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Feed Outlook

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Corn Production Projections Raised, Barley and Oats Lowered for 2021/22

U.S. corn production is raised 175 million bushels for 2021/22, based on increased harvested area forecast from the National Agricultural Statistics Service (NASS). Corn yields remain unchanged as national precipitation levels have been below-average, but do not represent an extreme deviation from the 1988 to 2020 average. Barley and oat production for 2021/22 is lowered, however, based on the first survey-based yield forecast published by NASS. Corn usage is expected to be higher for both the 2020/21 and 2021/22 marketing years. The result is lower corn ending stocks estimated for 2020/21 and higher ending stocks projected for 2021/22. Price forecasts are raised \$0.05 per bushel for the 2020/21 estimate and reduced \$0.10 per bushel for the 2021/22 projection.

Higher corn supplies and reduced competition from Brazil boost U.S. corn export prospects for 2021/22. The U.S. export projection for 2020/21 is unchanged at an all-time high, resulting in an almost 40 percent share in global corn trade, the highest since 2017/18, a year when all three other major corn exporters—Brazil, Argentina, and Ukraine—had weather-related crop problems. With lower projected sorghum and barley supplies, U.S. exports for both crops are expected to decline. With lower availability of U.S sorghum, China is projected to source part of its sorghum imports from Argentina. Canadian barley imports are expected to decline and be fractional.

Domestic Outlook

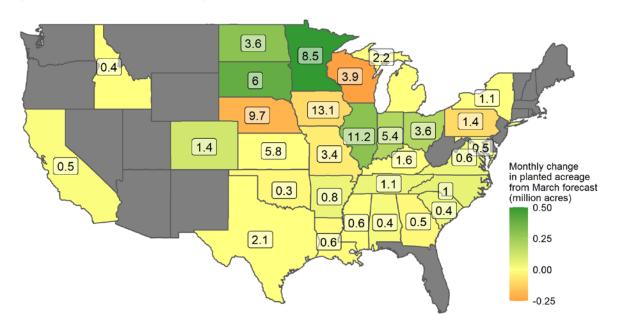
Michael McConnell

Corn Production Outlook Raised on Higher Area

The USDA's July *World Agricultural Supply and Demand Estimate* (*WASDE*) projects the U.S. corn crop at 15,165 million bushels for 2021/22, up 175 million bushels from the June *WASDE*. The increase is due to a higher harvested area forecast, based on the forecasts published by the National Agricultural Statistics Service's (NASS) *Acreage* report released on June 30. The *Acreage* report forecast 84.5 million acres of corn would be harvested this year; a nearly 1-million acre increase from the June *WASDE* number, which was based on the March 31 *Prospective Plantings* report planted area figure and an abandonment rate based on historical averages.

The June 30 *Acreage* report stated that farmers planted or planned to plant 92.7 million acres of corn, up from the March estimate of 91.1 million acres. The higher planted area from the March report is primarily in response to increasing cash and futures prices during the planting season—and to a lesser extent favorable planting weather for much of the Corn Belt. Planting increases were seen throughout the Corn Belt—with the biggest increases coming from Minnesota, South Dakota, North Dakota, Illinois, Indiana, and Ohio. These increases were offset by declines, primarily in Iowa and Nebraska.

Figure 1
State-level corn planted area (million acres) and change between March and June acreage reports, 2021/22 crop marketing year



Note: Only shows States with more than 250,000 acres of corn forecast in June report. Source: USDA, National Agricultural Statistics Service.

The national average corn yield is projected at 179.5 bushels per acre, unchanged from the previous month and based on the weather-adjusted trend yield starting from 1988/89. The current projection is based on normal July temperature and precipitation levels in eight key corn-producing States and includes a downward stochastic adjustment to account for the asymmetric response of yield to July precipitation (that detrimental conditions have a larger impact on yields than beneficial conditions). The first survey-based yield forecast from NASS will be released in the August *Crop Production* report.

The Corn Belt experienced diverse weather during June. Much of the Western Corn Belt in Iowa, Minnesota, Nebraska, and South Dakota experienced hotter- and drier-than-normal weather conditions, particularly during the first half of the month. This weather may impact crop development or leave localized areas more vulnerable to abnormal weather conditions that may occur in the coming weeks during the crop's reproductive stages. In contrast, the Eastern Corn Belt of Illinois, Indiana, and Ohio experienced ample precipitation levels in June. July precipitation levels and temperatures have historically been the most influential for the determining national corn yield, as the yield typically coincides with the key crop reproductive

stages. Poor growing conditions in June—in particular, drastic precipitation shortfalls—can detrimentally impact the national yield. Overall precipitation was lower than average across the eight corn-producing States used to model trend yields, but did not represent an extreme deviation from the 1988 to 2020 average.

