

Wheat Market Outlook and Price Report: September 6, 2022 By Marlene Boersch/ A.P. Temple/ Michael Wilton Mercantile Consulting Venture Inc.

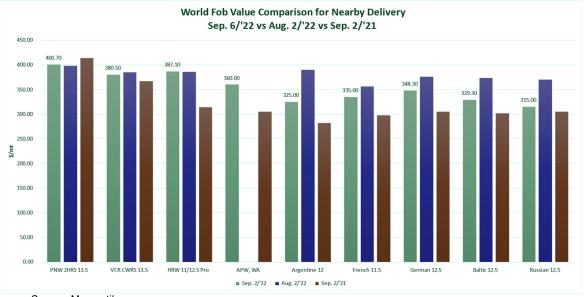
i) Background and Rationale for the Report

The following wheat market outlook and price report will be published on a weekly basis on the Sask Wheat Website. The report provides producers with an overview of world wheat markets, a market forecast, and benchmark prices at both the primary elevator and export positions (FOB Vancouver or elsewhere).

The report is made up of several sections. Following this section, a World Wheat overview is provided, which includes a summary of wheat market fundamentals, world production and trade, and a wheat market outlook. This is followed by several price tables, which include primary elevator bids at various Saskatchewan locations (Table 1), grain spreads (Table 2), and FOB port prices and basis (as measured by subtracting the primary elevator price (Rosetown) from the relevant port location price for individual crops) (Table 3). Table 3 is preceded by a description of the various assumptions, definitions and methodology used in arriving at the FOB port prices and in the export basis calculation.

ii) Wheat Market Outlook September 6, 2022

World FOB Value Comparison:



Source: Mercantile

- Global wheat values were mixed last month.
- Wheat values in North America were relatively unchanged ranging from \$4.60/mt lower in Vancouver for 13.5 pro wheat to \$2.80/mt higher for 13.5 pro wheat in the PNW. While there has been some recent harvest pressure in Canada, North American farmers have overall been holding onto their wheat in expectation of better prices.
- The situation is different in Europe. A very large Russian wheat crop is hitting the market and undercutting prices in the EU. Russian 12.5 pro wheat is worth \$315.00/mt on a FOB basis (down \$55.00/mt from last month), compared to French 11.5 pro wheat at \$334.40/mt. Even with high



freight and insurance, Russia's 120k mt sale to Egypt last week at \$340.00 mt, cost and freight, was lower than some French FOB prices.

Developments in Wheat Demand:

There was some new buying last week as cheap Russian new crop wheat hit the market.

Global wheat production and trade:

There is a lot of competition in the wheat markets as wheat is produced around the world. Below is a brief synopsis on last week's market events in the major wheat origins.

Futures:

- December 2022 contract Chicago winter wheat closed at 811-0, up 16-6 cents on Friday, up 5-6 cents on the week.
- December 2022 contract Kansas hard red winter wheat closed at 877-6, up 9-6 cents in Friday's trade, down 4-4 cents on the week.
- December 2022 Minneapolis hard red spring wheat closed at 890-0, up 3-4 cents on Friday, down 19-4 cents on the week.
- Wheat futures this Tuesday morning are trading 3-7 cents higher.



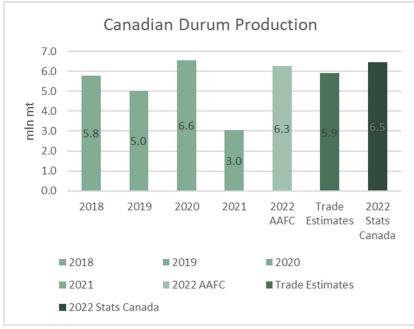
Canadian Wheat

- Harvest in Manitoba is 2% complete and 16% done in Saskatchewan. Yields in most areas seem to be average to slightly above average.
- Stats Canada put Canadian spring wheat (excluding durum) production at 25.6 million mt, 160k mt more than what analysts were expecting and 57% more than last year. Spring wheat yield was put at 52.7 bushels per acre. Current yields suggest that production could be slightly higher than Stats Canada's number.
- Canadian spring wheat exports for week four were 265.6k mt for a season total of 928.3k mt, down 33% from last year given the late harvest. Deliveries of 320.4k mt were strong as the first wave of new crop enters the elevator system.
- The Ag Transport Coalition says that CN and CP supplied 94% of the ordered hopper cars in shipping week three, and 95% of the ordered hopper cars in week four.



