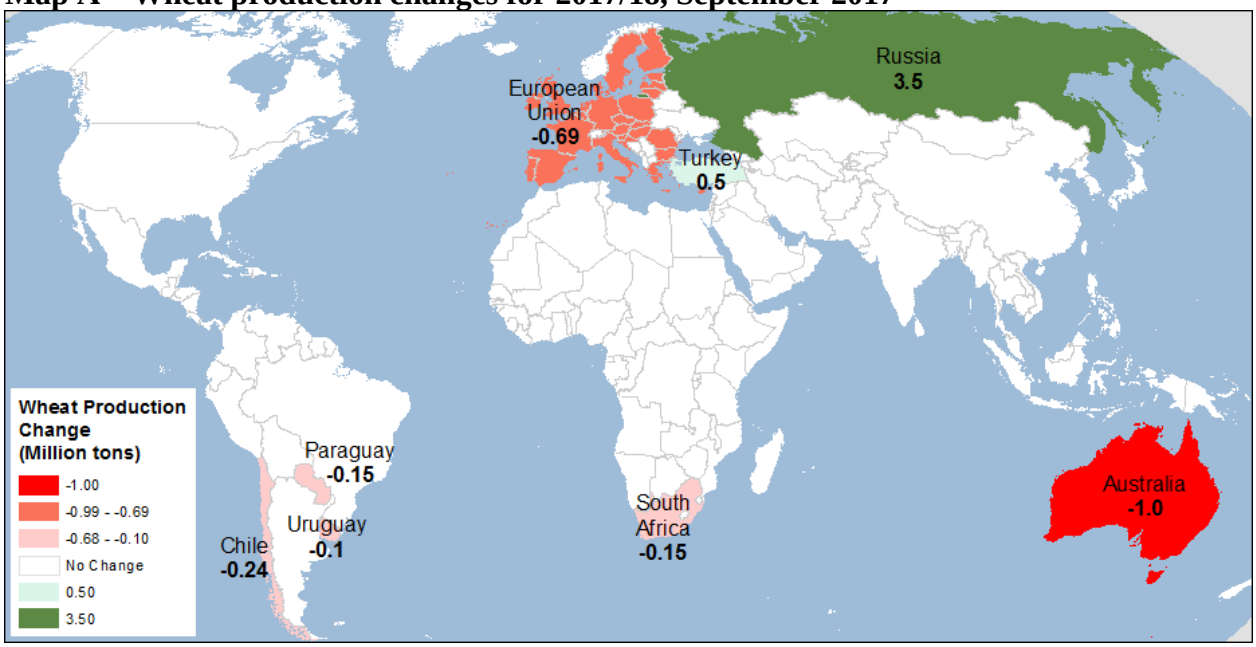
latest estimates of the volume and value of agricultural production from the 2015-16 Agricultural Census. ABS changed the scope for inclusion in the census to all businesses and is expected to apply this scope to all future estimates. ABS substantially reduced its estimate for Australian wheat output in 2015/16, down 1.9 million tons to 22.3 million, with a major 1.5-million-hectare reduction in harvested wheat area.

Smaller projected crops for 3 years in a row are expected to tighten Australian ending stocks. Consequently, reduced old-crop supplies will constrain 2017/18 wheat shipments from Australia, with the forecast of 2017/18 international trade-year (July-June) exports declining this month by 1.0 million tons to 21.0 million.

EU wheat production for the 2017/18 crop is forecast down 0.7 tons this month to 148.9 million—up 3.4 million tons from 2016/17. The decrease is based mainly on yield reductions for ***Germany, United Kingdom, Czech Republic,*** and ***Slovakia***. Partly offsetting are projected increases for ***Romania, Bulgaria, France, Poland***, and a few other EU countries. As a result of lower domestic supplies this year, EU wheat exports for 2017/18 are forecast 1.0 tons down to 28.5 million. Also, a full 12 months of trade data for 2016/17 are now complete, with exports totaling 27.3 million tons. A reduction in the EU crop size and exports still forecast higher than last year will tighten stocks. At 10.1 million tons, EU 2017/18 season-ending stocks are projected close to the lower end of historical ranges.