Inches of rainfall Illinois Indiana Minnesota Iowa 10.0 7.5 5.0 2.5 0.0 2000 2010 1990 2000 2010 2020 1990 2000 2010 2020 1990 2010 2020 1990 2000 2020 Ohio South Dakota Missouri Nebraska 10.0 2.5 0.0 2020 1990 2000 2010 2020 1990 2000 2010 2000 Year

Figure 2

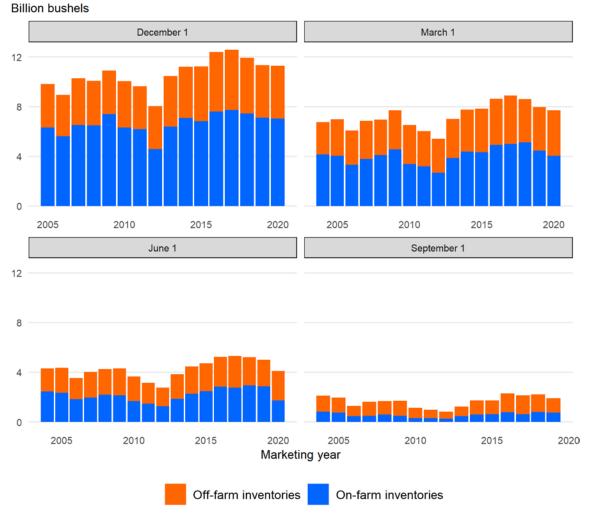
June rainfall precipitation levels, by State, mean, 10th, and 90th percentiles

Source: U.S. Department of Commerce, National Oceanic and Atmospheric Administration.

June 1 Inventories Show Brisk Pace of Corn Usage, Raising Feed and Residual Outlook for 2020/21

U.S. June 1 corn stocks totaled 4,112 billion bushels, according to NASS's June 30 *Grain Stocks* report—down 18 percent from the previous year's level of 5,003 million bushels. Notably, the on-farm component of stock is much lower than typical—both in terms of total volume and as a proportion of total stocks. The June report stated that 1,744 million bushels were stored on farms—down 39 percent from the same period the previous marking year. The inventory levels indicate that farmers have delivered a greater proportion of the 2020/21 crop compared with historical levels, likely motivated by strong demand and higher price levels witnessed thus far in the marketing year.

Figure 3
U.S. corn inventories, quarterly, on-farm versus off-farm



Source: USDA, National Agricultural Statistics Service.

In addition to being lower than the previous year, the report showed a strong pace of usage from the March 1 level. This usage is in part due to record quarterly exports between March and May, totaling 1,041 million bushels—the highest for any quarter. Nonetheless, the implied feed and residual figure for the March-May quarter showed that demand from the livestock sector remains robust, despite higher cash prices for corn and feedstuffs. The July *WASDE* raises 2020/21 feed and residual 25 million bushels to 5,725 million bushels. Feed and residual for 2021/22 is also raised in the July *WASDE*—also by 25 million bushels to 5,725 billion bushels.

Exports Raised for 2021/22, Unchanged for 2020/21

U.S. corn exports for 2020/21 are estimated at 2,850 million bushels—unchanged from the June estimate. If realized, this would be a record. According to the U.S. Census Bureau, the United

States has exported 2,152 million bushels of corn between September 2020 and May 2021, a 75-percent increase from the same period in 2019/20.

U.S. corn exports in 2021/22 are projected to total 2,500 million bushels, a 50-million-bushel increase from the previous month. The increase is primarily due to reduced corn production and exports estimated from Brazil's second corn crop (safrinha) that is currently being harvested. This is expected to support increased exports from the United States, particularly in the first half of the 2021/22 marketing year. For additional discussion on exports, please see the *International Outlook* section of this report.

Estimated food, seed, and industrial use for 2020/21 remains unchanged from the previous month at 6,470 million bushels. Corn used for fuel ethanol—the largest component of food, seed, and industrial use—also remains unchanged at 5,050 million bushels. Projections for 2021/22 are unchanged, as well, with total food, seed, and industrial use at 6,615 million bushels and fuel ethanol use at 5,200 million bushels. This usage represents a 2-percent and 3-percent annual increase, respectively.

