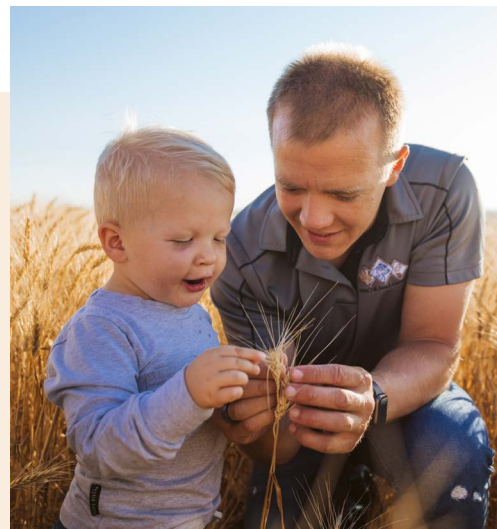




HIGH QUALITY
WHEAT FOR
EVERY NEED

2026

CROP QUALITY REPORT

FROM THE PRESIDENT

Dear Valued Partners:

One of the privileges of my role is representing U.S. wheat farmers to customers around the world. Before discussing this year's crop, I want to thank U.S. wheat farmers and their families for the work they do every year. This growing season presented significant challenges for U.S. producers, who persisted in delivering a good-quality wheat crop despite extreme weather volatility and sharply higher input costs. While overall U.S. production is lower this year, our global customers will continue to find good value in this crop, and we are incredibly grateful to U.S. farmers and their families for their dedication and resilience.

That work is reflected in the 2026 Crop Quality Report. It provides a detailed look at the quality and milling and baking performance of U.S. wheat. I encourage you to use the results to assess this year's crop and review the purchase specifications that matter to your business.

Just as important as the quality of the wheat is the confidence that comes with buying U.S. wheat. You know what to expect from our industry. From transparent markets and contract integrity to dependable logistics and shipment execution, you can rely on a supply chain built to meet your needs throughout the year.

Our work does not end when we publish the report. USW staff around the world are ready to work with millers and bakers to interpret the results, answer technical questions, and help you maximize the milling and baking value of U.S. wheat in your operations. Our team takes pride in helping you understand how U.S. wheat performs in real-world applications and in sharing practical solutions that help you get the most value from your purchases.

I also thank the state wheat commissions, industry partners, and USDA's Foreign Agricultural Service for supporting this work. We appreciate your continued partnership and look forward to working with you this year.

Sincerely,



Michael Spier
President and CEO
U.S. Wheat Associates

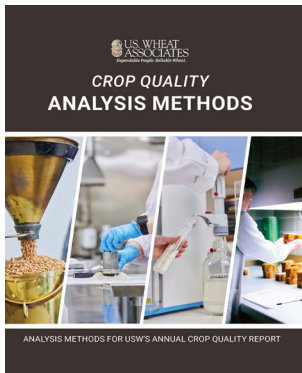


U.S. WHEAT ASSOCIATES IS FUNDED BY THE U.S. DEPARTMENT OF AGRICULTURE'S FOREIGN AGRICULTURAL SERVICE AND BY WHEAT PRODUCERS THROUGH THE FOLLOWING MEMBER ORGANIZATIONS:

- Arizona Grain Research & Promotion Council
- California Wheat Commission
- Colorado Wheat Administrative Committee
- Idaho Wheat Commission
- Kansas Wheat Commission
- Maryland Grain Producers Utilization Board
- Minnesota Wheat Research & Promotion Council
- Montana Wheat & Barley Committee
- Nebraska Wheat Board
- North Dakota Wheat Commission
- Ohio Small Grains Marketing Program
- Oklahoma Wheat Commission
- Oregon Wheat Commission
- South Dakota Wheat Commission
- Texas Wheat Producers Board
- Washington Grain Commission
- Wyoming Wheat Marketing Commission

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SCAN THIS QR CODE TO ACCESS USW'S ANALYSIS METHODS FOR CROP QUALITY TESTING.

The crop quality testing methodologies are now available in a stand-alone document, which provides detailed testing definitions and methodologies. Laboratory testing protocols are outlined for each wheat class.



SCAN THIS QR CODE TO ACCESS USW'S ANNUAL CROP QUALITY REPORTS.

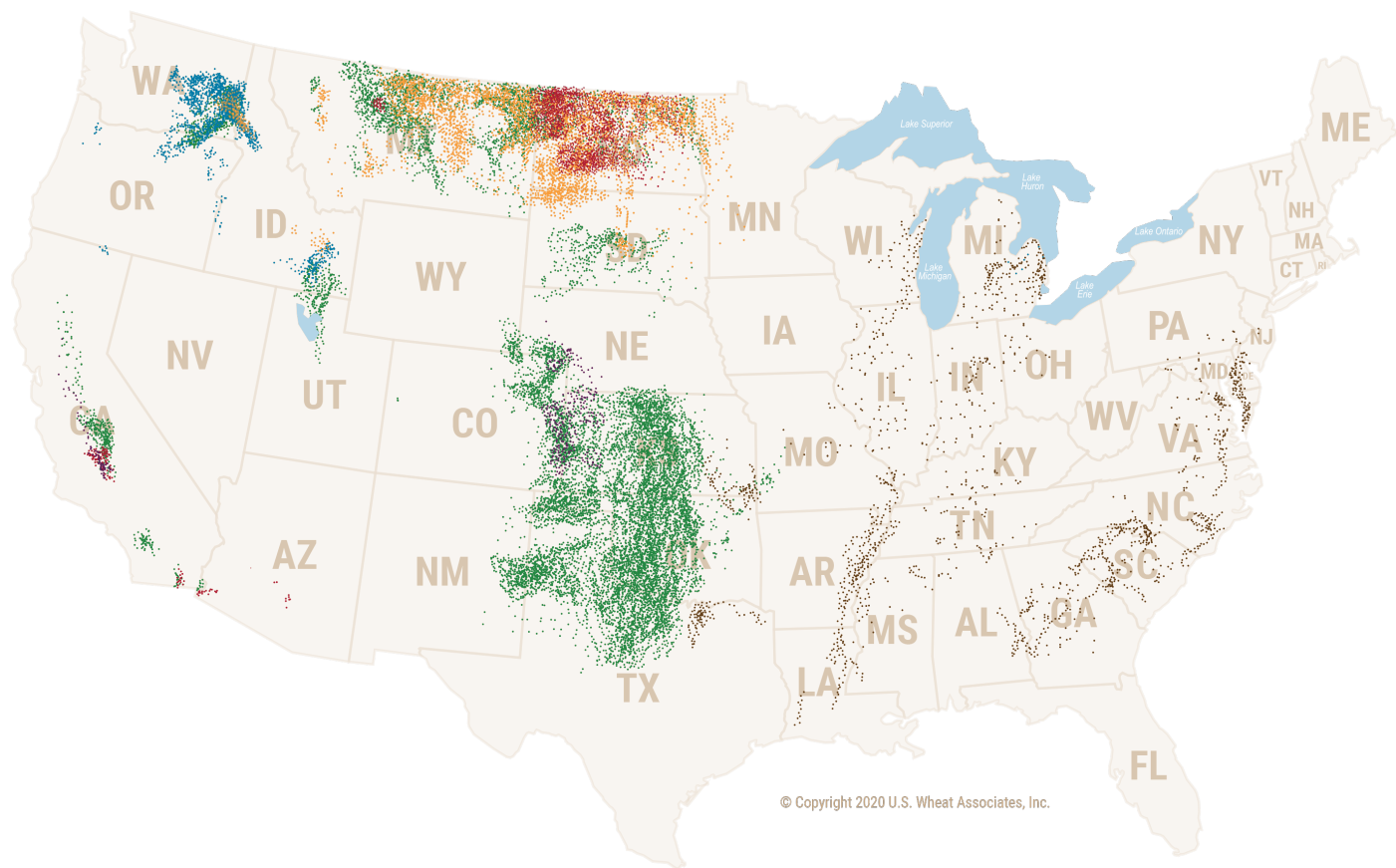
Available in: Arabic, Chinese, English, French, Italian, Portuguese and Spanish.

REGIONAL REPORTS ARE ALSO AVAILABLE:

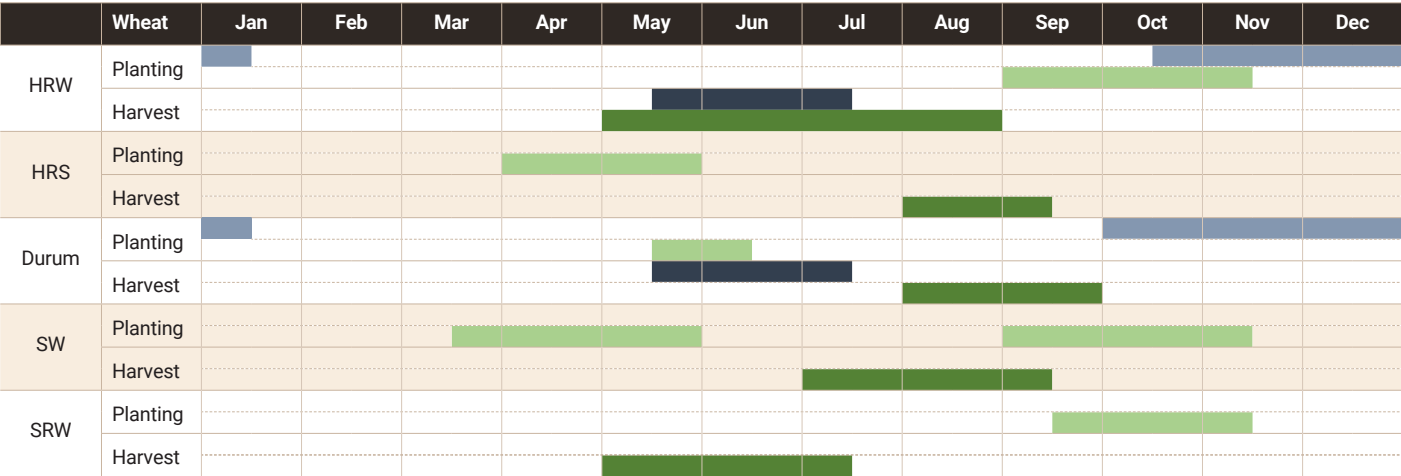
Hard White, Soft Red Winter, Soft White, Hard Red Spring, Northern Durum, Hard Red Winter, California Hard Red Winter and Desert Durum.

(Note: Regional reports are primarily available in English.)

2026 CROP QUALITY OVERVIEW



PLANTING AND HARVEST DATES



U.S. PRODUCTION BY CLASS

CROP YEAR (BEGINNING JUNE 1) (MMT)

	2026	2025	2024	2023	2022
Hard Red Winter	12.7	21.9	21.0	16.2	14.5
Hard Red Spring	11.3	12.5	13.7	12.7	12.2
Hard White	0.4	0.6	0.8	0.6	0.5
Durum	1.8	2.3	2.2	1.6	1.7
Soft White	7.6	7.1	6.7	5.8	6.9
Soft Red Winter	8.0	9.6	9.3	12.2	9.1
Total	41.7	54.0	53.6	49.1	44.9

Based on USDA crop estimates as of September 30, 2026.

U.S. SUPPLY AND DEMAND

ESTIMATED FOR 2026/27 (BEGINNING JUNE 1) (MMT)

	HRW	HRS	SRW	White ¹	Durum	Total
Beginning stocks	11.9	6.3	3.6	2.3	0.9	25.0
Production	12.7	11.3	8.0	7.9	1.8	41.7
Imports	0.5	1.9	0.1	0.1	1.2	3.9
Total Supply	25.1	19.5	11.7	10.4	3.9	70.7
Domestic Use	11.3	8.1	6.1	2.2	2.6	30.2
Exports	4.8	6.1	2.7	6.1	0.7	20.4
Total demand	16.1	14.2	8.8	8.3	3.2	50.6
Ending stocks	9.1	5.4	2.9	2.2	0.7	20.1
Stocks 5-year average	9.0	4.6	3.1	1.9	0.7	19.4

Based on USDA Supply/Demand estimates as of October 9, 2026.

¹Includes both SW and HW.

SUMMARY OF CLASSES

	Hard Red Winter ¹		Hard Red Spring		Soft White		Soft Red Winter		Northern Durum ²		Desert Durum ²	
	2026	5-Year Avg	2026	5-Year Avg	2026	5-Year Avg	2026	5-Year Avg	2026	5-Year Avg	2026	5-Year Avg
Test Weight (lb/bu)	60.5	60.5	60.5	61.5	60.9	60.5	59.8	59.7	60.5	61.3	63.3	63.3
(kg/hl)	79.6	79.6	79.6	80.8	80.1	79.6	78.7	78.5	78.8	79.8	82.4	82.5
Grade	1 HRW	1 HRW	1 NS	1 NS	1 SW	1 SW	2 SRW	2 SRW	1 HAD	1 HAD	1 HAD	1 HAD
Dockage (%)	0.4	0.5	0.7	0.6	0.5	0.4	0.4	0.4	1.5	0.8	0.3	0.3
Moisture (%)	10.9	11.0	11.7	12.0	9.0	9.0	13.3	13.0	11.7	11.4	7.5	7.3
Wheat Protein (%), 12% mb	12.5	12.3	14.7	14.5	9.1	10.2	9.8	9.5	14.5	14.4	14.5	13.6
Wheat Ash (%), 14% mb	1.47	1.53	1.57	1.53	1.36	1.40	1.38	1.37	1.60	1.58	1.74	1.64
1000 Kernel Weight (g)	28.5	30.4	29.4	32.0	35.1	33.6	34.7	33.8	33.4	40.3	47.0	49.6
Falling Number (sec)	363	363	436	392	290	335	304	312	397	409	474	648
Flour/Semolina Extraction (%) ²	71.2	75.9	66.5	67.0	73.2	70.8	71.7	68.1	54.0	56.0	69.1	71.9
Flour/Semolina Ash (%) ²	0.46	0.52	0.54	0.49	0.46	0.44	0.41	0.42	0.70	0.64	0.80	0.80
Wet Gluten (%) 14% mb	28.8	29.3	35.0	34.5	18.7	22.2	21.3	20.6	30.9	33.8	36.7	34.3
Farinograph:												
Peak Time (min)	6.8	5.2	7.6	7.9	1.2	1.7	0.6	0.6	—	—	—	—
Stability (min)	15.0	9.1	12.0	14.1	2.1	2.3	2.1	1.7	—	—	—	—
Absorption (%)	59.8	58.6	63.4	62.3	51.3	51.3	53.2	52.3	—	—	—	—
W (10 ⁻⁴ J)	350	229	399	408	76	82	113	90	—	—	—	—
Loaf Volume (cc)	865	877	1038	962	650	—	718	613	—	—	—	—
Production (MMT)	12.7	17.2	11.3	12.5	7.6	6.8	8.0	9.7	1.6	1.7	0.2	0.2

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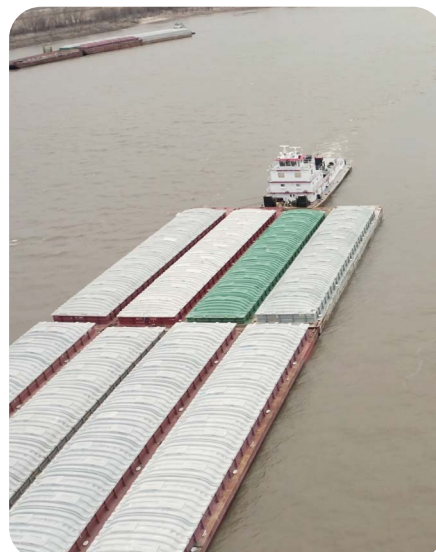
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¹HRW data does not include California.

²Durum extraction and ash values are for semolina.



GRADING, ABBREVIATIONS & CONVERSIONS

GRADES AND GRADE REQUIREMENTS

GRADING FACTORS:	GRADES U.S. NO.:				
	1	2	3	4	5
MINIMUM LIMITS:					
Test Weight (lb/bu)					
HRS or White Club	58.0	57.0	55.0	53.0	50.0
All other classes and subclasses	60.0	58.0	56.0	54.0	51.0
Test Weight (kg/hl)					
HRS or White Club	76.4	75.1	72.5	69.9	66.0
Durum	78.2	75.6	73.0	70.4	66.5
All other classes and subclasses	78.9	76.4	73.8	71.2	67.3
MAXIMUM PERCENT LIMITS:					
Defects					
Damaged kernels:					
- Heat (part of total)	0.2	0.2	0.5	1.0	3.0
- Total	2.0	4.0	7.0	10.0	15.0
Foreign material	0.4	0.7	1.3	3.0	5.0
Shrunken and broken kernels	3.0	5.0	8.0	12.0	20.0
Total ¹	3.0	5.0	8.0	12.0	20.0
Wheat of Other Classes²					
Contrasting classes	1.0	2.0	3.0	10.0	10.0
Total ³	3.0	5.0	10.0	10.0	10.0
Stones	0.1	0.1	0.1	0.1	0.1
MAXIMUM COUNT LIMITS (ALL GRADES):					
Other material (1,000 g sample)					
Animal filth	1				
Castor beans	1				
Crotalaria seeds	2				
Glass	0				
Stones	3				
Unknown foreign substance	3				
Total ⁴	4				
Insect-damaged kernels in 100 g	31				

U.S. Sample Grade is wheat that:

- (a) does not meet the requirements for U.S. Nos. 1, 2, 3, 4, 5; or
- (b) has a musty, sour or commercially objectionable foreign odor (except smut or garlic odor);
- (c) is heating or of distinctly low quality.

Notes:

- ¹ Includes damaged kernels (total), foreign material, and shrunken and broken kernels.
- ² Unclassed wheat of any grade may contain not more than 10.0% of wheat of other classes.
- ³ Includes contrasting classes.
- ⁴ Includes any combination of animal filth, castor beans, crotalaria seeds, glass, stones, or unknown foreign substance.

ABBREVIATIONS

°C	Celsius	in	inch
°F	Fahrenheit	J	joules
AACC	American Association of Cereal Chemists	kg	kilogram
AD	Amber Durum	kg/hl	Kilograms/Hectoliter
α-amylase	alpha-amylase	lb	pound
bu	Winchester bushel	lb/bu	pounds/bushel
BU	Brabender Unit	mb	moisture basis
cc	cubic centimeter (also cm³, ccm)	mg	milligram
Club	White Club	min	minute
cm	centimeter	mL	milliliter
cm²	square centimeters	mm	millimeter
cwt	quintal or hundredweight	MMT	million metric tons
db	Dry basis	MT	metric tons
DNS	Dark Northern Spring	NS	Northern Spring
DON	Deoxynivalenol (Vomitoxin)	PGI	Plains Grains Inc.
Durum	Durum	PNW	Pacific Northwest
FGIS	Federal Grain Inspection Service	ppm	parts per million
g	gram	PPO	polyphenol oxidase
GIPSA	Grain Inspection, Packers and Stockyards Administration	sec	second
GPAL	Great Plains Analytical Lab	SKCS	Single Kernel Characterization System
GPI	Gluten Performance Index	SRC	Solvent Retention Capacity
Gulf	Gulf of Mexico	SRW	Soft Red Winter
HAD	Hard Amber Durum	SW	Soft White
hl	hectoliter	TKW	1000 kernel weight or thousand kernel weight
hr	hour	USDA	United States Department of Agriculture
HRS	Hard Red Spring	WMC	Wheat Marketing Center
HRW	Hard Red Winter	WW	Western White
HW	Hard White		

UNIT CONVERSION FACTORS

The weight units conversion matrix should be read from the top, left.
For example: **1 MT** is equal to **1,000 kg**.

	1 bu	1 lb	1 MT	1 long ton	1 short ton	1 cwt	1 kg
bu	1	0.017	36.74	37.33	33.33	3.674	0.037
lb	60	1	2,204	2,240	2,000	100	2.205
MT	0.0272	0.0005	1	1.016	0.907	22.05	0.0010
long ton	0.0268	0.0004	0.984	1	0.893	0.045	0.0010
short ton	0.030	0.0005	1.102	1.12	1	0.05	0.0011
cwt	0.600	0.01	22.05	22.40	20.37	1	0.022
kg	27.2	0.45	1,000	1,016	907.2	45.36	1

LEGEND:

bu (Winchester bushel)
lb (pound)
MT (metric ton)
cwt (quintal or hundredweight)
kg (kilogram)

LAND AREA:

1 hectare (ha) = 2.47 acres (ac)
1 acre (ac) = 0.40 hectare (ha)

TEST WEIGHT:

Durum wheat: kg/hl = (lb/bu x 1.292) + 0.630
Common wheat: kg/hl = (lb/bu x 1.292) + 1.419

SOLVENT RETENTION CAPACITY:

GPI = Lactic Acid/(Sodium Carbonate + Sucrose)

FLOUR PROTEIN:

14% mb to db = Protein (14% mb) / 0.86
db to 14% mb = Protein (db) x 0.86

WHEAT PROTEIN:

12% mb to db = Protein (12% mb) / 0.88
db to 12% mb = Protein (db) x 0.88

HARD RED WINTER



Grown in the Great Plains, Pacific Northwest (PNW) and California, hard red winter (HRW) wheat is the most widely grown class in the United States. It is shipped via the Gulf and Pacific ports. It has medium to high protein of 10.0 to 13.0% (12% mb), medium hard endosperm, red bran, medium gluten content and mellow gluten.

For the miller, HRW brings consistency to the grist. A balanced mill optimizes flour extraction and helps maximize milling efficiency. Maintaining HRW as the foundation of the mill grist allows the miller to blend other U.S. classes, local wheat or wheat from other origins as cost advantages or product differentiation opportunities develop.

For the baker, HRW benefits include improved baking characteristics, including dough stability and water absorption, either alone or as part of a blend. HRW delivers consistency as it is always available and provides the most reliable foundational ingredient for most wheat-based products.