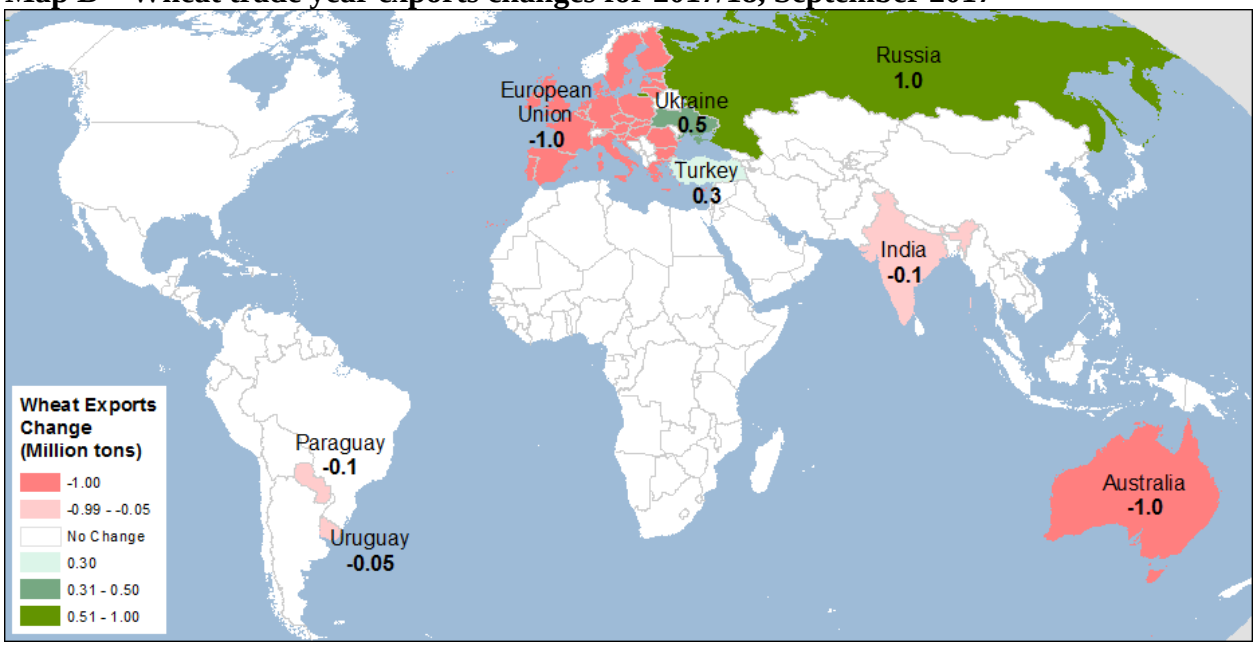
For additional information on this month's changes in wheat production, trade (both exports and imports) see maps A, B, and D.

Map A – Wheat production changes for 2017/18, September 2017



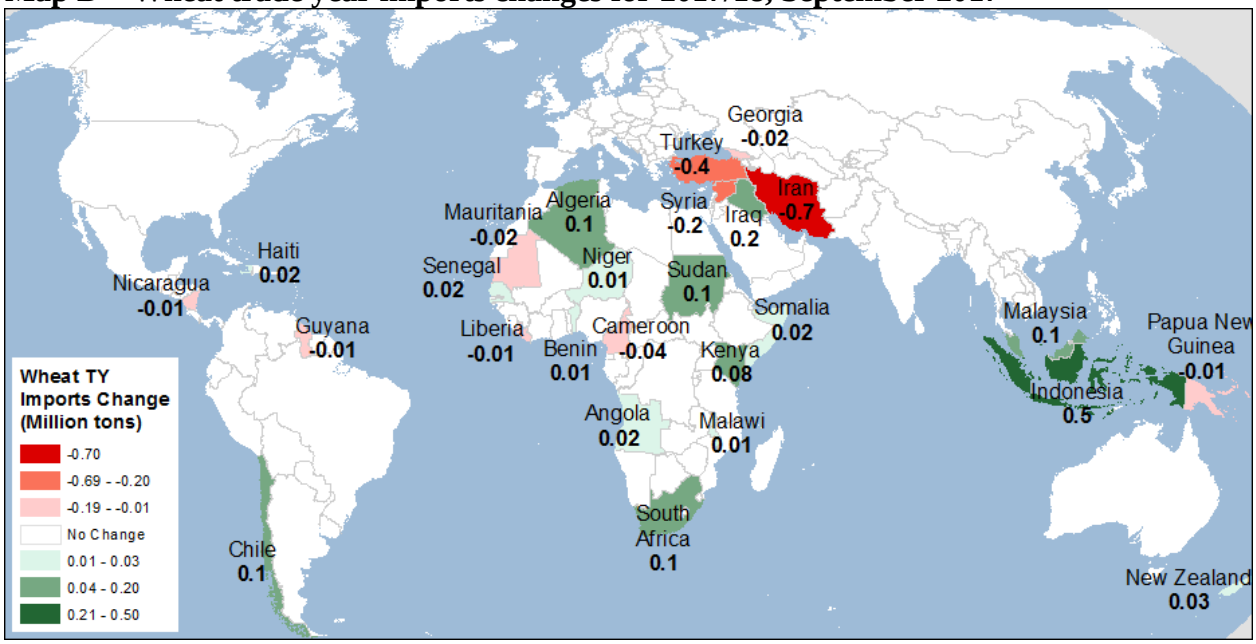
Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.

Map B – Wheat trade year exports changes for 2017/18, September 2017



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

Map D – Wheat trade year imports changes for 2017/18, September 2017



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

Country Focus: Russia

Is Favorable Weather Entirely Responsible for Skyrocketing Crop Yields in Russia?
(Submitted by Olga Liefert, Economic Research Service, OLILEFERT@ers.usda.gov)