Corn Price Raised for 2020/21, Lowered for 2021/22, but Remains Elevated by Historical Standards

Due to raised usage estimates, U.S. corn ending stocks for 2020/21 are reduced 25 million bushels in the July report to 1,082 million bushels. The season-average farm price is raised \$0.05 per bushel to \$4.40, as monthly prices received by farmers continue to trend higher. With the majority of the corn marketed at this point in the season and on-farm inventories lower than typical, the current high cash prices available for corn (prior to the new harvest) are likely to have minimal impacts on the marketing-weighted average.

Ending stocks for 2021/22 are projected to be 1,432 million bushels—a 75-million-bushel increase from the previous month, due to the increase in supplies outweighing higher use. Supplies are expected to remain tight by historical standards, however, with the current stocksto-use ratio projected at 9.6 percent.

The season-average farm price for corn in 2021/22 is projected to be \$5.60—a \$0.10 reduction from the previous month. The lower forecast primarily reflects recent trends in cash bids for corn delivered in the fall of 2021 and the recent fluctuations seen for new-crop futures contracts. The December futures contract price traded in a wide range of more than \$1.00 per bushel during the month of June alone; reaching below \$5.15 and exceeding \$6.20 per bushel during June,

according to the Chicago Mercantile Exchange (CME). Given the increased price volatility seen since the beginning of the planting season, prices received by farmers for the next marketing year's crop are going to be heavily influenced by the prices and timing of forward contracts established between growers and users.

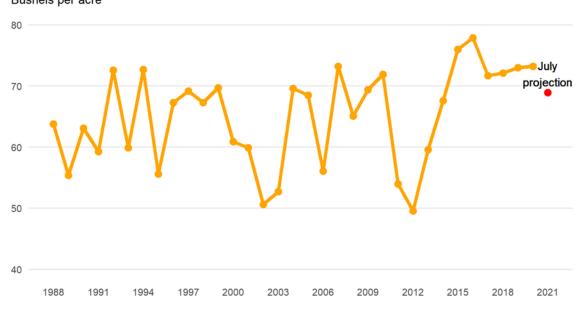
Sorghum Production Lowered, Exports Reduced for 2021/22

Lower sorghum supplies in the July *WASDE* result in a tighter market outlook for 2021/22. Sorghum production for 2021/22 is projected to total 399 million bushels, a 28-million-bushel reduction from the June projection, due to the first survey-based forecast of harvested acres published in the *Acreage* report. Yield projections remain virtually unchanged at 69.0 bushels per acre, based on the 20-year median. Lower production is combined with a 5-million-bushel reduction in beginning stocks, to result in total supplies 33-million bushels lower than the previous month, totaling 412 million bushels.

Figure 4

Sorghum yields, United States, 1988 to 2021 projection

Bushels per acre

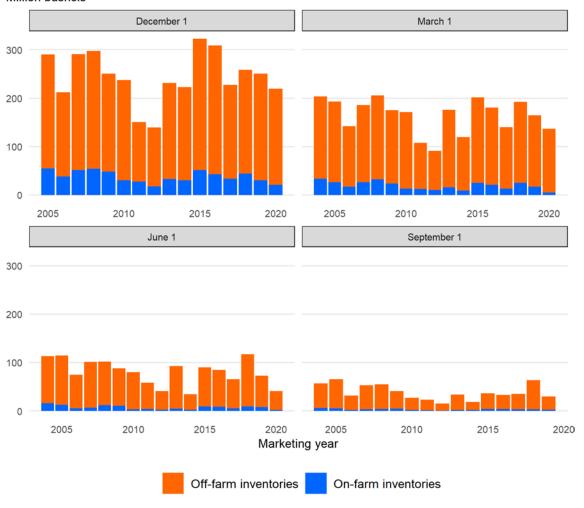


Source: USDA, National Agricultural Statistics Service.

Total use estimates for 2020/21 are raised 5-million bushels to 390 million bushels. The increase is due to higher estimated feed and residual, now forecast at 75 million bushels. The most recent NASS *Grain Stocks* report estimated June 1 sorghum inventories at nearly 41 million bushels for the current year—down from 73 million bushels the same period the previous year. The drawdown of inventories between March 1 and June 1 shows that there has been a

strong rate of domestic usage (and specifically for feed and residual, as minimal use of sorghum for fuel ethanol continued through May), in addition to the strong pace of exports that has been witnessed thus far in the 2021/22 marketing year.

Figure 5
U.S. sorghum inventories, quarterly, on-farm versus off-farm Million bushels



Source: USDA, National Agricultural Statistics Service.

