



Wheat Outlook

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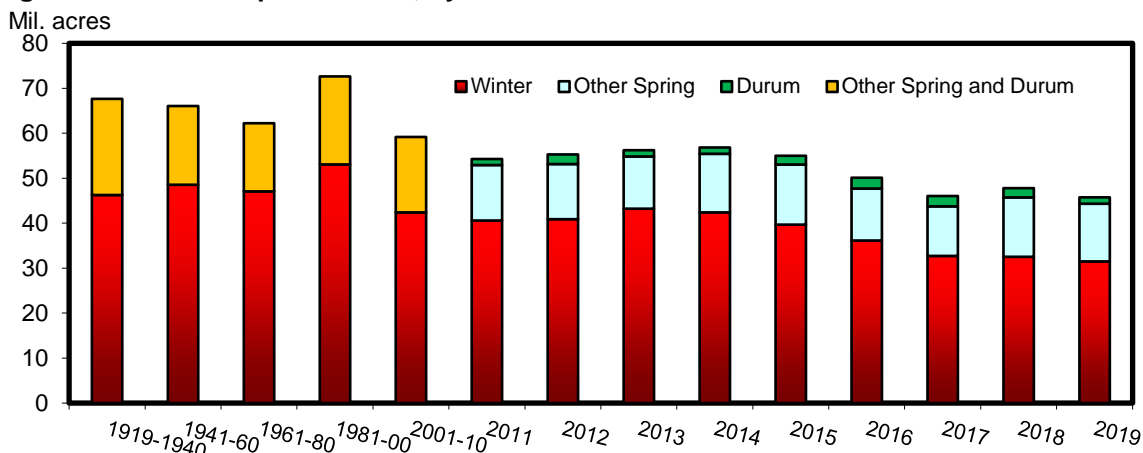
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U.S. All Wheat Area Planted for 2019/20 Lowest on Record

The March 29 USDA, NASS *Prospective Plantings* report estimated all wheat intended plantings for 2019/20 to be a scant 45.8 million acres, down 4 percent from 2018 and the lowest planted area since records began in 1919 (fig. 1). At 31.5 million acres, winter wheat plantings for 2019/20 are the second lowest since 1909, when winter wheat planted area totaled 29.2 million acres. Other spring wheat and durum area planted is forecast at 14.3 million acres in 2019/20 and down year-to-year on cash and futures price weakness for spring wheat and durum and higher expected relative returns for corn. NASS-reported spring wheat cash prices for Feb 2019 are 37 cents below the same month in 2018 and the May spring wheat futures contract has steadily weakened since mid-August of 2018.

Figure 1: U.S. wheat planted area, by class



Note: Average planted area used in chart where range of years appears.

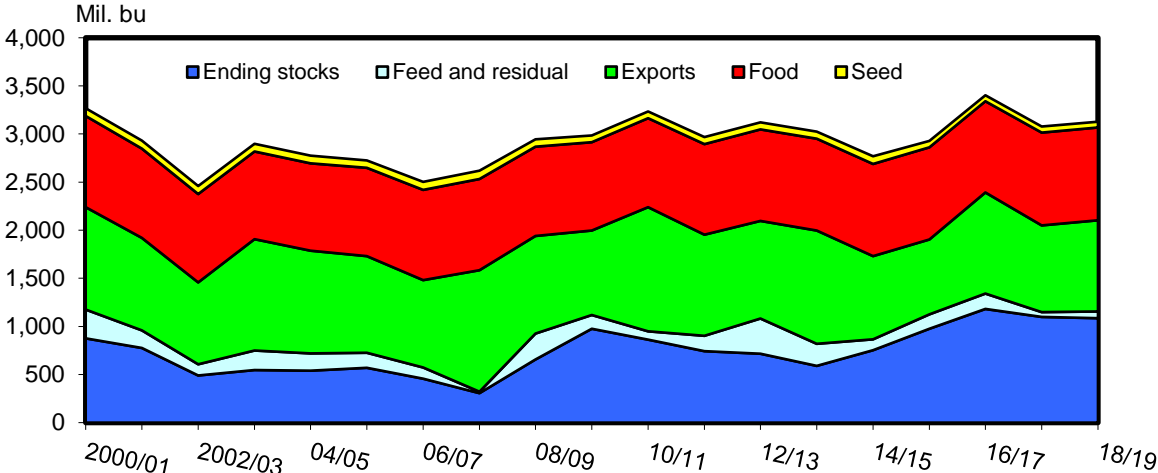
Sources: USDA, National Agricultural Statistics Service. *Quickstats database* and USDA, Economic Research Service calculations.

Domestic Outlook

Domestic Changes at a Glance:

- The USDA, National Agricultural Statistic Service (NASS) *Prospective Plantings* report projects 2019/20 all wheat planted area at 45.8 million acres, 4 percent below 2018/19 and the lowest since all wheat records began in 1919.
 - The current NASS forecast is below the 2019/20 planted area forecast of 47.0 million acres from the February 22, 2019 *Grains Outlook* presentation delivered at the USDA *Agricultural Outlook Forum*.
 - Seed use for 2018/19 is trimmed 1.5 million bushels on revised planted area expectations.
- The March 29-released USDA, NASS *Grain Stocks* report indicated aggregate stocks of all wheat on March 1, 2019 totaled 1.59 billion bushels, up 6 percent from a year ago.
 - The implied December 2018–February 2019 disappearance is 456 million bushels, 10 percent higher than the same period a year ago.
- All wheat annual feed and residual use is lowered 10 million bushels to 70 million based on lower-than-expected third quarter disappearance (fig. 2).
- With only a few weeks remaining in the 2018/19 marketing year, the pace of exports to date supports a 20 million bushel cut to the previous projection.
- Ending stocks for 2018/19 are raised 31.5 million bushels on reduced use to 1,087 million.
- Based on updated NASS price and marketing data through February 2019, the all wheat season average price is raised 5 cents to \$5.20 per bushel at the midpoint.

Figure 2: U.S. wheat utilization



Source: USDA, World Agricultural Outlook Board, WASDE.

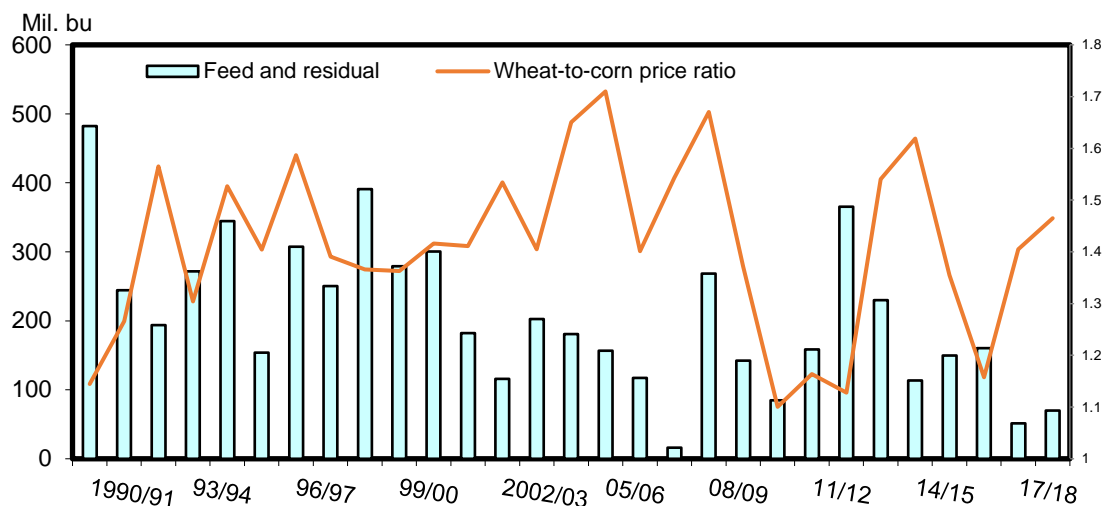
Table 1 – U.S. wheat supply and utilization at a glance, 2018/19

Balance sheet item	2018/19 (March)	2018/19 (April)	Change from previous month	Comments
Supply, total				<i>May-June Marketing Year (MY)</i>
Beginning stocks	1,098.9	1,098.9	0.0	
Production	1,884.5	1,884.5	0.0	
Imports	145.0	145.0	0.0	All wheat imports are unchanged this month.
Supply, total	3,128.3	3,128.3	0.0	
Demand				
Food	965.0	965.0	0.0	
Seed	63.0	61.5	-1.5	Seed use reduced on lowered expectations for the 2019/20 all wheat planted area.
Feed and residual	80.0	70.0	-10.0	Sluggish disappearance in the third quarter leads to a 10 million bushel cut. Hard red winter (HRW) wheat feeding is lowered 5 million bushels. Soft red spring (SRW) wheat feeding is lowered 5 million.
Domestic, total	1,108.0	1,096.5	-11.5	
Exports	965.0	945.0	-20.0	All wheat exports are 20 million bushels lower based on pace of sales to date, relative to previous projections. HRW exports are raised 10 million bushels on competitive prices; hard red spring (HRS) exports are cut 15 million bushels; White exports are trimmed 10 million; Durum are reduced 5 million.
Use, total	2,073.0	2,041.5	-31.5	
Ending stocks	1,055.3	1,086.8	31.5	Reduced use contributes to a boost in 2018/19 ending stocks.
Source: USDA, World Agricultural Outlook Board <i>Supply and Demand Estimates</i> .				

U.S. All Wheat Use Cut on Weak Demand

Nearly all use categories in the 2018/19 all wheat balance sheet are updated this month, following the USDA, NASS *Grain Stocks* report and most recent Census trade data release. Lower-than-expected disappearance in the third quarter, as implied by the March 1 stocks, supports a 10 million bushel cut to all wheat feed and residual. Now pegged at 70 million bushels, feed and residual for the 2018/19 marketing year is trending closer to last year's 51 million bushels and is well below the 10-year average of 172 million. An important driver of wheat feeding is the relative price of wheat to corn. Historically, wheat feed and residual grows (shrinks) as wheat becomes more (less) competitively priced, relative to corn. This month, the season-average farm price (SAFP) for corn remained at \$3.55 per bushel while the all wheat SAFP rose 5 cents to \$5.20, boosting the wheat-to-corn price ratio to 1.46 (fig. 3). This ratio is well above the 10-year average of 1.35 and provides further support for this month's feed and residual cut.