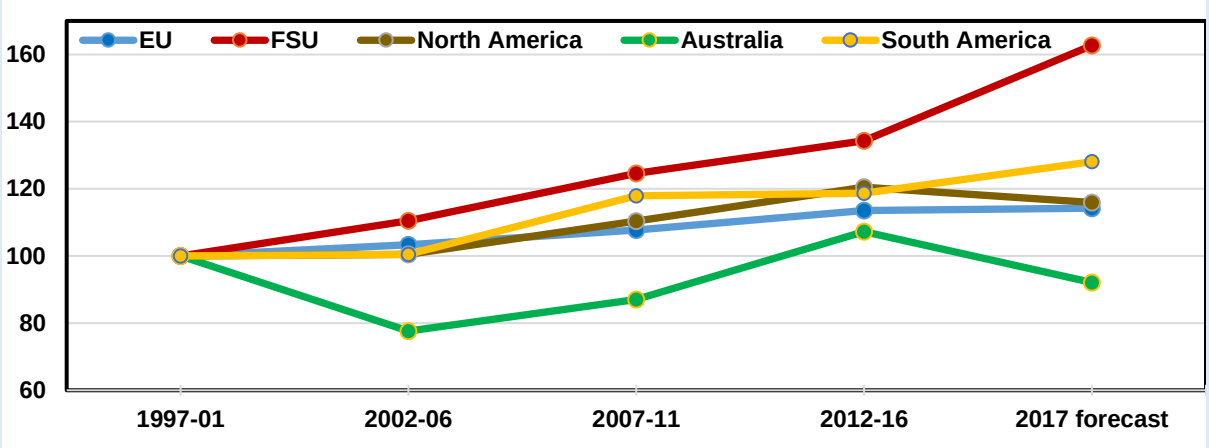
Russia does not fail to surprise. A year ago in 2016/17, the country's record wheat crop seemed an aberration. It also appeared that excellent weather was the major cause of the enormous harvest. However, the unfolding 2017/18 year bears a strong resemblance to last year, as an even bigger record-large wheat crop is expected.

USDA's Economic Research Service recently released the report "Productivity Growth and the Revival of Russian Agriculture" (N. Rada, W. Liefert, and O. Liefert), which measures Russian national and regional total factor productivity (TFP) growth in agriculture over the period 1994-2013. One report finding is that Russia's agricultural recovery since 2000 has been characterized by greater output specialization among districts. For example, the southern part of European Russia has specialized more in the bulk crops of grain, sunflower seed, and sugar beets, while the northern parts of the country have concentrated more on livestock products. Another finding is that the agricultural recovery is uneven across regions and major districts, with output growth being strongest in southern European Russia. The Central district has also shown nontrivial production and TFP growth in the latter years of the study period, which supports a cautiously optimistic view of Russia's future agricultural development.

Developments in the Russian crop sector since 2013 (the last year of the study) support the report's findings. Russian crops yields have continued climbing (especially winter varieties grown in the European part of the country). From 2001 to 2017, the Russian wheat yield grew at the healthy average annual rate of 2.1 percent. But from 2013 to 2017, the growth rate was a much more impressive 6.7 percent.

Russian weather has been favorable for grain since 2013, especially so in the current 2017/18 crop year. Timely rains and cool temperatures during the reproductive period were followed by dryness and higher temperatures that facilitated harvesting. However, it appears that other non-weather-related developments have also played a role. Russian agricultural performance has been generally improving since 2000, due to a combination of better farm ownership structure, investment, and superior (innovative) management. Beneficial practices include revamping and optimizing the crop structure, expanding Western technology transfer, and importation of advanced and efficiency-enhancing Western machinery and seeds.

Figure A: Wheat yields growth is uneven among major exporters, FSU countries leading, index



Note: Index of average annual values over the 5-year periods with 1997-2001=100; FSU=Former Soviet Union; EU=European Union.
Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.

Southern European Russia has led the progress, as it has the advantages of better soil and climate, geographical location (such as proximity to the major grain-exporting ports on the Black Sea), and infrastructure. The emergence of new vertically integrated producers (called agroholdings) has also been a prominent factor in the South. These producers have been applying best production practices and thereby promoting higher productivity in all the agricultural sectors of the district.

Contacts and Links

Contact Information
Jennifer Bond (domestic), (202) 694-5326, JKBond@ers.usda.gov
Olga Liefert (international), (202) 694-5155, oliefert@ers.usda.gov
Beverly Payton (Web Publishing), (202) 694-5165, bpayton@ers.usda.gov

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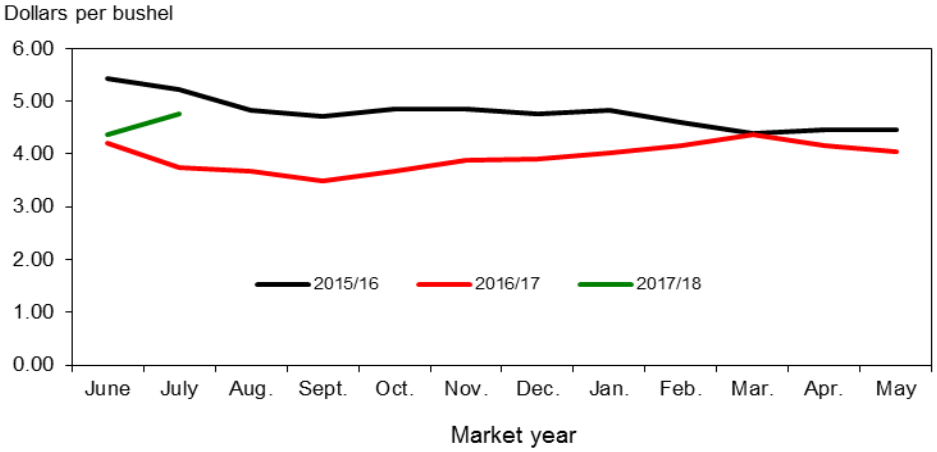
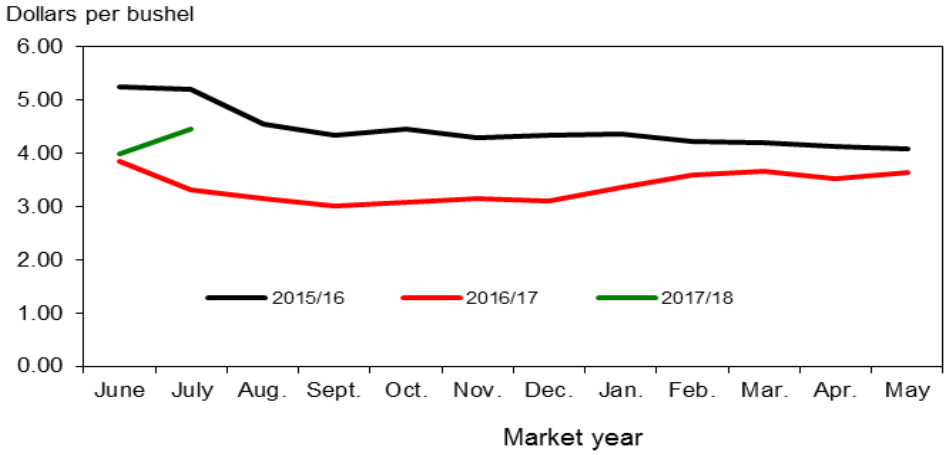
Figure 1
All wheat average prices received by farmers