The reduced supply outlook for 2021/22 results in fewer supplies available for export. Sorghum export projections for the year are lowered 30 million bushels from the previous month's report, totaling 320 million bushels. That reduction would still represent a 5-percent increase from the current 2020/21 estimate of 305 million bushels. Ending stocks for 2021/22 are projected at 17 million bushels, a 3-million-bushel reduction from the June *WASDE*.

The season-average farm price for sorghum is projected at \$6.00 per bushel—a \$0.10 reduction from the previous month, primarily due to the lowered price outlook for corn. Sorghum prices remain high by historical standards, due to the tight market outlook.

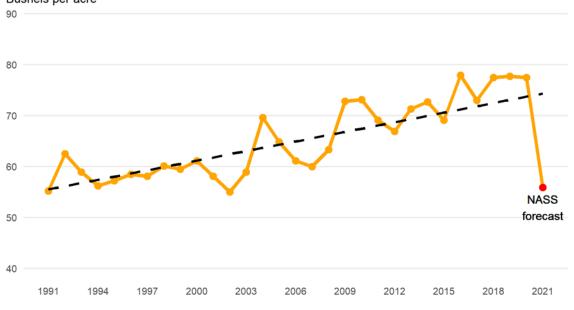
Barley Production to Decline Substantially in 2021/22

Barley production for 2021/22 is projected to be 114 million bushels, according to NASS's July *Crop Production* report publish on July 12. NASS projects national barley yields at 55.9 bushels per acre and 2 million acres of harvested area. If realized, the national barley yield would be the lowest national average yield since 2002/03. The yield forecast is the result of NASS's first survey-based yield for this year's barley crop.

Figure 6

Barley yields, United States, 1988 to 2021 July forecast

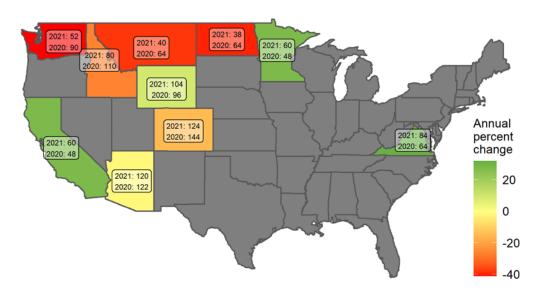
Bushels per acre



Source: USDA, National Agricultural Statistics Service.

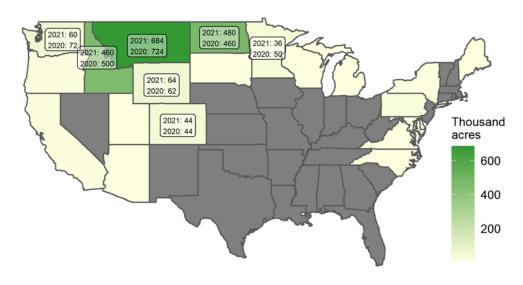
The biggest yield reductions are found in the Northern Plains and Northwest States—including the largest-producing States of North Dakota, Montana, and Idaho. These States have been greatly affected by drought conditions that have persisted in the Western part of the country. According to the USDA *Drought Monitor* through July 6, the 3 most severe drought categories (severe, extreme, and exceptional) account for 51 percent of the Idaho's crop, 41 percent of Montana's, and 95 percent of North Dakota's.

Figure 7
U.S. barley yields, 2021 July forecast versus 2020 final estimate, bushels per acre



Source: USDA, National Agricultural Statistics Service.

Figure 8
U.S. barley area harvested, 2021 July forecast versus 2020 final estimate, thousand acres



Note: Labels only included for States with more than 30,000 harvested acres for 2021. Source: USDA, National Agricultural Statistics Service.

Barley ending stocks for the 2020/21 marketing year—which concluded on May 31—totaled 72 million bushels as reported by NASS's latest *Grain Stocks*, a 7-million-bushel reduction from the

previous month's *WASDE* estimate. With ending stocks known, feed and residual for 2020/21 is raised nearly 6 million bushels.

The reduction in carryin stocks, as well as the lower production output forecast for 2021/22, also constrain projected barley use. Exports are projected to be 6 million bushels—halved from the previous month's projection. Domestic use is also projected to be lower. Food, seed, and industrial use projections are reduced 21-million-bushels to 120 million bushels. Projected feed and residual is reduced 5-million-bushels to 10 million. Barley ending stocks for 2021/22 are projected to be 57 million bushels—down 22-million-bushels from the previous month and the lowest marketing year total since 1953/54.

