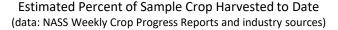
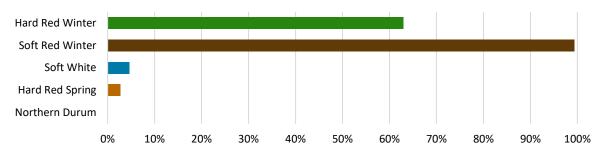




WEEKLY HARVEST REPORT – July 29, 2022

The U.S. HRW wheat harvest is rapidly progressing as much of the U.S. has been under high heat advisories. Harvest of the SRW crop is all but complete with final quality results still to come. Harvest of winter SW has begun in all three states, but the spring crop remains 2-3 weeks behind. The HRS and durum crops are also delayed but progressing under hot, dry conditions.





HARD RED WINTER

- **Crop Progress:** With hot, dry conditions, the HRW harvest, now north of Kansas, is moving fast. Cutting is at least 70% complete in Colorado, Nebraska and Wyoming, and harvest has officially begun in the PNW.
- Crop Conditions: Despite challenges with this crop, producers continue to report better-than-expected quality and yields in drought areas. In South Dakota, industry sources report excellent yields with an average protein of 13.2% (12% mb) and 11% moisture. Disease and weed pressures remain low in drier areas. Insect damage from stem sawfly and/or grasshoppers are a concern in Colorado, Wyoming, Montana and Idaho.
- Wheat Data: With 406 samples in the lab, there was minimal to no change in unweighted test results. Test weight is holding steady at 60.6 lb/bu (79.6 kg/hl) with an average protein of 12.9% (12% mb), very low dockage, slightly higher 1000 kernel weight and sound falling number. Kernel data indicate a good and uniform crop, which is expected to continue as harvest moves north and west. Very early milling data from southern areas indicate a sound crop with very good milling and baking characteristics.
- **Weather:** Dry, extremely hot conditions continue to push harvest progress and speed up crop maturation. With regional subsoil moisture levels ranging from 66% to 91% short to very short from Texas to Montana, growers are hoping for any moisture ahead of seeding the next winter wheat crop.

WHEAT DATA										GRADE FACTORS						
	Samples		Moisture	Protein	Dry Basis	Dockage	TKW	FN	Crada	Test V	Veight	FM	Damage	S&B	Defects	
	Tested	Expected	%	%	Protein %	%	g	sec	Grade	lb/bu	kg/hl	%	%	%	%	
This Week	406	500	10.7	12.9		0.4	30.3	333	1 HRW	60.6	79.6	0.2	0.6	1.0	1.8	
Last Week	360	500	10.6	13.3	15.1	0.4	30.1	330	1 HRW	60.5	79.6	0.1	0.6	1.0	1.7	
2021 Final	522	500	11.2	11.9	13.5	0.5	30.5	372	1 HRW	60.4	79.5	0.3	2.1	0.8	1.7	
5-year Avg	483	498	11.1	11.8	13.4	0.5	31.2	374	1 HRW	60.8	79.9	0.2	0.6	0.9	1.4	

Note: HRW averages in the weekly harvest report are not weighted for production. Results shown represent tested samples collected to date. States sampled: Colorado, Idaho, Kansas, Montana, Nebraska, Oklahoma, Oregon, South Dakota, Texas, Washington, Wyoming.

Data Source: Plains Grains, Inc.

SOFT RED WINTER

- Crop Progress: Only areas producing SRW for domestic use in northern states remain to be harvested. The lab has
 received all SRW samples for this year's harvest.
- Wheat Data: There is no change in data from last week with overall protein in line with the 5-year average. Test weight remains higher than 2021. Falling number is higher than last year and the 5-year average. And vomitoxin (DON) is lower than 2021.
- Flour Data: Milling yield, flour ash, bread volume and cookie ratios are similar to the 2021 average.
- Weather: Another heat wave is expected, but most of the SRW production region continues to have adequate soil
 moisture for fall seeding.

WHEAT DATA										GRADE FACTORS						
	Samples		Moisture	Protein	Dry Basis	Dockage	TKW	FN	01	Test Weight		FM	Damage	S&B	Defects	
	Tested	Expected	%	%	Protein %	%	g	sec	Grade	lb/bu	kg/hl	%	%	%	%	
This Week	229	300	12.6	9.6	10.9	0.4	33.1	328	2 SRW	59.9	78.8	0.1	0.2	0.5	0.8	
Last Week	223	300	12.6	9.6	10.9	0.4	33.1	328	2 SRW	59.9	78.8	0.1	0.2	0.4	0.7	
2021 Final	263	300	13.6	9.3	10.5	0.3	34.4	297	2 SRW	59.7	78.6	0.1	0.3	0.5	0.9	
5-year Avg	250	294	13.3	9.5	10.8	0.4	32.8	309	2 SRW	58.9	77.5	0.1	0.5	0.6	1.2	

Note: Weekly harvest report averages are simple averages of all samples tested and have not been weighted by the estimated production for each of the 18 reporting areas. States sampled: Alabama, Arkansas, Illinois, Indiana, Kentucky, Missouri, Ohio, Tennessee, Maryland, North Carolina, Virginia.

Data Source: Great Plains Analytical Laboratory

SOFT WHITE

- Crop Progress: Harvest is well underway in Oregon (18%) with average to above average yields. Combines are rolling in Washington and Idaho, 5% and 2% harvested, respectively, with widespread harvest expected to begin in two weeks. In all three states, producers are reporting excellent yields, good test weights and low protein. The spring crop remains behind average. The first winter wheat samples arrived at the lab with data expected next week.
- **Crop Conditions:** Latest NASS report ratings are holding steady for both the winter and spring crops. The winter crop is 68% good to excellent and the spring crop is 75%. Isolated reports of rust and grasshoppers in Idaho were noted and are being monitored closely.
- Weather: The PNW is experiencing 100°F+ (38°C+) temperatures, which is aiding crop ripening. No rain is forecast.