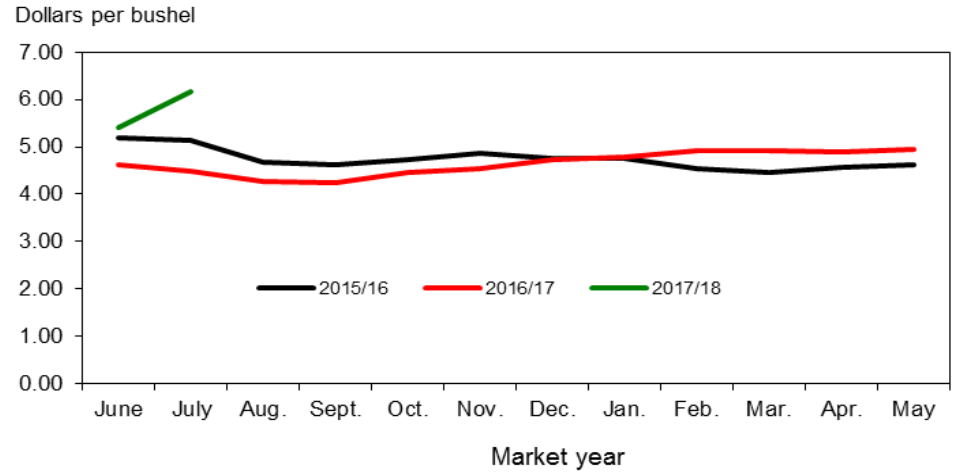
Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Figure 2
Hard red winter wheat average prices received by farmers



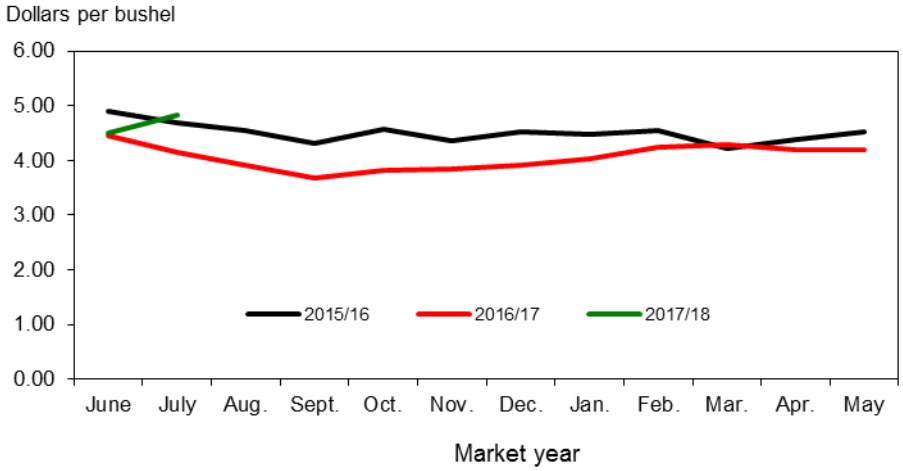
Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Figure 3
Hard red spring wheat average prices received by farmers



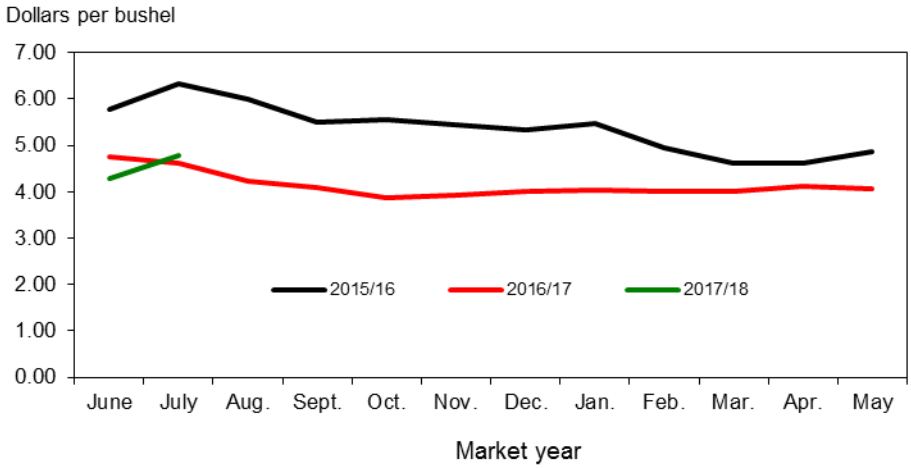
Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Figure 4
Soft red winter wheat average prices received by farmers