The season-average farm price for barley in 2020/21 is reported at \$4.75 per bushel, unchanged from the previous month's estimate. The current estimate reflects the complete marketing year of reported monthly prices by NASS. The price for 2021/22 is projected to increase to \$5.95 per bushel, also unchanged from the previous month's forecast.

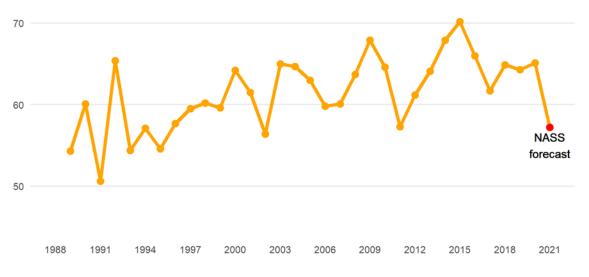
Oat Production Projections Reduced for 2021/22

NASS forecasts 2021/22 oat production at 41 million bushels in the July *Crop Production* report—a 12-million-bushel decrease from the June *WASDE* projection. The reduction is due to lower yields and, to a lesser extent, reduced harvested area forecast by NASS.

Figure 9

Oat yields, United States, 1988 to 2021 projection

Bushels per acre



Source: USDA, National Agricultural Statistics Service.

NASS reported that ending stocks for 2020/21 are estimated at 38 million bushels in the June 30 *Grain Stocks* report—a 1-million-bushel reduction from the previous month's *WASDE*. With ending stocks known, feed and residual for 2020/21 is currently estimated at 67 million bushels, 3-million bushels less than estimated in the previous month's forecast. For 2021/22, feed and residual projections 2021/22 are reduced 10-million-bushels to 65 million—and food, seed, and industrial use is reduced 1-million-bushels to 79 million, due to the lower production outlook.

The season-average farm price for 2020/21 is \$2.77 per bushel, as reported by NASS through the end of the marketing year in May--\$0.02 above the previous month's forecast. Ending stocks for 2021/22 are reduced 5-million-bushels to 25 million, due to the updated supply and use outlook. The season-average farm price remains unchanged—although higher on an annual basis—at \$3.60 per bushel.

Grain Consuming Animal Units Reduced, but Remain Large by Historical Standards.

The outlook for livestock inventories and implied demand for feed is lower in July, compared with the previous month. Total grain consuming animal units (GCAUs) for 2021/22 are projected to be 101.3 million units, compared with the previous month's projection of 101.8 million. The current projection compares with 2020/21 estimates at 101.5 million units in July—which was estimated at 101.8 million units a month ago. The month-to-month reduction is primarily due to a 0.5-million-unit reduction from the hog sector, based on the latest indications from the quarterly *Hogs and Pigs* report released on June 24 by NASS. While the latest forecasts are reduced from the previous month, GCAUs remain relatively large by historical standards. Prior to the current peak of 101.9 million units in 2019/20, animal units averaged 98.4 million units from 2016/17 to 2018/19.

Less Wheat, Barley, and Oats Tighten Feed and Residual Outlook Projections for 2021/22

Feed and residual for all grains (corn, sorghum, barley, oats, and wheat) is projected at 151.6 million metric tons for 2021/22—increased from the previous month's projection of 151.3 million metric tons. Raised feed and residual for corn outweigh the reduction to wheat, barley, and oats. Total grain feed and residual is expected to be lower year over year—down 1 percent from the 2020/21 estimate of 153 million metric tons; the result of tighter global grain markets.

International Outlook

Olga Liefert

Higher Coarse Grain Production in the United States Offsets Foreign Decline

Foreign coarse grain production for 2021/22 is projected lower this month, down 2.4 million tons. However, an increase in coarse grain production of 2.6 million tons for the United States (higher corn—but lower sorghum, barley, and oats output) is slightly more than offsetting, with global coarse grain output projected 0.2 million tons higher at 1,496.8 million.

Barley leads the foreign coarse grain production decline for 2021/22, with reductions in output for the *European Union (EU)*, *Canada*, *Russia*, *Kazakhstan*, and *India*. Partly offsetting the reductions are higher projected barley output in *Australia* and increased **corn** production in *Russia*, both reflecting higher crop area. **Oats** production is down marginally, with partly offsetting changes for *Canada* and *Australia* (see tables A1 and A2).