APPLICATIONS

With excellent milling and baking characteristics for wheat foods like pan breads, hard rolls, croissants and flat breads, HRW is an important and versatile wheat. It is also an ideal choice for some types of Asian noodles, general purpose flour and as an improver for blending.

Applications include:

- Baguettes
- Flatbreads, tortillas
- Pan breads
- Yeast breads and rolls
- Hard rolls
- Hearth breads
- Cereals
- Croissants
- Dumplings, Chinese
- Noodles, Asian-style
- Steamed bread (mushipan)
- Non-durum pasta
- Wide variety of other baked goods
- Flours (general-purpose, bread)
- Blending improver



Scan the QR code to access the USW Analysis Methods booklet.

SURVEY METHODOLOGY

SAMPLE COLLECTION AND ANALYSIS

Great Plains Analytical Laboratory (GPAL) in Kansas City, Missouri, collected the samples and conducted the quality analyses.

SAMPLE TESTING

Test weight, moisture, protein, 1000 kernel weight, wheat ash and falling number were determined for each sample, and DON was determined for a portion of the samples. The remaining tests were conducted on 18 composite samples categorized by growing region and protein range: <11.5%, 11.5 to 12.5% and >12.5%. Results were weighted by estimated production and reported as Overall, Gulf-exportable and Pacific Northwest (PNW)-exportable averages. An overview of the quality testing methods is provided in the USW Analysis Methods booklet.

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SAMPLES OF
HARD RED WINTER

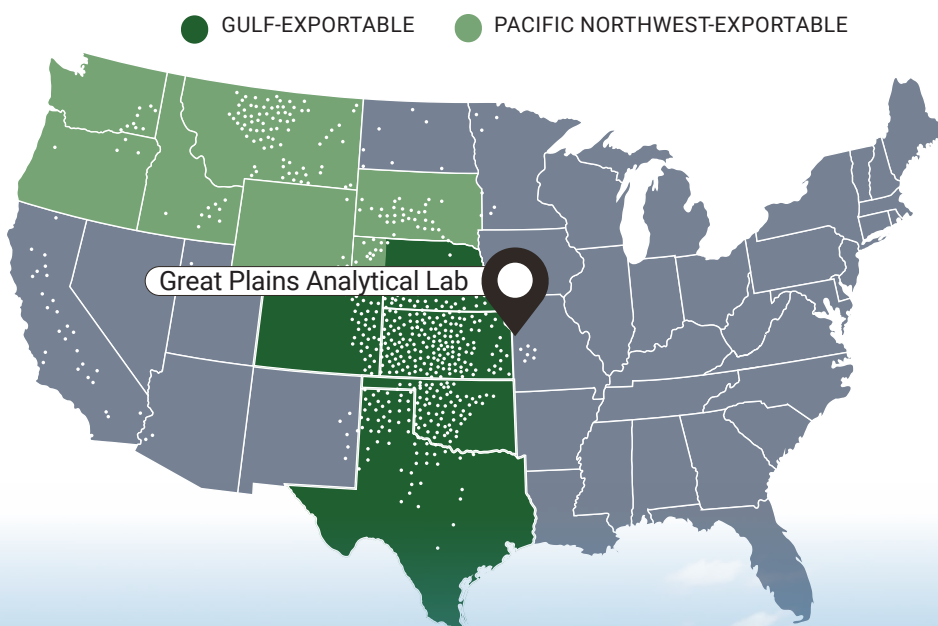
collected from grain elevators
in 40 reporting areas after
at least 30% of the local
harvest was complete

11

STATES SURVEYED

98%

OF TOTAL HRW PRODUCTION
REPRESENTED



WEATHER AND HARVEST

PLANTING: The 2026 HRW crop was established under mixed fall conditions, with moisture varying across the production region. USDA estimated planted area at 9.0 million hectares (22.1 million acres), down approximately 6% from the previous year. Dry conditions in parts of the Southern Great Plains contributed to uneven emergence, while more favorable moisture supported establishment elsewhere. Above-normal winter temperatures and unusually warm March weather accelerated development and increased moisture demand as the crop emerged from dormancy.

DEVELOPMENT: Drought intensified across much of the HRW region during critical spring growth stages. Limited rainfall, above-normal temperatures, and localized freeze events reduced yield potential, particularly in the Southern and Central Great Plains, and contributed to above-average abandonment. Conditions were generally more favorable in portions of the northern HRW region, although dry April and May weather and frost reduced top-end yield potential in Montana. Ample June moisture improved crop conditions and helped sustain the crop through later development.

HARD RED WINTER PRODUCTION

FOR THE MAJOR PRODUCING STATES (MMT)

	2026	2025	2024	2023	2022
California	0.2	0.2	0.1	0.2	0.1
Colorado	0.5	1.8	1.7	1.9	0.9
Idaho	0.3	0.4	0.4	0.3	0.3
Kansas	5.2	9.0	7.9	5.1	6.2
Montana	2.0	2.7	2.5	2.3	1.6
Nebraska	0.4	1.0	1.2	0.9	0.7
Oklahoma	1.5	2.8	2.9	1.8	1.8
Oregon	0.0	0.1	0.1	0.1	0.1
South Dakota	0.7	0.9	1.3	0.9	1.0
Texas	1.3	2.2	2.1	2.1	1.0
Washington	0.3	0.3	0.3	0.3	0.3
Wyoming	0.0	0.1	0.1	0.1	0.0
Twelve-State Total	12.5	21.5	20.6	15.8	14.1
Gulf-Exportable	8.7	16.2	14.9	11.2	10.3
PNW-Exportable	3.6	5.1	5.5	4.5	3.8
Total HRW Production	12.7	21.9	21.0	16.2	14.5

Based on USDA crop estimates as of September 30, 2026.

Non-zero values may display as 0.0 due to rounding.

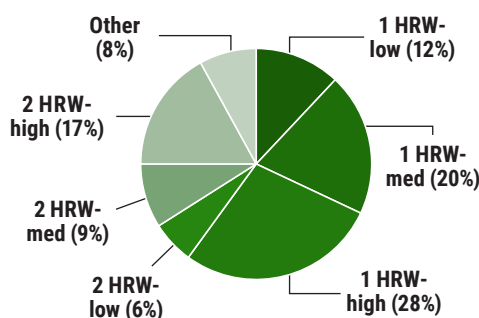
HARVEST: Periodic rainfall delayed early harvest in parts of Texas and Oklahoma and created localized quality concerns. Hot, dry weather later accelerated harvest progress across much of the production region. Late-season precipitation improved soil moisture in some areas but arrived too late to significantly improve yield prospects.

PRODUCTION: The 2026 HRW crop is estimated at 12.7 MMT (466 million bushels), down 42% from the previous year and one of the smallest crops in decades. Reduced planted area, drought-related yield losses, and high abandonment were the primary factors limiting production.

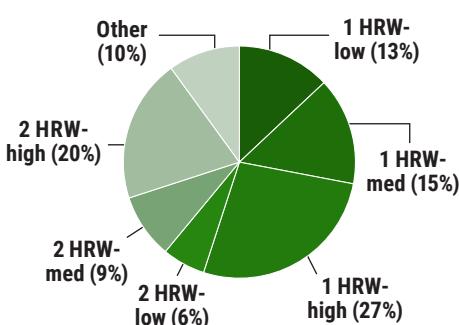
DISTRIBUTION BY GRADE

PROTEIN RANGE, 12% MB: LOW, <11.5%; MED, 11.5-12.5%; HIGH, >12.5%.

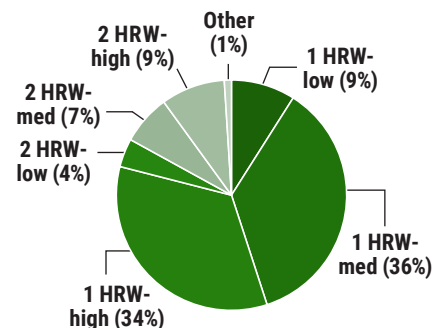
OVERALL



GULF



PACIFIC NORTHWEST



OVERALL HARVEST DATA

	2026 BY PROTEIN ¹			2026	2025	5-Year
	Low	Med	High	Avg	Avg	Avg
WHEAT GRADE DATA:						
Test Weight (lb/bu)	60.5	60.8	60.4	60.5	60.0	60.5
(kg/hl)	79.6	79.9	79.4	79.6	79.0	79.6
Damaged Kernels (%)	0.5	0.3	0.4	0.4	0.3	0.7
Foreign Material (%)	0.1	0.2	0.1	0.1	0.1	0.1
Shrunken & Broken (%)	0.8	1.0	1.0	1.0	0.7	0.9
Total Defects (%)	1.5	1.4	1.6	1.5	1.1	1.4
Grade	1 HRW	1 HRW	1 HRW	1 HRW	1 HRW	1 HRW
WHEAT NON-GRADE DATA:						
Dockage (%)	0.3	0.4	0.4	0.4	0.5	0.5
Moisture (%)	11.3	10.9	10.8	10.9	11.5	11.0
Protein (%) 12%/0% mb	10.9/12.4	12.1/13.7	13.4/15.3	12.5/14.2	12.1/13.7	12.3/14.0
Ash (%) 14%/0% mb	1.38/1.60	1.46/1.70	1.50/1.75	1.47/1.70	1.47/1.71	1.53/1.78
1000 Kernel Weight (g)	30.0	29.2	27.6	28.5	30.1	30.4
Kernel Size (%) lg/md/sm	78/21/01	67/33/01	61/38/01	66/33/01	68/32/00	66/33/01
Single Kernel: Hardness	59.8	61.8	63.9	62.5	58.8	61.6
Weight (mg)	31.3	30.6	29.5	30.2	31.2	31.5
Diameter (mm)	2.62	2.58	2.54	2.56	2.62	2.62
Sedimentation (cc)	31.8	40.8	54.4	46.2	51.4	51.4
Falling Number (sec)	332	370	370	363	370	363
DON (ppm)	0.1	0.0	0.0	0.0	0.0	0.0
FLOUR DATA:						
Lab Mill Extraction (%) ²	70.6	71.6	71.2	71.2	75.8	75.9
Color: L*	90.6	90.4	90.3	90.4	90.7	90.7
a*	-2.0	-1.9	-1.8	-1.9	-1.4	-0.9
b*	10.0	9.8	9.7	9.8	10.2	10.2
Protein (%) 14%/0% mb	9.5/11.1	10.6/12.4	11.9/13.8	11.1/12.9	11.0/12.8	11.2/12.8
Ash (%) 14%/0% mb	0.46/0.53	0.46/0.53	0.46/0.53	0.46/0.53	0.53/0.62	0.52/0.61
Wet Gluten (%) 14% mb	23.3	27.8	31.3	28.8	28.4	29.3
Falling Number (sec)	350	388	398	386	370	363
Amylograph Viscosity: 65g (BU)	521	656	739	675	724	749
RVA: Pasting Temp. (°C)/Peak Visc. (cP)	79.6/2223	75.2/2368	74.4/2551	75.6/2436	74.2/2283	—
Hot Paste Visc. (cP)/Final Visc. (cP)	1424/2567	1631/2847	1740/2965	1649/2857	1578/2785	—
Damaged Starch (%)	8.1	7.6	7.9	7.8	6.2	6.1
SRC: Water/50% Sucrose (%)	63/108	65/114	65/115	65/113	66/113	66/113
5% Lactic Acid/5% Na ₂ CO ₃ (%)	131/84	141/89	145/86	141/87	138/88	135/88
Gluten Performance Index (GPI)	0.68	0.69	0.72	0.71	0.69	0.67
DOUGH PROPERTIES:						
Farinograph: Peak Time (min)	5.4	6.3	7.5	6.8	4.9	5.2
Stability (min)	11.9	13.9	16.8	15.0	9.4	9.1
Absorption (%)	58.0	59.1	60.9	59.8	58.8	58.6
Alveograph: P (mm)	107	108	106	107	82	85
L (mm)	69	88	102	92	82	81
P/L Ratio	1.56	1.23	1.04	1.16	1.00	1.10
W (10 ⁻⁴ J)	282	338	380	350	228	229
Extensograph (45/135 min): Resistance ₅₀ (BU)	391/532	351/494	340/483	355/497	361/586	399/689
Resistance Max (BU)	599/700	566/699	617/716	596/707	496/801	—
Extensibility (cm)	15.3/13.5	17.1/14.3	17.6/15.4	16.9/14.6	15.0/13.8	14.7/13.2
Area (cm ²)	118/123	126/128	137/143	129/134	97/135	91/129
R ₅₀ /E Ratio	2.6/4.1	2.1/3.5	1.9/3.1	2.1/3.4	2.4/4.4	—
Rmax/E Ratio	3.9/5.3	3.3/4.9	3.5/4.7	3.5/4.9	3.3/5.9	—
BAKING EVALUATION:						
Pan Bread: Bake Absorption (%)	62.8	63.5	64.8	64.0	62.1	63.2
Loaf Volume (cc)	796	846	900	865	798	877
Specific Volume (cc/g)	5.2	5.4	5.8	5.6	5.3	—
SPAGHETTI EVALUATION:						
Color: L*	58.6	58.1	58.2	58.3	59.2	69.2
a*	3.5	3.7	3.4	3.5	4.9	4.1
b*	28.7	29.0	29.3	29.1	24.3	19.9
Cooked Weight (g)	30.8	31.6	29.9	30.6	32.6	31.6
Cooking Loss (%)	6.1	5.9	5.3	5.6	6.6	6.4
Cooked Firmness (g cm)	7.6	7.7	8.2	8.0	7.0	6.3
% OF SAMPLES:	27	27	46	100		

¹ Protein Range: Low, <11.5%; Med, 11.5 - 12.5%; High, >12.5%.

² The laboratory changed in 2026; flour, dough and end-product values are not comparable to prior years. See analysis methods.

GULF-EXPORTABLE HARVEST SURVEY

Drought, above-normal temperatures and uneven rainfall significantly affected the 2026 Gulf-exportable HRW crop grown in the Southern and Central Great Plains, reducing yield potential and increasing abandonment. Despite these environmental challenges, the crop achieved a U.S. No. 1 HRW grade, with sound grain, protein above last year and slightly above the five-year average, and test weight aligned with the five-year average. Smaller kernels reflect the dry growing conditions, while falling number results confirm minimal sprout damage. Loaf volumes are average to above average for the class, showing no loss of performance despite the difficult growing season. Overall, the crop offers dependable quality and good opportunities for blending with stronger wheats.

GULF-EXPORTABLE CROP HIGHLIGHTS

GRADE: The overall average for the Gulf-exportable crop is U.S. No. 1 HRW.

TEST WEIGHT: Values aligned with the five-year average, likely due to tighter packing of smaller kernels.

WHEAT PROTEIN: Values are higher than last year's and up slightly from the five-year average. Protein content is typical for the Gulf, with slightly higher protein reflecting drought conditions in most production areas.

WHEAT MOISTURE: Values are in line with the five-year average and typical for the Gulf.

KERNEL CHARACTERISTICS: Values show smaller kernels compared to last year and the five-year average, with Gulf samples showing smaller kernels and lower 1000 kernel weights that are consistent with slight drought stress.

WHEAT FALLING NUMBER: Average is similar to the five-year average, confirming a sound crop with minimal sprout damage.

BUHLER LABORATORY MILL: Extraction rates are consistent with smaller kernels milled on a standard Buhler MLU-202. Commercial mills should see better extractions.

Note: Beginning with the 2026 crop, laboratory milling was conducted on a Buhler MLU-202 mill rather than the tandem Buhler mill used in previous years. The MLU-202 has fewer break and reduction passages and a different milling flow than the tandem mill, which results in different

flour extraction and flour characteristics. Therefore, 2026 laboratory milling, flour, dough and end-product results are not directly comparable with prior-year or five-year average values.

WET GLUTEN: Tracks with protein content and is typical of the class.

STARCH PASTING PROPERTIES: Amylograph and rapid visco analyzer (RVA) viscosities indicate the crop is suitable for noodle making, particularly clean bite noodles such as instant fried noodles.

DAMAGED STARCH: Values are higher this year as a result of the change in laboratory milling rather than a characteristic of the crop. This is reflected in increased farinograph and bake absorptions.

SOLVENT RETENTION CAPACITY: Gluten performance index (GPI) values are above the 0.60 threshold which is desirable for bread making in hard wheats.

DOUGH PROPERTIES: Absorption and stability track with protein and are typical for the class, with a good balance of strength and extensibility that translates directly to baking results.

PAN BREAD: Bake absorption, bread volume and specific volume are typical for the class and reflect slightly higher protein and balanced dough rheology this year. Gulf HRW offers good opportunities for blending with stronger wheats.

SPAGHETTI: Higher-protein samples show greater cooked firmness and lower cooking loss, consistent with expected spaghetti cooking performance.

"The 2026 harvest was less than ideal, to say the least. A challenging growing season marked by drought and late freezes led to below-average yields. However, grain quality exceeded expectations. The quality of the wheat we harvested is something we as producers can be proud of."

— Chris Tanner, Kansas wheat farmer

GULF-EXPORTABLE HARVEST DATA

	2026 BY PROTEIN ¹			2026	2025	5-Year
	Low	Med	High	Avg	Avg	Avg
WHEAT GRADE DATA:						
Test Weight (lb/bu)	60.3	60.3	60.0	60.2	59.7	60.3
(kg/hl)	79.4	79.3	79.0	79.2	78.6	79.3
Damaged Kernels (%)	0.6	0.1	0.5	0.4	0.4	0.5
Foreign Material (%)	0.2	0.1	0.1	0.1	0.1	0.2
Shrunken & Broken (%)	0.9	1.1	1.1	1.0	0.6	0.9
Total Defects (%)	1.6	1.3	1.6	1.6	1.1	1.5
Grade	1 HRW	1 HRW	1 HRW	1 HRW	2 HRW	2 HRW
WHEAT NON-GRADE DATA:						
Dockage (%)	0.3	0.4	0.4	0.4	0.5	0.5
Moisture (%)	11.8	11.4	11.1	11.3	11.7	11.4
Protein (%) 12%/0% mb	11.0/12.5	12.1/13.7	13.5/15.3	12.6/14.3	12.0/13.6	12.3/14.0
Ash (%) 14%/0% mb	1.38/1.60	1.45/1.69	1.50/1.75	1.46/1.70	1.49/1.73	1.54/1.79
1000 Kernel Weight (g)	29.2	28.4	27.4	28.0	29.9	30.1
Kernel Size (%) lg/md/sm	77/22/01	65/34/01	61/38/01	65/34/01	69/31/00	66/33/01
Single Kernel: Hardness	59.3	61.8	63.4	62.2	59.8	60.8
Weight (mg)	30.6	29.7	29.4	29.7	30.6	30.7
Diameter (mm)	2.59	2.56	2.54	2.55	2.62	2.61
Sedimentation (cc)	30.9	39.8	53.7	45.6	48.7	49.8
Falling Number (sec)	334	353	362	354	374	359
DON (ppm)	0.1	0.0	0.0	0.0	0.0	0.0
FLOUR DATA:						
Lab Mill Extraction (%) ²	70.1	70.6	70.8	70.6	75.7	76.0
Color: L*	90.6	90.3	90.3	90.3	90.7	90.7
a*	-2.0	-1.9	-1.8	-1.9	-1.4	-0.9
b*	10.0	9.8	9.6	9.7	10.2	10.1
Protein (%) 14%/0% mb	9.6/11.2	10.5/12.3	11.8/13.7	11.0/12.8	10.8/12.6	11.2/13.1
Ash (%) 14%/0% mb	0.46/0.54	0.47/0.55	0.46/0.54	0.46/0.54	0.54/0.63	0.53/0.62
Wet Gluten (%) 14% mb	23.2	27.6	31.1	28.6	28.1	28.9
Falling Number (sec)	345	376	396	380	374	359
Amylograph Viscosity: 65g (BU)	522	579	721	645	696	718
RVA: Pasting Temp. (°C)/Peak Visc. (cP)	82.1/2162	77.7/2284	76.0/2515	77.6/2386	73.4/2259	—
Hot Paste Visc. (cP)/Final Visc. (cP)	1369/2493	1487/2656	1692/2896	1575/2755	1540/2725	—
Damaged Starch (%)	8.0	7.9	8.0	8.0	6.2	6.0
SRC: Water/50% Sucrose (%)	61/108	63/113	64/113	63/112	66/113	66/113
5% Lactic Acid/5% Na ₂ CO ₃ (%)	127/82	134/85	142/84	137/84	138/88	135/87
Gluten Performance Index (GPI)	0.67	0.68	0.72	0.70	0.69	0.68
DOUGH PROPERTIES:						
Farinograph: Peak Time (min)	5.3	5.8	7.1	6.4	4.8	5.2
Stability (min)	12.0	13.5	16.6	14.9	9.4	9.2
Absorption (%)	57.8	58.8	60.6	59.6	58.9	58.4
Alveograph: P (mm)	107	103	104	104	83	82
L (mm)	69	87	102	92	78	83
P/L Ratio	1.55	1.19	1.02	1.14	1.06	1.04
W (10 ⁻⁴ J)	284	326	375	345	221	226
Extensograph (45/135 min): Resistance ₅₀ (BU)	398/519	370/480	340/483	360/490	360/576	397/684
Resistance Max (BU)	616/690	600/696	617/716	612/706	495/786	—
Extensibility (cm)	15.3/13.7	17.6/14.9	17.6/15.4	17.1/14.9	14.9/13.8	14.7/13.2
Area (cm ²)	121/123	137/133	137/143	134/136	97/133	91/126
R ₅₀ /E Ratio	2.6/3.9	2.1/3.3	1.9/3.1	2.1/3.3	2.4/4.3	—
Rmax/E Ratio	4.0/5.1	3.4/4.7	3.5/4.7	3.6/4.8	3.3/5.8	—
BAKING EVALUATION:						
Pan Bread: Bake Absorption (%)	62.7	63.6	64.8	64.1	62.0	63.1
Loaf Volume (cc)	802	849	899	867	803	884
Specific Volume (cc/g)	5.2	5.5	5.8	5.6	5.4	—
SPAGHETTI EVALUATION:						
Color: L*	58.9	59.1	58.3	58.6	59.7	69.3
a*	3.3	3.2	3.3	3.3	4.8	4.1
b*	28.6	28.4	29.0	28.7	23.6	19.6
Cooked Weight (g)	30.7	31.9	29.7	30.5	33.0	31.6
Cooking Loss (%)	6.2	5.8	5.2	5.6	6.6	5.7
Cooked Firmness (g cm)	7.6	7.7	8.3	8.0	6.8	7.0
% OF SAMPLES:	17	18	39	74		

¹ Protein Range: Low, <11.5%; Med, 11.5 - 12.5%; High, >12.5%.

