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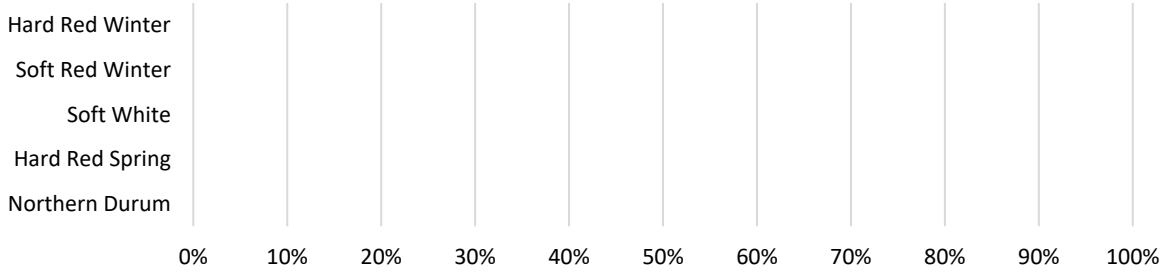
WEEKLY HARVEST REPORT – May 19, 2023

Welcome to the first Harvest Report for the 2023/24 U.S. wheat crop. The 2023 Hard Red Winter Wheat Tour hosted by the Wheat Quality Council wrapped up this week; for updates about the crop in Kansas, southern Nebraska and northern Oklahoma, follow #wheattour23 on Twitter. HRW harvest is off to a slow start in Texas due to rain delays. Further north, rains have delayed spring wheat planting in North Dakota and Minnesota, but farmers are making steady progress.

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



HARD RED WINTER

- **Planted Area:** USDA estimates HRW planted area at 26.0 million acres (10.5 million hectares) and forecasts HRW production to be down 3% from last year at 14.0 MMT (514 million bushels). If USDA's first winter wheat production forecast is realized, this will be the lowest HRW production since 1963 and the highest level of abandonment in the Southern Plains since 2002.
- **Crop progress:** Harvest has begun in Texas but is slow moving due to rainfall and wet fields. Industry sources are reporting average test weights of 60 lb/bu and high protein between 13-19% (12% mb).
- **Crop Conditions:** USDA estimates 29% of the HRW wheat crop is in good to excellent condition.
- **Weather:** The Southern Plains HRW growing region is experiencing severe to exceptional multi-year drought conditions. Producers have welcomed recent rains, but they are likely too late to relieve the drought stressed crop. Much of the Northern Plains and PNW received precipitation over winter, alleviating much of the lingering drought conditions.

WHEAT DATA

	Samples		Moisture	Protein	Dry Basis Protein	Dockage	TKW	FN
	Tested	Expected	%	%	%	%	gm	sec
2022 Final	524	520	10.2	13.0	14.8	0.5	31.4	361
5-year Avg	488	504	11.1	11.6	13.2	0.5	31.3	370

GRADE FACTORS

Grade	Test Weight		FM	Damage	S&B	Defects
	lb/bu	kg/hl	%	%	%	%
1 HRW	61.0	80.2	0.1	0.5	1.1	1.8
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 Source: Plains Grains, Inc.

SOFT RED WINTER

- **Planted Area:** USDA estimates that farmers planted 7.80 million acres (3.16 million hectares) of SRW last fall, up 12% from the previous year. USDA estimates SRW production at 11.0 MMT (406 million bushels).
- **Crop progress:** 76% of the SRW crop is now headed, with 26% of Arkansas's crop beginning to color.
- **Crop Conditions:** USDA estimates 72% of the SRW wheat crop is in good to excellent condition.
- **Weather:** Average temperatures and sporadic moisture are expected over the weekend across much of the growing region.