WHEAT DATA									GRADE FACTORS						
	Samples		Moisture	Protein	Dry Basis	Dockage	TKW	FN		Test V	est Weight		Damage	S&B	Defects
	Tested	Expected	%	%	Protein %		g	sec	Grade	lb/bu	kg/hl	%	%	%	%
2021 Final	375	390	8.8	11.3	12.3	0.5	29	344	2 SW	59.3	77.9	0	0.1	1	1.1
5-year Avg	438	392	9.1	10.0	11.3	0.5	34.6	327	1 SW	61.1	80.3	0.0	0.1	0.6	0.7

Note: SW averages in the weekly harvest report are weighted for production. Results shown represent tested samples collected to date. States sampled: Idaho, Oregon, Washington.

Data Source: Wheat Marketing Center

HARD RED SPRING

- Crop Progress: Harvest is underway in South Dakota (11% per USDA), with an average protein of 16% (12% mb). Scouts on the 2022 Wheat Quality Council Hard Spring and Durum Tour saw a delayed but promising crop with an estimated yield potential of 49.1 bu/acre. More than 90% of the HRS crop is headed out and Montana's fields are rapidly turning color. Harvest is not expected to begin in Minnesota until after Labor Day.
- Crop Conditions: USDA's crop ratings held steady for North Dakota (78% good to excellent), South Dakota (65%), and Minnesota (72%), while Montana slipped to 43% good to excellent. There are increasing reports of grasshopper

damage, and, with increased humidity, foliar diseases are a concern; producers are monitoring and addressing pest and disease pressures.

 Weather: Temperatures remain hot and dry in much of the growing area, accelerating crop development. In Minnesota, adequate soil moisture and recent cool weather have greatly aided yield potential. The Montana crop could use rain.

WHEAT DATA									GRADE FACTORS							
	Samples		Moisture Protein		Dry Basis	Dockage	TKW F	FN	0	Test Weight		FM	Damage	S&B	Defects	DHV
	Tested	Expected	%	%	Protein %	%	g	sec	Grade	lb/bu	kg/hl	%	%	%	%	%
2021 Final	481	451	11.6	15.4	17.5	0.6	29.3	377	1 DNS	61.3	80.6	0	0.2	1.1	1.3	80
5-year Avg	474	457	12.0	14.6	16.6	0.6	30.8	375	1 NS	61.5	80.9	0.0	0.3	0.9	1.2	73

Note: HRS averages in the weekly harvest report are not weighted for production. Results shown represent tested samples collected to date. States sampled: Minnesota, Montana, North Dakota, South Dakota.

Data source: North Dakota State University, Hard Red Spring Wheat Quality Laboratory

NORTHERN DURUM

- Crop Progress: Montana's crop is now 84% headed and 25% turning color. In North Dakota, recent heat has accelerated growth, but the crop is still behind average with 65% headed and 15% turned color. The Wheat Quality Council Tour estimated durum yield potential at 39.2 bu/acre.
- **Crop Conditions:** USDA conditions for the northern durum crop remain very high with North Dakota rated 87% good to excellent; Montana ratings decreased to 49% due to hot, dry weather. Hot, humid conditions have increased disease and insect pressures with producers managing.
- **Weather:** In North Dakota, recent rainfall and warmer temperatures have aided crop development. Precipitation is needed in Montana for the crop to meet its full potential.

WHEAT	WHEAT DATA													
	Sai	mples	Moisture	Protein	Dry Basis	Dockage	TKW	FN						
	Tested	Expected	%	%	Protein %	%	g	sec						
2021 Final	121	120	10.9	15.5	17.6	0.5	41.2	428						
5-year Avg	113	118	11.3	14.4	16.3	0.9	42.3	399						

GRADE FACTORS												
Grade	Test W	/eight	FM	Damage	S&B	Defects	HVAC %					
	lb/bu	kg/hl	%	%	%	%						
1 HAD	60.5	78.8	0.1	0.1	0.6	1.2	86					
1 HAD	61.2	79.7	0.0	0.7	0.7	1.6	83					

Note: Northern durum averages in the weekly harvest report are not weighted for production. States sampled: Montana, North Dakota.

Data source: North Dakota State University, Durum Wheat Quality Laboratory

GENERAL CROP CONDITION DEFINITIONS

- Very Poor Extreme degree of loss to yield potential, complete or near crop failure.
- Poor Heavy degree of loss of yield potential which can be caused by excess soil moisture, drought, disease, etc.
- Fair Less than normal crop condition. Yield loss is a possibility, but the extent is unknown.
- **Good** Yield prospects are normal or above normal. Moisture levels are adequate with only light disease and insect damage.
- **Excellent** Yield prospects are above normal, and crops are experiencing little or no stress.

TOP AND SUB-SOIL MOISTURE DEFINITIONS (WITH TOP-SOIL DEFINED AS THE TOP 6 INCHES):

- **Very Short** Soil moisture supplies are significantly less than what is required for normal plant development. Growth has been stopped or nearly so and plants are showing visible signs of moisture stress. Under these conditions, plants will quickly suffer irreparable damage.
- Short Soil dry. Seed germination and/or normal crop growth and development would be curtailed.
- Adequate Soil moist. Seed germination and/or crop growth and development would be normal or unhindered.
- **Surplus** Soil wet. Fields may be muddy and will generally be unable to absorb additional moisture. Young developing crops may be yellowing from excess moisture.

Source: https://www.nass.usda.gov/Publications/National Crop Progress/Terms and Definitions/index.php#percents