² The laboratory changed in 2026; flour, dough and end-product values are not comparable to prior years. See analysis methods.

PNW-EXPORTABLE HARVEST SURVEY

The 2026 PNW-exportable HRW crop developed under mixed growing conditions across the Northern Great Plains and Pacific Northwest. Dry April and May weather and localized frost reduced top-end yield potential in Montana, but ample June moisture helped sustain the crop through later development. Timely precipitation supported stronger performance in other northern and western production areas, particularly in irrigated fields, while prolonged drought constrained dryland yields. Despite this regional variability, the crop achieved a U.S. No. 1 HRW grade, with sound kernels, protein comparable to last year and the five-year average, and strong falling number results. Overall, the crop provides dependable milling and baking functionality, with good opportunities for blending and noodle applications.

PNW-EXPORTABLE CROP HIGHLIGHTS

GRADE: The overall average for the PNW-exportable crop is U.S. No. 1 HRW.

TEST WEIGHT: Values trended higher due to timely rainfall throughout the season, especially in Montana and the PNW states.

WHEAT PROTEIN: Values are comparable to last year and the five-year average.

WHEAT MOISTURE: Values were lower this year compared to last year due to drier conditions at maturity.

KERNEL CHARACTERISTICS: PNW kernels are similar in weight and size to last year, but with increased hardness that better aligns with the five-year average.

WHEAT FALLING NUMBER: Average is higher than last year and the five-year average, confirming a sound crop with minimal sprout damage.

BUHLER LABORATORY MILL: Extraction rates are consistent with average kernels milled on a standard Buhler MLU-202. Commercial mills should see better extractions.

Note: Beginning with the 2026 crop, laboratory milling was conducted on a Buhler MLU-202 mill rather than the tandem Buhler mill used in previous years. The MLU-202 has fewer break and reduction passages and a different milling flow than the tandem mill, which results in different flour extraction and flour characteristics. Therefore, 2026 laboratory milling, flour, dough and end-product results are not directly comparable with prior-year or five-year average values.

WET GLUTEN: Aligns with protein content and is typical for the class.

STARCH PASTING PROPERTIES: Amylograph and rapid visco analyzer (RVA) viscosities indicate the crop is suitable for noodle making, particularly clean bite noodles such as instant fried noodles.

DAMAGED STARCH: Values are higher this year as a result of the change in laboratory milling rather than a characteristic of the crop. This is reflected in increased farinograph and bake absorptions.

SOLVENT RETENTION CAPACITY: Gluten performance index (GPI) values are above the 0.60 threshold desirable for bread making in hard wheats. Values above 0.70 suggest good strength for blending and baking applications.

DOUGH PROPERTIES: The PNW crop exhibits typical absorption and stability, with improved strength relative to extensibility this year that aligns with baking results.

PAN BREAD: Bake absorption, loaf volume, and specific loaf volume are typical for the class and align with GPI values and dough properties. This year's PNW HRW crop offers good opportunities for noodles and blends with stronger wheats.

SPAGHETTI: Higher-protein samples show greater cooked firmness, while cooking loss varies little among protein levels.

"This crop has had a lot of stress, but the quality is surprisingly good. The thing about production agriculture is that it's very rewarding. It can be challenging, obviously, but it's nice to harvest clean fields and work alongside family. We're blessed to be out here working the land and taking care of it. If you don't love it, you wouldn't do it."

— Courtney Herzog, Montana Wheat Farmer

PNW-EXPORTABLE HARVEST DATA

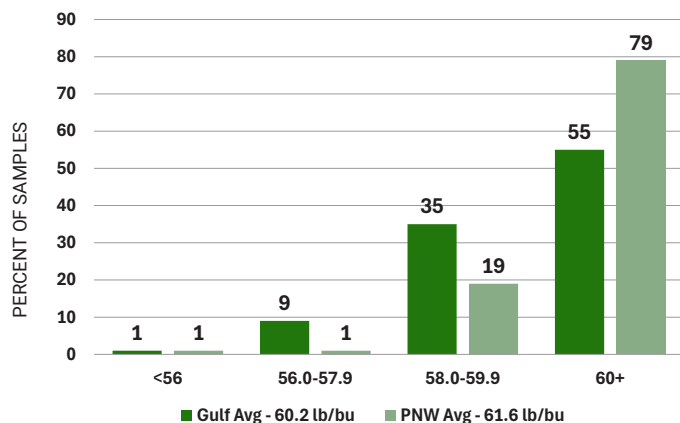
	2026 BY PROTEIN ¹			2026	2025	5-Year
	Low	Med	High	Avg	Avg	Avg
WHEAT GRADE DATA:						
Test Weight (lb/bu)	61.4	61.7	61.5	61.6	60.7	60.9
(kg/hl)	80.8	81.1	80.9	81.0	79.9	80.1
Damaged Kernels (%)	0.2	0.5	0.0	0.2	0.1	0.2
Foreign Material (%)	0.0	0.2	0.2	0.2	0.0	0.1
Shrunken & Broken (%)	0.5	0.9	1.0	0.9	0.8	0.8
Total Defects (%)	0.6	1.6	1.2	1.3	0.9	1.2
Grade	1 HRW	1 HRW	1 HRW	1 HRW	1 HRW	1 HRW
WHEAT NON-GRADE DATA:						
Dockage (%)	0.2	0.4	0.4	0.4	0.5	0.5
Moisture (%)	9.3	9.9	10.0	9.9	11.0	10.2
Protein (%) 12%/0% mb	10.5/11.9	12.0/13.7	13.4/15.2	12.4/14.1	12.3/14.0	12.3/14.0
Ash (%) 14%/0% mb	1.39/1.58	1.49/1.73	1.50/1.74	1.48/1.72	1.42/1.66	1.50/1.74
1000 Kernel Weight (g)	33.6	30.6	28.4	30.0	30.8	30.2
Kernel Size (%) lg/md/sm	81/18/01	70/30/01	59/40/01	66/33/01	66/34/00	62/37/01
Single Kernel: Hardness	62.1	61.9	65.9	63.7	56.5	63.8
Weight (mg)	34.6	32.2	30.0	31.5	32.6	32.6
Diameter (mm)	2.74	2.61	2.54	2.60	2.62	2.64
Sedimentation (cc)	36.3	42.6	57.3	48.2	57.6	55.0
Falling Number (sec)	323	401	403	392	359	365
DON (ppm)	0.0	0.0	0.1	0.0	0.1	0.0
FLOUR DATA:						
Lab Mill Extraction (%) ²	72.9	73.4	72.6	73.0	76.0	75.7
Color: L*	90.5	90.6	90.4	90.5	90.8	90.7
a*	-2.0	-2.0	-1.9	-2.0	-1.4	-0.9
b*	10.1	10.0	10.1	10.1	10.2	10.3
Protein (%) 14%/0% mb	9.4/10.9	10.8/12.6	12.2/14.2	11.2/13.1	11.3/13.2	11.5/13.5
Ash (%) 14%/0% mb	0.44/0.51	0.43/0.50	0.43/0.50	0.43/0.50	0.51/0.59	0.52/0.60
Wet Gluten (%) 14% mb	23.8	28.2	31.8	29.2	29.0	30.1
Falling Number (sec)	374	411	408	405	359	365
Amylograph Viscosity: 65g (BU)	516	795	810	765	790	771
RVA: Pasting Temp. (°C)/Peak Visc. (cP)	68.0/2509	70.6/2519	68.4/2688	69.3/2591	76.0/2338	—
Hot Paste Visc. (cP)/Final Visc. (cP)	1678/2908	1891/3192	1926/3234	1878/3173	1668/2926	—
Damaged Starch (%)	8.2	7.0	7.5	7.4	6.1	6.3
SRC: Water/50% Sucrose (%)	69/111	68/115	70/119	69/116	66/114	66/112
5% Lactic Acid/5% Na ₂ CO ₃ (%)	145/95	154/97	157/94	154/96	138/87	134/88
Gluten Performance Index (GPI)	0.71	0.73	0.74	0.73	0.69	0.67
DOUGH PROPERTIES:						
Farinograph: Peak Time (min)	5.6	7.2	9.2	7.9	5.1	5.4
Stability (min)	11.3	14.4	17.7	15.5	9.5	9.1
Absorption (%)	59.4	59.9	62.0	60.7	58.6	59.3
Alveograph: P (mm)	109	117	114	115	81	92
L (mm)	68	89	101	92	92	78
P/L Ratio	1.60	1.31	1.13	1.25	0.88	1.22
W (10 ⁻⁴ J)	275	360	398	365	246	244
Extensograph (45/135 min): Resistance ₅₀ (BU)	358/594	317/520	—	327/537	363/609	415/712
Resistance Max (BU)	517/751	504/705	—	507/716	499/834	—
Extensibility (cm)	15.1/12.4	16.2/13.3	—	15.9/13.1	15.0/13.8	14.7/13.1
Area (cm ²)	103/121	106/120	—	105/120	97/140	96/132
R ₅₀ /E Ratio	2.4/4.8	2.0/3.9	—	2.1/4.1	2.5/4.6	—
Rmax/E Ratio	3.4/6.1	3.1/5.3	—	3.2/5.5	3.4/6.2	—
BAKING EVALUATION:						
Pan Bread: Bake Absorption (%)	63.3	63.3	64.5	63.8	62.5	63.7
Loaf Volume (cc)	766	840	906	859	786	864
Specific Volume (cc/g)	4.9	5.4	5.7	5.5	5.2	—
SPAGHETTI EVALUATION:						
Color: L*	57.2	56.3	57.9	57.1	58.1	68.8
a*	4.4	4.5	3.7	4.1	5.0	4.1
b*	29.2	30.1	30.7	30.3	25.5	20.4
Cooked Weight (g)	31.6	31.0	30.8	31.0	31.8	31.5
Cooking Loss (%)	5.8	6.0	5.8	5.9	6.5	7.2
Cooked Firmness (g cm)	7.4	7.8	8.0	7.8	7.2	5.5
% OF SAMPLES:	10	9	7	26		

¹ Protein Range: Low, <11.5%; Med, 11.5 - 12.5%; High, >12.5%.

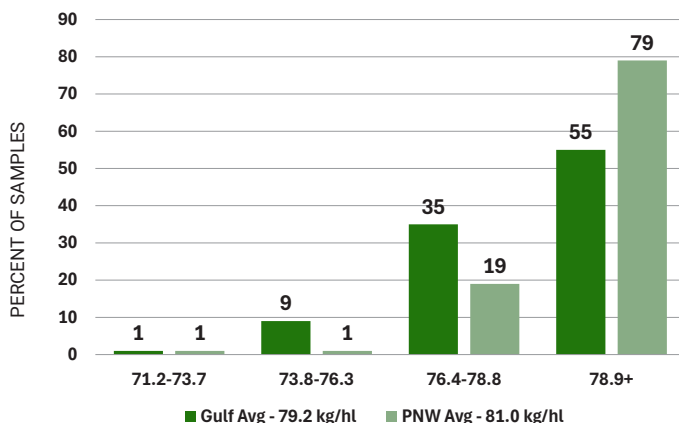
² The laboratory changed in 2026; flour, dough and end-product values are not comparable to prior years. See analysis methods.

DISTRIBUTIONS

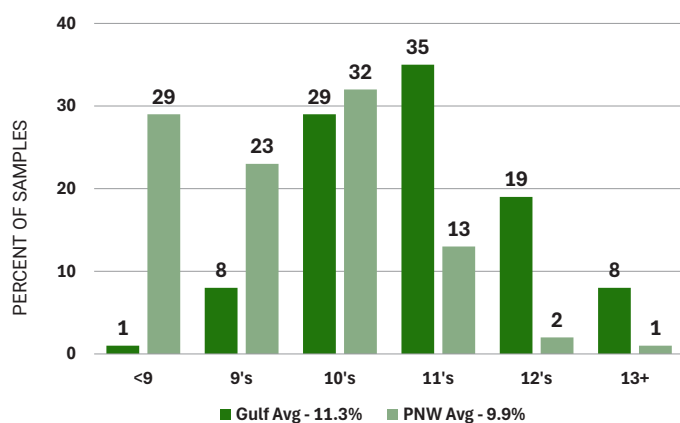
TEST WEIGHT | Pounds/Bushel



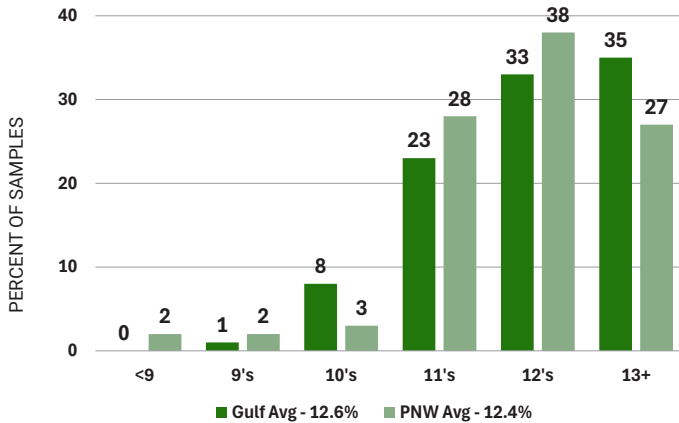
TEST WEIGHT | Kilograms/Hectoliter



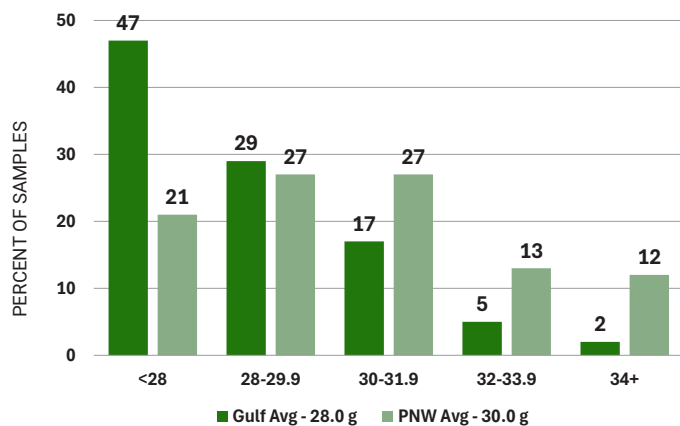
WHEAT MOISTURE | Percent



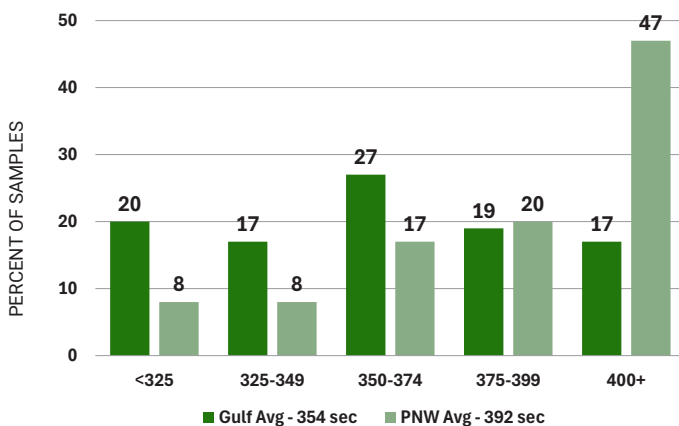
PROTEIN (12% MB) | Percent



THOUSAND KERNEL WEIGHT | Grams



FALLING NUMBER | Seconds



Note: Percentages may not total 100 due to rounding.

HARD RED SPRING



Grown primarily in the North Central region and shipped via the Pacific, Gulf and Great Lakes ports, hard red spring (HRS) wheat is the second largest class of U.S. wheat. It has high protein of 12.0 to 15.0% (12% mb), hard endosperm, red bran, strong gluten and high water absorption.

For the miller, the reward for incorporating HRS into the grist includes a higher-than-average flour yield from its harder, more compact endosperm. This creates excellent granulation through the break system, providing an abundance of stock to the purifiers producing the maximum amount of low ash, bright color flour.

For the baker, HRS delivers strong dough characteristics used alone or as part of a blend to improve the overall performance of the desired dough. In markets where consumers are demanding a “clean label,” HRS flour blended with HRW or other wheat flour can create better water absorption and loaf volume while reducing or eliminating the use of chemical improvers. And many pasta makers around the world know that when traditional durum wheat semolina is not needed, HRS wheat flour or semolina is a very acceptable alternative.



APPLICATIONS

The aristocrat of wheat when it comes to “designer” wheat foods like bagels, artisan hearth breads, pizza crust and other strong dough applications, HRS also has excellent milling and baking characteristics and is a valued improver in flour blends.

Applications include:

- Bagels
- Buns
- Croissants
- Frozen doughs
- Hard rolls
- Ramen noodles
- Pan breads
- Pizza crust
- Specialty/artisan breads
- Yeast breads and rolls
- Wide variety of other baked goods
- Blends for ramen noodles
- Non-durum pasta
- Improver flour for blends
- Flours (general-purpose, bread)



Scan the QR code to access the USW Analysis Methods booklet.

SURVEY METHODOLOGY

SAMPLE COLLECTION AND ANALYSIS

The HRS Wheat Quality Laboratory in the Department of Plant Sciences at North Dakota State University (NDSU) in Fargo, North Dakota, collected the samples and conducted the quality analyses.

SAMPLE TESTING

Official grade and non-grade factors were determined for approximately 60% of the samples. Functionality tests were conducted on six composite samples categorized by export region and protein range: <13.5%, 13.5 to 14.5% and >14.5%. Results were weighted by estimated production and reported as Overall, Gulf/Great Lakes-exportable and Pacific Northwest (PNW)-exportable averages based on the composite samples. An overview of the quality testing methods is provided in the USW Analysis Methods booklet.

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SAMPLES OF
HARD RED SPRING

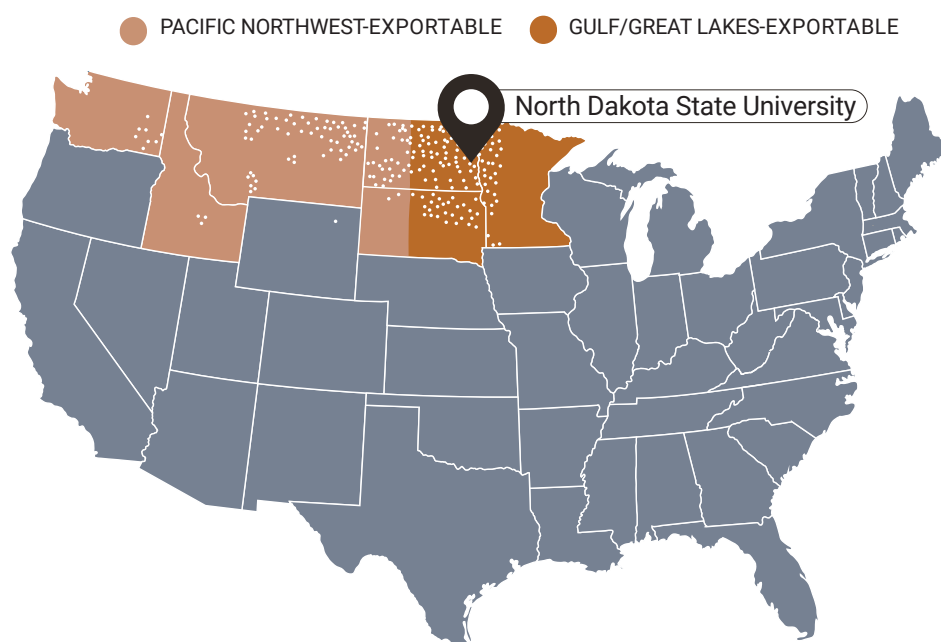
collected from fields, on-farm bin sites or elevators,
and separated by export
region

6

STATES SURVEYED

100%

OF TOTAL HRS PRODUCTION
REPRESENTED



SUBCLASSES

Under the Official United States Standards for Grain, hard red spring wheat is divided into the three subclasses based on vitreous kernel content:

DARK NORTHERN SPRING (DNS)

- Contains at least 75% or more dark, hard, vitreous kernels.

NORTHERN SPRING (NS)

- Contains between 25-74% dark, hard, vitreous kernels.

RED SPRING (RS)

- Contains less than 25% dark, hard, vitreous kernels.



HARD RED SPRING PRODUCTION

FOR THE MAJOR PRODUCING STATES (MMT)

	2026	2025	2024	2023	2022
Idaho	0.3	0.4	0.4	0.3	0.3
Minnesota	1.7	2.1	2.2	2.1	2.0
Montana	2.3	1.5	1.7	2.1	1.7
North Dakota	6.2	7.5	8.4	7.2	7.2
South Dakota	0.7	0.9	0.8	0.8	0.9
Washington	0.1	0.1	0.1	0.1	0.1
Six-State Total	11.3	12.5	13.7	12.7	12.2
PNW-Exportable	5.2	6.2	6.6	5.7	5.8
Gulf/Great Lakes-Exportable	6.1	6.3	7.1	7.0	6.3
Total HRS Production	11.3	12.5	13.7	12.7	12.2

Based on USDA crop estimates as of September 30, 2026.



