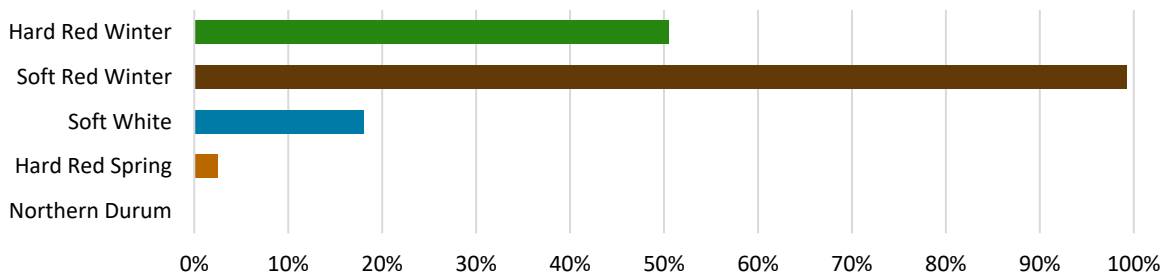




WEEKLY HARVEST REPORT – July 27, 2023

Much of the U.S. has been under high heat advisories and high humidity this week, which is expected to continue through next week. The U.S. HRW harvest is progressing quickly as it moves to the north and northwest. Harvest of the SRW crop is all but complete with final quality results still to come; the crop is grading a U.S. No. 1 SRW. Hot, dry weather is expected to push development and harvest of the SW, HRS and northern durum crops.

Estimated Percent of Sample Crop Harvested to Date
(data: NASS Weekly Crop Progress Reports and industry sources)



HARD RED WINTER

- **Crop Progress:** With hot, dry conditions, the HRW harvest is now moving fast and is 50% complete. The Kansas harvest is winding down and cutting is at least 50% complete in Colorado, Nebraska and Oregon.
- **Crop Conditions:** The 2023 HRW crop has been challenging and farmers continue to report variable yields and quality based on environmental factors with early reported proteins higher than average. Proteins are trending lower and yields higher as harvest moves to later maturing wheat that benefited from timely rains and cooler temperatures.
- **Disease/Pest Pressure:** There are reports of swathing due to weed pressure and wheat stem sawfly. Disease pressure remains low in the drier areas.
- **Wheat Data:** This week includes analysis of 306 samples with results reflecting early and mid-season drought conditions and rainfall at harvest. Kernel data reflect a considerable higher percentage of large kernels (69.8%) than last year and the 3-year average; TKW and single kernel data are also higher than last year and the 3-year average. Kernel hardness of 56.9 is lower than last year and the 3-year average. No performance issues have been reported from domestic mills that have started utilizing the new crop. The average grade remains No. 2 HRW. Early milling data is expected to be available next week.
- **Weather:** Temperatures throughout the growing region are hot and mostly dry, with isolated chances for precipitation.

WHEAT DATA									GRADE FACTORS						
	Samples		Moisture %	Protein %	Dry Basis Protein %	Dockage %	TKW gm	FN sec	Grade	Test Weight		FM %	Damage %	S&B %	Defects %
	Tested	Expected								lb/bu	kg/hl				
This Week	264	520	11.9	13.1	14.9	0.8	30.2	366	2 HRW	59.9	78.8	0.2	0.4	0.7	1.4
Last Week	205	520	12.0	13.3	15.1	0.9	31.0	366	2 HRW	60.2	79.2	0.3	0.4	0.7	1.4
2022 Final	524	500	10.2	13.0	14.8	0.5	31.4	361	1 HRW	61.0	80.2	0.1	0.5	1.1	1.8
5-year Avg	488	500	11.1	11.6	13.2	0.5	31.3	370	1 HRW	60.9	80.0	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. Data and commentary are on the following sampled states only: CO, ID, KS, MT, NE, OK, OR, SD, TX, WA, WY.

Data Source: Plains Grains, Inc.

Legend: Protein = 12% Moisture Basis
TKW = 1000 Kernel Weight

FN = Falling Number
FM = Foreign Material

S&B = Shrunken and Broken
n/a = not available

SOFT RED WINTER

- **Crop Progress:** Only areas producing SRW for domestic use in northern states remain to be harvested.
- **Wheat Data:** Testing is complete on 232 samples from across the region with little to no change from last week. Wheat protein average is 9.23% compared to the 5-year average of 9.66%. The falling number value is 318 sec, higher than the 5-year average of 309 sec. Thousand kernel weights have steadily been increasing year after year, with this year at 35.81 g compared to the 5-year average of 32.46 g. Vomitoxin is lower than last year, and well below the 5-year average. Test weight is similar to last year and higher than the 5-year average making the average grade a U.S. No. 1 SRW.
- **Flour Data:** Composite flour data results so far suggest milling yield and flour ash are similar to last year’s crop. Compared to the 5-year average, flour protein, wet gluten and flour ash are slightly lower this year. The cookie width/thickness ratio average is 9.87 compared to the 5-year average of 8.93.

WHEAT DATA									GRADE FACTORS						
	Samples		Moisture %	Protein 12% mb	Dry Basis Protein %	Dockage %	TKW gm	FN sec	Grade	Test Weight		FM %	Damage %	S&B %	Defects %
	Tested	Expected								lb/bu	kg/hl				
This Week	232	250	13.5	9.2	10.5	0.4	35.8	318	1 SRW	60.2	79.2	0.1	0.3	0.6	1.0
Last Week	222	250	13.4	9.3	10.6	0.4	35.8	319	1 SRW	60.2	79.2	0.2	0.3	0.6	1.0
2022 Final	229	250	12.4	9.6	10.9	0.4	32.9	327	1 SRW	60.1	79.1	0.1	0.2	0.6	0.9
5-year Avg	242	250	13.3	9.5	10.8	0.3	32.7	309	2 SRW	58.9	77.5	0.1	0.5	0.6	1.2

Note: SRW averages in the weekly harvest report are simple averages of all samples tested and have not been weighted by the estimated production for each of the 18 reporting areas. Data and commentary are on the following sampled states only: AL, AR, IL, IN, KY, MD, MO, NC, OH, TN, VA.