Figure 3: U.S. feed and residual shrink with stronger wheat-corn-price ratio



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

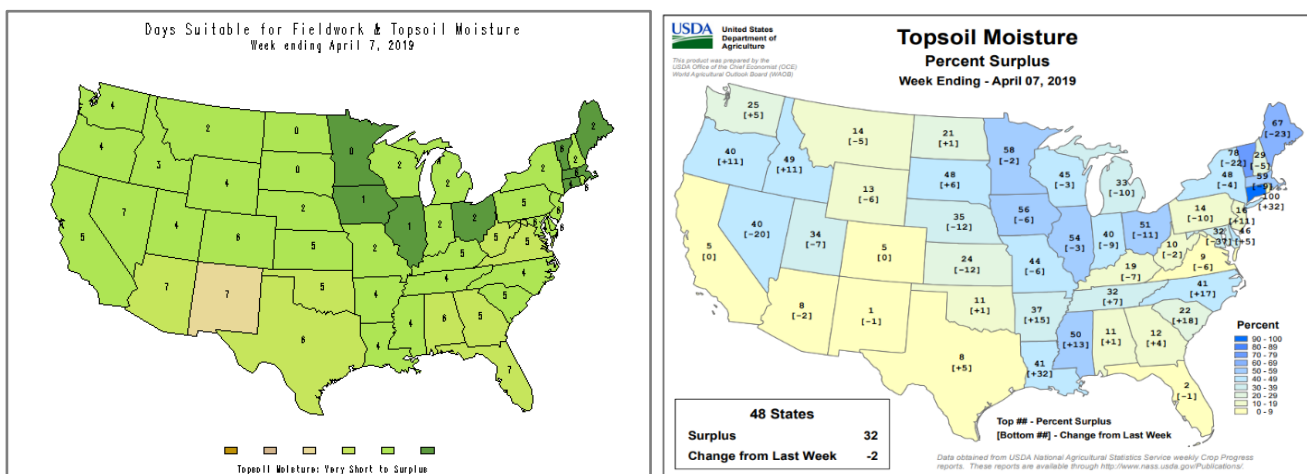
The updated area planted by class projections facilitated a revision of seed use in 2018/19 for use in sowing the 2019/20 crop. The sharp decline in other spring wheat planted area, relative to earlier expectations, underpins this month's 1.5 million bushel seed use cut. Other spring sowings came in below expectations, in part due to lackluster exports and prices that reduced relative profitability compared to competing crops and reduced farmer interest in planting wheat. Weakening other spring wheat prices are in part due expectations that Canada may increase spring wheat sowings in 2019/20. Tighter Canadian wheat stocks have supported relatively higher prices than those for U.S. farmers and an escalating trade dispute between Canada and China is attributed with possibly encouraging Canadian farmer interest in shifting some area of

canola production into wheat. Canadian farmers export the vast majority of canola they grow, upwards of 90 percent, of which up to more than forty percent is shipped to China. With China no longer purchasing Canadian canola, prices have fallen in recent months, creating incentives to sow alternative crops. Accordingly, Agriculture and Agri-Food Canada's March 21, 2019 *Outlook for Principal Field Crops* estimates that new crop other spring wheat and durum wheat sowings will be up 10 percent from 2018/19 estimates, creating sizable competition and downward price pressure for U.S.-grown spring wheat.

Spring Wheat Plantings Off to a Slow, Soggy Start

Spring wheat plantings for the week ending April 7, 2019 are estimated at 1 percent compared to the 5-year average of 5 percent, according to the latest NASS *Crop Progress* report. A mid-March blizzard brought more snow on top of significant late winter snowfall in the key spring wheat growing States including, North and South Dakota and Minnesota. As of April 9, a storm system is crossing the Northwest and is expected to intensify as it passes over the Central Plains, creating a “significant, late-season snow event” that will affect States from Wyoming into the upper Great Lakes region. This storm is expected to bring moisture to areas of spring wheat production and to further inhibit field work. As of the week ending April 7, 2019 USDA, NASS reported that zero days were suitable for field work in North Dakota, South Dakota and Minnesota, and only 2 days were suitable in Montana (fig. 3).

Figures 3 and 4: Surplus soil moisture in the Northern Plains limits field work opportunities



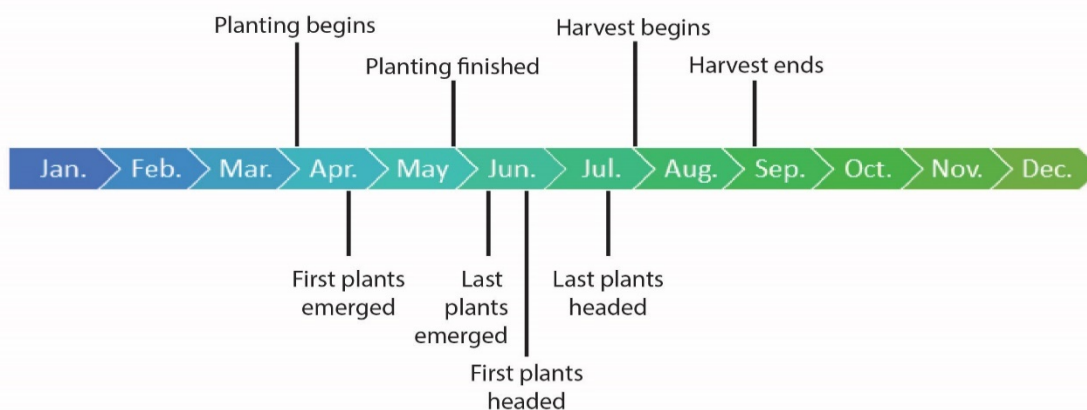
Sources: USDA, National Agricultural Statistics Service (fig. 3) and USDA, Office of the Chief Economist using USDA, NASS data (fig. 4).

Contributing to limited field work opportunities are saturated and, in some cases, snow-covered fields. In Minnesota, fully 58 percent of fields are reported by USDA, NASS to have surplus soil

moisture. In North and South Dakota, 24 and 48 percent of fields, respectively have surplus soil moisture as of the week ending April 7 (fig. 4).

By week 14 (ending around April 7), on average (5-year), about 5 percent of the U.S. spring wheat crop has been planted. Typically, between weeks 14 and 16 (mid to late April) a further 20 percent of the spring wheat crop is planted (fig. 5). With a significant storm expected to bring additional moisture to the spring wheat growing area during the week of April 7–13 (week 15), wet fields will have little opportunity to dry out during what is typically a busy planting period in the Northern Plains.

Figure 5: Five-year average spring wheat planting to harvest progress



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

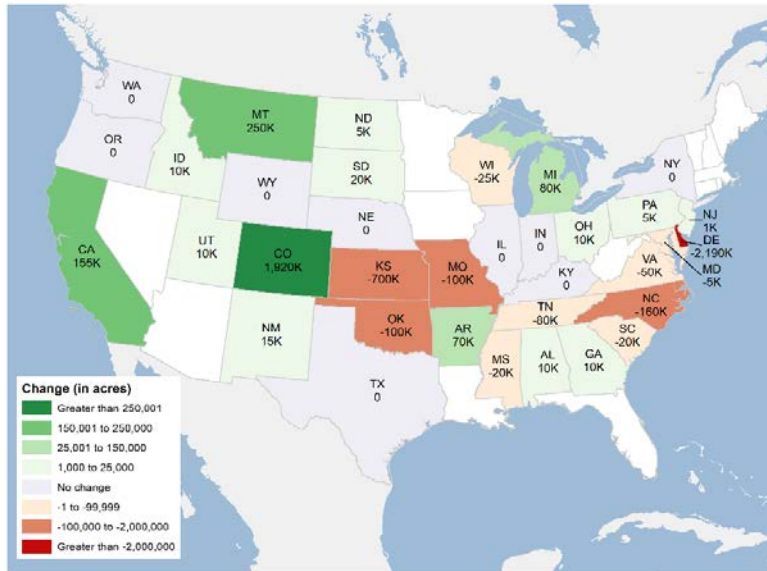
Crop insurance final plant dates for North and South Dakota are May 31-June 5 and May 5-May 15, giving would be spring wheat producers a month to 7 weeks to plant. As the final plant dates approach, limited field work opportunities may encourage producers to change plans and plant corn or soybeans. The next survey-based USDA, NASS other spring planted and durum area forecasts will be released in the *Acreage* report on June 28.

Prospective Plantings Report Reveals Significant Shift in Key Wheat-Growing States

On March 29, USDA, NASS released its annual *Prospective Plantings* report. This report includes an update to the February-released winter wheat planted area estimate along with the survey-based forecast of farmers' other spring and durum wheat planting intentions. Winter wheat planted area, while remaining the second-lowest on record, was raised 1 percent from the NASS *Winter Wheat and Canola Seedings* forecast to 31.5 million acres. An estimated

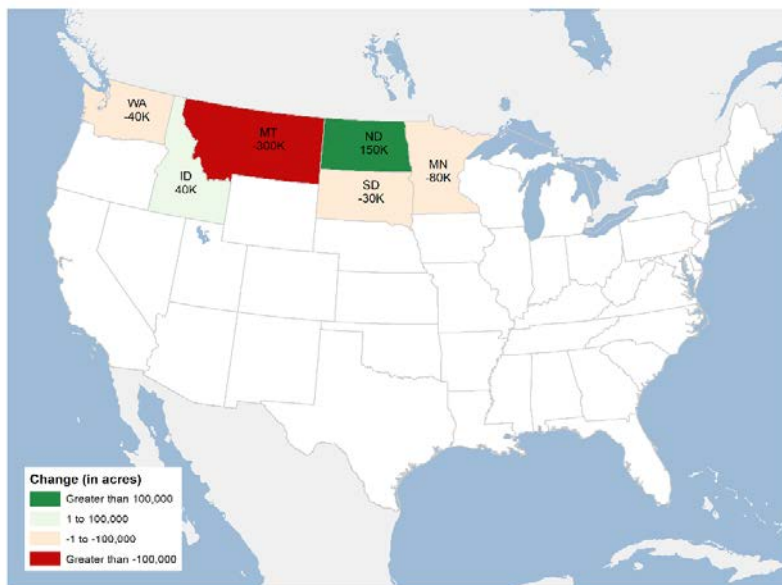
700,000 acres reduction in winter wheat planted area in Kansas combines with 100,000+ acres cuts in Oklahoma, Missouri, and North Carolina for a 3 percent year-to-year reduction in aggregate area (fig. 6).

Figure 6: Shifts in U.S. winter wheat planted area 2019 vs. 2018



Sources: USDA, National Agricultural Statistics Service and USDA, Economic Research Service calculations.

Figure 7: Shifts in U.S. other spring wheat planted area 2019 vs. 2018



Sources: USDA, National Agricultural Statistics Service and USDA, Economic Research Service calculations.