WEATHER AND HARVEST

PLANTING: USDA estimated 2026 HRS planted area at 3.6 million hectares (9.0 million acres). Much of the crop was planted under favorable soil conditions, though western areas were quite dry. Cold soils and some rainfall delayed planting in northern areas. Despite these delays, most acres were planted by the end of May, slightly ahead of average.

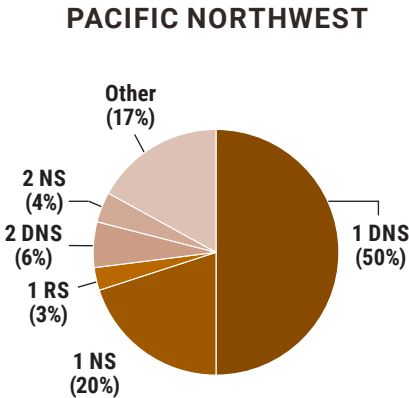
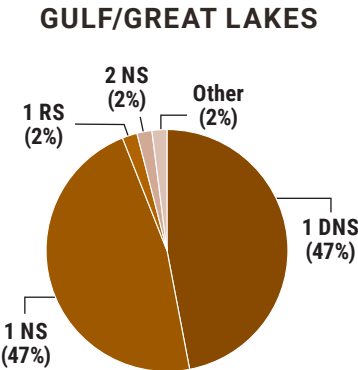
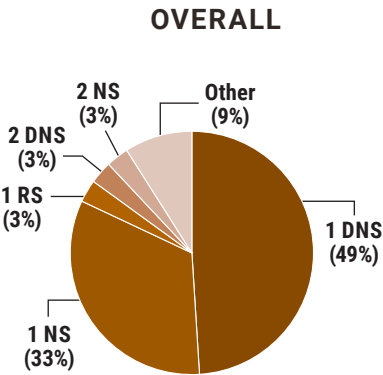
DEVELOPMENT: Emergence was slow and uneven due to highly variable weather, including dry conditions, high winds, and large temperature swings. Growing conditions remained mixed throughout the season, with areas of surplus moisture contrasting with areas of severe drought. Crop conditions were generally more favorable in eastern and northern

production areas, while western regions experienced greater stress. Overall disease pressure was low, with elevated pressure limited to isolated areas.

HARVEST: Harvest began in late July under mostly dry conditions and progressed rapidly through much of August. Rain in September caused delays in northern areas, although most harvest was completed by mid-September.

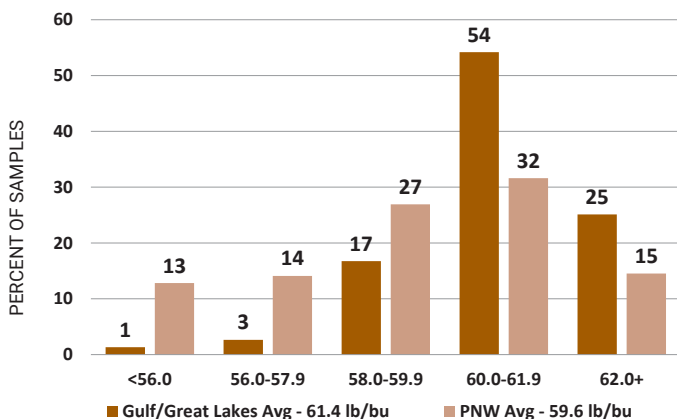
PRODUCTION: The 2026 U.S. HRS crop is estimated at 11.3 MMT (416 million bushels), down 9% from the previous year. Reduced acreage and lower overall yields limited production, although yields were generally better than expected given the heat and drought stress experienced in some production areas.

DISTRIBUTION BY GRADE

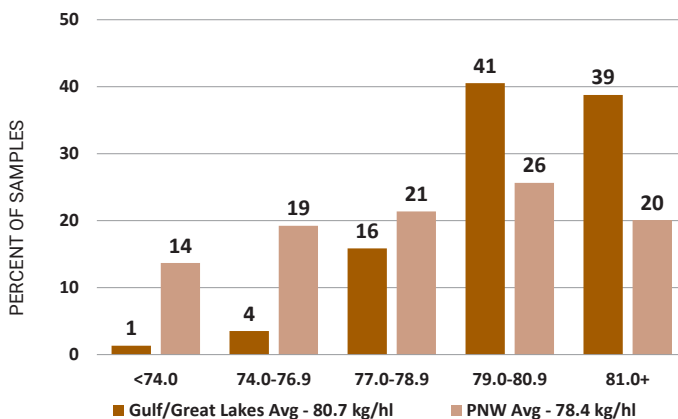


DISTRIBUTIONS

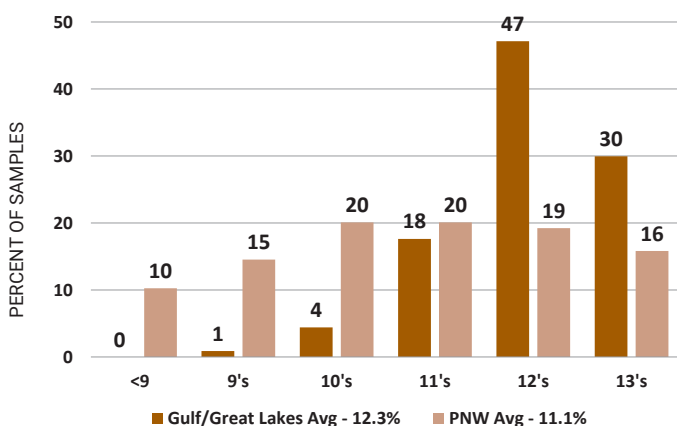
TEST WEIGHT | Pounds/Bushel



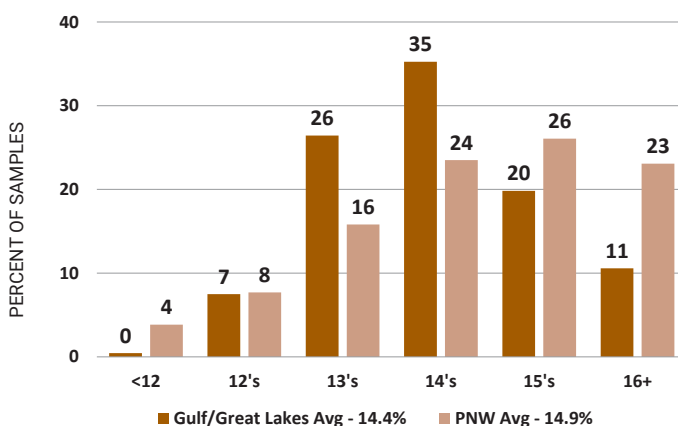
TEST WEIGHT | Kilograms/Hectoliter



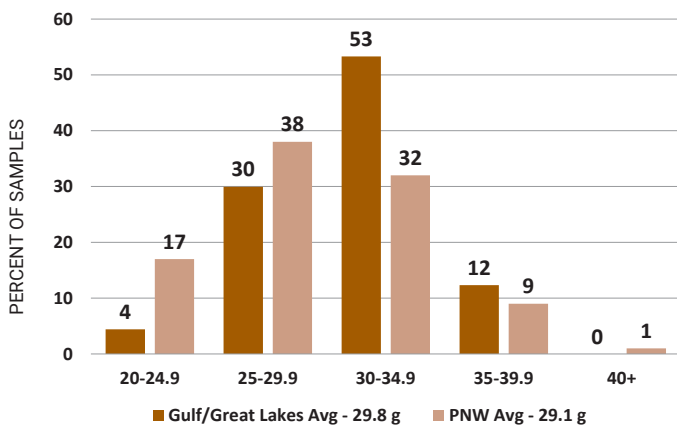
WHEAT MOISTURE | Percent



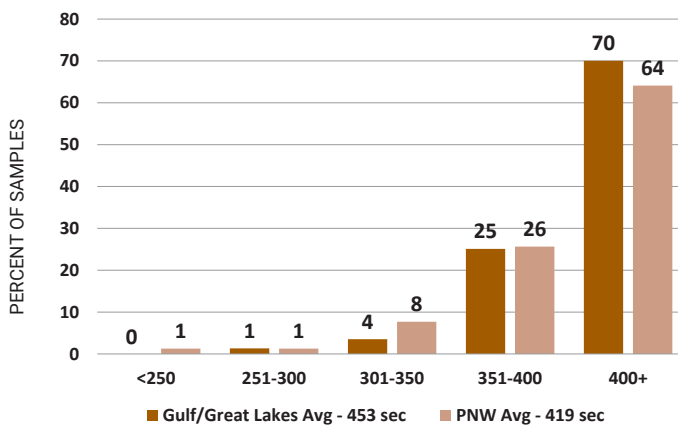
PROTEIN (12% MB) | Percent



THOUSAND KERNEL WEIGHT | Grams



FALLING NUMBER | Seconds



Note: Percentages may not total 100 due to rounding.

OVERALL HARVEST DATA

	2026 BY PROTEIN ¹			2026	2025	5-Year
	Low	Med	High	Avg	Avg	Avg
WHEAT GRADE DATA:						
Test Weight (lb/bu)	61.8	61.3	59.5	60.5	61.6	61.5
(kg/hl)	81.3	80.6	78.4	79.6	81.0	80.8
Damaged Kernels (%)	0.3	0.5	0.3	0.3	0.3	0.4
Foreign Material (%)	0.0	0.0	0.0	0.0	0.0	0.0
Shrunken & Broken (%)	0.8	0.7	1.1	0.9	0.5	0.9
Total Defects (%)	1.1	1.2	1.4	1.2	0.8	1.3
Vitreous kernels (%)	66	68	78	73	62	67
Grade	1 NS	1 NS	1 DNS	1 NS	1 NS	1 NS
WHEAT NON-GRADE DATA:						
Dockage (%)	0.6	0.5	0.7	0.7	0.6	0.6
Moisture (%)	11.7	12.1	11.6	11.7	12.2	12.0
Protein (%) 12%/0% mb	12.8/14.6	14.1/16.0	15.6/17.7	14.7/16.7	14.4/16.3	14.5/16.4
Ash (%) 14%/0% mb	1.56/1.81	1.54/1.79	1.59/1.85	1.57/1.83	1.53/1.78	1.53/1.78
1000 Kernel Weight (g)	30.7	29.9	28.7	29.4	33.9	32.0
Kernel Size (%) lg/md/sm	44/53/03	40/57/03	32/62/06	36/59/05	54/44/02	45/52/03
Sedimentation (cc)	64.0	64.0	65.0	65.0	65.0	66.0
Falling Number (sec)	427	444	434	436	404	392
DON (ppm)	0.3	0.1	0.1	0.2	0.3	0.2
FLOUR DATA:						
Lab Mill Extraction (%)	67.1	65.9	66.6	66.5	68.0	67.0
Color: L*	89.6	89.2	89.5	89.5	89.3	90.1
a*	-2.0	-1.8	-1.8	-1.8	-1.8	-1.5
b*	9.6	9.6	9.7	9.7	9.3	9.5
Protein (%) 14%/0% mb	11.7/13.6	12.9/15.0	14.6/17.0	13.6/15.8	13.3/15.5	13.2/15.3
Ash (%) 14%/0% mb	0.54/0.62	0.52/0.60	0.56/0.65	0.54/0.63	0.53/0.61	0.49/0.57
Wet Gluten (%) 14% mb	29.4	33.8	37.6	35.0	34.3	34.5
Falling Number (sec)	412	395	411	407	406	396
Amylograph Viscosity: 65g (BU)	616	674	657	655	573	648
RVA: Pasting Temp. (°C)/Peak Visc. (cP)	87.9/2382	88.6/2297	88.8/2307	88.6/2318	87.3/2199	84.4/2164
Hot Paste Visc. (cP)/Final Visc. (cP)	1788/2635	1770/2614	1807/2619	1793/2620	1462/2346	1616/2462
Damaged Starch (%)	7.4	6.6	6.7	6.8	7.1	6.6
SRC: Water/50% Sucrose (%)	71/116	68/117	72/117	70/117	72/120	71/118
5% Lactic Acid/5% Na ₂ CO ₃ (%)	145/98	142/92	139/95	141/95	147/102	150/99
Gluten Performance Index (GPI)	0.67	0.68	0.65	0.66	0.66	0.69
DOUGH PROPERTIES:						
Farinograph: Peak Time (min)	6.2	7.2	8.3	7.6	7.3	7.9
Stability (min)	10.7	11.5	12.7	12.0	12.3	14.1
Absorption (%)	62.2	62.4	64.5	63.4	63.6	62.3
Alveograph: P (mm)	96	89	93	92	94	92
L (mm)	109	131	135	129	131	129
P/L Ratio	0.88	0.68	0.69	0.72	0.72	0.71
W (10 ⁻⁴ J)	360	386	419	399	413	408
Extensograph (45/135 min): Resistance ₅₀ (BU)	345/492	309/497	332/487	328/490	—	—
Resistance Max (BU)	547/797	519/783	548/860	540/826	536/802	565/986
Extensibility (cm)	17.1/17.4	16.3/15.7	18.8/17.6	17.8/17.0	17.8/16.8	16.8/14.4
Area (cm ²)	118/176	106/153	132/187	122/175	121/164	120/171
R ₅₀ /E Ratio	20.2/28.4	19.0/31.5	17.7/27.9	18.5/29.0	—	—
Rmax/E Ratio	32.0/45.9	31.8/49.7	29.1/49.3	30.4/48.8	—	—
BAKING EVALUATION:						
Pan Bread: Bake Absorption (%)	63.4	64.1	66.1	65.0	65.6	66.4
Loaf Volume (cc)	933	1012	1088	1038	966	962
Specific Volume (cc/g)	7.40	8.01	8.60	8.21	7.53	—
SPAGHETTI EVALUATION:						
Color: L*	57.3	57.0	55.8	56.4	56.0	57.9
a*	4.7	4.8	5.2	5.0	5.4	4.8
b*	28.7	28.5	27.9	28.2	25.9	27.3
Cooked Weight (g)	30.1	29.8	29.2	29.6	31.8	31.4
Cooking Loss (%)	5.6	5.4	4.6	5.0	6.2	6.5
Cooked Firmness (g cm)	7.8	8.3	9.4	8.8	7.4	4.9
% OF SAMPLES:	19	28	53	100		

¹Protein Range: Low, <13.5%; Med, 13.5 - 14.5%; High, >14.5%.

GULF/GREAT LAKES-EXPORTABLE HARVEST SURVEY

The 2026 U.S. HRS wheat crop grown in the eastern, Gulf/Great Lakes-exportable region has a strong grade profile, sound kernels and protein above last year and the five-year average. Test weight remains strong, vitreous kernel content is higher and falling number results confirm minimal sprout damage. Kernels are smaller than last year, while dough evaluations indicate balanced strength and extensibility. Loaf volume and specific loaf volume are higher than last year and the five-year average. Overall, the crop provides dependable milling and baking functionality, with good opportunities for bread, blending and other high-protein applications.

GULF/GREAT LAKES-EXPORTABLE CROP HIGHLIGHTS

GRADE: The average grade of the 2026 Gulf/Great Lakes-exportable crop is U.S. No. 1 Northern Spring (NS), with 96% of samples grading U.S. No. 1.

TEST WEIGHT: The average is 61.4 lb/bu (80.7 kg/hl), slightly lower than last year and the five-year average but remains strong.

DAMAGED KERNELS: The average is slightly lower than last year and the five-year average.

SHRUNKEN AND BROKEN: The average is slightly higher than last year and the five-year average but remains low.

VITREOUS KERNELS: The average dark, hard and vitreous (DHV) kernel content is 70%, higher than last year and the five-year average.

WHEAT PROTEIN: The average is 14.4% (12% mb), slightly higher than last year and the five-year average. Forty-four percent of samples are in the high-protein category.

1000 KERNEL WEIGHT: The average is lower than last year and the five-year average. The crop has fewer large kernels and a greater proportion of medium-sized kernels.

WHEAT FALLING NUMBER: The average is higher than last year and the five-year average, indicating a sound crop with minimal sprout damage.

VOMITOXIN (DON): The average is 0.2 ppm, below last year and the five-year average.

BUHLER LABORATORY MILL: Flour extraction is lower than last year and the five-year average. Flour ash is similar to last year and higher than the five-year average, while flour color is similar to last year.

WET GLUTEN: The average is higher than last year and slightly above the five-year average, consistent with the crop's higher protein content.

STARCH PASTING PROPERTIES: Amylograph and RVA viscosities are higher than last year and the five-year average, consistent with the strong falling number results.

DOUGH PROPERTIES: Farinograph absorption is similar to last year and slightly above the five-year average, while stability is lower than last year and the five-year average. Alveograph results show strength and extensibility generally consistent with historical values. Extensograph results indicate greater resistance at the longer rest time compared with last year, with extensibility and area values generally aligned with historical performance.

PAN BREAD: Bake absorption is slightly higher than last year but below the five-year average. Loaf volume and specific loaf volume are higher than last year and the five-year average, indicating strong baking performance.

SPAGHETTI EVALUATION: Higher-protein samples show greater cooked firmness and lower cooking loss, consistent with expected spaghetti cooking performance.

“Despite challenging weather conditions during the growing season, producers in my area were pleasantly surprised by yields. Dry weather during most of harvest was beneficial and allowed for rapid harvest progress. Protein levels were higher than normal, and while there were pockets of lower test weights, overall we had a good-grading crop with sound kernel characteristics.”

— Scott Huso, North Dakota wheat farmer

GULF/GREAT LAKES-EXPORTABLE HARVEST DATA

	2026 BY PROTEIN ¹			2026	2025	5-Year
	Low	Med	High	Avg	Avg	Avg
WHEAT GRADE DATA:						
Test Weight (lb/bu)	62.0	61.7	60.9	61.4	61.7	62.0
(kg/hl)	81.5	81.1	80.1	80.7	81.2	81.5
Damaged Kernels (%)	0.5	0.3	0.2	0.3	0.4	0.4
Foreign Material (%)	0.0	0.0	0.0	0.0	0.0	0.0
Shrunken & Broken (%)	0.5	0.6	0.6	0.6	0.4	0.5
Total Defects (%)	1.0	0.9	0.8	0.9	0.8	0.9
Vitreous kernels (%)	62	65	77	70	54	57
Grade	1 NS	1 NS	1 DNS	1 NS	1 NS	1 NS
WHEAT NON-GRADE DATA:						
Dockage (%)	0.6	0.4	0.5	0.5	0.4	0.5
Moisture (%)	12.4	12.5	12.2	12.3	12.8	12.7
Protein (%) 12%/0% mb	13.0/14.8	14.1/16.0	15.2/17.3	14.4/16.4	14.2/16.1	14.2/16.2
Ash (%) 14%/0% mb	1.59/1.85	1.54/1.79	1.58/1.84	1.57/1.82	1.55/1.80	1.53/1.78
1000 Kernel Weight (g)	30.1	29.5	29.9	29.8	34.0	33.7
Kernel Size (%) lg/md/sm	46/52/02	43/54/03	41/56/03	43/54/03	59/39/01	56/42/02
Sedimentation (cc)	62.0	62.0	61.0	62.0	63.0	65.0
Falling Number (sec)	425	446	469	453	410	384
DON (ppm)	0.4	0.1	0.2	0.2	0.3	0.3
FLOUR DATA:						
Lab Mill Extraction (%)	67.0	65.0	66.9	66.2	68.6	67.5
Color: L*	89.6	89.1	89.7	89.5	89.3	90.0
a*	-2.0	-1.7	-1.9	-1.8	-1.8	-1.4
b*	9.8	9.6	9.4	9.5	9.4	9.4
Protein (%) 14%/0% mb	11.7/13.6	12.8/14.9	14.3/16.6	13.3/15.5	13.1/15.2	13.0/15.1
Ash (%) 14%/0% mb	0.53/0.62	0.50/0.58	0.55/0.64	0.53/0.61	0.54/0.62	0.49/0.57
Wet Gluten (%) 14% mb	29.2	33.4	36.8	34.2	33.4	33.9
Falling Number (sec)	388	384	397	391	404	386
Amylograph Viscosity: 65g (BU)	617	720	693	689	536	591
RVA: Pasting Temp. (°C)/Peak Visc. (cP)	88.0/2346	88.9/2295	88.8/2355	88.7/2332	87.4/2167	84.8/2094
Hot Paste Visc. (cP)/Final Visc. (cP)	1740/2608	1781/2616	1790/2652	1778/2631	1449/2355	1539/2385
Damaged Starch (%)	7.2	6.4	7.0	6.8	7.2	6.4
SRC: Water/50% Sucrose (%)	69/113	67/116	71/112	69/114	71/117	70/116
5% Lactic Acid/5% Na ₂ CO ₃ (%)	142/94	139/89	141/94	140/92	142/99	147/97
Gluten Performance Index (GPI)	0.68	0.68	0.68	0.68	0.65	0.69
DOUGH PROPERTIES:						
Farinograph: Peak Time (min)	6.5	7.1	8.1	7.5	7.5	7.5
Stability (min)	10.7	10.8	11.6	11.2	12.1	13.9
Absorption (%)	61.7	61.9	64.0	62.8	62.8	62.3
Alveograph: P (mm)	91	86	92	90	92	92
L (mm)	111	133	135	130	126	125
P/L Ratio	0.82	0.65	0.68	0.69	0.73	0.73
W (10 ⁻⁴ J)	356	380	412	391	392	400
Extensograph (45/135 min): Resistance ₅₀ (BU)	324/462	307/482	321/407	317/443	—	—
Resistance Max (BU)	552/787	506/750	521/725	521/745	525/713	558/932
Extensibility (cm)	17.0/17.6	15.7/15.5	18.7/18.5	17.3/17.3	16.9/17.9	17.0/15.0
Area (cm ²)	118/175	100/147	124/169	114/162	111/160	120/170
R ₅₀ /E Ratio	19.1/26.3	19.6/31.1	17.2/22.0	18.4/26.0	—	—
Rmax/E Ratio	32.5/44.7	32.2/48.4	27.9/39.2	30.2/43.4	—	—
BAKING EVALUATION:						
Pan Bread: Bake Absorption (%)	63.3	63.5	66.2	64.7	64.3	65.7
Loaf Volume (cc)	930	1020	1063	1024	948	961
Specific Volume (cc/g)	7.43	8.12	8.42	8.14	7.44	—
SPAGHETTI EVALUATION:						
Color: L*	57.3	57.7	56.6	57.1	55.6	57.7
a*	4.8	4.6	5.1	4.8	5.5	4.9
b*	28.2	28.9	27.7	28.2	25.4	26.6
Cooked Weight (g)	30.1	30.0	29.5	29.8	31.5	31.1
Cooking Loss (%)	5.9	5.5	5.1	5.4	5.9	6.4
Cooked Firmness (g cm)	7.5	8.7	9.5	8.9	7.7	5.1
% OF SAMPLES:	9	17	23	49		

¹Protein Range: Low, <13.5%; Med, 13.5 - 14.5%; High, >14.5%.