For the **2020/21** crop year, global coarse grain production is projected lower, as a sizeable reduction in projected corn production in *Brazil* and *Paraguay* are only partly offset by higher corn output in *Argentina*. For Argentina and Brazil, the 2020/21 corn crop year starts in March 2021 and overlaps the 2021/22 crop year for Northern Hemisphere countries.

In *Brazil*, corn yields are further reduced this month. The harvest of the first-crop corn that was planted in the fall of 2020 is 95 percent completed, while the harvest of the second and third-crop corn for 2020/21 crop year started in June and will continue through August 2021. Corn crops in southern Brazil (Mato Grosso do Sul, parts of Parana, Sao Paulo, and Goias) were already facing poor yield prospects after a dry growing season, when the crops were hit with frost at the end of June. Localized impacts are expected, although for many areas, it is likely that at the time of frosts, the crop was already through the most vulnerable stages of development.

This combination of adverse factors is expected to reduce yields further by 5.5 percent to 4.7 tons per hectare, the lowest corn yield in 5 years. The reduction is also supported by reports from the government state agencies. Similar weather conditions affected the corn crop in *Paraguay* (adjacent to southern Brazil), where corn yields are projected 7.3 percent lower than a month ago, at the lowest level since 2012/13 (see also table A2).

Corn production in *Argentina* for the **2020/21** growing season is projected 1.5 million tons higher this month, to reach 48.5 million tons. Increased area estimates are provided by government agencies and higher corn yields are supported by harvest reports, with about 60 percent of corn fields already being harvested.

For more information and a visual display of this month's changes in coarse grain production, see tables A1 and A2 below. The changes in global, foreign, and U.S coarse grain production (by type of grain) are shown in table A1, while changes in coarse grain production by country are given in table A2. For barley production changes, see map A.

Region or country	Production Change from previous month ¹		YoY change ²	Comments
		Million tons		
arse grain prod	uction (total)		
World	1,496.8	+0.2	+67.4	
Foreign	1098.1	-2.4	+43.2	Changes are projected for several major coarse grain produc See table A2 and report text.
United States	398.7	+2.6	+24.2	Higher projected area. See section on U.S. domestic output.
orld production	of coarse gr	ains by type of gı	rain	
			CORN	
World	1,194.8	+4.9	+74.2	
Foreign	809.6	+0.5	+49.2	Higher corn output projected for Russia. See table A2.
United States	385.2	+4.4	+25.0	See section on U.S. domestic output.
	,		BARLE	Y
World	153.5	-3.7	-6.3	
Foreign	151.0	-2.7	-5.2	Lower barley production in Canada, European Union, Russia Kazakhstan, and India is partly offset by higher Australian and Ukrainian output. See table A2.
United States	2.5	-1.0	-1.1	See section on U.S. domestic output.
			SORGHU	JM
World	64.5	-0.7	+2.5	
Foreign	54.4	No change	+1.8	
United States	10.1	-0.7	+0.7	See section on U.S. domestic output.
			OATS	
World	24.2	-0.3	-1.3	
Foreign	23.6	-0.1	-1.0	Lower oats production in Canada is partly offset by higher Australian output. See table A2.
United States	0.6	-0.2	-0.3	See section on U.S. domestic output.
· 			MIXED GR	RAIN
World/Foreign	15.6	Small change	-0.4	A small adjustment for Canada.
hange from previous	month. Smaller	changes for coarse gr	ain output are ma	ade for several countries.