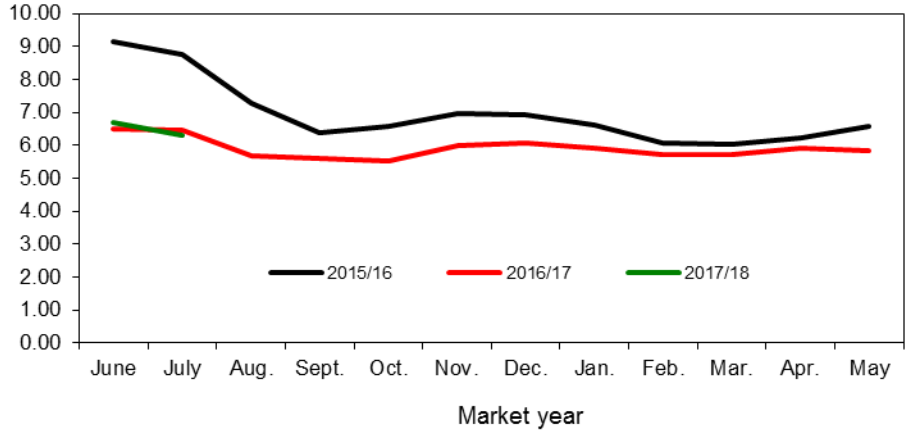
Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Figure 5
Soft white wheat average prices received by farmers



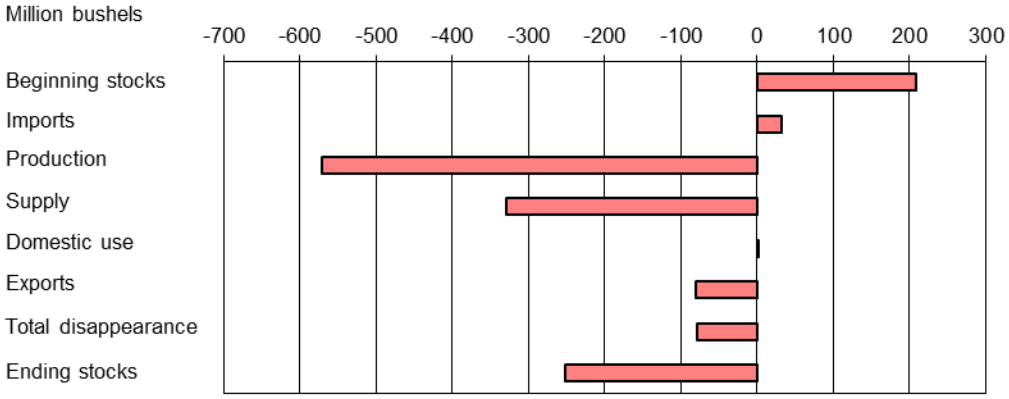
Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Figure 6
Durum wheat average prices received by farmers



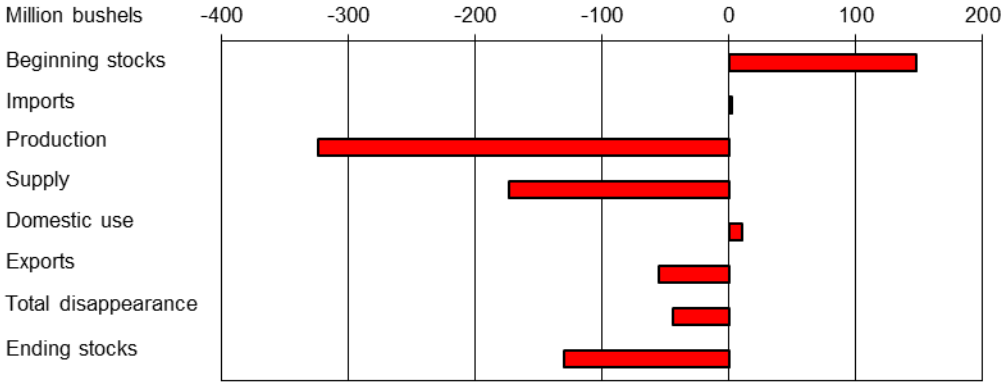
Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

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



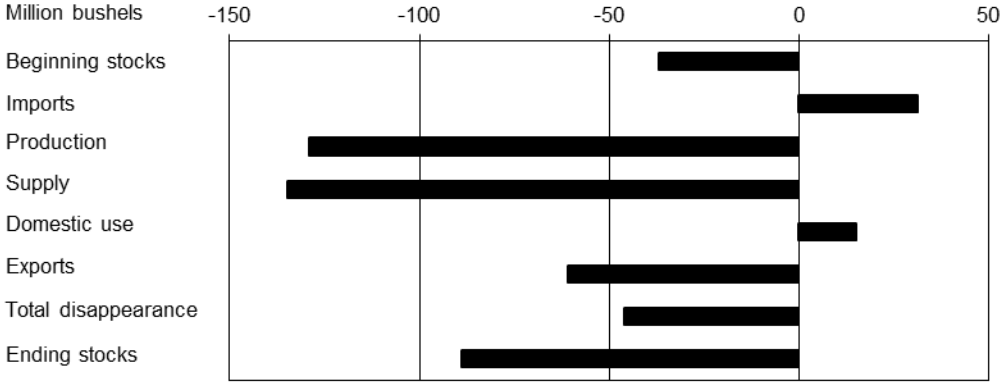
Source: USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*.