PACIFIC NORTHWEST-EXPORTABLE HARVEST SURVEY

The 2026 PNW-exportable HRS crop has high protein, high vitreous kernel content and strong falling number results. The crop averages U.S. No. 1 Dark Northern Spring, with low damaged kernel levels. Test weight and kernel size are lower this year, contributing to a wider grade distribution. Dough evaluations indicate good strength and extensibility, while loaf volume and specific loaf volume are higher than last year and the five-year average. Overall, the crop provides dependable milling and baking functionality, with good opportunities for bread and blending applications.

PNW-EXPORTABLE CROP HIGHLIGHTS

GRADE: The average grade of the 2026 PNW-exportable crop is U.S. No. 1 Dark Northern Spring (DNS).

TEST WEIGHT: The average is 59.6 lb/bu (78.4 kg/hl), lower than last year and the five-year average.

DAMAGED KERNELS: The average remains low and is similar to last year and the five-year average.

SHRUNKEN AND BROKEN: The average is higher than last year but aligns with the five-year average.

VITREOUS KERNELS: The average dark, hard and vitreous (DHV) kernel content is 76%, higher than last year and equal to the five-year average.

WHEAT PROTEIN: The average is 14.9% (12% mb), higher than last year and slightly above the five-year average. More than half of the samples are in the high-protein category.

1000 KERNEL WEIGHT: The average is lower than last year and slightly below the five-year average. The crop has fewer large kernels and a greater proportion of medium and small kernels.

WHEAT FALLING NUMBER: The average is higher than last year and the five-year average, indicating a sound crop with minimal sprout damage.

VOMITOXIN (DON): The average is 0.1 ppm, below last year and equal to the five-year average.

BUHLER LABORATORY MILL: Flour extraction is slightly lower than last year but slightly above the five-year average. Flour ash is higher than last year and the five-year average, while flour color is similar to last year.

WET GLUTEN: The average is slightly higher than last year and the five-year average, consistent with the crop's higher protein content.

STARCH PASTING PROPERTIES: Amylograph viscosity is slightly higher than last year but below the five-year average. RVA viscosities are higher than last year and the five-year average.

DOUGH PROPERTIES: Farinograph absorption is similar to last year and above the five-year average. Peak time is slightly longer than last year, while stability is similar to last year but below the five-year average. Alveograph results indicate good strength and extensibility. Extensograph results show greater resistance and area at the longer rest time compared with last year.

PAN BREAD: Bake absorption is slightly lower than last year and the five-year average. Loaf volume and specific loaf volume are higher than last year and the five-year average, indicating strong baking performance.

SPAGHETTI EVALUATION: The high-protein sample shows greater cooked firmness and lower cooking loss than the low- and medium-protein samples, consistent with expected spaghetti cooking performance.

"We had timely rains early, but the persistent heat this summer affected yield. The Wheat Quality Council estimated overall spring wheat yields at around 50 bushels per acre, which seems about right for our area. At the same time, the quality of our wheat crop was very good, with protein averaging 14% to 15%. We would have liked a bigger yield, but we are pretty happy with the 2026 crop."

— Riley Schriefer, North Dakota wheat farmer

PACIFIC NORTHWEST-EXPORTABLE HARVEST DATA

	2026 BY PROTEIN ¹			2026	2025	5-Year
	Low	Med	High	Avg	Avg	Avg
WHEAT GRADE DATA:						
Test Weight (lb/bu)	61.7	60.7	58.5	59.6	61.5	61.0
(kg/hl)	81.1	79.8	77.0	78.4	80.9	80.2
Damaged Kernels (%)	0.1	0.9	0.3	0.4	0.3	0.3
Foreign Material (%)	0.0	0.0	0.0	0.0	0.0	0.0
Shrunken & Broken (%)	1.1	0.9	1.4	1.2	0.7	1.2
Total Defects (%)	1.2	1.8	1.7	1.6	1.0	1.5
Vitreous kernels (%)	69	72	79	76	70	76
Grade	1 NS	1 NS	1 DNS	1 DNS	1 NS	1 DNS
WHEAT NON-GRADE DATA:						
Dockage (%)	0.7	0.7	0.9	0.8	0.8	0.8
Moisture (%)	11.0	11.4	11.1	11.1	11.6	11.3
Protein (%) 12%/0% mb	12.7/14.4	14.1/16.0	15.9/18.1	14.9/16.9	14.5/16.5	14.7/16.7
Ash (%) 14%/0% mb	1.53/1.78	1.54/1.79	1.60/1.86	1.57/1.83	1.51/1.76	1.52/1.77
1000 Kernel Weight (g)	31.3	30.4	27.8	29.1	33.8	30.3
Kernel Size (%) lg/md/sm	42/54/04	34/62/04	25/67/08	30/64/06	49/48/02	35/60/05
Sedimentation (cc)	65.0	68.0	68.0	67.0	67.0	67.0
Falling Number (sec)	428	442	407	419	399	399
DON (ppm)	0.3	0.1	0.1	0.1	0.2	0.1
FLOUR DATA:						
Lab Mill Extraction (%)	67.1	67.2	66.3	66.7	67.4	66.4
Color: L*	89.6	89.4	89.4	89.4	89.4	90.1
a*	-2.0	-1.9	-1.8	-1.9	-1.8	-1.5
b*	9.5	9.6	9.9	9.8	9.2	9.7
Protein (%) 14%/0% mb	11.7/13.6	13.1/15.2	14.8/17.2	13.8/16.1	13.6/15.8	13.4/15.5
Ash (%) 14%/0% mb	0.54/0.63	0.54/0.63	0.56/0.65	0.55/0.64	0.52/0.60	0.49/0.57
Wet Gluten (%) 14% mb	29.6	34.4	38.2	35.7	35.3	35.1
Falling Number (sec)	434	413	422	422	408	406
Amylograph Viscosity: 65g (BU)	616	603	630	621	611	702
RVA: Pasting Temp. (°C)/Peak Visc. (cP)	87.9/2415	88.1/2299	88.8/2270	88.5/2305	87.2/2232	83.9/2191
Hot Paste Visc. (cP)/Final Visc. (cP)	1831/2659	1753/2611	1820/2593	1807/2610	1475/2336	1646/2483
Damaged Starch (%)	7.5	6.9	6.5	6.8	7.0	6.3
SRC: Water/50% Sucrose (%)	72/119	70/119	72/121	72/120	73/123	71/121
5% Lactic Acid/5% Na ₂ CO ₃ (%)	147/102	147/96	137/96	141/97	153/105	152/101
Gluten Performance Index (GPI)	0.67	0.68	0.63	0.65	0.67	0.69
DOUGH PROPERTIES:						
Farinograph: Peak Time (min)	5.9	7.3	8.5	7.7	7.1	8.3
Stability (min)	10.7	12.7	13.5	12.8	12.4	14.2
Absorption (%)	62.6	63.1	64.8	64.0	64.4	63.1
Alveograph: P (mm)	100	93	94	95	97	92
L (mm)	108	127	135	128	136	133
P/L Ratio	0.93	0.73	0.70	0.74	0.71	0.69
W (10 ⁻⁴ J)	364	396	424	406	434	415
Extensograph (45/135 min): Resistance ₅₀ (BU)	363/519	313/519	340/548	339/536	—	—
Resistance Max (BU)	543/806	540/833	569/965	558/905	547/895	572/1038
Extensibility (cm)	17.2/17.2	17.3/16.1	18.9/16.9	18.2/16.8	18.7/15.6	16.5/13.7
Area (cm ²)	118/177	116/163	138/201	129/188	132/169	121/172
R ₅₀ /E Ratio	21.1/30.2	18.1/32.2	18.0/32.4	18.6/31.9	—	—
Rmax/E Ratio	31.6/46.9	31.2/51.7	30.1/57.1	30.6/53.9	—	—
BAKING EVALUATION:						
Pan Bread: Bake Absorption (%)	63.5	65.0	66.0	65.3	66.9	67.0
Loaf Volume (cc)	935	1000	1108	1051	985	964
Specific Volume (cc/g)	7.38	7.84	8.74	8.28	7.63	—
SPAGHETTI EVALUATION:						
Color: L*	57.4	55.8	55.1	55.7	59.1	58.0
a*	4.7	5.1	5.4	5.2	3.7	4.7
b*	29.2	27.9	28.0	28.2	29.6	27.7
Cooked Weight (g)	30.1	29.6	29.1	29.4	29.2	31.4
Cooking Loss (%)	5.3	5.3	4.2	4.7	5.2	6.5
Cooked Firmness (g cm)	8.1	7.8	9.4	8.8	5.9	4.9
% OF SAMPLES:	10	11	30	51		

¹Protein Range: Low, <13.5%; Med, 13.5 - 14.5%; High, >14.5%.

SOFT WHITE



Grown primarily in the Pacific Northwest (PNW) and shipped via Pacific ports, approximately 80% of soft white (SW) wheat is exported from the United States. It typically has a low protein of 8.5 to 10.5% (12% mb), low moisture and weak gluten. SW includes winter and spring varieties that provide a wide range of protein and functionality within the class.

For the miller, SW delivers excellent results. Arriving at the mill with an average moisture of less than 10%, an average test weight of more than 79 hectoliter mass and a low quantity of screenings, SW wheat provides the millers every opportunity for high flour extraction. The lower wheat moisture provides numerous financial and processing opportunities to the miller.

For the baker, the finer particle size may increase the rate of water absorption, decrease mix time and improve production efficiencies. With the fine particle size and starch characteristics, SW flour creates a unique and tender texture for many end-products.



APPLICATIONS

From specialty products such as sponge cakes to blending with HRS for improving bread color, U.S. SW wheat flour has the versatility to improve the quality of a wide variety of products.

Applications include:

- Biscuits
- Sugar snap cookies
- Cakes
- Muffins
- Pastries
- Wafers/Ice cream cones
- Other confectionary products
- Cereals and cereal bars
- Crackers
- Snack foods
- Fried Spring Rolls
- Steamed bread, Chinese southern-type
- Tempura batter
- Quick breads
- Flat Breads
- Flours (cake, pastry, self-rising)



Scan the QR code to access the USW Analysis Methods booklet.

SURVEY METHODOLOGY

SAMPLE COLLECTION AND ANALYSIS

The Wheat Marketing Center (WMC) in Portland, Oregon, conducted the wheat and flour quality analyses. The Federal Grain Inspection Service (FGIS) determined the official grade and wheat protein content.

SAMPLE TESTING

Official grade, protein, moisture, 1000 kernel weight and falling number were determined for each sample. The remaining tests were conducted on four composite samples: three Soft White composites categorized by protein range—<9.0%, 9.0 to 10.5% and >10.5%—and one composite of all White Club (Club) samples. An overview of the quality testing methods is provided in the USW Analysis Methods booklet.

345

SAMPLES OF
SOFT WHITE

57

SAMPLES OF
WHITE CLUB

collected from state, private grain
inspection agencies and commercial
wheat handling operations

3

STATES SURVEYED

97%

OF TOTAL SW PRODUCTION
REPRESENTED



SOFT WHITE PRODUCTION

FOR THE MAJOR PRODUCING STATES (MMT)

	2026		2025		2024		2023		2022	
	SW	CLUB	SW	CLUB	SW	CLUB	SW	CLUB	SW	CLUB
Washington	4.0	0.1	3.4	0.1	3.4	0.2	2.6	0.1	3.3	0.3
Oregon	1.4	0.0	1.3	0.0	1.3	0.0	1.0	0.0	1.3	0.0
Idaho	1.6	0.0	1.8	0.0	1.7	0.0	1.5	0.0	1.7	0.0
Three-State Total	7.1	0.2	6.5	0.1	6.4	0.2	5.1	0.2	6.3	0.3
Three-State SW Total	7.2		6.6		6.6		5.3		6.6	
Total SW Production	7.6		7.1		6.7		5.8		6.9	

Based on USDA crop estimates as of September 30, 2026.

Non-zero values may display as 0.0 due to rounding.

HARVEST SURVEY

The Pacific Northwest (PNW) experienced timely moisture and moderate temperatures before drying out during the second half of the 2026 crop year, allowing for favorable harvest conditions. This year's soft white (SW) crop has appropriately weak to medium gluten strength and good to excellent finished product characteristics. SW is especially suited for use in cakes, pastries, cookies and snack foods. The higher-protein segment also provides blending opportunities for crackers, Asian noodles, steamed breads, flat breads and pan breads. White club (Club), with very weak gluten strength, is typically blended with SW to produce Western White for cakes and delicate pastries.

WEATHER AND HARVEST

PLANTING: USDA estimated 2026 PNW soft white wheat planted area at 1.6 million hectares (3.9 million acres), up 4% from last year. Favorable autumn moisture supported establishment of the winter crop, while spring planting benefited from generally adequate soil moisture and cool early-season conditions.

DEVELOPMENT: Periodic spring rainfall supported crop development and yield potential across much of the region. Localized hail, storms, and strong winds created some variability, while hot, dry conditions developed as the crop approached maturity. Winter-planted fields generally benefited from favorable moisture conditions, while spring-planted fields were more affected by late-season heat.

HARVEST: Harvest progressed steadily under mostly favorable conditions, although timing varied across production areas.

PRODUCTION: The 2026 U.S. SW crop is estimated at 7.6 MMT (279 million bushels), up 7% from the previous year. Increased acreage and generally favorable growing conditions supported production despite localized weather impacts and late-season heat.

CROP HIGHLIGHTS

GRADE: The 2026 SW and Club averages are both U.S. No. 1.

TEST WEIGHT: SW and Club average 60.9 lb/bu (80.1 kg/hl) and 61.3 lb/bu (80.7 kg/hl), respectively, similar to last year.

WHEAT PROTEIN: SW averages 9.1% and Club 9.7% (12% mb). Higher yields result in lower SW protein, although it remains within the normal range; Club is similar to last year.

WHEAT ASH: SW and Club averages are slightly higher than last year and align with their respective five-year averages, likely reflecting timely moisture during the growing season.

WHEAT FALLING NUMBER: SW and Club average 290 and 314 seconds, respectively, below last year and their five-year averages due in part to localized freeze events during grain filling.

BUHLER LABORATORY MILL: SW extraction is higher, while Club is slightly lower than last year. Both have higher flour ash, likely reflecting higher wheat ash, and L* values.

Damaged starch is higher for SW and remains similar for Club.

WET GLUTEN: SW values are slightly lower than last year and the five-year average, reflecting the slightly lower average protein content this year.

SOLVENT RETENTION CAPACITY: SW profiles support cookie and cracker performance, while Club values reflect very weak gluten and low water-holding capacity. SW sodium carbonate values are consistent with damaged starch. Results may not be directly comparable with five-year averages because of the automated shaker introduced last year.

STARCH PASTING PROPERTIES: Amylograph and RVA viscosities indicate suitability for batter-based products. Values are below last year and the five-year average, consistent with lower falling numbers.

DOUGH PROPERTIES: SW and Club show typical very weak to medium gluten strength and low water absorption. SW Alveograph L (extensibility) and P (strength) values are similar to last year and the five-year average. WC has a similar P value but a shorter L value, consistent with lower sedimentation and lactic acid SRC values.

SPONGE CAKE: SW has higher volumes and softer textures than last year and the five-year average. Club performance is near last year and the five-year average. Appropriate short-patent flour streams should improve performance.

COOKIE: SW and Club results are similar to last year and align with SRC values.

PAN BREAD: SW performance is similar to last year, with bake absorption in the normal range and specific loaf volume generally tracking with protein and absorption. Blends containing up to 20% SW should produce acceptable pan breads, especially when using higher-protein SW.

CHINESE SOUTHERN-TYPE STEAMED BREAD: SW and Club have slightly lower specific volumes and harder textures than last year. Lower-protein SW composites show cracking and a coarser crumb; high-protein SW performs better. Club has an open crumb, surface cracking and poor symmetry. Appropriate flour streams should improve performance.

HARVEST DATA

	2026					2025		5-Year	
	SW BY PROTEIN¹			SW	Club	SW	Club	SW	Club
	Low	Med	High	Avg	Avg	Avg	Avg	Avg	Avg
WHEAT GRADE DATA:									
Test Weight (lb/bu)	61.0	61.1	59.4	60.9	61.3	61.0	61.6	60.5	60.6
(kg/hl)	80.2	80.3	78.2	80.1	80.7	80.3	81.1	79.6	79.8
Damaged Kernels (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Foreign Material (%)	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0
Shrunken & Broken (%)	0.5	0.5	1.2	0.5	0.9	0.6	0.9	0.6	1.2
Total Defects (%)	0.6	0.5	1.2	0.6	1.0	0.6	0.9	0.7	1.2
Grade	1 SW	1 SW	2 SW	1 SW	1 WC	1 SW	1 WC	1 SW	1 WC
WHEAT NON-GRADE DATA:									
Dockage (%)	0.5	0.5	0.5	0.5	0.7	0.5	1.0	0.4	0.8
Moisture (%)	9.2	8.9	8.6	9.0	8.5	9.3	9.4	9.0	8.4
Protein (%) 12%/0% mb	8.2/9.3	9.6/10.9	11.9/13.5	9.1/10.3	9.7/11.0	10.0/11.4	9.8/11.1	10.2/11.5	10.3/11.6
Ash (%) 14%/0% mb	1.32/1.54	1.38/1.60	1.45/1.69	1.36/1.58	1.30/1.51	1.32/1.50	1.25/1.42	1.40/1.61	1.31/1.50
1000 Kernel Weight (g)	35.6	35.6	30.4	35.1	35.9	33.7	31.2	33.6	29.9
Kernel Size (%) lg/md/sm	88/12/00	84/16/00	66/31/03	79/20/01	73/27/00	83/17/00	72/28/00	82/18/01	70/30/00
Single Kernel: Hardness	17.0	21.1	19.4	18.9	25.3	22.5	23.7	24.4	28.3
Weight (mg)	38.0	38.2	33.5	37.7	33.7	33.2	32.7	36.4	33.9
Diameter (mm)	2.70	2.70	2.60	2.71	2.59	2.64	2.56	2.68	2.52
Sedimentation (cc)	12.7	11.8	18.6	12.8	7.8	13.8	8.3	14.4	9.8
Falling Number (sec)	269	308	341	290	314	317	330	335	338
FLOUR DATA:									
Lab Mill Extraction (%)²	73.8	73.2	70.8	73.2	74.3	71.6	75.7	70.8	72.9
Color: L*	92.9	93.3	93.4	93.1	93.2	92.7	92.7	93.0	93.1
a*	-2.4	-2.3	-2.1	-2.3	-2.2	-2.0	-1.9	-2.1	-2.0
b*	7.9	7.7	7.5	7.8	7.7	7.4	7.1	7.9	7.6
Protein (%) 14%/0% mb	6.6/7.7	7.9/9.2	10.1/11.7	7.5/8.8	8.3/9.7	8.3/9.7	7.9/9.2	8.9/10.4	8.9/10.4
Ash (%) 14%/0% mb	0.46/0.53	0.46/0.53	0.47/0.55	0.46/0.54	0.45/0.52	0.42/0.49	0.40/0.47	0.44/0.51	0.44/0.51
Wet Gluten (%) 14% mb	12.2	19.5	44.8	18.7	—	19.7	—	22.2	—
Falling Number (sec)	325	335	360	333	339	366	347	369	367
Amylograph Viscosity: 65g (BU)	425	402	633	434	563	552	475	552	519
RVA: Pasting Temp. (°C)/Peak Visc. (cP)	80.7/1675	81.6/1810	82.3/1943	81.2/1763	81.4/1955	75.0/2364	71.8/2194	79.0/2318	71.7/2290
Hot Paste Visc. (cP)/Final Visc. (cP)	1174/2145	1309/2315	1520/2570	1269/2264	1505/2541	1612/3021	1543/2883	1648/3073	1645/3033
Damaged Starch (%)	4.8	4.6	3.6	4.6	3.9	4.3	3.9	4.0	3.6
SRC: Water/50% Sucrose (%)	55/99	55/104	57/110	56/103	52/94	55/103	52/96	54/98	52/92
5% Lactic Acid/5% Na₂CO₃ (%)	88/74	89/73	100/76	90/74	69/70	95/74	72/76	97/70	72/68
Gluten Performance Index (GPI)	0.51	0.50	0.54	0.51	0.42	0.54	0.42	0.56	0.45
DOUGH PROPERTIES:									
Farinograph: Peak Time (min)	—	1.1	2.0	1.2	—	1.2	—	1.7	—
Stability (min)	—	2.1	2.6	2.1	—	1.7	—	2.3	—
Absorption (%)	—	51.1	52.1	51.3	—	51.0	—	51.3	—
Alveograph: P (mm)	34	37	37	36	23	38	24	38	25
L (mm)	88	83	138	90	52	99	101	84	63
P/L Ratio	0.39	0.45	0.27	0.40	0.44	0.38	0.24	0.49	0.46
W (10⁻⁴ J)	74	73	101	76	28	86	40	82	33
Extensograph (45 min): Resistance₅₀ (BU)	—	156	164	157	—	208	—	249	—
Resistance Max (BU)	—	176	217	183	—	241	—	—	—
Extensibility (cm)	—	16.7	20.7	17.4	—	17.8	—	18.1	—
Area (cm²)	—	45	67	49	—	65	—	55	—
R₅₀/E Ratio	—	0.9	0.8	0.9	—	1.2	—	—	—
BAKING EVALUATION:									
Sponge Cake: Volume (cc)	1170	1134	1093	1146	1102	1092	1107	1105	1104
Hardness (g)	251	267	300	263	263	336	287	—	—
Cookie: Diameter (cm)	8.0	8.0	8.1	8.0	8.2	8.1	8.4	8.4	8.5
Spread Factor (diameter/height)	8.8	8.2	8.4	8.5	9.8	8.7	9.7	9.2	10.2
Pan Bread: Bake Absorption (%)	54.5	56.1	57.2	55.5	—	55.9	—	55.9	—
Loaf Volume (cc)	634	650	726	650	—	698	—	657	—
Specific Volume (cc/g)	4.60	4.80	5.50	4.80	—	5.00	—	4.70	—
CHINESE SOUTHERN-TYPE STEAMED BREAD EVALUATION:									
Specific Volume (cc/g)	2.3	2.3	2.4	2.3	2.5	2.6	2.7	2.4	2.6
Hardness (g)	2193	1968	1997	2070	2014	1923	1802	—	—
% OF SAMPLES:	44	46	10	100	100				

¹ Protein Range: Low, <9.0%; Medium, 9.0 - 10.5%; High, >10.5%.