Type of crop	Crop year		Change in forecast ¹	YoY ² change	Comments		
		M	lillion tons				
			2		crop year		
CANADA							
Barley	Aug-July	11.3	-1.2	+0.6	Barley area is projected lower, based on the recently published Jun Statistics Canada report.		
Oats	Aug-July	3.9	-0.4	-0.7	Smaller oats area is based on the June Statistics Canada report.		
EUROPEAN UNION							
Barley	July-June	54.8	-1.2	-0.5	Persisting dryness and heat in the central and southern part of European Union are expected to reduce yields in barley (as well as wheat and rapeseed). Barley area is reported lower in a number of countries.		
T				RU	SSIA		
Barley	July-June	19.4	-0.4	-1.2	Spring barley crop from southern Volga to western Siberia—the major spring barley-producing areas—was hurt by persistent drynes and heat. Good winter barley conditions in southwestern Russia partly offset lower spring barley yields.		
Corn	Oct-Sep	15.4	+0.5	+1.5	Final corn planting reports suggest higher-than-expected area.		
KAZAKHSTAN							
Barley	July-June	3.7	-0.3	Small change	Dryness and heat in the northern crop-producing areas adjacent to Russia's western Siberia are expected to reduce yields.		
INDIA							
Barley	Apr-Mar	1.7	-0.2	-0.1	Based on the Government third advanced production estimate.		
1	1			AUST	ralia		
Barley	Nov-Oct	10.5	+0.5	-2.5	Barley area is projected higher this month, as suggested in the ABARES ³ quarterly report.		
Oats	Nov-Oct	1.6	+0.3	-0.1	The ABARES ³ quarterly report suggests higher area.		
UKRAINE							
Barley	July-June	9.2	+0.1	+1.5	Favorable weather during filling stage is expected to boost yields.		
2020/21 crop year							
1	1			BR	AZIL		
Corn	Mar-Feb	93.0	-5.5	-9.0	Corn yields are further reduced this month, partly on account of unseasonable frosts at the end of June in southern Brazil; the reductions are supported by reports from government state agencies. See report text.		
				PARA	AGUAY		
Corn	Mar-Feb	3.2	-0.3	-0.3	Unseasonable frost at the end of June, in areas adjacent to southe Brazil, are expected to reduce yields. Area is also revised lower.		
ARGENTINA							
Corn	Mar-Feb	48.5	+1.5	-2.5	Corn area is projected higher based on Government estimate. Yield are increased based on recent harvest reports.		
Change from pre	vious month. Sr	maller changes	are also made	for several	countries, see map A for barley production changes.		

European Union -0.4 [19.40] [11.30] [54.80] Cazakhstan United States -0.3 -1.0 [3.70]Ukraine [2,49] 0.1 [9.20] India -0.2 [1.65] Barley production changes (Million tons) Australia -1.20 - -1.02 -1.03 - -0.40 -0.39 - -0.20 No Change Country label 0.10 Top number: July 2021 changes Bottom number: [Total 2021/22 value] 0.11 - 0.50

Map A - Barley production changes for 2021/22, July 2021

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

Foreign Coarse Grain Use and Stocks Slightly Down

The forecast for world coarse grain use for 2021/22 is projected slightly lower this month, down 1.3 million tons to 1,488.9 million. Foreign feed use is down 3.6 million tons, while an increase in coarse grain feeding projected for the United States partly offsets the reduction, with global feed and residual use declining 3.2 million tons this month.

The largest change in foreign coarse grain use is a reduction for barley and corn feed use in the *European Union* (lower barley output and reduced corn imports), down 1.5 million tons—and for *Canada* (reduced barley and oats production), down 1.3 million tons. Barley feeding is also projected lower for *Kazakhstan*, due to smaller projected output. Lower projected corn imports (from Brazil) reduce corn feeding in *Iran*. With higher barley exports projected from *Australia*, its feed use is down despite higher output. At the same time, feed use is raised for *Thailand* and *Vietnam*, as these countries—the major current destinations for Australian barley—are expected to benefit from higher Australian exports. Lower corn exports from Mexico push its corn feed use higher.

Sorghum feeding in *China* is projected to decline slightly by 0.1 million tons. With lower projected sorghum supplies and exports from the *United States*, China is expected to source more sorghum mainly from *Argentina*. Other revisions in feed use this month reflect changes in production and trade for specific countries.

Global coarse grain ending stocks projected for 2021/22 are just fractionally down this month to 318.2 million tons with a reduction for foreign stocks, down 1.3 million tons, and higher U.S. stocks that mitigate the decline. The changes for individual foreign countries' stocks do not exceed 0.3 million tons this month and reflect revisions of commodity balances by country.

World Coarse Grain Trade Reduced, U.S. Corn Exports Projected Higher

The July forecast for world coarse grain exports for the October-September international trade years of 2021/22 is lower than projected in June. Global corn and sorghum exports are reduced, while barley trade is projected higher.

World **corn** trade is reduced 1.9 million tons to 194.3 million for the **2021/22** trade year and 0.8 million tons to 184.3 million for the current **2020/21** trade year.