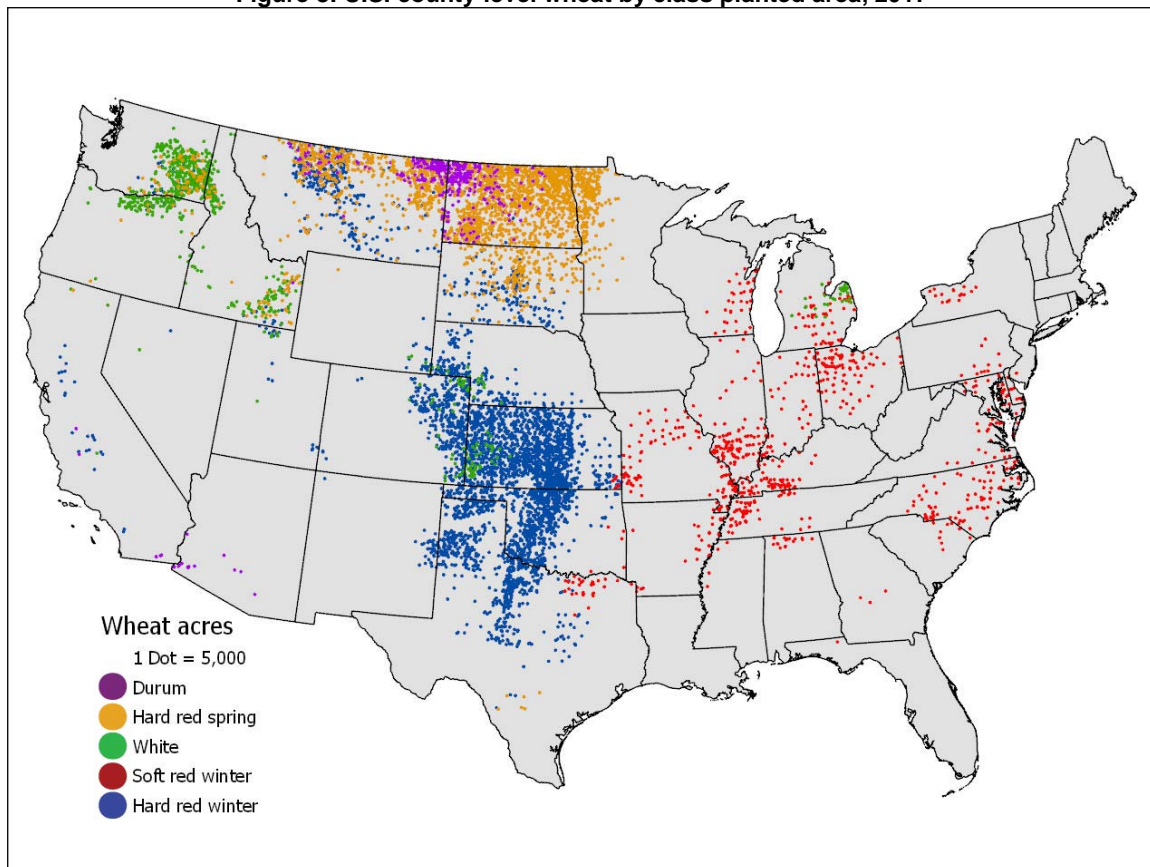
During the first 2 weeks of March, USDA, NASS surveyed approximately 82,400 farmers about their planting intentions, including prospects for sowing spring wheat. In 2019, spring wheat estimates were discontinued in Colorado, Nevada, Oregon, and Utah. In the six surveyed States, growers indicated intentions to plant 12.8 million acres of spring wheat, down 3 percent from 2018. Declines in spring wheat planted area are expected for all spring wheat producing States except North Dakota (+150,000 acres) and Idaho (+40,000 acres) (fig. 7). Nearly 97

percent of intended other spring wheat plantings are expected to be hard red spring (12.4 million acres).

Farm Service Data Used to Create County-Level Wheat by Class Map

Using 2017 prevented and failed wheat by class data supplied by the USDA, Farm Service Agency, geographers from the Economic Research Service updated a 1998 map of a wheat by class, by county (fig. 8). Similar to the 1998 version, the 2017 map shows where production of each of the five major classes of U.S. wheat (hard red winter (HRW), hard red spring (HRS), soft red spring (SRW), white wheat (WW), and durum) are concentrated.

Figure 8: U.S. county-level wheat by class planted area, 2017



Sources: USDA, Farm Service Agency planted and failed acreage data and USDA, Economic Research Service calculations.

As is visible in Figure 8, HRW—which represents about 40 percent of total production—is grown primarily in the Great Plains (from Texas and north to Montana). SRW accounts for about 15–20 percent of production and is grown largely in States along the Mississippi River and in Eastern States. White wheat comprises 10–15 percent of production and is concentrated in the Pacific

Northwest with some production from Kansas to Nebraska and as far north as Michigan. About 20 percent of U.S. wheat production is HRS, which is grown primarily in the Northern Plains (North Dakota, Montana, Minnesota, and South Dakota) with some cultivation in the Pacific Northwest. Durum wheat is grown mainly in Montana and North Dakota with a limited production of “desert durum” in California and Arizona.

As compared to the archival 1998 map, less HRW is now grown in California and the Northern Plains. White wheat production has largely shifted out of the Great Lakes area and New York and into the Pacific Northwest and Midwest. Desert durum production (CA and AZ) has declined as acres were lost to cotton production and production shifted to the Northern Plains.

Domestic Feature: Wheat by Class Trade Estimation Methods

The USDA wheat Interagency Commodity Estimate Committee (ICEC) is comprised of members of the USDA World Agricultural Outlook Board, Foreign Agricultural Service, Farm Service Agency, and the Economic Research Service (ERS). This committee is responsible for developing wheat production forecasts each month for major foreign producing countries, as well as, supply, demand, and price estimates for the United States. In addition to maintaining the all wheat supply and demand estimates that are presented in the wheat balance sheet published in the World Agricultural Supply and Demand Estimate (WASDE) monthly report, the committee also maintains separate balance sheets for each of five classes of wheat: Hard Red Winter (HRW), Hard Red Spring (HRS), Soft Red Winter (SRW), White wheat (WW), and Durum.

Data provided by USDA, National Agricultural Statistics Service (NASS) and the Census Bureau is not uniformly reported by class outside of durum, necessitating the development of methods to convert all wheat data into wheat by class data that is appropriate for inclusion in the associated balance sheets. In this feature, methods for estimating wheat by class imports and exports are summarized and examples given.

Converting Census Data to Grain-Equivalent Bushels

The monthly estimates of U.S. wheat exports and imports are each the sum of associated exports and imports of wheat grain, wheat flour, and selected wheat products. The flour and wheat products include both food and animal feed items. Before the flour and products can be aggregated with wheat grain, these items are converted to grain-equivalent bushels—that is, the quantity of wheat grain that would have to be milled to produce that quantity of flour or wheat product (table 2). The Census Bureau trade data for grain, flour, and selected products are in metric tons (grain exports) or kilograms (flour and products). Volume data for flour and selected

products are converted to grain-equivalent kilograms—i.e., the quantity of wheat grain that would have to be milled to produce one kilogram of that flour or wheat product. Then, the grain and grain-equivalent data are converted to bushels. Please see table 2 for more details.

Categories and HTS codes*	Description	Unit	Grain Equivalent Factor	Pounds per Kilogram	Pounds per Bushel
Grain	All Wheat Grain and Seed Codes	kilogram	1	2.204622	60
Flour					
1101000010	Hard spring flour	kilogram	1.36986	2.204622	60
1101000020	Durum flour	kilogram	1.72414	2.204622	60
1101000030	White winter flour	kilogram	1.36986	2.204622	60
1101000060	Flour not elsewhere specified	kilogram	1.36986	2.204622	60
1101000050	Organic flour	kilogram	1.36986	2.204622	60
1103110020	Semolina	kilogram	1.72414	2.204622	60
1103110040	Wheat meal and groats	kilogram	1.01010	2.204622	60
Products					
1103200010	Wheat pellets	kilogram	1.92308	2.204622	60
1902112010	Pasta with eggs	kilogram	1.33200	2.204622	60
1902112020	Pasta with eggs	kilogram	1.33200	2.204622	60
1902112030	Pasta with eggs	kilogram	1.33200	2.204622	60
1902112090	Pasta with eggs	kilogram	1.33200	2.204622	60
1902114000	Pasta with eggs and sauce	kilogram	1.33200	2.204622	60
1902192010	Pasta without eggs	kilogram	1.42200	2.204622	60
1902192020	Pasta without eggs	kilogram	1.42200	2.204622	60
1902192030	Pasta without eggs	kilogram	1.42200	2.204622	60
1902192090	Pasta without eggs	kilogram	1.42200	2.204622	60
1902194000	Pasta without eggs, but with sauce	kilogram	1.42200	2.204622	60
1902400000	Couscous	kilogram	1.01010	2.204622	60
1904300000	Bulgur	kilogram	1.01010	2.204622	60

*HTS = Harmonized Tariff Schedule.

An example calculation converting 1.0 million kilograms of flour to grain-equivalent bushels is as follows:

Step 1. Converting kilograms of flour to grain-equivalent kilograms:

$$1,000,000 \text{ kilograms of flour} \times 1.36986 = 1,369,860 \text{ grain equivalent kilograms}$$

Step 2. Converting grain-equivalent kilograms to grain-equivalent pounds:

$$1,369,860 \text{ kilograms} \times 2.204622 \text{ pounds/kilogram} = 3,020,023.493 \text{ pounds}$$

Step 3. Converting grain-equivalent pounds to grain-equivalent bushels:

$$3,020,023.493 \text{ pounds} \times 1 \text{ bushel}/60 \text{ pounds} = 50,334 \text{ bushels}$$

Wheat and wheat-product imports are allocated by Census category (HTS code) across the five classes using a fixed set of proportions (table 3). These proportions, by Census category, were developed in consultation with industry representatives. For example, the allocation of imports of bulgur (HTS code 1904300000) is made after converting the import data to grain-equivalent bushels. Then, 25 percent of these bushels are allocated to the HRW wheat class and 75 percent to the HRS wheat class. The durum and durum-product export allocation is taken directly from the converted Census data.