² The lab mill extraction calculation changed in 2023; values are not comparable to the 5-year average. See analysis methods.

³ The cookie methodology changed in 2023; values are not comparable to the 5-year average. See analysis methods.

SUBCLASSES

Under the Official United States Standards for Grain, soft white (SW) wheat is divided into the following three subclasses:

SOFT WHITE (SW)

- Contains not more than 10% of white club wheat.
- SW, *Triticum aestivum* (common wheat), also known as “Common Soft White,” has a white bran and soft endosperm. Soft white is often used for typical soft wheat applications and has low to medium-low gluten strength.

WHITE CLUB (WC, CLUB)

- Contains not more than 10% of other soft white wheats.
- *Triticum compactum* (white club wheat) has a white bran and very soft endosperm and is known as the softest class of U.S. wheat. Club wheat has very weak gluten and its use results in excellent cake quality (high ratio sponge cake). It is normally exported as a component of Western White but can also be purchased separately.

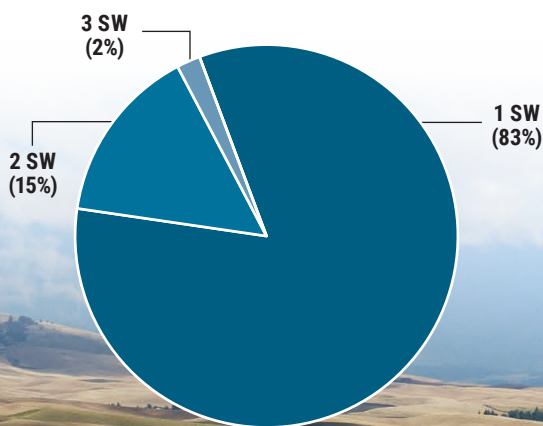
WESTERN WHITE (WW)

- Contains more than 10% of white club wheat and more than 10% of other soft white wheats.
- Some customers specify varying levels of the SW wheat and white club wheat blend to take advantage of club wheat’s weaker gluten characteristics for sponge cake and other confections. Western White is prized for its cake baking quality.

“In Douglas County, Washington, most growers are pleased with the crop this year. We experienced mostly favorable growing conditions, which resulted in average or slightly above-average yields. Most areas in Washington received timely rains that benefited the crop. Protein levels varied greatly by region, but overall soft white quality has been excellent.”

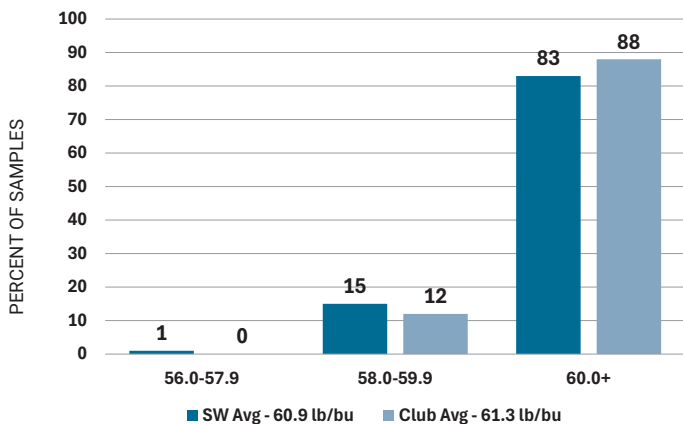
— Ben Adams, Washington
wheat farmer

DISTRIBUTION BY GRADE

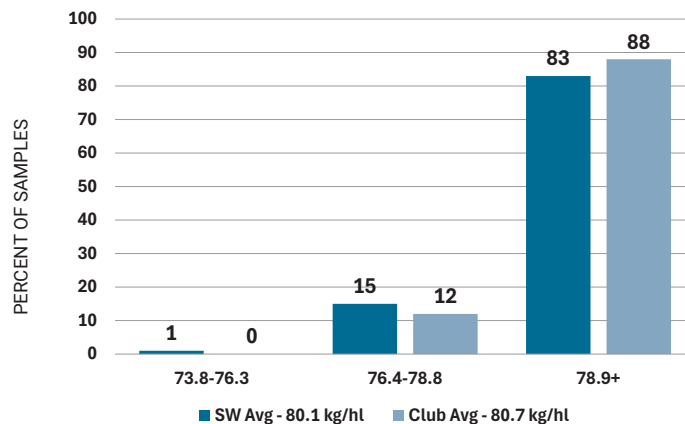


DISTRIBUTIONS

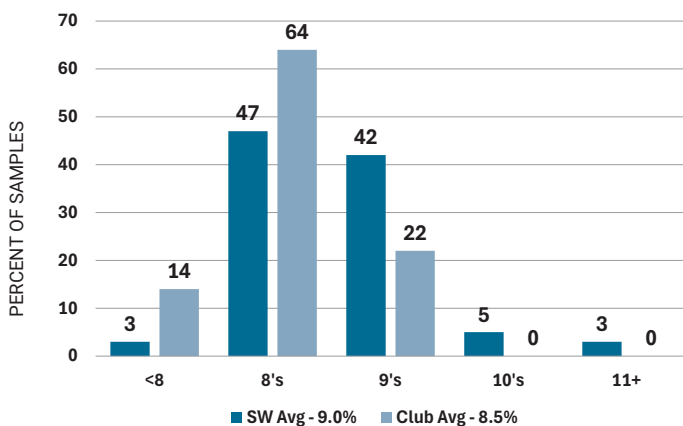
TEST WEIGHT | Pounds/Bushel



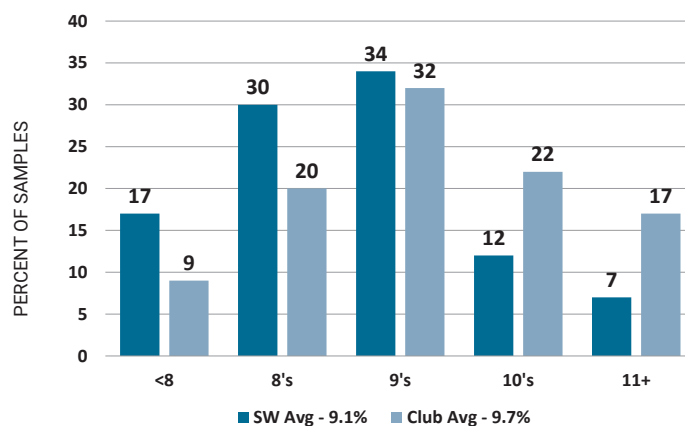
TEST WEIGHT | Kilograms/Hectoliter



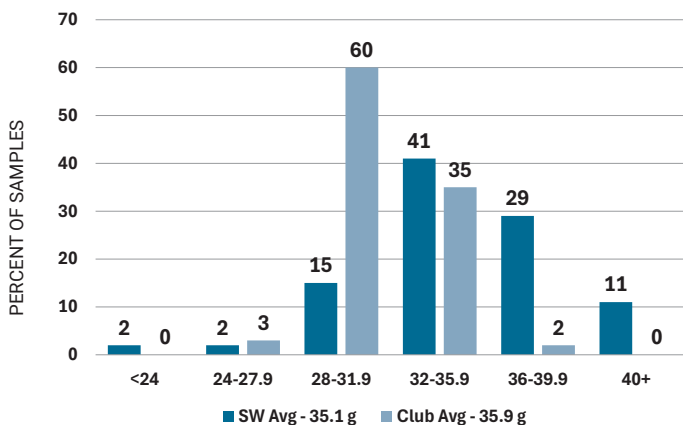
WHEAT MOISTURE | Percent



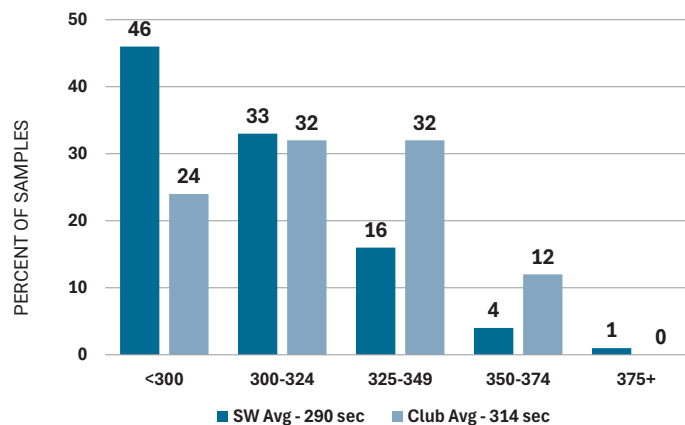
PROTEIN (12% MB) | Percent



THOUSAND KERNEL WEIGHT | Grams



FALLING NUMBER | Seconds



Note: Percentages may not total 100 due to rounding.

SOFT RED WINTER



Grown in the eastern third of the United States and shipped via Gulf, Atlantic and Great Lakes ports, soft red winter (SRW) wheat is the third largest class of wheat grown in the United States. SRW is a high-yielding wheat with low protein of 8.5 to 10.5% (12% mb), soft endosperm, red bran and weak gluten. It is used in pastries, cakes, cookies, crackers, pretzels, flat breads and for blending flours.

For the miller, SRW helps diversify the types of flour produced to improve the quality of many products. SRW blended with hard red spring (HRS) and hard red winter (HRW) wheat can lower grist cost and improve bread crumb texture or improve the quality and appearance of a wide variety of products.

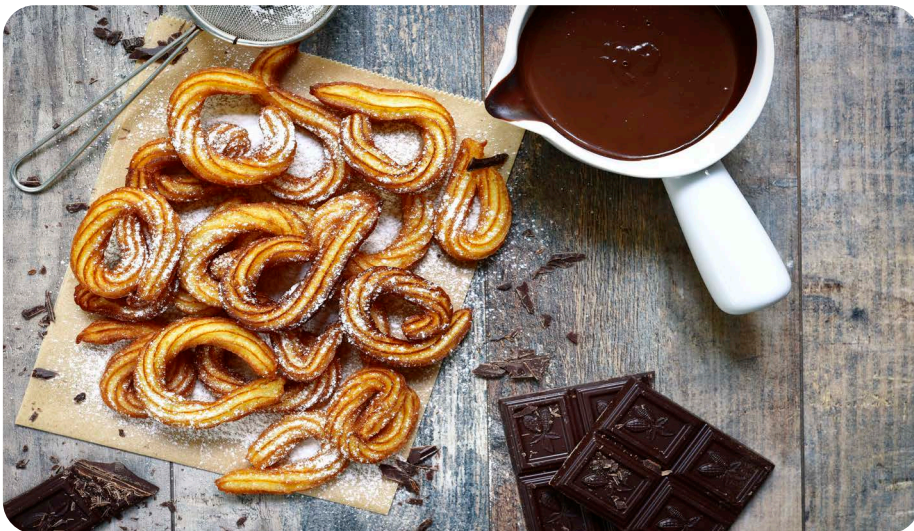
For the baker, the lower moisture content of the flour produced with SRW creates an advantage by increasing the added water volume while optimizing water absorption and product quality to the consumer.

APPLICATIONS

U.S. SRW wheat, commonly used for specialty products such as sponge cakes, cookies, crackers and other confectionary products, also adds value to the miller and baker as a blending wheat.

Applications include:

- Cookies
- Pastries
- Cakes
- Cereals or cereal bars
- Crackers
- Pretzels
- Snack foods
- Fried Spring Rolls
- Mooncake
- Baguettes
- Empanadas
- Flat breads
- Flours (cake, pastry, self-rising, wafer)
- Blending wheat to improve extensibility



Scan the QR code to access the USW Analysis Methods booklet.

SAMPLE COLLECTION AND ANALYSIS

Great Plains Analytical Laboratory (GPAL) in Kansas City, Missouri, collected the samples and conducted the quality analyses.

SAMPLE TESTING

Test weight, moisture, protein, 1000 kernel weight, wheat ash and falling number were determined for each sample, and DON was determined for a portion of the samples. The remaining tests were conducted on 18 composite samples. Results were weighted by estimated production for each reporting area and reported as Overall, East Coast-exportable and Gulf-exportable averages. An overview of the quality testing methods is provided in the USW Analysis Methods booklet.

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SAMPLES OF
SOFT RED WINTER

collected from elevators
in 18 reporting areas

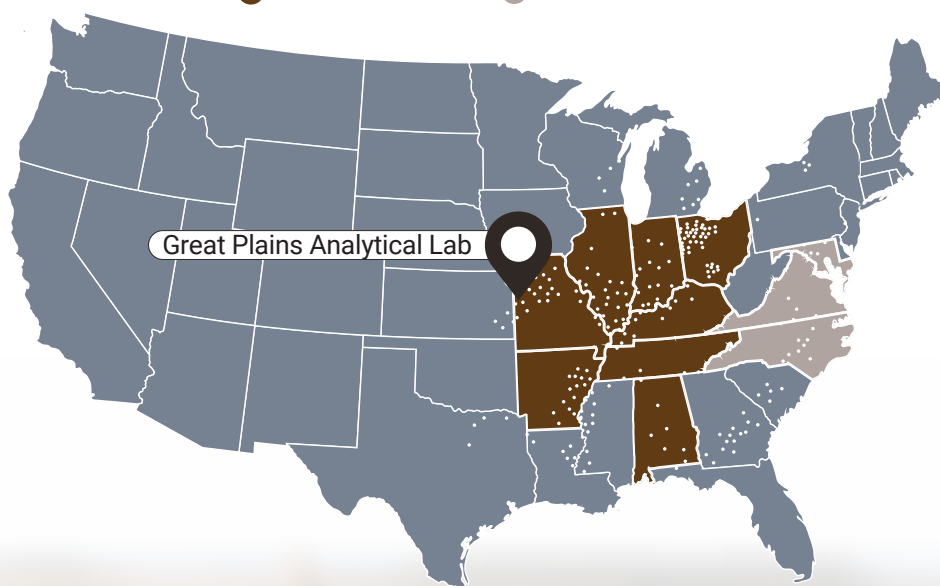
11

STATES SURVEYED

69%

OF TOTAL SRW
PRODUCTION
REPRESENTED

● GULF-EXPORTABLE ● EAST COAST-EXPORTABLE



HARVEST SURVEY

The SRW wheat crop is grown over a wide area of the eastern United States. Dry fall planting conditions were followed by frequent spring rainfall that improved crop development but raised concerns about disease pressure and harvest delays. Despite these challenges, major quality issues were generally localized, and the crop exhibits good milling characteristics. Processors will find a versatile crop with good qualities for cookies and crackers and value in blending applications. Isolated pockets of higher enzymatic activity, reflected in lower falling numbers, will naturally be directed into animal feed channels rather than milling supplies. Overall, buyers should find good quality in the 2026 SRW crop and are encouraged to review their specifications to ensure the wheat meets their needs for traditional soft wheat products or blending with stronger wheat.

WEATHER AND HARVEST

PLANTING: The 2026 SRW crop was planted beginning in September 2025 under mixed conditions. Dry weather and below-normal soil moisture affected much of the eastern SRW region, contributing to uneven emergence in some areas. USDA estimated the area seeded to SRW wheat for the 2026 harvest at 2.2 million hectares (5.4 million acres), down 12% from the previous year and 18% below the 2021-2025 average.

DEVELOPMENT: Winter and spring conditions improved as frequent rainfall replenished soil moisture and supported crop development across much of the region. Excessive precipitation in some areas increased disease concerns and delayed fieldwork. Localized freeze events later in the spring added to regional variability in crop performance.

HARVEST: Progress was uneven as periodic rainfall slowed activity during June and early July. Conditions improved later in the season under warmer, drier weather, allowing harvest to advance more rapidly. Weather-related quality concerns were generally localized.

PRODUCTION: The 2026 SRW crop is estimated at 8.0 MMT (294 million bushels), down 17% from last year's 9.6 MMT (353 million bushels). Reduced acreage was the primary factor limiting production, although generally favorable growing conditions supported crop development across much of the region.

CROP HIGHLIGHTS

GRADE: The overall crop and Gulf grade averages are U.S. No. 2 SRW. The East Coast graded U.S. No. 1 SRW.

TEST WEIGHT: Gulf region values are slightly higher and align with the five-year average. East Coast samples also improve and are slightly above average.

WHEAT PROTEIN: Both Gulf and East Coast values are higher this year, reflecting more typical Gulf growing conditions and drier conditions in the East Coast region.

WHEAT MOISTURE: Gulf region moisture is slightly higher due to periodic harvest rainfall. East Coast moisture is lower, reflecting drier conditions.

WHEAT FALLING NUMBER: Gulf region values are below last year and the five-year average, reflecting minor sprout damage from harvest delays. East Coast values are significantly higher due to drier harvest conditions.

VOMITOXIN (DON): Levels are lower across both regions. Much of the crop was past the vulnerable flowering stage when wetter conditions arrived, reducing DON potential.

STARCH PASTING PROPERTIES: Gulf values decrease in line with lower falling numbers, while East Coast samples improve due to lower amylase activity. Results indicate suitability for batter-based products.

SOLVENT RETENTION CAPACITY: Gulf profiles are generally consistent with the five-year average and traditional uses such as cookies, crackers and cakes. East Coast values are generally similar to last year and average, with higher sodium carbonate SRC consistent with greater starch damage and kernel hardness.

DOUGH PROPERTIES: Gulf values are consistent with last year and the five-year average. East Coast dough shows functional protein and more balanced rheology than last year. Alveograph results for both regions are generally stable and align with previous years, with slightly higher W values reflecting higher protein.

COOKIE: Gulf cookies remain similar to last year, with consistent spread and appearance. East Coast cookies have smaller diameters, consistent with higher protein and damaged starch. Composites with reduced falling numbers show a slightly darker color.

PAN BREAD: Gulf performance is better than last year and the five-year average, with greater volumes reflecting higher protein and improved Alveograph W. East Coast bread has greater absorption and loaf volumes, likely due to higher falling numbers and improved dough rheology.

SPONGE CAKE: Gulf and East Coast cakes have lower volumes and harder textures. Higher amylase activity affects Gulf quality, while higher protein and starch damage likely contribute in both regions.