(CGC) Grain Handling Sumn	nary Wheat		Week 4	(August 28 '22)
('000 mt)	Producer Deliveries	Terminal Receipts	Bulk Exports	Domestic Disappearance
Week 4	320.4	255.3	265.6	127.9
Week ago	191.4	253.7	129.6	43.6
YTD	803.0	1,240.9	928.3	351.4
Last YTD	1,128.4	1,726.5	1,392.4	375.9
YTD less Last YTD	-325.4	-485.6	-464.1	-24.5
YTD over Last YTD	71%	72%	67%	93%

- **Durum** harvest is 51% complete in Saskatchewan. Yields have been variable with reports anywhere from "very strong" to "poor".
- Stats Canada is estimating that Canadian durum production will be 6.5 million mt. This is likely upwards of 500k mt too high.

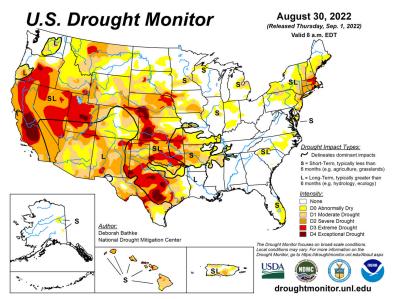


Source: Stats Canada, AAFC, Mercantile



US Wheat:

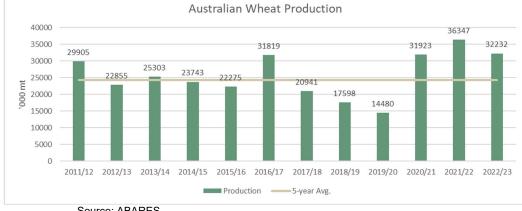
- Spring wheat harvest in the US is 50% complete, up 7% from last week. Thirty-four percent of the crop has been harvested in North Dakota. Yields have been strong. The USDA is likely underestimating the US spring wheat crop by upwards of 25-30 million bushels. HRS production will likely be ~540 million bushels rather than the USDA's current 512 million bushel number.
- For the US durum crop, harvest in North Dakota is 31% complete while Montana's durum crop is • 61% harvested.
- The US Plains saw some moisture ahead of planting season, but conditions in the winter wheat • belt remain dry overall.



US HRS for October 2022 was valued at \$400.70/ mt FOB PNW (up \$1.20/mt from last week), FOB Gulf HRW 11/12.5 pro is valued at \$387.10/mt (down \$0.0/mt from last week).

Australian wheat:

Australia's crop continues to look good. In their September report, Australia's Department of • Agriculture (ABARES) put wheat production for the country at 32.2 million mt. Although this is an 11% decrease from last year, this is still the second largest production number on record.



Source: ABARES



Argentine wheat:

- Buenos Aires Grain Exchange (BAGE) lowered the condition of Argentina's wheat crop by an additional 1% to 17% Gd/Ex. Poor/very poor ratings rose 4% over the week to 24%. Forty percent of the total wheat area has poor soil moisture. The country will remain dry as the crop enters the heading stage.
- Brazil has been importing less wheat as rising prices are impacting demand for flour-based products. Wheat imports through July of 3.7 million mt are the lowest since 2017.

China wheat:

• Rain in China has helped alleviate the 70-day long heatwave that has been ravishing the Yangtze River basin. The damage to the crops in the region is irreversible, but this area is more important for rice, peanut, and rapeseed crops.