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



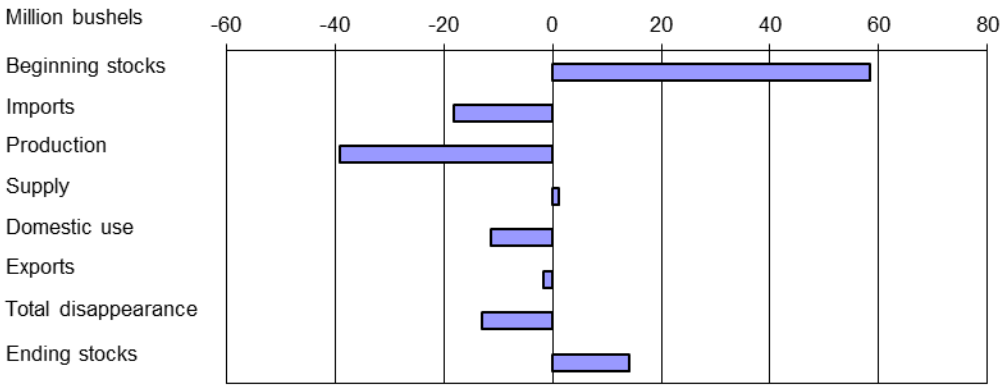
Source: USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*.

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



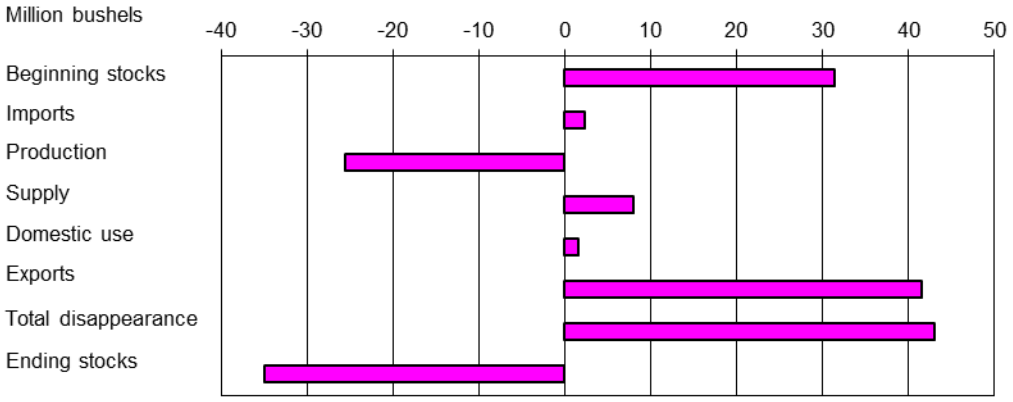
Source: USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*.

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



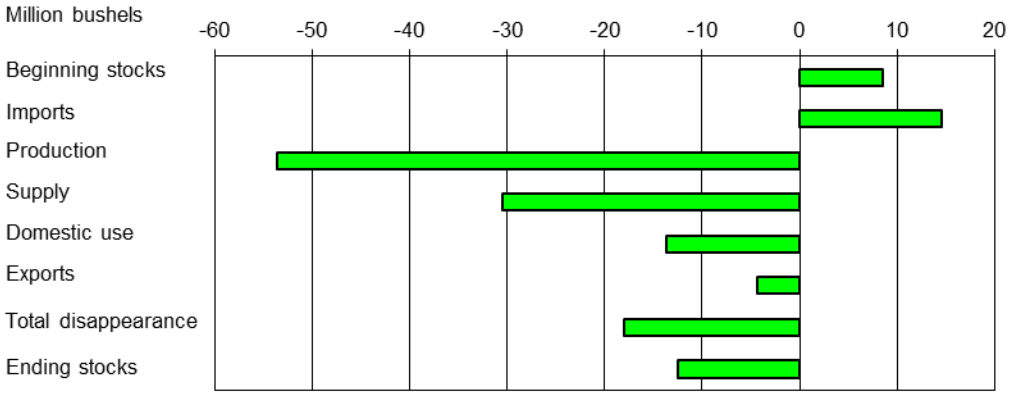
Source: USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*.

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, 9/14/2017

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	50.2	45.7
Harvested	Million acres	45.7	48.8	45.3	46.4	47.3	43.9	38.1
Yield	Bushels per acre	43.6	46.2	47.1	43.7	43.6	52.6	45.6
Supply:								
Beginning stocks	Million bushels	863.0	742.6	717.9	590.3	752.4	975.6	1,184.4
Production	Million bushels	1,993.1	2,252.3	2,135.0	2,026.3	2,061.9	2,309.7	1,739.2
Imports [1]	Million bushels	113.1	124.3	172.5	151.2	112.7	118.1	150.0
Total supply	Million bushels	2,969.2	3,119.2	3,025.3	2,767.8	2,927.1	3,403.4	3,073.6
Disappearance:								
Food use	Million bushels	941.4	950.8	955.1	958.3	957.1	948.8	950.0
Seed use	Million bushels	75.6	73.1	75.6	79.4	67.2	61.0	66.0
Feed and residual use	Million bushels	158.5	365.3	228.2	113.4	149.3	154.1	150.0
Total domestic use	Million bushels	1,175.5	1,389.3	1,258.8	1,151.1	1,173.7	1,163.9	1,166.0
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	2,219.0	2,141.0
Ending stocks	Million bushels	742.6	717.9	590.3	752.4	975.6	1,184.4	932.6
CCC inventory	Million bushels						.0	
Stocks-to-use ratio		33.4	29.9	24.2	37.3	50.0	53.4	43.6
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	4.30-4.90
Market value of production	Million dollars	14,269	17,383	14,604	11,915	10,203	8,985	8,000

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.
[2] 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.