Data Source: Great Plains Analytical Laboratory

SOFT WHITE

- **Crop Progress:** With hot, dry conditions, SW harvest is picking up speed with the winter crop nearly 30% harvested and spring nearly 10%. Harvest started this week in low elevations of Idaho.
- **Crop Conditions:** The SW crop is variable depending on soil moisture at planting and heat and dryness as the crop developed. On earlier planted fields and areas that were drier, producers are reporting below average to average yields and higher protein, while protein on irrigated and later planted fields is trending lower.
- **Wheat Data:** Very early weighted average data from a small sample size reflects the dry conditions of this year’s crop. Wheat protein is currently higher than average but is expected to lower as harvest progresses. Kernel sizes (weight and dimension) are smaller than last year, and test weights are currently trending lower. Solvent retention capacity (SRC) lactic acid values and overall profiles are typical for SW despite the higher protein. Like in 2021, this will be a good year to understand SW protein *performance* versus protein *levels*; your local USW representative can help.
- **Disease/Pest Pressure:** There have been isolated reports of cereal leaf beetle in Oregon.
- **Weather:** The hot, dry weather continues for the SW growing region, benefiting harvest progress.

WHEAT DATA									GRADE FACTORS						
	Samples		Moisture %	Protein %	Dry Basis Protein %	Dockage %	TKW gm	FN sec	Grade	Test Weight		FM %	Damage %	S&B %	Defects %
	Tested	Expected								lb/bu	kg/hl				
This Week	20	390	9.3	11.9	13.8	0.4	30.4	333	2 SW	59.4	78.1	0.1	0.1	0.9	0.9
2022 Final	404	390	8.9	9.5	10.8	0.5	34.8	340	1 SW	61.0	80.2	0.1	0.1	0.5	0.6
5-year Avg	416	390	9.1	10.0	11.3	0.5	34.6	327	1 SW	61.1	80.3	0.0	0.0	0.6	0.7

Note: SW averages in the weekly harvest report are weighted for production. Results shown represent tested samples collected to date. Data and commentary are on the following sampled states only: ID, OR, WA.

Data Source: Wheat Marketing Center

HARD RED SPRING

- **Crop Progress:** Harvest is underway in South Dakota (9% per USDA) and Minnesota (1%). With most of the HRS crop headed out (94% per USDA as of July 24) and dry conditions ahead, harvest is expected to progress rapidly. State representatives report hot, dry weather took top yield potential and reduced tillering, but recent cooler weather stabilized the crop. The early planted crop is turning color while the later planted crop is still in the head filling stage and could use moisture.
- **Crop Conditions:** With no widespread measurable precipitation since May, scouts on the 2023 Wheat Quality Council Hard Red Spring and Durum Tour saw a dry but promising crop. The tour reported variable conditions depending on plant date and moisture received and estimate the earliest planted fields are 1-2 weeks from harvest. The tour snapshot of expected HRS yield was 47.7 bu/a (3.2 tons/ha), slightly lower than the 2022 estimate.
- **Disease/Pest Pressure:** There are isolated reports of foliar diseases and grasshoppers in drier areas.
- **Weather:** Temperatures remain hot and dry in much of the growing area, accelerating crop development.

WHEAT DATA									GRADE FACTORS							
	Samples		Moisture %	Protein %	Dry Basis Protein %	Dockage %	TKW gm	FN sec	Grade	Test Weight		FM %	Damage %	S&B %	Defects %	DHV %
	Tested	Expected								lb/bu	kg/hl					
2022 Final	423	450	11.6	14.3	16.2	0.6	30.4	386	1 NS	62.1	81.6	0.0	0.2	1.0	1.2	74
5-year Avg	463	450	12.0	14.6	16.6	0.5	30.7	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. Data and commentary are on the following sampled states only: MN, MT, ND, SD.

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

NORTHERN DURUM

- **Crop Progress:** The North Dakota durum crop is progressing ahead of average levels: 89% has headed out, up from 70% a week ago. In Montana, crop development has progressed quickly with 86% headed, up from 61% a week ago.
- **Crop Conditions:** Crop conditions increased slightly with North Dakota at 65% good to excellent and Montana 22%. [State representatives](#) note that recent hot temperatures reduced top yield potential and producers are expecting an average to below average crop. The Wheat Quality Council Tour estimated durum yield potential at 43.9 bu/acre, higher than last year's tour estimate of 39.2 bu/acre.
- **Disease/Pest Pressure:** Grasshoppers have been reported in the drier production areas.
- **Weather:** Like HRS, temperatures remain hot and dry in much of the growing area, accelerating crop development.

WHEAT DATA									GRADE FACTORS							
	Samples		Moisture %	Protein %	Dry Basis Protein %	Dockage %	TKW gm	FN sec	Grade	Test Weight		FM %	Damage %	S&B %	Defects %	HVAC %
	Tested	Expected								lb/bu	kg/hl					
2022 Final	121	122	11.0	13.7	15.6	1.1	40.4	433	1 HAD	61.8	80.4	0.0	0.1	1.0	1.1	11.0
5-year Avg	113	122	11.3	14.4	16.3	0.9	42.3	399	1 HAD	61.1	79.5	0.0	0.7	0.9	1.6	11.3

Note: Northern durum averages in the weekly harvest report are not weighted for production. Results shown represent tested samples collected to date. Data and commentary are on the following sampled states only: ND, MT.

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