EU wheat:

- Wheat in the EU is struggling against very cheap Black Sea wheat. EU prices managed to end the week higher, but most of this was from a deteriorating euro which is falling to 20-year lows.
- FOB prices in the EU: October 2022 French 11.5 pro wheat closed at \$335.00/mt (*up* \$5.00/mt from last week); October 2022 German 12.5 pro wheat closed at \$348.30/mt (*up* \$2.10/mt from last week).

Black Sea wheat:

- Russian wheat exports are expected to grow as their new crop begins to reach the market at a steep discount to EU prices.
- Russia's crop looks like it will be pushing up against 100 million mt, but shipping capacity will put a ceiling on exports. Analysts think the country will export 4.0 million mt in September, up 500k mt from their August amount. September shipments of 4.0 million mt would still be lower than last year as the country competes with exports from Ukraine and Europe and trade from the country has been impacted by sanctions.
- Limited planting of Ukraine's next winter wheat crop is already gaining some attention. The
 Ukrainian Agribusiness Club estimates that seeded wheat area in 2023 will be one-third of the
 2022 area, causing total production to fall to ~15 million mt. The decline in wheat area is due to
 a combination of factors: a significant portion (35-40%) of Ukraine's winter wheat area is under
 Russian control, farmers have limited cash for inputs, and domestic prices are below the cost of
 production thanks to heavily constrained logistics. Ukrainian farmers would normally be planting
 now.
- FOB prices in the Black Sea: October 2022 Russian 12.5 pro closed at \$315.00/mt (*down* \$5.00/mt from last week).

Significant purchases/ trades:

- **Egypt** bought 120k mt of Russian wheat on credit at \$340.00 CIF (cost, insurance, and freight)
- Algeria is reported to have bought 105,000 mt of Russian wheat
- **Iraq** bought 100k mt of US HRW at \$494.00 Liner Out. This could have most certainly been bought cheaper from Europe.
- Korea tenders today (Tuesday) for 70k mt of feed wheat.
- There was no **US** weekly sales report. The next report will not be released until the 15th. The strong US dollar will likely keep US sales at a minimum.



> Wheat Market Outlook:

Significant events over the past week:

- Australia's Australian Bureau of Agricultural and Resource Economics (ABARES) is expecting a 32.2 million mt winter crop, which is the fourth highest on record.
- Moscow announced that it will not restart the Nord Stream 1 pipeline to Europe until sanctions are lifted. The announcement caused natural gas prices in Europe to shoot higher. High energy costs shutting down fertilizer plants in Europe will have implications that the market has not delt with yet.
- The Kazakhstan government will lift the restrictions on wheat and flour exports it set in May to lower domestic prices. Kazakhstan is expected to produce 13.0 million mt of wheat this season (vs 11.8 million mt last year).

Outlook:

Wheat remains supported, but poor macroeconomics, harvest pressure, and cheap Black Sea supplies will push against the market. There are concerns about next year's crop: many winter wheat areas (US, EU) are dry ahead of planting and fertilizer is expensive. Ukraine will plant at least 20% less winter wheat this fall.

If you already have some sales on the books and have cash flow for this fall, you may want to wait to sell more, for now.