Table 3: Wheat import trade codes, description, and weights by class		Wheat Class and Associated Weight				
HSCODE	Commodity Description	HRW	HRS	SRW	WHITE	DURUM
<i>Wheat Grain</i>						
1001100000	DURUM WHEAT	0	0	0	0	1
1001100010	DURUM WHEAT SEED FOR SOWING	0	0	0	0	1
1001100025	DURUM WHEAT, CERTIFIED ORGANIC, EXCEPT SEED	0	0	0	0	1
1001100061	DURUM WHEAT(GRADE 1) VITREOUS KRNL GT 84%, NOT ORGNIC, EXCPT SEED	0	0	0	0	1
1001100062	DURUM WHEAT(GRADE 1) VITREOUS KRNL NOT OVER 84%, NOT ORGNIC, EX SD	0	0	0	0	1
1001100065	DURUM WHEAT(GRADE 2) VITREOUS KRNL GT 84%, NOT ORGNIC, EXCPT SEED	0	0	0	0	1
1001100066	DURUM WHEAT(GRADE 2) VITREOUS KRNL NOT OVER 84%, NOT ORGNIC, EX SD	0	0	0	0	1
1001100069	DURUM WHEAT, OTHER THAN CERTIFIED ORGANIC, EXCEPT SEED, NESOI	0	0	0	0	1
1001100090	DURUM WHEAT, EXCEPT SEED	0	0	0	0	1
1001100091	DURUM WHEAT(GRADE 1) VITREOUS KERNEL > 84%	0	0	0	0	1
1001100092	DURUM WHEAT GRADE 1, VITREOUS KERNEL NOT OVER 84%	0	0	0	0	1
1001100095	DURUM WHEAT(GRADE 2) VITREOUS KERNEL > 84%	0	0	0	0	1
1001100096	DURUM WHEAT GRADE 2, VITREOUS KERNEL NOT OVER 84%	0	0	0	0	1
1001100099	DURUM WHEAT EXCEPT SEED, NESOI	0	0	0	0	1
1001110000	DURUM WHEAT SEED	0	0	0	0	1
1001190025	DURUM WHEAT, CERTIFIED ORGANIC, EXCEPT SEED	0	0	0	0	1
1001190051	DURUM WHEAT, GRADE 1, OTHER THAN SEED OR CERTIFIED ORGANIC	0	0	0	0	1
1001190053	DURUM WHEAT, GRADE 2, OTHER THAN SEED, OTHER THAN CERTIFIED ORGANIC	0	0	0	0	1
1001190061	DURUM WHEAT,#1,DARK HARD VITREOUS KRNL GT 84%, NOT CRT ORGNC, EX SD	0	0	0	0	1
1001190062	DURUM WHEAT,#1,DARK HARD VTRS KRNL NOT GT 84%, NOT CRT ORGNC, EX SD	0	0	0	0	1
1001190065	DURUM WHEAT,#2,DARK HARD VITREOUS KRNL GT 84%, NOT CRT ORGNC, EX SD	0	0	0	0	1
1001190066	DURUM WHEAT,#2,DARK HARD VTRS KRNL NOT GT 84%, NOT CRT ORGNC, EX SD	0	0	0	0	1
1001190069	DURUM WHEAT, OTHER THAN CERTIFIED ORGANIC, EXCEPT SEED, NESOI	0	0	0	0	1
1001901000	WHEAT AND MESLIN SEED FOR SOWING (EXCEPT DURUM)	0.25	0.5	0	0.25	
1001902000	WHEAT AND MESLIN, EXCEPT SEED, NESOI	0	1	0	0	0
1001902005	CANADIAN WESTERN XTRASTRONG HARD RED SPRING WHEAT	0	1	0	0	0
1001902010	RED SPRING WHEAT, GRADE 1 (EXCEPT SEED)	0	1	0	0	0
1001902011	RED SPRING WHEAT, GRADE 1, PROTEIN <= 12.9% BY WT.	0	1	0	0	0
1001902012	RED SPRNG WHET, GRAD 1 PROTEIN > 12.9%, <=13.3% WT	0	1	0	0	0
1001902013	RED SPRING WHEAT GRADE 1;PROTEIN >13.3%<=13.5% WGT	0	1	0	0	0
1001902014	RED SPRNG WHEAT GRADE 1 PROTEIN >13.6% <=13.9% WGT	0	1	0	0	0
1001902016	RED SPRING WHEAT GRADE 1 PROTEIN >13.9%<=14.2% WGT	0	1	0	0	0
1001902019	RED SPRING WHEAT GRADE 1 PROTEIN CONT >14.2% WGT.	0	1	0	0	0
1001902020	RED SPRING WHEAT, GRADE 2, (EXCEPT SEED)	0	1	0	0	0
1001902021	RED SPRING WHEAT GRADE 2 PROTEIN CONTENT<12.9% WGT	0	1	0	0	0
1001902022	RED SPRING WHEAT GRADE 2 PROTEIN >12.9%<=13.3% WGT	0	1	0	0	0
1001902023	RED SPRING WHEAT GRADE 2 PROTEIN >13.3%<=13.6% WGT	0	1	0	0	0
1001902024	RED SPRING WHEAT GRADE 2 PROTEIN >13.6%<=13.9% WGT	0	1	0	0	0
1001902026	RED SPRING WHEAT GRADE 2 PROTEIN >13.9%<=14.2% WGT	0	1	0	0	0
1001902029	RED SPRING WHEAT GRADE 2 PROTEIN CONT > 14.2% WGT.	0	1	0	0	0
1001902030	RED SPRING WHEAT, NESOI, (EXCEPT SEED)	0	1	0	0	0
1001902035	RED SPRING WHEAT, NESOI, (EXCEPT SEED)	0	1	0	0	0
1001902040	WHITE WINTER WHEAT, EXCEPT SEED	0	0	0	1	0
1001902050	CANADIAN WESTERN RED WINTER WHEAT, EXCEPT SEED	1	0	0	0	0
1001902060	SOFT WHITE SPRING WHEAT, EXCEPT SEED	0	0	0	1	0
1001902090	WHEAT AND MESLIN, EXCEPT SEED, NESOI	0	1	0	0	0
1001902095	WHEAT AND MESLIN, EXCEPT SEED, NESOI	0	1	0	0	0
1001902096	WHEAT AND MESLIN, EXCEPT SEED, NESOI	0	0	1	0	0
1001910000	WHEAT AND MESLIN SEED (EXCEPT DURUM)	0.25	0.5	0	0.25	0
1001990005	CANADIAN WESTERN EXTRA STRONG HARD RED SPRING (CWEA/HRS) WHEAT	0	1	0	0	0
1001990011	RED SPRING WHEAT, GRADE 1(EX SD), PROTEIN NOT GT 12.9% BY WGT	0	1	0	0	0

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Table 3: Wheat import trade codes, description, and weights by class, continued		Wheat Class and Associated Weight				
HSCODE	Commodity Description	HRW	HRW	HRW	HRW	HRW
1001990012	RED SPRING WHEAT,#1(EX SD),PROTEIN GT 12.9% BUT NOT GT 13.3% BY WGT	0	1	0	0	0
1001990013	RED SPRING WHEAT,#1(EX SD),PROTEIN GT 13.3% BUT NOT GT 13.6% BY WGT	0	1	0	0	0
1001990014	RED SPRING WHEAT,#1(EX SD),PROTEIN GT 13.6% BUT NOT GT 13.9% BY WGT	0	1	0	0	0
1001990015	RED SPRING WHEAT,#1(EX SD),PROTEIN GT 12.9% BUT NOT GT 13.9% BY WGT	0	1	0	0	0
1001990016	RED SPRING WHEAT,#1(EX SD),PROTEIN GT 13.9% BUT NOT GT 14.2% BY WGT	0	1	0	0	0
1001990019	RED SPRING WHEAT,GRADE 1(EX SD), PROTEIN GT 14.2% BY WGT	0	1	0	0	0
1001990020	RED SPRING WHEAT,GRADE 1(EX SD), PROTEIN GT 13.9% BY WGT	0	1	0	0	0
1001990021	RED SPRING WHEAT,GRADE 2(EX SD), PROTEIN NOT GT 12.9% BY WGT	0	1	0	0	0
1001990022	RED SPRING WHEAT,#2(EX SD),PROTEIN GT 12.9% BUT NOT GT 13.3% BY WGT	0	1	0	0	0
1001990023	RED SPRING WHEAT,#2(EX SD),PROTEIN GT 13.3% BUT NOT GT 13.6% BY WGT	0	1	0	0	0
1001990024	RED SPRING WHEAT,#2(EX SD),PROTEIN GT 13.6% BUT NOT GT 13.9% BY WGT	0	1	0	0	0
1001990025	RED SPRING WHEAT,#2(EX SD),PROTEIN GT 12.9% BUT NOT GT 13.9% BY WGT	0	1	0	0	0
1001990026	RED SPRING WHEAT,#2(EX SD),PROTEIN GT 13.9% BUT NOT GT 14.2% BY WGT	0	1	0	0	0
1001990028	RED SPRING WHEAT,GRADE 2(EX SD), PROTEIN GT 13.9% BY WGT	0	1	0	0	0
1001990029	RED SPRING WHEAT,GRADE 2(EX SD), PROTEIN GT 14.2% BY WGT	0	1	0	0	0
1001990035	RED SPRING WHEAT, NESOI, (EXCEPT SEED)	0	1	0	0	0
1001990040	WHITE WINTER WHEAT, EXCEPT SEED	0	0	0	1	0
1001990050	CANADIAN' WESTERN RED WINTER WHEAT, EXCEPT SEED	1	0	0	0	0
1001990060	SOFT WHITE SPRING WHEAT, EXCEPT SEED	0	0	0	1	0
<i>Wheat Products</i>						
1001990096	WHEAT AND MESLIN, EXCEPT DURUM WHEAT, SEED, NESOI	0	0.75	0.25	0	0
1101000000	WHEAT OR MESLIN FLOUR	1	0	0	0	0
1101000010	HARD SPRING WHEAT FLOUR	0	1	0	0	0
1101000020	DURUM WHEAT FLOUR	0	0	0	0	1
1101000030	WHITE WINTER WHEAT FLOUR	0	0	0	1	0
1101000060	WHEAT OR MESLIN FLOUR, NESOI	0	1	0	0	0
1101000050	WHEAT OR MESLIN FLOUR, CERTIFIED ORGANIC	1	0	0	0	0
1103110020	GROATS AND MEAL OF WHEAT, SEMOLINA	0	0	0	0	1
1103110040	GROATS AND MEAL OF WHEAT, NESOI	0	1	0	0	0
1103200010	PELLETS OF WHEAT	0	1	0	0	0
1103210000	PELLETS OF WHEAT	0	1	0	0	0
1902112000	PASTA WITH EGG UNCOOKED NOT STUFFED OR OTHRWISE PRE	0	0	0	1	0
1902112010	EGG PASTA, NT CKD, EU CTRY, SBJT TO INWD PROC REG	0	0	0	1	0
1902112020	EGG PASTA, NT CKD, EU CTRY, REDUCED EXP REFUND	0	0	0	1	0
1902112030	EGG PASTA, NOT COOKED, EU CTRY, OTHER	0	0	0	1	0
1902112090	EGG PASTA, NOT COOKED, OF A CTRY OTHER THAN EU.	0	0	0	1	0
1902114000	PASTA WITH EGG NESOI SAUCE NOT STUFFED/OTHRWS PREP	0	0	0	1	0
1902192000	PASTA NO EGG UNCOOKED NOT STUFFED OR OTHERWISE PREP	0	0	0	0.2	0.8
1902192010	PASTA NO EGG,UNCKD,NT STFD/OTHR PREP, SBJT TO IPR	0	0	0	0.2	0.8
1902192020	PASTA NO EGG,UNCKD,NT STFD, SBJT TO REDUCD REFUND	0	0	0	0.2	0.8
1902192030	PASTA NO EGG,UNCKD,NT STFD/OTHR PREP, OTHER	0	0	0	0.2	0.8
1902192090	PASTA NO EGG,UNCKD,NT STFD/OTHR PREP, NT EU CTRY	0	0	0	0.2	0.8
1902194000	PASTA NO EGG NESOI INCL SAUCE NT STUFF/OTHRWS PREP	0	0	0	0.2	0.8
1902400000	COUSCOUS, WHETHER OR NOT PREPARED	0	0	0	0	1
1904300000	BULGUR WHEAT, PRE COOKE OR OTHERWISE PREPARED	0.25	0.75	0	0	0

Flour and Selected Products Used in Developing the Wheat Trade Estimates

All flours, but only selected wheat products are used in estimating wheat trade quantities for total wheat and durum wheat. The selected products included in the estimates are based on relative volumes traded. Wheat products included in by-class trade estimates are as follows: pasta made with eggs, pasta made without eggs, couscous, bulgur, and pellets. For couscous and pasta made without eggs, 80% of this volume is assumed to be made from durum.

Estimating Wheat by Class Exports

Wheat exports are calculated differently than imports. Census export data is less detailed than import data necessitating the use of proportional weights to determine wheat by class exports for non-durum wheat. Grain exports and product data is available for durum, thus this class can be determined directly from converted product and grain Census data. An example of the methodology used to allocate non-durum exports by class is as follows:

Step 1. Sum all the Census non-durum grain and converted non-durum flour and products (in grain-equivalent bushels). For example: 242 million bushels of non-durum grain + 6 million grain-equivalent bushels of non-durum flour + 2 million grain-equivalent bushels of non-durum products = 250 million bushels

Step 2. Sum export sales and donations for the four non-durum classes and then calculate the proportion each class composes of this total.

Non-durum class	Export sales and donations	Share of 234 million bushels
HRW	120 million bushels	51 percent
HRS	56 million bushels	24 percent
SRW	30 million bushels	13 percent
White	28 million bushels	12 percent
Total	234 million bushels	100 percent

Step 3. Multiply the sum from Step 1 by the proportions calculated in Step 2 to estimate the bushels exported for each of the four classes of wheat.