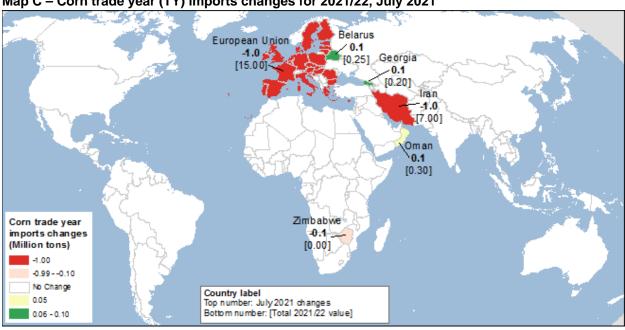
A further reduction in Brazilian second-crop corn production for the 2020/21 crop year is expected to weigh down on Brazilian exports. For the local Brazilian March-February 2020/21 marketing year, corn exports are reduced 5 million tons. The second-crop corn in Brazil is marketed from July through February next year and a reduction in Brazilian corn exports is split between the 2 international October-September trade years: the last 3 months of 2020/21 and the 5 months stretching into 2021/22. Consequently, corn exports from Brazil are projected lower for both the 2020/21 and for 2021/22 trade years—down 2 million tons to 30 million and 3 million tons to 37 million, respectively. Given these reductions, corn imports are cut for the two top destinations of Brazilian corn exports—*Iran* and the *European Union* (mainly *Spain*, *Italy*, and *Portugal*)—for both trade years.

For the **2021/22** projection year, **U.S** exports are projected 1 million tons higher to reach 63 million (50 million bushels to 2,500 million for the September-August local marketing year). Further reductions in projected corn supplies and exports by Brazil this month are expected to support U.S. exports during the latter part of 2020/21 and the first part of 2021/22, when Brazil will be exporting second-crop (safrinha) corn, which is currently being harvested. Higher corn output, coupled with reduced competition from Brazil, is expected to boost the **U.S.** 2021/22 share in global corn trade to 32 percent—with gains in such Asian countries as **Japan**, **Taiwan**, and **South Korea**—that import corn from both United States and Brazil. Increased corn production in **Russia** supports higher export prospects, up 0.3 million tons to 4.4 million. See maps B and C below for a visual display of the changes in corn trade year exports and imports.

0.3 [4.40] United States [63.00] Mexico -0.2 [0.70] Brazil -3.0 Corn trade year 37.00 exports changes (Million tons) -2.99 - -0.20 No Change Country label 0.30 Top number: July 2021 changes Bottom number: [Total 2021/22 value] 0.31 - 1.00 Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database. Map C - Corn trade year (TY) imports changes for 2021/22, July 2021

Russia

Map B - Corn trade year (TY) exports changes for 2021/22, July 2021



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

For the current **2020/21** trade year (ending in September 2021), a 2-million-ton reduction in *Brazilian* corn exports is partly offset by higher projected exports for *Argentina*, up 1.5 million tons to reach 33.5 million—supported by an increase in 2020/21 corn production and highly competitive prices. Reduced corn output for the same year in *Paraguay* trims its export prospects 0.1 million tons to 2.6 million. Corn exports from *Mexico* are also cut 0.2 million tons to 0.7 million, based on pace of recent sales and shipments. For the **2020/21** international

October-September trade year, *U.S.* corn exports are unchanged at an all-time record of 73 million tons, an almost 40 percent share of the year's global corn trade. This is a robust share for current times and the highest since 2017/18, a year when all three other major corn exporters—Brazil, Argentina, and Ukraine—had weather-related crop production problems.

Global barley trade is projected higher this month for both the 2021/22 and 2020/21 October-September trade years. With higher 2021/22 projected barley output for *Australia* and *Ukraine*, but lower for the *European Union*, exports are increased 0.9 million tons for Australia and 0.1 million tons for Ukraine—and reduced 0.3 million tons for the European Union. The robust pace of barley sales and shipments supports increases for Australia and the European Union for the current 2020/21 trade year, up 0.7 and 0.6 million tons, respectively. With higher barley exports projected for *Australia*, barley imports are raised for both years for *Thailand* and *Vietnam*—the two major export destinations for Australian barley exports since Australia shifted away from *China*, its previous major foreign market. Barley imports for the 2020/21 trade year are also projected higher for *China* and *Iran*, mainly from the *European Union*—these countries' typical major supplier. Barley imports for *Canada* are reduced, following a decline in U.S. supplies, and are expected to be fractional in 2021/22.

Global **sorghum** trade for the 2021/22 October-September trade year is projected slightly lower this month, down 0.2 million tons to 11.9 million. Tighter sorghum supplies and reduced exports for the *United States*, down 0.7 million tons, is partly offset by higher export flow from *Argentina* to *China*. This is a comparatively recent development, as China becomes more accustomed to a large volume of sorghum imports from Argentina. As a result, China's sorghum imports for 2021/22 are reduced by just 0.2 million tons to 9.8 million.

For a short overview of changes in specific countries' trade, as well as features on related topics, see "Grain: World Markets and Trade," issued by USDA's *Foreign Agricultural Service*.

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