HARVEST DATA

	TOTAL			GULF			EAST COAST		
	2026 Avg	2025 Avg	5-Year Avg	2026 Avg	2025 Avg	5-Year Avg	2026 Avg	2025 Avg	5-Year Avg
WHEAT GRADE DATA:									
Test Weight (lb/bu)	59.8	59.0	59.7	59.7	59.2	59.8	60.2	57.7	59.1
(kg/hl)	78.7	77.7	78.5	78.6	77.9	78.7	79.2	76.0	77.7
Damaged Kernels (%)	0.5	1.2	0.5	0.5	1.1	0.5	0.3	1.5	0.6
Foreign Material (%)	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.3	0.2
Shrunken & Broken (%)	0.6	0.9	0.6	0.6	0.9	0.6	0.7	1.0	0.6
Total Defects (%)	1.2	2.2	1.3	1.2	2.2	1.2	1.2	2.7	1.4
Grade	2 SRW	2 SRW	2 SRW	2 SRW	2 SRW	2 SRW	1 SRW	3 SRW	2 SRW
WHEAT NON-GRADE DATA:									
Dockage (%)	0.4	0.5	0.4	0.4	0.5	0.4	0.5	0.5	0.3
Moisture (%)	13.3	12.8	13.0	13.5	12.8	12.9	12.4	12.8	13.3
Protein (%) 12%/0% mb	9.8/11.1	9.3/10.5	9.5/10.7	9.6/10.9	9.1/10.4	9.4/10.6	10.7/12.1	10.2/11.6	9.8/11.1
Ash (%) 14%/0% mb	1.38/1.61	1.21/1.41	1.37/1.59	1.40/1.62	1.21/1.40	1.37/1.60	1.30/1.51	1.22/1.41	1.33/1.55
1000 Kernel Weight (g)	34.7	32.9	33.8	34.9	33.1	33.6	33.5	31.7	34.2
Kernel Size (%) lg/md/sm	88/11/00	87/13/01	87/12/01	89/11/00	87/12/01	87/12/01	83/16/01	84/15/01	86/13/01
Single Kernel: Hardness	27.0	23.3	24.1	26.2	23.7	24.1	32.3	20.2	23.7
Weight (mg)	35.3	33.2	34.0	35.5	33.5	34.0	34.2	30.9	33.9
Diameter (mm)	2.69	2.63	2.64	2.70	2.65	2.64	2.61	2.53	2.61
Sedimentation (cc)	13.9	13.2	12.1	13.5	12.7	11.9	16.3	16.7	13.3
Falling Number (sec)	304	301	312	302	308	316	313	262	293
DON (ppm)	0.4	1.1	0.7	0.4	1.1	0.8	0.1	1.1	0.5
FLOUR DATA:									
Lab Mill Extraction (%)	71.7	69.5	68.1	71.9	69.7	68.3	71.0	68.4	67.1
Color: L*	91.3	91.5	91.1	91.3	91.4	91.1	91.0	91.5	91.0
a*	-2.1	1.2	-1.5	-2.2	1.2	-1.6	-2.0	1.2	-1.5
b*	8.9	9.3	9.1	8.9	9.3	9.1	8.5	8.7	8.7
Protein (%) 14%/0% mb	8.2/9.5	7.6/8.8	7.6/8.8	8.1/9.4	7.4/8.6	7.5/8.8	8.8/10.2	8.4/9.7	7.9/9.2
Ash (%) 14%/0% mb	0.41/0.47	0.41/0.47	0.42/0.48	0.41/0.47	0.40/0.47	0.41/0.48	0.41/0.47	0.43/0.50	0.42/0.48
Wet Gluten (%) 14% mb	21.3	19.7	20.6	20.9	19.3	20.5	23.7	22.3	21.6
Falling Number (sec)	300	301	309	297	308	313	318	262	288
Amylograph Viscosity: 65g (BU)	417	438	552	407	462	578	483	279	430
RVA: Pasting Temp. (°C)/Peak Visc. (cP)	77.7/2094	80.2/2011	81.9/2231	77.2/2077	80.2/2059	82.1/2257	80.7/2210	80.3/1697	80.5/2063
Hot Paste Visc. (cP)/Final Visc. (cP)	1160/2196	1241/2258	1355/2452	1133/2158	1305/2363	1384/2500	1335/2449	823/1574	1165/2131
Damaged Starch (%)	3.7	3.4	3.8	3.7	3.3	3.8	3.7	3.6	3.8
SRC: Water/50% Sucrose (%)	52/91	54/96	52/90	51/90	53/94	52/90	55/98	55/105	52/93
5% Lactic Acid/5% Na ₂ CO ₃ (%)	96/76	108/72	103/71	95/76	106/72	102/71	106/75	121/75	109/71
Gluten Performance Index (GPI)	0.58	0.64	0.64	0.57	0.64	0.64	0.61	0.67	0.66
DOUGH PROPERTIES:									
Farinograph: Peak Time (min)	1.5	1.1	1.2	1.4	1.1	1.2	1.9	1.4	1.3
Stability (min)	2.1	1.4	1.7	2.0	1.4	1.6	2.9	1.7	1.7
Absorption (%)	53.2	53.0	52.3	53.0	52.9	52.3	54.3	53.5	52.5
Alveograph: P (mm)	46	45	42	46	45	42	47	42	42
L (mm)	82	75	73	80	71	72	94	102	84
P/L Ratio	0.56	0.59	0.57	0.57	0.63	0.59	0.50	0.41	0.50
W (10 ⁻⁴ J)	113	101	90	112	99	88	120	113	99
Extensograph (45 min): Resistance ₅₀ (BU)	216	204	201	221	197	198	185	254	216
Resistance Max (BU)	262	238	230	264	228	226	244	305	254
Extensibility (cm)	14.7	14.7	15.0	14.6	14.5	14.9	15.4	15.6	15.8
Area (cm ²)	56	52	52	57	49	51	55	68	59
R ₅₀ /E Ratio	1.49	1.40	1.35	1.51	1.36	1.34	1.33	1.69	1.41
BAKING EVALUATION:									
Cookie: Diameter (cm)	8.8	8.9	8.9	8.8	8.9	8.9	8.5	8.8	8.9
Spread Factor (diameter/height)	9.0	9.3	9.9	9.1	9.3	9.9	8.5	9.3	10.1
Pan Bread: Bake Absorption (%)	57.3	56.5	54.6	57.2	56.3	54.7	57.7	57.2	54.1
Loaf Volume (cc)	718	605	613	718	604	613	719	610	616
Specific Volume (cc/g)	4.74	4.00	—	4.74	3.99	—	4.76	4.06	—
Sponge Cake: Volume (cc)	1040	1154	1102	1041	1155	1102	1034	1147	1101
Hardness (g)	401	279	312	402	274	305	394	317	353
% OF SAMPLES:	100	100		25	22		75	78	

SOFT RED WINTER PRODUCTION

FOR THE MAJOR PRODUCING STATES (MMT)

	2026	2025	2024	2023	2022
Alabama	0.1	0.1	0.1	0.3	0.2
Arkansas	0.1	0.1	0.1	0.3	0.2
Georgia	0.1	0.1	0.1	0.1	0.2
Illinois	1.5	1.7	1.6	1.8	1.2
Indiana	0.5	0.6	0.6	0.8	0.5
Kentucky	0.6	0.7	0.8	1.1	0.8
Maryland	0.3	0.3	0.4	0.5	0.4
Michigan	0.7	0.8	0.6	0.9	0.6
Missouri	0.8	1.0	1.0	1.1	0.7
North Carolina	0.3	0.4	0.5	0.8	0.7
New York	0.2	0.2	0.2	0.2	0.2
Ohio	1.1	1.2	1.1	1.4	1.0
Pennsylvania	0.4	0.4	0.4	0.5	0.4
Tennessee	0.4	0.5	0.7	0.8	0.7
Virginia	0.1	0.1	0.2	0.3	0.3
Wisconsin	0.4	0.5	0.5	0.5	0.5
Surveyed-States Total*	5.7	6.9	7.0	9.3	6.6
East Coast-Exportable	0.7	0.9	1.0	1.5	1.3
Gulf-Exportable	5.0	6.0	5.9	7.8	5.3
Sixteen-State Total	7.6	8.9	8.7	11.4	8.5
Total SRW Production	8.0	9.6	9.3	12.2	9.1

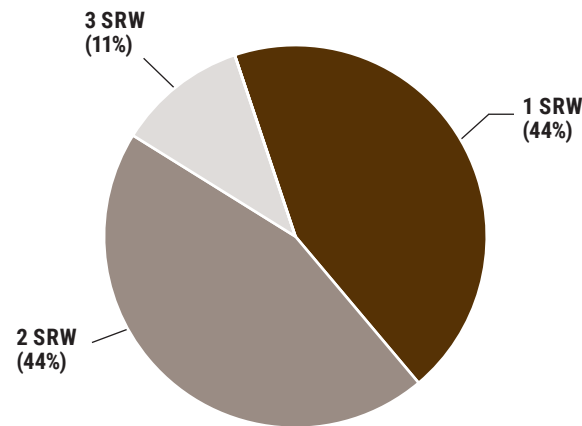
Based on USDA crop estimates as of September 30, 2026.

Non-zero values may display as 0.0 due to rounding.



DISTRIBUTION BY GRADE

(BASED ON 18 COMPOSITE SAMPLES)

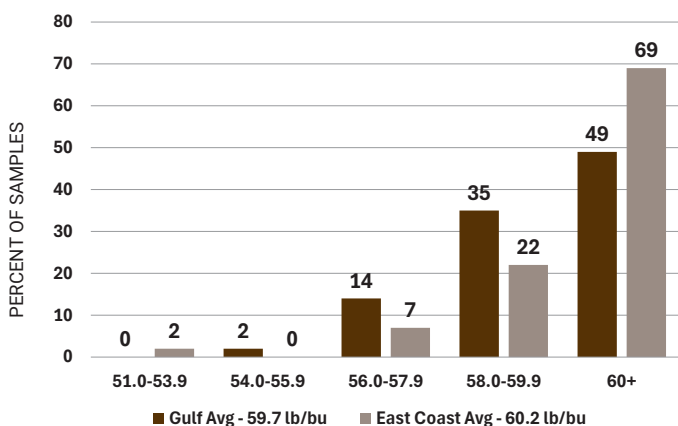


“I’m very pleased with Ohio’s 2026 soft red winter wheat harvest. On our farm, we saw yields in the 105- to 110-bushel range, along with solid quality. It was a strong crop and another good example of the quality and productivity Ohio wheat farmers can deliver.”

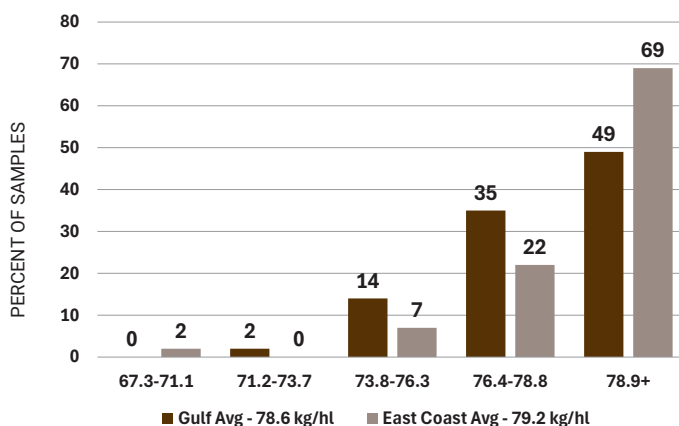
— Bill Schroeder, Ohio wheat farmer

DISTRIBUTIONS

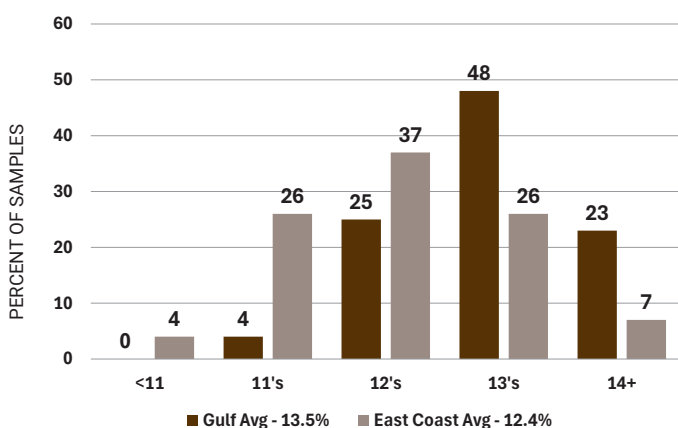
TEST WEIGHT | Pounds/Bushel



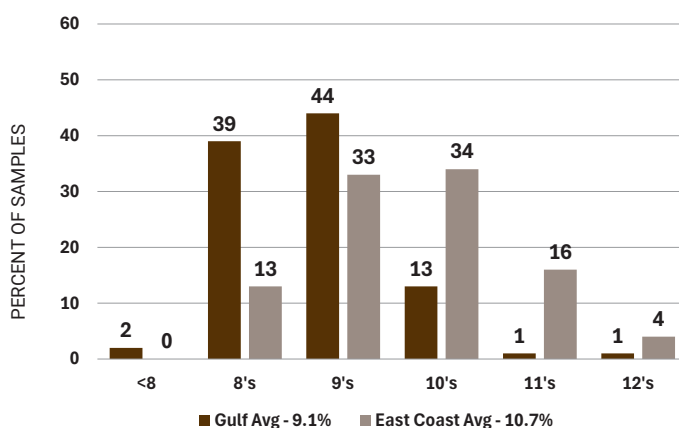
TEST WEIGHT | Kilograms/Hectoliter



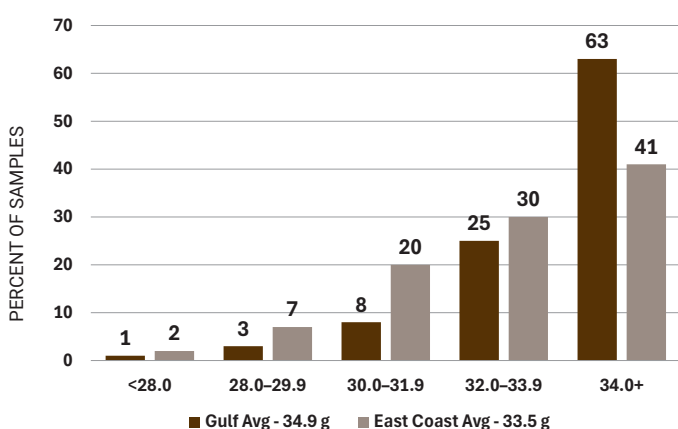
WHEAT MOISTURE | Percent



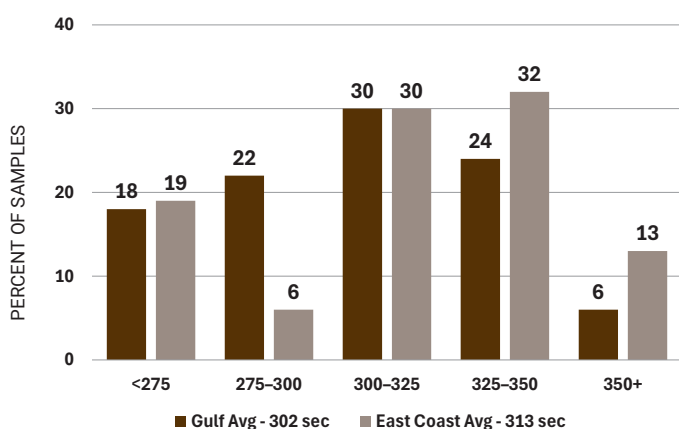
PROTEIN (12% MB) | Percent



THOUSAND KERNEL WEIGHT | Grams



FALLING NUMBER | Seconds



Note: Percentages may not total 100 due to rounding.

DURUM



Northern Durum is grown primarily in the North Central region and shipped via Gulf, Great Lakes and Pacific ports, while Desert Durum® is grown primarily under contract in the desert Southwest (Arizona and California) and shipped via the Gulf or West Coast. Durum is the fifth largest class of wheat grown in the United States and has a high protein content of 12.0 to 15.0% (12% mb), rich amber color, yellow endosperm, high gluten and white bran.

For the miller, durum is a large, very hard kernel with the potential for very high extraction of high quality, low ash semolina that is ideal for fine pasta. Desert Durum® is harvested and shipped at a very low moisture content, an advantage to millers that contributes to efficient transportation costs and high extraction rates.

For consumers of pasta, couscous and Mediterranean breads, durum helps deliver excellent color and texture.

APPLICATIONS

Hard Amber Durum (HAD) sets the "gold standard" for premium pasta products, couscous and some Mediterranean breads and cakes.

Applications include:

- Premium quality long and short goods pasta
- Blends (with HRS) for pizza doughs
- Durum semolina
- Couscous
- Mediterranean breads and cakes



Scan the QR code to access the USW Analysis Methods booklet.

SURVEY METHODOLOGY

NORTHERN DURUM SAMPLE COLLECTION AND ANALYSIS

The Durum Quality Lab at North Dakota State University in Fargo, North Dakota, conducted the quality analyses.

NORTHERN DURUM SAMPLE TESTING

Official grade, test weight, vitreous kernel content, 1000 kernel weight, protein and falling number were determined for approximately 60% of samples. The remaining tests were conducted on six composite samples categorized by growing region. The Northern Durum production area is highlighted on the map below. An overview of the quality testing methods is provided in the USW Analysis Methods booklet.

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SAMPLES OF
NORTHERN DURUM

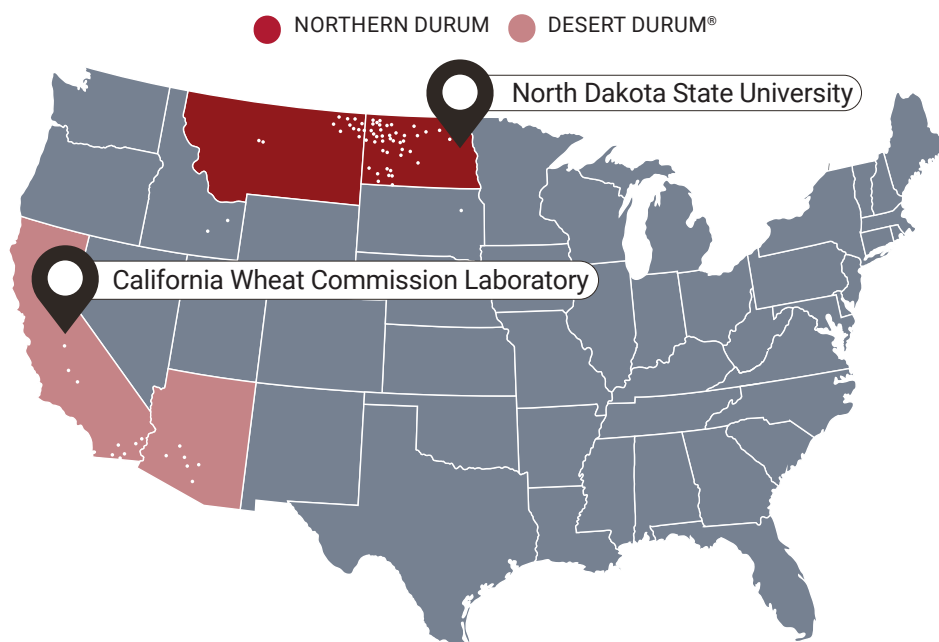
collected from fields, farm
bins and local elevators by
the National Agricultural
Statistics Service

4

STATES SURVEYED

99%

OF TOTAL DURUM
PRODUCTION REPRESENTED



6

SAMPLES OF
DESERT DURUM®

collected by a Federal Grain Inspection
Service (FGIS) licensed inspection agency or
submitted by handlers to a licensed agency

DESERT DURUM® SAMPLE COLLECTION AND ANALYSIS

The California Wheat Commission Laboratory conducted the quality analyses.

DESERT DURUM® SAMPLE TESTING

All tests were conducted on each sample, and production-weighted results are reported. The Desert Durum® production area is highlighted on the map above. An overview of the quality testing methods is provided in the USW Analysis Methods booklet.

DURUM PRODUCTION

FOR THE MAJOR PRODUCING STATES (MMT)

	2026	2025	2024	2023	2022
Arizona	0.1	0.2	0.2	0.1	0.3
California	0.0	0.0	0.1	0.1	0.1
Montana	0.7	0.7	0.5	0.6	0.5
North Dakota	0.9	1.4	1.4	0.9	0.8
Four-State Total	1.8	2.3	2.2	1.6	1.7
Northern Durum	1.6	2.1	1.9	1.4	1.4
Desert Durum®	0.2	0.2	0.2	0.2	0.4
Total Durum Production	1.8	2.3	2.2	1.6	1.7

Based on USDA crop estimates as of September 30, 2026.

Non-zero values may display as 0.0 due to rounding.

SUBCLASSES

Under the Official United States Standards for Grain, durum wheat is divided into the following three subclasses based on vitreous kernel content:

HARD AMBER DURUM (HAD)

- Contains at least 75% hard, vitreous kernels of amber color.

AMBER DURUM (AD)

- Contains between 60-74% hard, vitreous kernels of amber color.

DURUM (D)

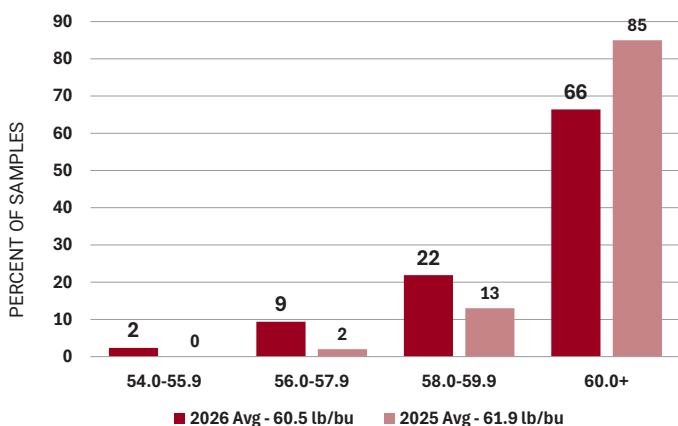
- Contains less than 60% hard, vitreous kernels of amber color.

“Variable growing conditions led to a wide range of yields in this year’s durum crop, with some producers pleasantly surprised by their yields and others reporting lower-than-average yields. The year started off dry, but many durum producers received timely precipitation early in the growing season that sustained the crop through harvest. Rain during harvest and other weather factors affected quality in some areas, but overall buyers should be able to source durum that meets their needs.”