HRW	250×0.51	= 128 million bushels
HRS	250×0.24	= 60 million bushels
SRW	250×0.13	= 32 million bushels
White	250×0.12	= 30 million bushels

International Outlook

Global Wheat Supplies Are Up

While world wheat production for 2018/19 is projected at 732.9 million metric tons this month, down slightly from 733 million last month, global supplies are projected to grow by 2.1 million tons, with higher projected beginning stocks, up 2.3 million tons. With just a few months remaining in the 2018/19 (July–June) international trade year, supply and demand wheat balances have been revised for a number of countries, though most of the adjustments are relatively small.

The 2018/19 wheat harvest in the Northern Hemisphere was completed several months ago, and the revisions reflect primarily official data from government agencies. The production revisions are all under 0.3 million tons, with the largest change this month being a decrease of 0.3 million tons in wheat production for Norway, a 68 percent decrease from the previous estimate, primarily due to poor yields.

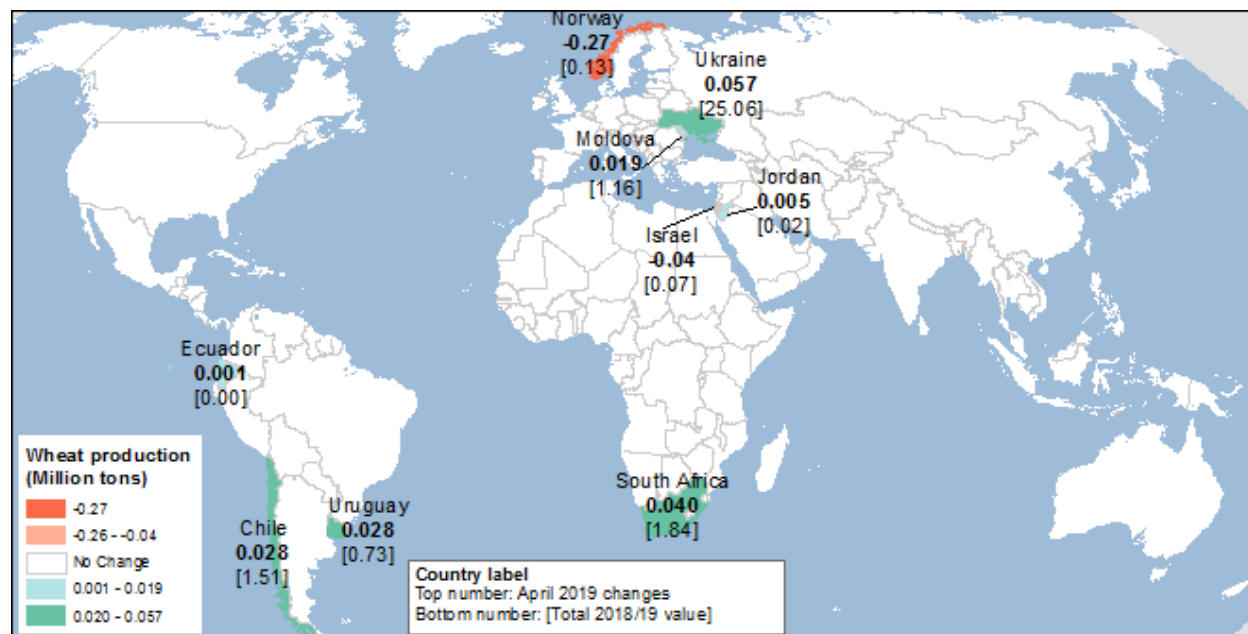
The world wheat harvested area was reduced by 169 thousand hectares this month, to 216.4 million hectares. The largest change was a 182 thousand hectare reduction for Ukraine on final government data. Global yield changes were similarly minor.

2017/18 world production is revised slightly upwards this month, to 763.2 million metric tons, primarily due to an increase in reported Russian production to 85.2 million.

Consumption and stocks are revised in Iran this month; the revisions of the country's wheat feed and residual use and ending stocks categories go back to 2015/16. With multiple year reductions in feed and residual use, Iranian stocks were increased, raising beginning 2018/19 stocks by 2.0 million tons. Morocco and Turkey also had revisions made for multiple years of their stocks data. Other smaller revisions in beginning stocks were also made for a number of other countries.

An overview of this month's changes in wheat production are presented in map A (wheat production), below.

Map A – Wheat production changes for 2018/19, April 2019



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

A Shift to Corn Feeding Takes Foreign Wheat Use Down

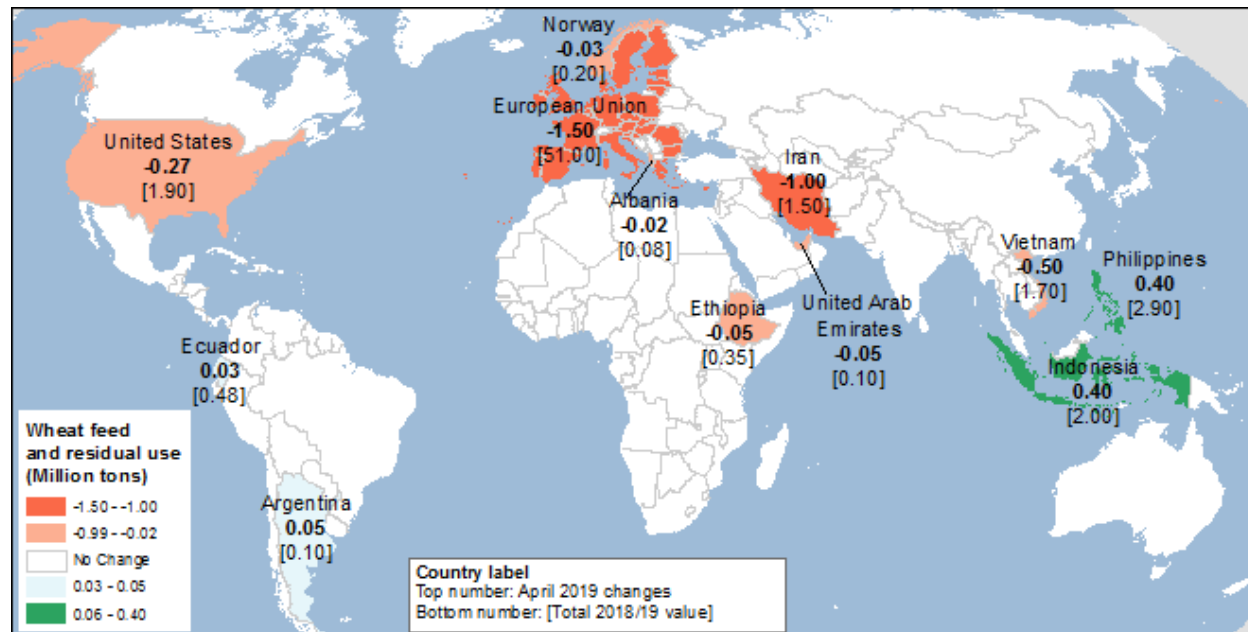
Total 2018/19 world wheat consumption is projected at 739.2 million tons, down 2.9 million from last month. Given that U.S. domestic wheat consumption is projected 0.3 million tons lower this month, foreign total wheat consumption is revised down by 2.6 million metric tons, to 709.3 million.

Foreign feed and residual wheat use is forecast down 2.3 million tons, mainly due to reductions for the European Union (EU) and Iran. The EU is substituting relatively lower-priced coarse grains for wheat in feeding and thereby is expected to export more wheat to non-EU countries. The Iran reduction was due to multi-year data revision. Iranian wheat feeding for 2018/19 and the previous years is trimmed as corn and barley imports have been increasing, which supports the partial substitution for wheat in feed rations. Feed use is also lowered in Vietnam on reportedly weakening demand for wheat feeding as noted by the USDA Attaché in Vietnam. Partly offsetting is an increase of feed use in Indonesia and the Philippines, up 0.4 million tons, reflecting healthy growth in the poultry sector. Smaller changes are also made for a number of countries this month.

With multiple offsetting revisions, 2018/19 foreign food, seed, and industrial use (FSI) is forecast down 0.9 million tons. The largest change is a 0.4 million ton reduction for Bangladesh to reflect lower projected imports.

For an overview on this month's changes in wheat domestic consumption, see map B (wheat feed and residual use) below.

Map B – Wheat feed and residual use changes for 2018/19, April 2019



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

Wheat Ending Stocks Projected Higher

The projected increase in world wheat supplies and lower projected consumption result in raising 2018/19 global ending stocks. They are projected up 5.1 million tons this month to 275.6 million tons, in part due to data revisions for Iran, Morocco, and Turkey for multiple years. The largest increases are for Iran, up 3.1 million tons, followed by the U.S., with a 0.9 million increase. Many other relatively small changes in stocks are made this month, as specific countries' wheat balances are revised. Ending stocks for 2016/17 and 2017/18 are also increased, mainly because of the revisions to Iran's balance sheet.

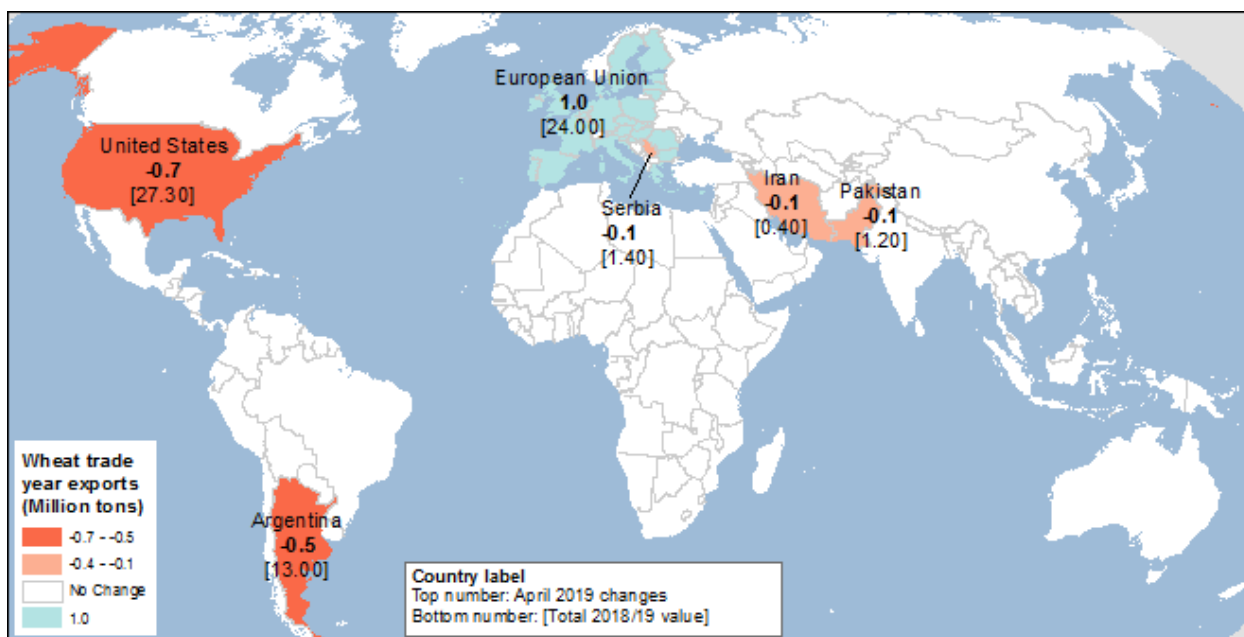
Summary information for this month's changes in wheat ending stocks is presented in map C (wheat stocks).

become more competitive in the world market, U.S. forward prices for delivery through June and August are at a premium compared to other major exporters on a free-on-board basis. The pace of U.S. export shipments will still have to accelerate to reach the current projection. It is expected several U.S. competitors will deplete their wheat stocks near the end of 2018/19 and the United States will increase its export pace. This year U.S. wheat stocks alone are greater than the aggregate stocks of all other major exporters (Argentina, Australia, Canada, European Union, Russia, and Ukraine).