Date run: 9/13/2017

Table 2--Wheat by class: U.S. market year supply and disappearance, 9/14/2017

Market year, item, and unit			All wheat	Hard red winter[1]	Hard red spring[1]	Soft red winter[1]	White[1]	Durum
2016/17	Area:							
	Planted acreage	Million acres	50.15	26.59	10.95	6.02	4.19	2.41
	Harvested acreage	Million acres	43.89	21.86	10.67	4.98	4.02	2.37
	Yield	Bushels per acre	52.62	49.48	46.23	69.37	71.04	44.02
	Supply:							
	Beginning stocks	Million bushels	975.60	445.53	271.97	156.63	73.68	27.80
	Production	Million bushels	2,309.68	1,081.69	493.13	345.23	285.51	104.12
	Imports[2]	Million bushels	118.14	5.05	41.78	33.19	7.74	30.38
	Total supply	Million bushels	3,403.42	1,532.27	806.87	535.05	366.94	162.30
	Disappearance:							
	Food use	Million bushels	948.76	384.69	250.00	150.00	85.00	79.07
	Seed use	Million bushels	60.99	26.61	15.33	10.87	5.23	2.96
	Feed and residual use	Million bushels	154.12	73.12	-14.32	67.49	8.24	19.59
	Total domestic use	Million bushels	1,163.87	484.42	251.01	228.36	98.47	101.62
	Exports[2]	Million bushels	1,055.13	454.74	320.86	91.69	163.46	24.38
	Total disappearance	Million bushels	2,219.01	939.15	571.87	320.05	261.94	126.00
	Ending stocks	Million bushels	1,184.41	593.12	235.00	215.00	105.00	36.30
2017/18	Area:							
	Planted acreage	Million acres	45.66	23.82	10.26	5.61	4.06	1.92
	Harvested acreage	Million acres	38.12	18.09	9.88	4.44	3.85	1.86
	Yield	Bushels per acre	45.63	41.93	36.87	68.95	67.49	27.20
	Supply:							
	Beginning stocks	Million bushels	1,184.41	593.12	235.00	215.00	105.00	36.30
	Production	Million bushels	1,739.22	758.37	364.21	306.12	259.99	50.54
	Imports[2]	Million bushels	150.00	7.00	73.00	15.00	10.00	45.00
	Total supply	Million bushels	3,073.64	1,358.49	672.21	536.12	374.99	131.83
	Disappearance:							
	Food use	Million bushels	950.00	385.00	245.00	150.00	90.00	80.00
	Seed use	Million bushels	66.00	30.00	16.00	12.00	5.00	3.00
	Feed and residual use	Million bushels	150.00	80.00	5.00	55.00	5.00	5.00
	Total domestic use	Million bushels	1,166.00	495.00	266.00	217.00	100.00	88.00
	Exports[2]	Million bushels	975.00	400.00	260.00	90.00	205.00	20.00
	Total disappearance	Million bushels	2,141.00	895.00	526.00	307.00	305.00	108.00
	Ending stocks	Million bushels	932.64	463.49	146.21	229.12	69.99	23.83

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 production, are approximations.
[2] 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.

Date run: 9/13/2017

Table 3--Wheat: U.S. quarterly supply and disappearance (million bushels), 9/14/2017

Market year	and quarter	Production	Imports[1]	Total supply	Food use	Seed use	Feed and residual use	Exports[1]	Ending 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	1,393	229	21	-59	227	976
	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
	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
	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	1,229	236	19	-70	301	743
	Mkt. year	1,993	113	2,969	941	76	159	1,051	743
2012/13	Jun-Aug	2,252	26	3,020	238	1	403	264	2,115
	Sep-Nov		33	2,148	247	55	-22	198	1,671
	Dec-Feb		35	1,705	229	1	5	235	1,235
	Mar-May		31	1,266	238	15	-20	315	718
	Mkt. year	2,252	124	3,119	951	73	365	1,012	718
2013/14	Jun-Aug	2,135	36	2,889	235	4	422	358	1,870
	Sep-Nov		48	1,918	249	53	-168	309	1,475
	Dec-Feb		42	1,517	231	2	-1	228	1,057
	Mar-May		47	1,104	240	17	-25	282	590
	Mkt. year	2,135	172	3,025	955	76	228	1,176	590
2014/15	Jun-Aug	2,026	44	2,661	239	6	256	253	1,907
	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	45	-108	192	1,746
	Dec-Feb		34	1,780	230	1	3	175	1,372
	Mar-May		25	1,396	239	20	-44	205	976
	Mkt. year	2,062	113	2,927	957	67	149	778	976
2016/17	Jun-Aug	2,310	33	3,318	238	1	267	268	2,545
	Sep-Nov		30	2,575	245	41	-29	239	2,077
	Dec-Feb		25	2,102	228	1	-22	238	1,657
	Mar-May		31	1,688	238	18	-62	310	1,184
	Mkt. year	2,310	118	3,403	949	61	154	1,055	1,184
2017/18	Mkt. year	1,739	150	3,074	950	66	150	975	933

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.