Legend: Protein = 12% Moisture Basis; TKW = 1000 Kernel Weight; FN = Falling Number; FM = Foreign Material; S&B = Shrunken and Broken; n/a = not available

WHEAT DATA	Samples		Moisture	Protein	Dry Basis Protein	Dockage	TKW	FN
	Tested	Expected	%	%	%	%	gm	sec
2022 Final	229	300	12.4	9.6	10.9	0.4	32.9	327
5-year Avg	242	300	13.3	9.5	10.8	0.3	32.7	309

GRADE FACTORS	Test Weight		FM	Damage	S&B	Defects
Grade	lb/bu	kg/hl	%	%	%	%
1 SRW	60.1	79.1	0.1	0.2	0.6	0.9
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 Source: Great Plains Analytical Laboratory

SOFT WHITE

- **Planted Area:** Based on USDA estimates, farmers planted 3.71 million acres (1.50 million hectares) of white wheat last fall and 0.62 million acres (0.25 million hectares) this spring, a 1.7% increase from the previous year. USDA estimates SW winter wheat production at 5.4 MMT (200 million bushels).
- **Crop progress:** The PNW winter crop heading is behind the 5-year average for Idaho and Oregon but similar for Washington. The spring crop is 88% planted; emergence is behind the 5-year average for Idaho and Oregon at 46% and 80%, respectively; Washington is ahead of the 5-year average with 72% emerged. The Idaho crop is estimated to be 4 weeks behind average.
- **Weather:** Cool, wet conditions have transitioned to warmer and drier in the PNW with a heat wave impacting Oregon.

WHEAT DATA	Samples		Moisture	Protein	Dry Basis Protein	Dockage	TKW	FN
	Tested	Expected	%	%	%	%	gm	sec
2022 Final	404	390	8.9	9.5	10.8	0.5	34.8	340
5-year Avg	416	390	9.1	10.0	11.3	0.5	34.6	327

GRADE FACTORS	Test Weight		FM	Damage	S&B	Defects
Grade	lb/bu	kg/hl	%	%	%	%
1 SW	61.0	80.2	0.1	0.1	0.5	0.6
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 Source: Wheat Marketing Center

HARD RED SPRING

- **Planted Area:** USDA's March 31 forecast estimates that planted acres for HRS wheat will be 9.95 million acres (10.5 million hectares), a 5.5% decrease from 2022.
- **Crop progress:** HRS planting is behind average in Minnesota and North Dakota with 28% and 20% planted, respectively. NDWC reports producers are optimistic about planting with favorable weather forecast. South Dakota is 84% planted, well ahead of the 5-year average. Montana is 54%, in line with the 5-year average. Emergence is behind normal with South Dakota at 37% and Montana 15%, North Dakota 2%, and Minnesota 3%.
- **Weather:** Recent cooler weather and variable precipitation across the region will turn to warmer, drier conditions this weekend.

WHEAT DATA	Samples		Moisture	Protein	Dry Basis Protein	Dockage	TKW	FN
	Tested	Expected	%	%	%	%	gm	sec
2022 Final	423	451	11.6	14.3	16.2	0.6	30.4	386
5-year Avg	463	452	12.0	14.6	16.6	0.5	30.7	375

GRADE FACTORS	Test Weight		FM	Damage	S&B	Defects	DHV
Grade	lb/bu	kg/hl	%	%	%	%	%
1 NS	62.1	81.6	0.0	0.2	1.0	1.2	74
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 source: North Dakota State University, Hard Red Spring Wheat Quality Laboratory

Legend: Protein = 12% Moisture Basis; TKW = 1000 Kernel Weight; FN = Falling Number; FM = Foreign Material; S&B = Shrunken and Broken; n/a = not available

NORTHERN DURUM

- **Planted Area:** As of March 31, USDA anticipates an 8.3% increase in northern durum planted area from 1.63 million acres (0.66 million hectares) in 2022 to 1.78 million acres (0.72 million hectares) in 2023.
- **Crop progress:** Northern durum planting in North Dakota is near last year but well behind average with only 12% complete while Montana is 39% planted. Emergence is 4% in Montana.
- **Weather:** A cold front brought 2-4 inches of rain to the durum growing region of North Dakota. Warmer, drier conditions are forecast.

WHEAT DATA

	Samples		Moisture	Protein	Dry Basis Protein	Dockage	TKW	FN
	Tested	Expected	%	%	%	%	gm	sec
2022 Final	121	122	11.0	13.7	15.6	1.1	40.4	433
5-year Avg	113	122	11.3	14.4	16.3	0.9	42.3	399

GRADE FACTORS

Grade	Test Weight		FM	Damage	S&B	Defects	HVAC
	lb/bu	kg/hl	%	%	%	%	%
1 HAD	61.8	80.4	0.0	0.1	1.0	1.1	11.0
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 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