Outstanding U.S. sales—an indicator for export pace in the next two months—are currently 50 percent above last year. But a large proportion of these outstanding sales will need to be shipped by the end of May for the local marketing year and by the end of June for the international TY to meet USDA’s current 2018/19 export forecast.

The lower-than-expected pace of wheat exports and commitments by Argentina support a reduction in its TY exports by 0.5 million tons this month to reach 13.0 million.

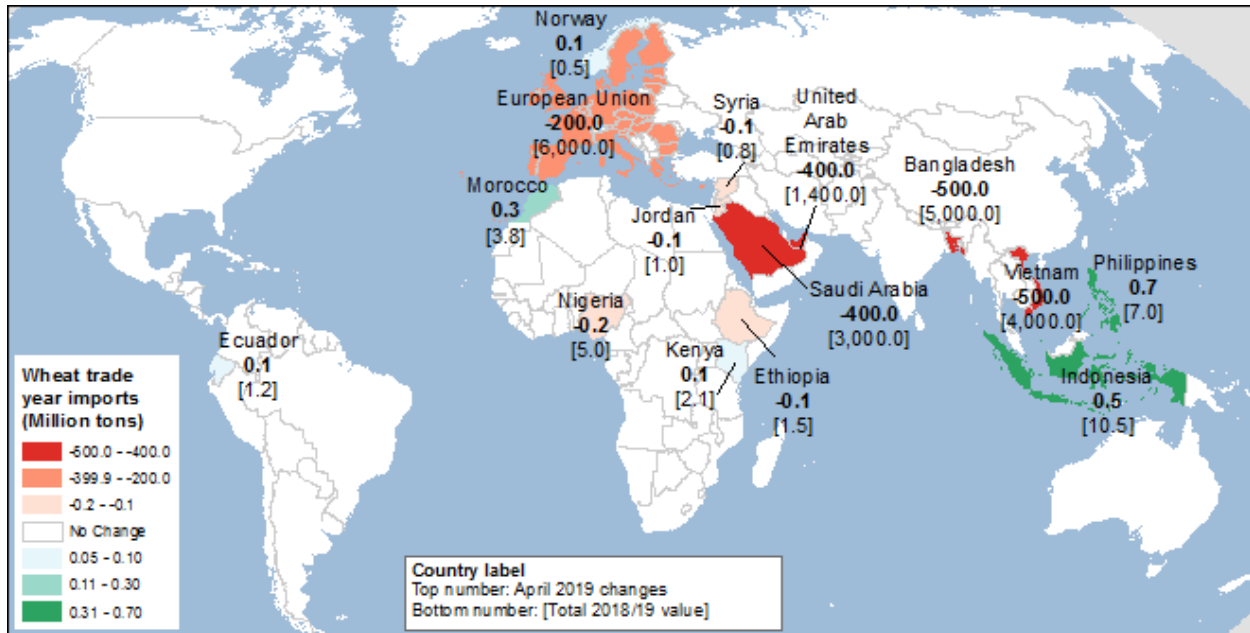
For a visual display of this month’s changes in 2018/19 wheat exports, see map D1 (wheat TY exports).



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

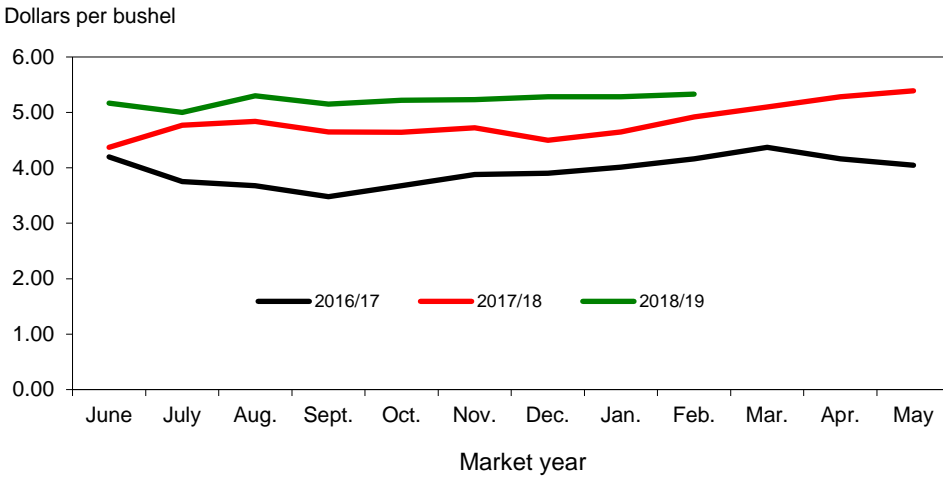
On the import side, the largest increase is a 0.7 million ton increase for the Philippines, while both Vietnam and Bangladesh are reduced by a 0.5 thousand tons, see map D2 (wheat TY imports).

Map D2 – Wheat trade year (TY) imports changes for 2018/19, April 2019



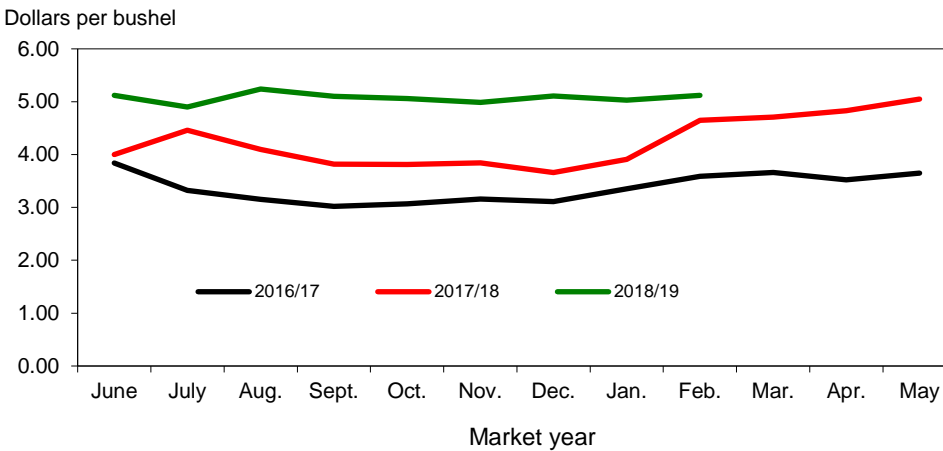
Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.

Figure 1
All wheat average prices received by farmers



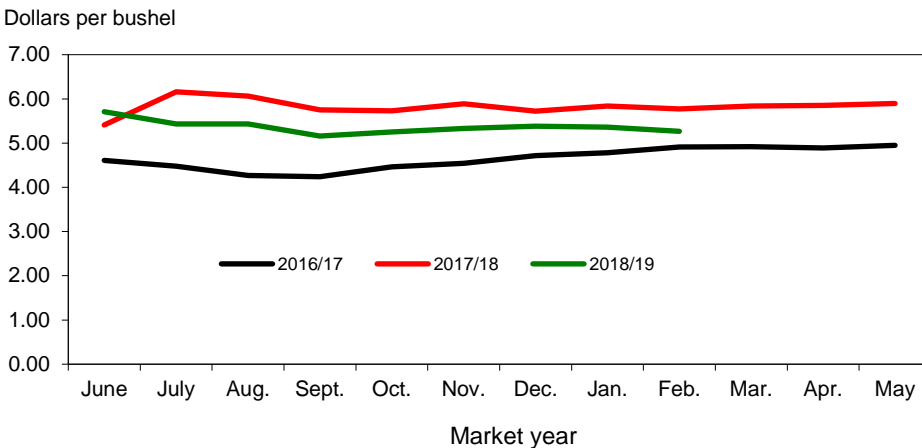
Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Figure 2
Hard red winter wheat average prices received by farmers



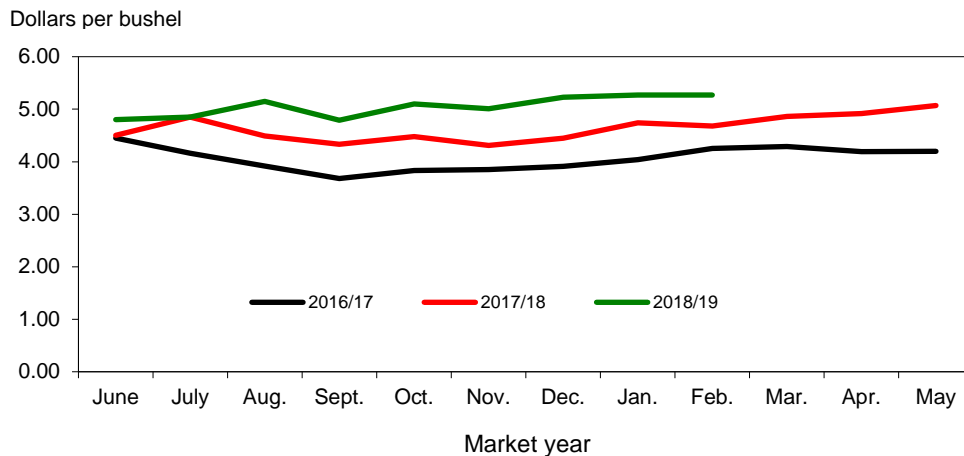
Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Figure 3
Hard red spring wheat average prices received by farmers



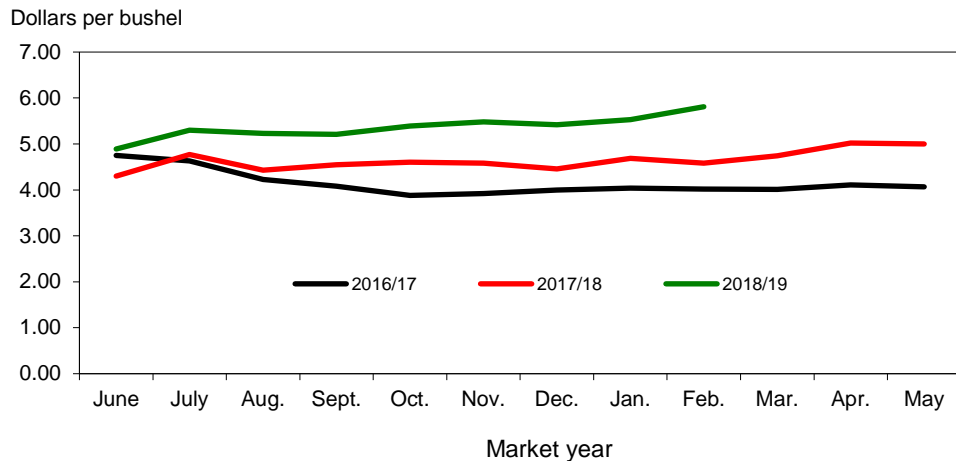
Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Figure 4
Soft red winter wheat average prices received by farmers