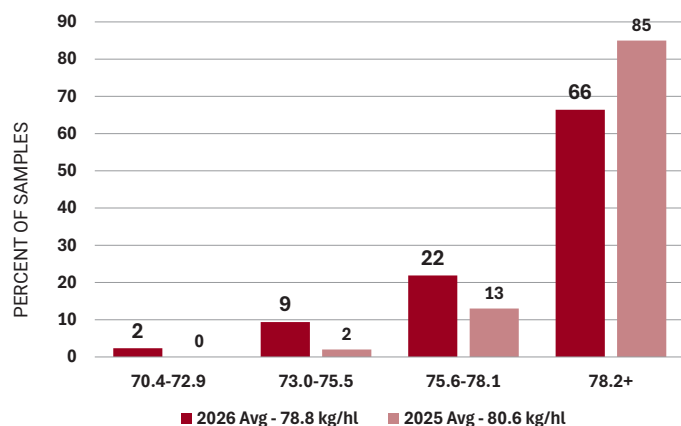
— Mark Birdsall, North Dakota wheat farmer

NORTHERN DURUM DISTRIBUTIONS

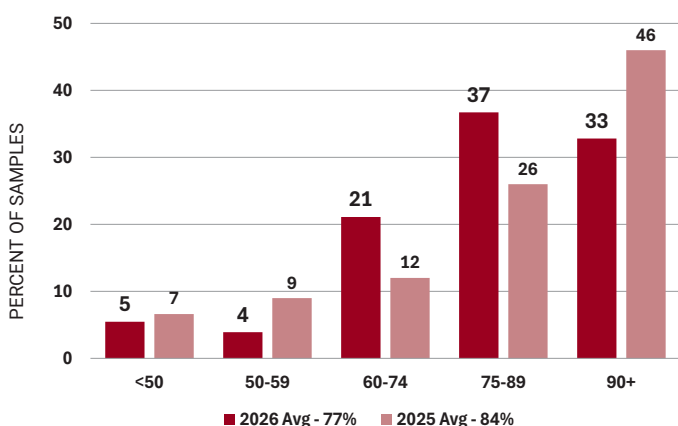
TEST WEIGHT | Pounds/Bushel



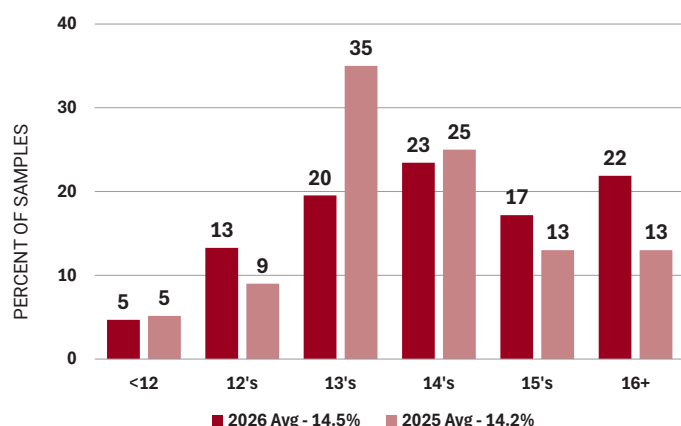
TEST WEIGHT | Kilograms/Hectoliter



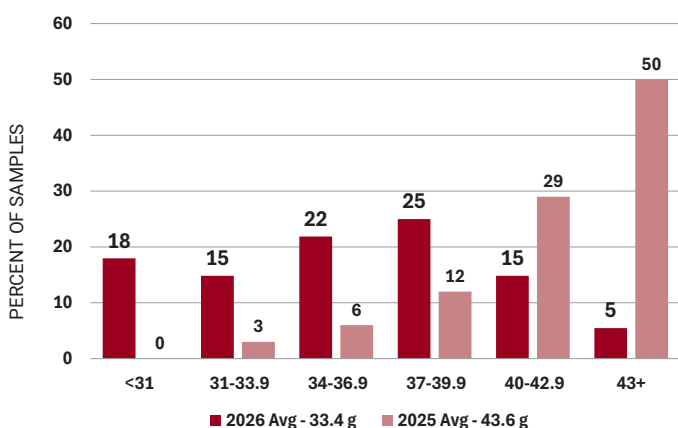
VITREOUS KERNELS | Percent



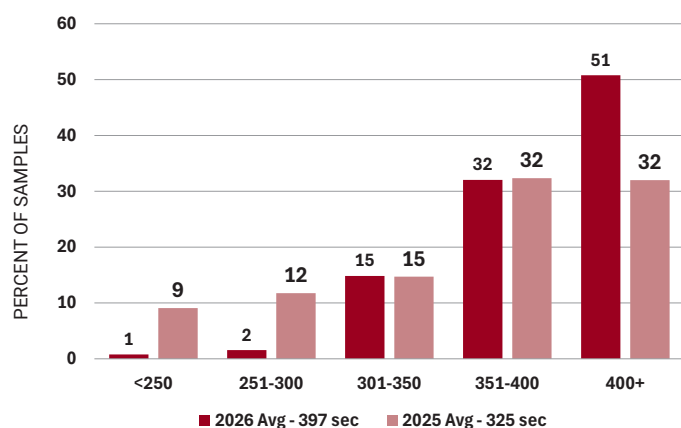
PROTEIN (12% MB) | Percent



THOUSAND KERNEL WEIGHT | Grams



FALLING NUMBER | Seconds



Note: Percentages may not total 100 due to rounding.

NORTHERN DURUM HARVEST SURVEY

The 2026 Northern Plains durum crop offers high protein, a U.S. No. 1 Hard Amber Durum average grade and improved falling number performance. Although test weight, vitreous kernel content and kernel size are lower than last year and the five-year average, the crop has low damaged kernels and DON levels. Semolina and spaghetti evaluations show strong gluten characteristics, improved yellow color, low cooking loss and excellent cooked firmness. Quality varies across several grading and kernel characteristics, so buyers should review distributions and use appropriate contract specifications to obtain the characteristics needed for pasta, couscous and other durum products.

WEATHER AND HARVEST

PLANTING: USDA estimated 2026 Northern Plains durum planted area at 0.7 million hectares (1.7 million acres), down 10% from the previous year. Planting began under generally dry soil conditions, with high winds and periodic rainfall causing some delays. Most acres were planted by the end of May, slightly ahead of average.

DEVELOPMENT: Crop development was uneven due to variable rainfall and stressful weather conditions across the region. Timely rainfall during planting and early growth supported the crop, but hot, dry weather later accelerated development and reduced yield potential in some areas. Disease pressure was elevated in limited eastern production areas following wet conditions in early July.

HARVEST: Harvest began ahead of average in early August as hot, dry weather accelerated maturity. Dry conditions supported early progress, but September rainfall caused delays and negatively affected quality in some areas. Harvest was largely complete by mid-September, although some fields remained into early October.

PRODUCTION: The 2026 U.S. Northern Durum crop is estimated at 1.6 MMT (58 million bushels), down 26% from the previous year. Despite challenging weather conditions, many producers reported better-than-expected yields. Average yields in Montana were higher than last year, while North Dakota yields were lower than the state's strong 2025 crop.

CROP HIGHLIGHTS

GRADE: The 2026 Northern Plains durum crop averages U.S. No. 1 Hard Amber Durum (HAD), with just under 40% of the crop reaching the top grade.

TEST WEIGHT: Average test weight is 60.5 lb/bu (78.8 kg/hl), lower than last year and the five-year average.

VITREOUS KERNELS: The average vitreous kernel content is 77%, lower than last year and the five-year average.

WHEAT PROTEIN: The average is 14.5% (12% mb),

slightly higher than last year and the five-year average.

1000 KERNEL WEIGHT: The average is notably lower than last year and the five-year average due to stressful growing conditions. The crop has a greater proportion of medium and small kernels than last year, which likely contributed to reduced semolina extraction.

WHEAT MOISTURE: The average of 11.7% is similar to last year and slightly higher than the five-year average.

WHEAT FALLING NUMBER: The average is substantially higher than last year and close to the five-year average. More than 80% of samples exceed 350 seconds and only a small proportion fall below 300 seconds, indicating a generally sound crop.

VOMITOXIN (DON): The average is 0.2 ppm, below last year and equal to the five-year average.

LABORATORY MILLING: Semolina extraction is lower than last year and the five-year average, likely reflecting the crop's smaller kernel size. Samples were milled on a Quadrumat Junior mill; laboratory milling is not indicative of commercial milling performance.

SEMOLINA PROTEIN: The average is similar to last year and slightly below the five-year average.

SEMOLINA ASH: The average is higher than last year and the five-year average.

SPECKS: The average is lower than last year and slightly below the five-year average.

SEMOLINA COLOR: The average b* value, a measure of yellow color, is higher than last year and the five-year average. A higher L* value also indicates brighter semolina.

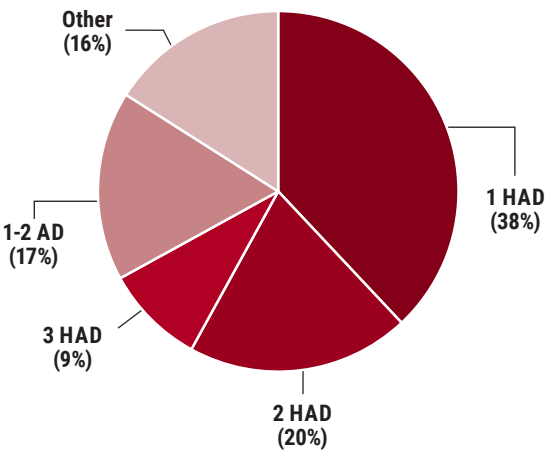
GLUTEN PROPERTIES: Wet gluten is lower than last year and the five-year average, while the gluten index is substantially higher, indicating strong gluten quality. Sedimentation values are also higher than last year and the five-year average, and overall dough strength is slightly stronger than last year.

SPAGHETTI EVALUATION: Spaghetti has improved yellow color, lower cooking loss and greater cooked firmness than last year and the five-year average. Cooked weight is lower, but firmness is strong.

NORTHERN DURUM HARVEST DATA

	2026 Avg	2025 Avg	5-Year Avg
WHEAT GRADE DATA:			
Test Weight (lb/bu)	60.5	61.9	61.3
(kg/hl)	78.8	80.6	79.8
Damaged Kernels (%)	0.5	1.8	0.6
Foreign Material (%)	0.1	0.0	0.0
Shrunken & Broken (%)	0.9	0.5	0.8
Total Defects (%)	1.5	2.3	1.4
Vitreous kernels (%)	77	84	85
Grade	1 HAD	1 HAD	1 HAD
WHEAT NON-GRADE DATA:			
Dockage (%)	1.5	0.6	0.8
Moisture (%)	11.7	11.6	11.4
Protein (%) 12%/0% mb	14.5/16.5	14.2/16.2	14.4/16.4
Ash (%) 14%/0% mb	1.60/1.86	1.55/1.80	1.58/1.84
1000 Kernel Weight (g)	33.4	43.6	40.3
Kernel Size (%) lg/md/sm	36/57/07	64/34/02	48/48/04
Falling Number (sec)	397	325	409
Sedimentation (cc)	86	80	76
DON (ppm)	0.2	0.6	0.2
SEMOLINA DATA:			
Semolina Extraction (%)	54.0	58.8	56.0
Color: L *	81.5	80.9	82.4
a *	-3.4	-3.0	-2.7
b *	30.5	28.7	30.0
Protein (%) 14%/0% mb	12.4/14.4	12.3/14.3	12.6/14.7
Ash (%) 14%/0% mb	0.70/0.81	0.61/0.71	0.64/0.74
Specks (no/10 in ²)	25	33	27
Wet Gluten (%) 14% mb	30.9	34.5	33.8
Gluten Index (%)	92	82	83
SPAGHETTI EVALUATION:			
Color: L *	58.6	57.7	59.6
a *	4.4	4.6	3.8
b *	45.9	40.1	42.9
Cooked Weight (g)	29.7	32.1	31.2
Cooking Loss (%)	6.1	6.9	7.2
Cooked Firmness (g cm)	9.5	8.4	5.7
SAMPLE COUNT:	242	252	238

NORTHERN DURUM GRADE DISTRIBUTION



DESERT DURUM® HARVEST SURVEY

Desert Durum® is a registered certification mark of the Arizona Grain Research and Promotion Council and the California Wheat Commission, which authorizes its use only to designate durum grown under irrigation in the desert valleys and lowlands of Arizona and California.

Desert Durum® can be produced and delivered “identity preserved” to domestic and export markets, allowing customers to purchase grain with quality traits specific to their processing needs. Annual requirements can be pre-contracted with grain merchandisers ahead of the fall-winter planting season for harvest from late May through early July. Varietal identity is maintained by experienced growers who plant certified seed and by merchandisers who store and ship according to customers’ preferred delivery schedules.

CROP HIGHLIGHTS

Desert Durum® exhibits consistently large kernels and low moisture, traits that contribute to efficient transportation costs and high extraction rates. The 2026 crop will deliver the valuable milling, semolina and pasta quality traits that customers have learned to expect and appreciate. Desert Durum® production is estimated at 0.2 MMT (7 million bushels).

GRADE: The overall sample average for the 2026 Desert Durum® harvest survey is U.S. No. 1 Hard Amber Durum (HAD).

TEST WEIGHT: The average is 63.3 lb/bu, slightly higher than last year and comparable to the five-year average, reflecting high test weights typical of Desert Durum®.

KERNEL VITREOUSNESS: The average hard vitreous amber color (HVAC) content is comparable to both last year and the five-year average, reflecting the high HVAC content typical of Desert Durum®.

WHEAT MOISTURE: The average is comparable to last year and the five-year average, reflecting the low moisture content typical of Desert Durum®. More water can be added to the grain before milling, providing additional value to millers.

WHEAT PROTEIN: The average is higher than last year and the five-year average, reflecting the high protein content typical of Desert Durum®.

1000 KERNEL WEIGHT: The average is slightly lower than last year and the five-year average, but still characteristic of the large kernels typical of Desert Durum®.

WHEAT FALLING NUMBER: The average is 474 seconds, lower than last year and the five-year average.

SEMOLINA ASH: The average is comparable to last year and the five-year average.

WET GLUTEN: The average is slightly higher than last year and the five-year average.

GLUTEN INDEX: The average is slightly lower than last year and the five-year average.

SEMOLINA COLOR: The average b* value, a measure of yellow color, is slightly lower than last year and the five-year average and indicates a bright yellow semolina color.

SPAGHETTI EVALUATION: Cooked firmness averages slightly higher than last year and the five-year average, indicating good cooking tolerance and eating quality.

“Arizona’s 2026 Desert Durum® crop had its challenges, with the heat in March making for a tougher growing season and yields coming in lower than we would have liked. We were pleased with the quality, though, and that’s something we can be proud of. You take what the year gives you and keep moving forward.”

— Richard Heiden, Arizona wheat farmer

DESERT DURUM® HARVEST DATA

	2026 Avg	2025 Avg	5-Year Avg
WHEAT GRADE DATA:			
Test Weight (lb/bu)	63.3	62.5	63.3
(kg/hl)	82.4	81.4	82.5
Damaged Kernels (%)	0.5	0.0	0.1
Foreign Material (%)	0.0	0.1	0.1
Shrunken & Broken (%)	0.5	0.5	0.4
Total Defects (%)	1.0	0.6	0.6
Vitreous kernels (%)	98	97	98
Grade	1 HAD	1 HAD	1 HAD
WHEAT NON-GRADE DATA:			
Dockage (%)	0.3	0.5	0.3
Moisture (%)	7.5	7.2	7.3
Protein (%) 12%/0% mb	14.5/17.3	13.8/16.6	13.6/15.9
Ash (%) 14%/0% mb	1.74/2.02	1.70/1.97	1.64/1.91
1000 Kernel Weight (g)	47.0	48.2	49.6
Kernel Size (%) lg/md/sm	95/04/00	94/05/00	94/06/00
Falling Number (sec)	474	772	648
Sedimentation (cc)	65	70	65
DON (ppm)	—	—	—
SEMOLINA DATA:			
Lab Mill Extraction (%)	81.3	80.7	79.9
Semolina Extraction (%)	69.1	68.9	71.9
Color: L*	86.5	86.2	86.1
a*	-4.1	-4.0	-4.0
b*	30.1	31.6	32.0
Protein (%) 14%/0% mb	13.2/15.4	12.7/14.7	12.7/14.9
Ash (%) 14%/0% mb	0.80/0.94	0.80/0.93	0.80/0.92
Specks (no/10 in ²)	21	20	22
Wet Gluten (%) 14% mb	36.7	34.8	34.3
Gluten Index (%)	66	73	71
SPAGHETTI EVALUATION:			
Color: L*	57.3	56.7	56.4
a*	-0.4	-0.1	-0.1
b*	43.3	43.7	43.9
Cooked Weight (g)	29.3	29.4	29.7
Cooking Loss (%)	6.0	5.5	5.9
Cooked Firmness (g cm)	7.9	7.4	7.2
SAMPLE COUNT:	6	22	15



DEPENDABLE PEOPLE. RELIABLE WHEAT.

The U.S. farm families who produce the wheat and the industry that supplies it remain committed to operating a transparent and open market. Here are some of the reasons why our overseas customers know they can depend on the integrity of our supply chain, the quality of U.S. wheat and our unmatched reliability as a supplier.

THE U.S. WHEAT “STORE” IS ALWAYS OPEN.

U.S. farmers overcome significant risk every year to meet domestic wheat demand and still provide half their crop for export markets. Farmers and commercial warehouses can store and efficiently transport wheat in top condition to meet overseas demand when needed and throughout the marketing year.

PRICES ARE TRANSPARENT AND HONORED.

U.S. wheat export prices are discovered openly through futures exchanges and basis costs and are always available to customers. Private exporters use risk management tools to honor sales contract prices often made months in advance of vessel loading.



QUALITY IS ASSURED.

USW publishes weekly reports during harvest that summarize initial wheat quality findings. USW works with several organizations and laboratories to analyze hundreds of wheat samples for all six U.S. wheat classes and publishes all results in the annual Crop Quality Report. Our staff, farmers and industry experts then travel the world to present the results to our customers and end users. U.S. country elevators and export elevators inspect and test wheat as it arrives and segregate each class by quality to meet customer requirements. The USDA's Federal Grain Inspection Service (FGIS) independently inspects wheat at vessel loading to certify that the quality loaded matches the customer's specifications.

EXPORT LOGISTICS DEEMED ESSENTIAL.

During the COVID-19 outbreak, all farmers and food distribution industries were deemed essential. Export grain systems and FGIS inspections continued operating with little or no interruption.

DIRECT GOVERNMENT EXPORT INTERVENTION IS BANNED.

Several U.S. federal laws protect the sanctity of all export contracts. The only exception is a declared national emergency.

BUYERS RECEIVE UNMATCHED TRADE SERVICING AND TECHNICAL SUPPORT.

With funding from U.S. wheat farm families and USDA's Foreign Agricultural Service, experienced USW staff and consultants add exceptional value to all U.S. wheat class imports.

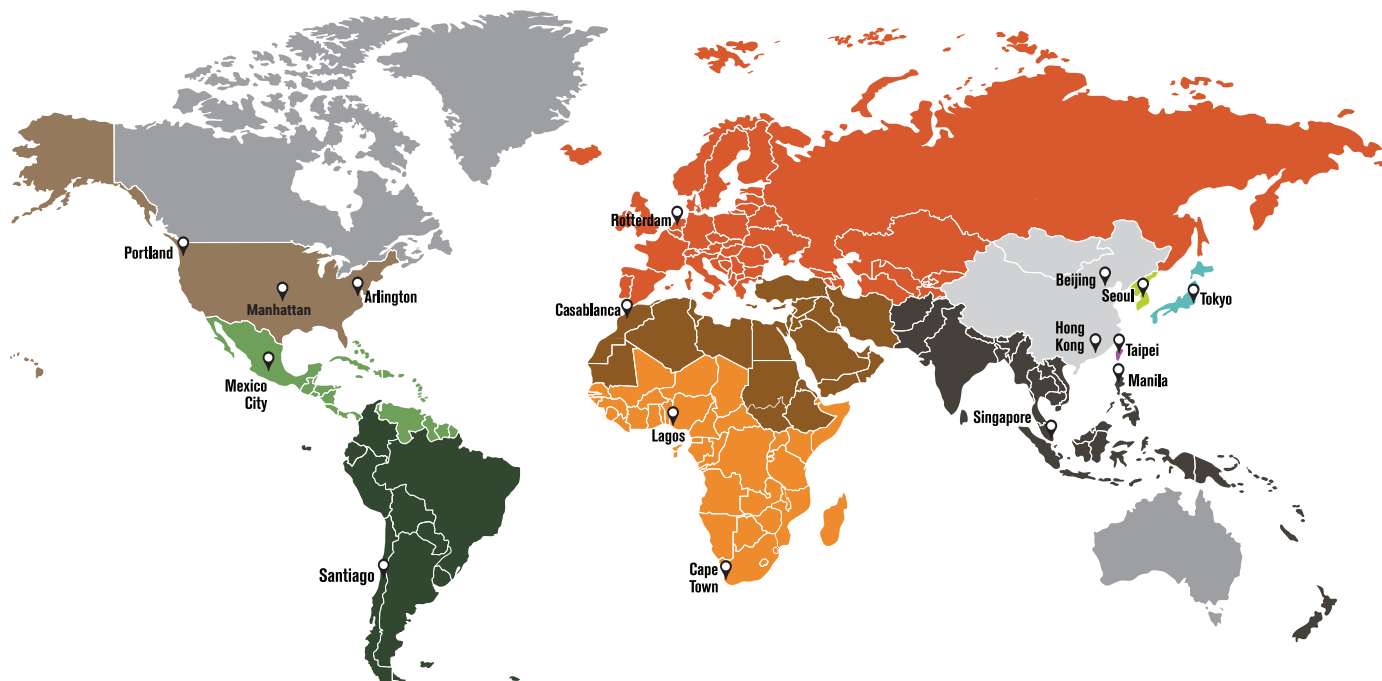
FOSTERING TRADE.

USW invests substantial funding from farmers and federal programs to help overcome trade or technical barriers that would otherwise keep end-users from realizing the highest value and most revenue from using U.S. wheat.





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U.S. Wheat Associates (USW) is the industry's market development organization working in more than 100 countries. Its mission is to "develop, maintain and expand international markets to enhance wheat's profitability for U.S. wheat producers and its value for their customers." USW activities are funded by producer checkoff dollars managed by 17 state wheat commissions and USDA Foreign Agricultural Service cost-share programs. For more information, visit www.uswheat.org or contact your state wheat commission.

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