Date run: 9/13/2017

Table 4--Wheat: Monthly food disappearance estimates (1,000 grain-equivalent bushels), 9/14/2017

Mkt year and month 1/		Wheat ground for flour	+	Food imports²	+	Nonmilled food use³	-	Food exports²	=	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	74,703		2,828		2,000		1,534		77,996
	May	76,381		2,818		2,000		1,914		79,284
2017/18	Jun	73,077		3,248		2,000		1,822		76,503
	Jul			2,966				1,795		1,171

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.
 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.

Date run: 9/13/2017

Table 5--Wheat: National average price received by farmers (dollars per bushel) , 9/14/2017

Month	All wheat		Winter		Durum		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		3.41		5.66		4.26	
September	3.48		3.25		5.61		4.22	
October	3.68		3.37		5.51		4.38	
November	3.88		3.41		6.00		4.48	
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), 9/14/2017

Month	Hard red winter		Soft red 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		3.92		4.27		4.23	
September	3.02		3.68		4.24		4.08	
October	3.07		3.83		4.46		3.88	
November	3.16		3.85		4.54		3.92	
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.

Date run: 9/13/2017

Table 7--Wheat: Average cash grain bids at principal markets, 9/14/2017

	No. 1 hard red winter (ordinary protein) Kansas City, MO (dollars per bushel)		No. 1 hard red winter (13% protein) Kansas City, MO (dollars per bushel)		No. 1 hard red winter (ordinary protein) Portland, OR (dollars per bushel)		No. 1 hard red winter (ordinary protein) Texas Gulf, TX [1] (dollars per 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	--
September	4.24	--	5.36	--	4.41	--	150.47	--
October	4.40	--	5.58	--	4.20	--	152.12	--
November	4.64	--	5.70	--	4.12	--	150.28	--
December	4.56	--	5.76	--	4.03	--	141.83	--
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)		No. 1 dark northern spring (14% protein) Chicago, IL (dollars per bushel)		No. 1 dark northern spring (14% protein) Portland, OR (dollars per bushel)		No. 1 hard amber durum Minneapolis, MN (dollars per 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	--	--	--
October	--	--	--	--	6.34	--	--	--
November	--	--	--	--	6.28	--	--	--
December	--	--	--	--	6.49	--	--	--
January	--	--	--	--	6.80	--	--	--
February	--	--	--	--	6.81	--	--	--
March	--	--	--	--	6.60	--	--	--
April	--	--	--	--	6.45	--	--	--
May	--	--	--	--	6.64	--	--	--

	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)		No. 1 soft white Portland, OR (dollars per 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	--	3.76	--	3.72	--	4.77	--
October	3.89	--	3.82	--	3.90	--	4.65	--
November	4.04	--	3.88	--	3.92	--	4.64	--
December	3.91	--	3.94	--	3.80	--	4.57	--
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: 9/13/2017

Table 8--Wheat: U.S. exports and imports for last 6 months (1,000 bushels), 9/14/2017

Item		Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017
Exports	All wheat grain	80,136	91,205	98,895	114,788	111,472	83,974
	All wheat flour[1]	1,434	1,287	1,188	1,538	1,456	1,438
	All wheat products[2]	573	574	366	418	393	385
	Total all wheat	82,142	93,066	100,450	116,744	113,322	85,797
Imports	All wheat grain	5,976	8,358	7,211	7,206	8,438	10,481
	All wheat flour[1]	1,076	1,277	1,206	1,204	1,416	1,339
	All wheat products[2]	1,259	1,592	1,641	1,638	1,858	1,652
	Total all wheat	8,311	11,227	10,059	10,048	11,712	13,472

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.

Date run: 9/13/2017

Table 9--Wheat: U.S. exports, Census and export sales comparison (1,000 metric tons)

Importing country	2015/16		2016/17		2017/18 (as of 08/24/17)		
					Shipments	Out-standing	Total
Data source	Census 1/	Export sales 2/	Census 1/	Export sales 2/	Export sales 2/		
Country:							
China	609	764	1,632	1,562	422	110	532
Japan	2,497	2,434	2,920	2,820	804	386	1,190
Mexico	2,513	2,318	3,580	3,090	900	718	1,618
Nigeria	1,497	1,401	1,491	1,540	445	276	721
Philippines	2,116	2,118	2,634	2,729	843	620	2,680
Korean Rep.	1,093	1,074	1,327	1,276	464	560	1,023
Egypt	42	75	112	112	115	0	115
Taiwan	1,131	1,034	1,047	1,049	359	205	565
Indonesia	656	608	1,151	1,084	369	243	611
Venezuela	252	239	457	398	117	30	147
European Union	838	934	715	648	209	72	280
Total grain	20,492	19,473	27,986	26,513	7,370	5,089	12,459
Total (including products)	21,142	19,577	28,636	26,648	7,396	5,112	12,509
USDA forecast of Census		21,168		28,716			26,535

[1] Source: U.S. Department of Commerce, U.S. Census Bureau

[2] Source: USDA, Foreign Agricultural Service, *U.S. Export Sales* .