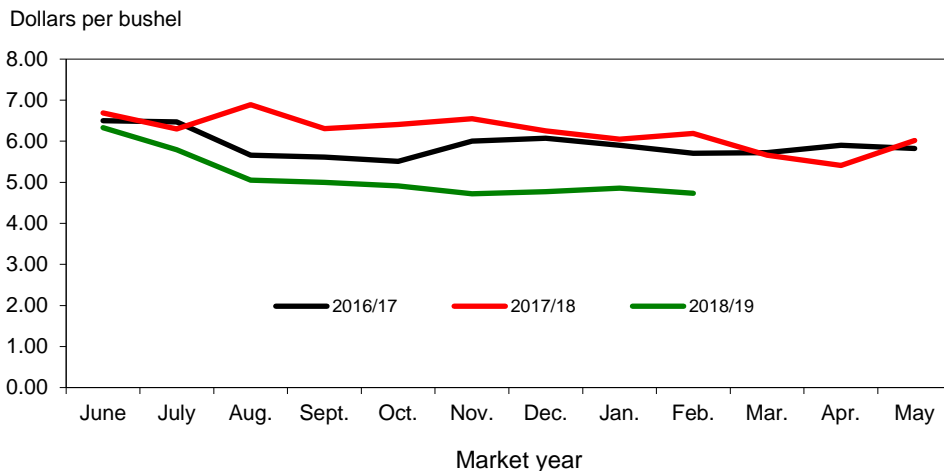
Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Figure 5
Soft white wheat average prices received by farmers



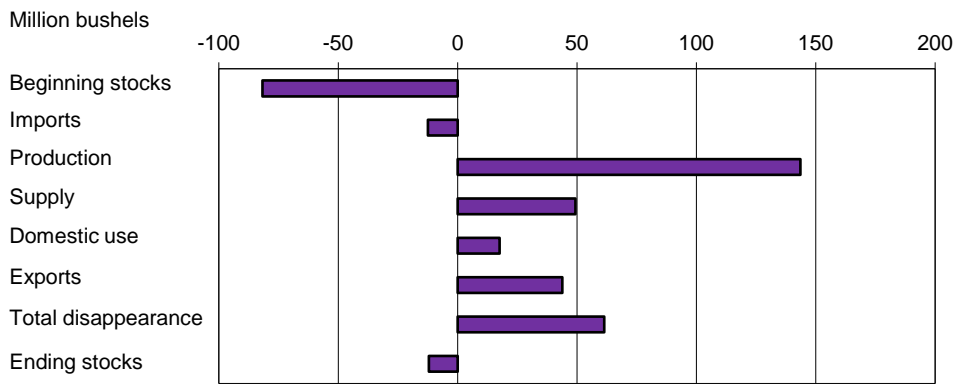
Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Figure 6
Durum wheat average prices received by farmers



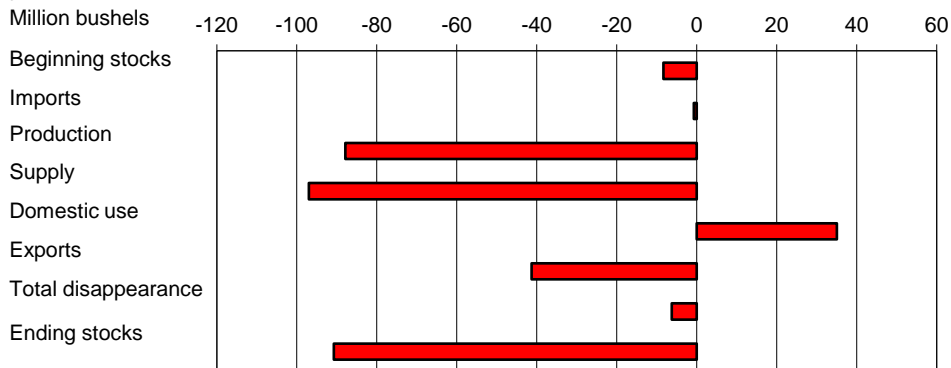
Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

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



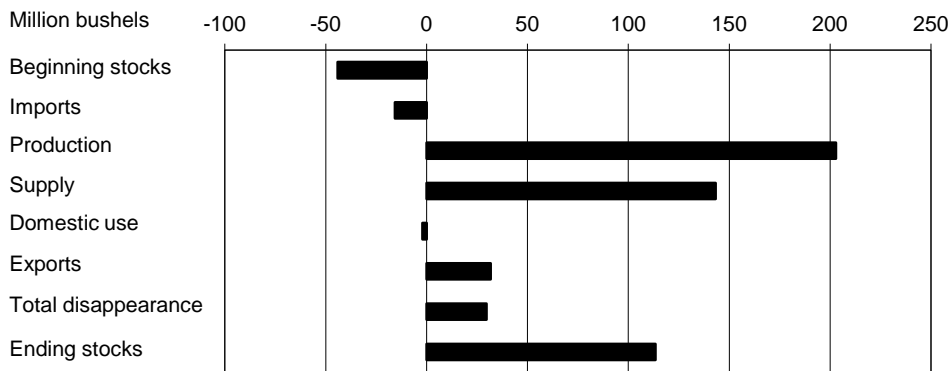
Source: USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*.

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



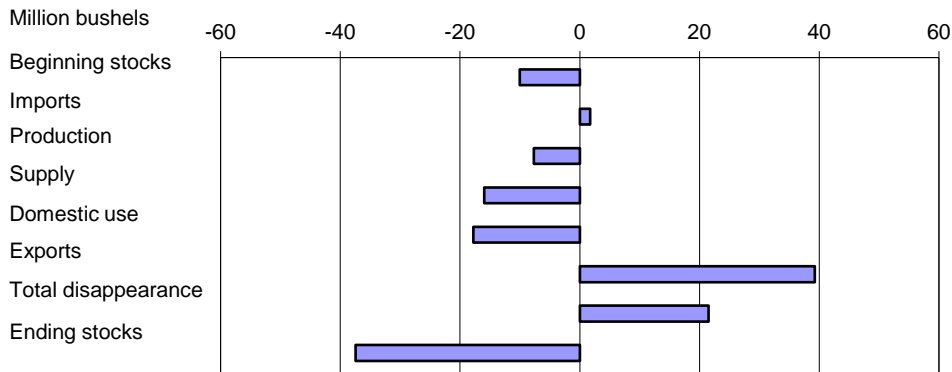
Source: USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*.

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



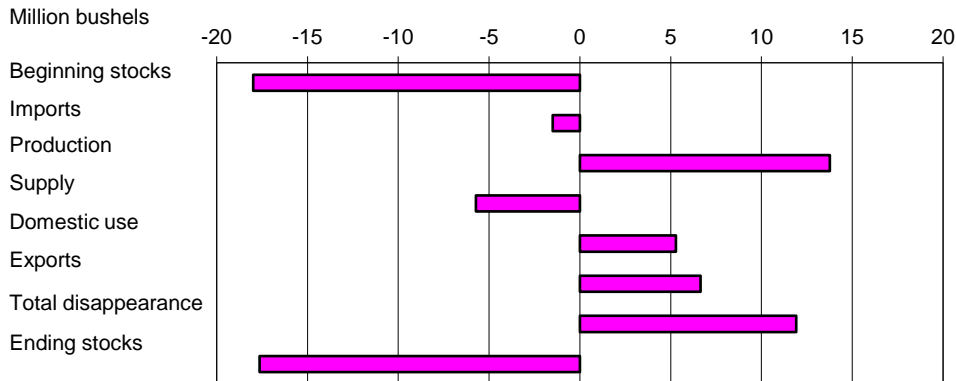
Source: USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*.

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



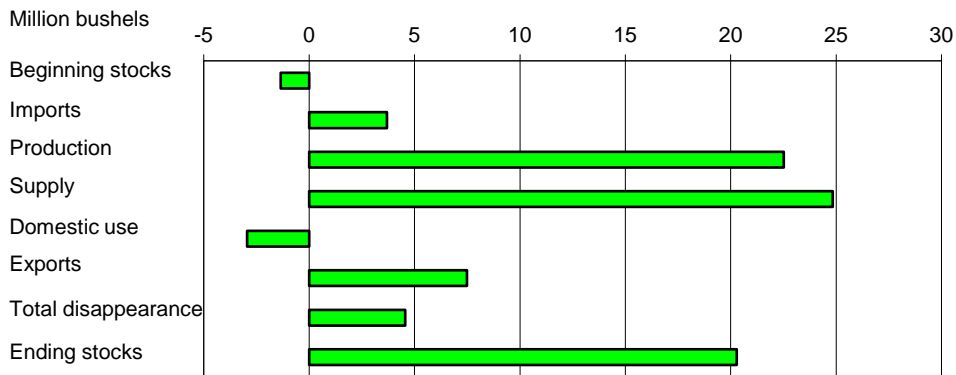
Source: USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*.

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, 4/11/2019

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	46.1	47.8
Harvested	Million acres	48.8	45.3	46.4	47.3	43.8	37.6	39.6
Yield	Bushels per acre	46.2	47.1	43.7	43.6	52.7	46.4	47.6
Supply:								
Beginning stocks	Million bushels	742.6	717.9	590.3	752.4	975.6	1,180.6	1,098.9
Production	Million bushels	2,252.3	2,135.0	2,026.3	2,061.9	2,308.7	1,740.9	1,884.5
Imports ¹	Million bushels	124.3	172.5	151.2	112.8	118.0	157.4	145.0
Total supply	Million bushels	3,119.2	3,025.3	2,767.8	2,927.1	3,402.3	3,078.9	3,128.3
Disappearance:								
Food use	Million bushels	950.8	955.1	958.3	957.1	949.0	964.4	965.0
Seed use	Million bushels	73.1	73.7	79.4	67.2	61.3	63.4	61.5
Feed and residual use	Million bushels	365.3	230.1	113.4	149.5	160.5	51.2	70.0
Total domestic use	Million bushels	1,389.3	1,258.8	1,151.1	1,173.8	1,170.8	1,079.0	1,096.5
Exports ¹	Million bushels	1,012.1	1,176.2	864.3	777.8	1,050.9	901.1	945.0
Total disappearance	Million bushels	2,401.4	2,435.1	2,015.4	1,951.5	2,221.7	1,980.1	2,041.5
Ending stocks	Million bushels	717.9	590.3	752.4	975.6	1,180.6	1,098.9	1,086.8
CCC inventory	Million bushels					.0		
Stocks-to-use ratio		29.9	24.2	37.3	50.0	53.1	55.5	53.2
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	4.72	5.15-5.25
Market value of production	Million dollars	17,383	14,604	11,915	10,203	8,981	8,217	9,799

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: 4/11/2019

Table 2--Wheat by class: U.S. market year supply and disappearance, 4/11/2019

Market year, item, and unit		All wheat	Hard red winter ¹	Hard red spring ¹	Soft red winter ¹	White ¹	Durum	
2017/18	Area:							
	Planted acreage	Million acres	46.05	23.43	10.51	5.76	4.05	2.31
	Harvested acreage	Million acres	37.56	17.64	9.65	4.33	3.83	2.11
	Yield	Bushels per acre	46.36	42.53	39.80	67.70	67.53	26.01
	Supply:							
	Beginning stocks	Million bushels	1,180.60	589.30	235.00	215.00	105.00	36.30
	Production	Million bushels	1,740.91	750.13	384.19	293.22	258.59	54.78
	Imports ²	Million bushels	157.43	6.75	87.59	4.28	7.50	51.31
	Total supply	Million bushels	3,078.94	1,346.19	706.78	512.50	371.08	142.39
	Disappearance:							
	Food use	Million bushels	964.39	391.71	254.00	154.00	85.00	79.68
	Seed use	Million bushels	63.35	25.58	17.98	11.58	5.26	2.96
	Feed and residual use	Million bushels	51.22	-23.36	15.62	51.18	.47	7.31
	Total domestic use	Million bushels	1,078.95	393.93	287.60	216.77	90.72	89.94
	Exports ²	Million bushels	901.10	371.31	228.18	90.74	193.36	17.51
	Total disappearance	Million bushels	1,980.05	765.24	515.78	307.50	284.08	107.44
	Ending stocks	Million bushels	1,098.89	580.94	191.00	205.00	87.00	34.95
2018/19	Area:							
	Planted acreage	Million acres	47.80	22.92	12.69	6.08	4.05	2.07
	Harvested acreage	Million acres	39.61	16.95	12.40	4.47	3.82	1.97
	Yield	Bushels per acre	47.58	39.08	47.33	63.90	71.32	39.29
	Supply:							
	Beginning stocks	Million bushels	1,098.89	580.94	191.00	205.00	87.00	34.95
	Production	Million bushels	1,884.46	662.25	587.01	285.56	272.36	77.29
	Imports ²	Million bushels	145.00	6.00	72.00	6.00	6.00	55.00
	Total supply	Million bushels	3,128.35	1,249.19	850.01	496.56	365.36	167.23
	Disappearance:							
	Food use	Million bushels	965.00	389.00	258.00	153.00	85.00	80.00
	Seed use	Million bushels	61.50	25.00	17.50	11.00	6.00	2.00
	Feed and residual use	Million bushels	70.00	15.00	10.00	35.00	5.00	5.00
	Total domestic use	Million bushels	1,096.50	429.00	285.50	199.00	96.00	87.00
	Exports ²	Million bushels	945.00	330.00	260.00	130.00	200.00	25.00
	Total disappearance	Million bushels	2,041.50	759.00	545.50	329.00	296.00	112.00
	Ending stocks	Million bushels	1,086.85	490.19	304.51	167.56	69.36	55.23

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: 4/11/2019

Table 3--Wheat: U.S. quarterly supply and disappearance (million bushels), 4/11/2019

Market year and quarter		Production	Imports ¹	Total supply	Food use	Seed use	Feed and residual use	Exports ¹	Ending stocks
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	15	-24	282	590
	Mkt. year	2,135	172	3,025	955	74	230	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	44	-107	192	1,746
	Dec-Feb		34	1,780	230	2	2	175	1,372
	Mar-May		25	1,397	239	20	-43	205	976
	Mkt. year	2,062	113	2,927	957	67	149	778	976
2016/17	Jun-Aug	2,309	33	3,317	238	1	266	268	2,545
	Sep-Nov		29	2,575	245	41	-30	239	2,079
	Dec-Feb		25	2,104	228	1	-13	229	1,659
	Mar-May		31	1,690	238	19	-62	315	1,181
	Mkt. year	2,309	118	3,402	949	61	160	1,051	1,181
2017/18	Jun-Aug	1,741	42	2,964	239	1	165	292	2,267
	Sep-Nov		36	2,303	251	40	-55	194	1,874
	Dec-Feb		37	1,911	233	2	-14	195	1,495
	Mar-May		42	1,537	242	21	-45	221	1,099
	Mkt. year	1,741	157	3,079	964	63	51	901	1,099
2018/19	Jun-Aug	1,884	42	3,025	239	2	190	203	2,390
	Sep-Nov		31	2,420	247	37	-79	206	2,009
	Dec-Feb		37	2,046	232	1	-3	226	1,591
	Mkt. year	1,884	145	3,128	965	62	70	945	1,087

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: 4/11/2019

Table 4--Wheat: Monthly food disappearance estimates (1,000 grain-equivalent bushels), 4/11/2019

Mkt year and month 1/	Wheat ground for flour	+	Food imports ²	+	Nonmilled food use ³	-	Food exports ²	=	Food use ⁴
2017/18	Jun	73,183		3,242		2,000		1,849	76,576
	Jul	74,520		2,964		2,000		1,794	77,689
	Aug	81,444		3,148		2,000		2,088	84,505
	Sep	78,315		2,620		2,000		1,462	81,473
	Oct	82,325		3,239		2,000		1,167	86,397
	Nov	78,798		3,218		2,000		1,301	82,714
	Dec	73,964		2,934		2,000		1,569	77,329
	Jan	74,607		3,075		2,000		1,423	78,259
	Feb	74,014		2,948		2,000		1,589	77,374
	Mar	78,526		3,197		2,000		1,571	82,152
	Apr	75,525		3,259		2,000		1,432	79,351
	May	77,221		3,087		2,000		1,742	80,566
2018/19	Jun	73,881		2,921		2,000		1,689	77,113
	Jul	74,093		2,968		2,000		1,346	77,716
	Aug	80,978		3,103		2,000		1,584	84,497
	Sep	77,867		2,626		2,000		1,675	80,818
	Oct	81,125		3,361		2,000		1,779	84,707
	Nov	77,650		3,060		2,000		1,602	81,108
	Dec	72,886		3,212		2,000		1,664	76,434
	Jan			3,307				1,699	1,608

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.

⁴ 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: 4/11/2019

Table 5--Wheat: National average price received by farmers (dollars per bushel), 4/11/2019

Month	All wheat		Winter		Durum		Other spring	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
June	4.37	5.17	4.11	5.05	6.69	6.33	5.35	5.66
July	4.77	5.00	4.56	4.92	6.30	5.79	6.08	5.41
August	4.84	5.30	4.27	5.23	6.89	5.05	5.86	5.40
September	4.65	5.15	4.11	5.14	6.31	5.00	5.62	5.16
October	4.64	5.22	4.17	5.21	6.41	4.91	5.56	5.26
November	4.72	5.23	4.07	5.20	6.55	4.72	5.78	5.33
December	4.50	5.28	3.89	5.24	6.25	4.77	5.62	5.38
January	4.65	5.28	4.15	5.25	6.05	4.86	5.72	5.37
February	4.92	5.33	4.63	5.41	6.19	4.73	5.66	5.29
March	5.10		4.73		5.66		5.74	
April	5.28		4.90		5.41		5.78	
May	5.39		5.05		6.02		5.84	

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

Table 6--Wheat: National average prices received by farmers by class (dollars per bushel), 4/11/2019

Month	Hard red winter		Soft red winter		Hard red spring		White	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
June	4.00	5.12	4.50	4.80	5.41	5.71	4.30	4.89
July	4.46	4.90	4.85	4.85	6.16	5.43	4.77	5.30
August	4.10	5.24	4.49	5.15	6.06	5.43	4.43	5.23
September	3.82	5.10	4.33	4.79	5.75	5.16	4.55	5.21
October	3.81	5.06	4.48	5.10	5.73	5.25	4.60	5.39
November	3.84	4.99	4.31	5.01	5.89	5.33	4.58	5.48
December	3.66	5.11	4.45	5.23	5.72	5.38	4.46	5.42
January	3.91	5.03	4.74	5.27	5.84	5.36	4.69	5.53
February	4.65	5.12	4.68	5.27	5.77	5.27	4.58	5.81
March	4.71		4.86		5.84		4.74	
April	4.83		4.92		5.85		5.02	
May	5.05		5.07		5.90		5.00	

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

Date run: 4/11/2019

Table 7--Wheat: Average cash grain bids at principal markets, 4/11/2019

Month	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)	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
June	5.24	6.35	6.65	6.79	4.53	5.58	189.60	213.85
July	5.65	6.20	7.22	6.66	5.12	5.24	203.74	214.58
August	4.80	6.61	6.28	6.86	4.22	6.25	171.41	230.75
September	5.07	6.03	6.52	6.18	4.81	5.93	178.76	212.93
October	5.11	6.11	6.24	6.26	5.03	6.14	175.82	213.66
November	5.30	6.18	6.84	6.38	4.96	6.14	179.49	203.56
December	5.38	6.36	6.72	6.58	4.84	6.44	183.90	211.09
January	5.73	6.26	6.94	6.38	5.03	6.41	192.17	209.62
February	5.93	6.02	6.89	6.16	5.41	6.21	--	218.63
March	6.05	5.94	6.70	6.06	5.52	5.92	--	205.76
April	6.09	--	6.67	--	5.64	--	213.48	--
May	6.56	--	7.03	--	5.93	--	--	--
Month	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)	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
June	--	--	--	--	7.50	6.98	--	--
July	--	--	--	--	8.77	6.58	--	--
August	--	--	--	--	7.74	7.15	--	--
September	--	--	--	--	7.40	6.62	--	--
October	--	--	--	--	7.39	6.76	--	--
November	--	--	--	--	7.52	6.82	--	--
December	--	--	--	--	7.38	6.82	--	--
January	--	--	--	--	7.42	6.67	--	--
February	--	--	--	--	7.29	6.70	--	--
March	--	--	--	--	7.40	6.76	--	--
April	--	--	--	--	7.06	--	--	--
May	--	--	--	--	7.51	--	--	--
Month	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)	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
June	4.66	5.16	4.41	4.92	4.44	5.15	4.91	5.92
July	5.15	5.21	4.96	4.98	4.94	5.20	5.40	5.88
August	4.31	5.34	4.12	5.32	4.20	5.48	5.13	6.18
September	4.30	4.79	4.23	4.81	4.27	5.04	5.19	5.98
October	4.16	4.94	4.22	4.88	4.24	5.04	5.30	6.11
November	4.34	5.18	4.13	5.01	4.18	5.00	5.26	6.25
December	4.28	5.48	4.12	5.24	4.04	5.14	5.22	6.23
January	4.38	5.48	4.27	5.20	4.22	5.12	5.30	6.29
February	4.65	5.32	4.55	4.97	4.54	4.95	5.39	6.36
March	4.76	4.84	4.69	4.46	4.75	4.48	5.64	6.10
April	4.75	--	4.74	--	4.85	--	5.63	--
May	5.19	--	5.08	--	5.24	--	5.79	--

-- = Not available or no quote.

¹ Free on board.

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

Date run: 4/11/2019

Table 8--Wheat: U.S. exports and imports for last 6 months (1,000 bushels), 4/11/2019

Item		Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019
Exports	All wheat grain	76,846	67,192	70,050	63,452	82,208	73,601
	All wheat flour ¹	1,097	1,269	1,373	1,188	1,249	1,278
	All wheat products ²	559	435	432	476	481	453
	Total all wheat	78,501	68,896	71,856	65,117	83,937	75,332
Imports	All wheat grain	10,701	7,719	7,455	6,292	9,429	9,297
	All wheat flour ¹	1,452	1,425	1,723	1,456	1,336	1,572
	All wheat products ²	1,672	1,243	1,701	1,650	1,908	1,758
	Total all wheat	13,825	10,387	10,880	9,398	12,674	12,626

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: 4/11/2019

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