iii) Primary Elevator Price Tables and Grade Spreads

	Date:			06/09/2022		
NW Sask	Sp	Spot		Deferred		
	(bu.)	(mt)	NW Sask	Nov '22 (bu.)	Nov '22 (mt.)	
1 CWRS 13.5	\$10.48	\$385.08	1 CWRS 13.5	\$10.55	\$387.65	
1 CWAD 13.0	\$10.82	\$397.57	1 CWAD 13.0	\$10.90	\$400.51	
1 CPSR 11.5	\$9.78	\$359.36	1 CPSR 11.5	\$9.82	\$360.83	
SW Sask			SW Sask			
1 CWRS 13.5	\$10.32	\$379.20	1 CWRS 13.5	\$10.41	\$382.51	
1 CWAD 13.0	\$10.79	\$396.47	1 CWAD 13.0	\$10.86	\$399.04	
1 CPSR 11.5	\$9.68	\$355.68	1 CPSR 11.5	\$9.76	\$358.62	
NE Sask			NE Sask			
1 CWRS 13.5	\$10.16	\$373.32	1 CWRS 13.5	\$10.26	\$376.99	
1 CWAD 13.0	\$10.62	\$390.22	1 CWAD 13.0	\$10.71	\$393.53	
1 CPSR 11.5	n/a	n/a	1 CPSR 11.5	n/a	n/a	
SE Sask			SE Sask			
1 CWRS 13.5	\$10.14	\$372.58	1 CWRS 13.5	\$10.25	\$376.63	
1 CWAD 13.0	\$10.56	\$388.02	1 CWAD 13.0	\$10.69	\$392.79	
1 CPSR 11.5	\$9.52	\$349.80	1 CPSR 11.5	\$9.54	\$350.54	

Table 1: Canadian Primary Elevator Bids, in Canadian Dollars per Bu and per MILLION MT

Data source: PDQ, Sept. 6/'22

Table 2: Grade Spreads, in Canadian Dollars per Bu and per MILLION MT

Avg. Grade Spread/ Pro Discounts	Cdn\$/bu.	Cdn.\$/mt
1 CWRS 13.5	Base Grade	Base Grade
2 CWRS 13.5	(0.10)	(3.67)
1 CWRS 12.5	(0.02)	(0.85)
1 CWAD 13.0	Base Grade	Base Grade
1 CWAD 13.5	0.01	0.37
2 CWAD 13.5	(0.09)	(3.31)
2 CWAD 12.5	(0.11)	(4.04)

Data source: PDQ, Sept. 6/'22

iv) FOB Wheat Prices and Export Basis Calculation

Background and Rationale:

Reporting FOB prices at port position and primary elevator prices allows the reader to gain an understanding of both local and international wheat prices and to understand the relationship between the two, as measured by the export basis. Export basis can be defined as FOB port position prices minus the primary elevator prices at any given prairie delivery location and is therefore reflective of transportation costs plus any premiums being captured by terminal grain elevator companies or the railway companies, at any given time.



In general, a widening basis is indicative of decreasing system performance in terms of either reduced port capacity or rail service, or both. A narrowing basis is indicative of increased available port capacity and/or better ability of the railways to provide ample service to grain shippers. In this regard, tracking these prices over time has value both in terms of producers being able to time the selling of their grain but also in terms of evaluating and setting policy related to various transportation and capacity issues.

Gray (2015) has calculated a normal basis to be in the range of C\$72/million mt. During the 2013/14 crop year the export basis for wheat widened to approximately C\$250/million mt, which indicated an inability of the grain handling and transportation system to adequately handle the record crop produced that year. This occurrence has highlighted the need to improve the level of rail service and take measures to expand port capacity where possible. It has also underscored the need for better price transparency and market information within the grain sector.

Assumptions, Definitions, and Methodology

The following background information should assist in understanding and interpreting international market signals and to relate them to the 'local' Saskatchewan wheat market:

- The price information generated for the weekly report is designed to show farmers at what price levels several wheat classes are trading at local primary elevators (Table 1) and in nearby international markets (Table 3). To express the Export Basis¹ (see Export Basis in Table 3) defined as Cdn. FOB Prices minus primary elevator bids, the FOB prices are translated into Cdn. dollars from US dollars and compared to current actual primary elevator Street prices at Rosetown, Saskatchewan (see Street Prices in Table 3). Rosetown is used as a proxy for all primary elevators in the basis calculation. The actual handling and transportation costs from the West Coast to delivered elevator (Rosetown area) range from ~C\$58.00-C\$74.72/million mt, depending on number of cars moved and elevator used.
- > Approximate relationship between U.S. wheat classes and Canadian wheat classes:
 - DNS 14% in the Pacific North West (PNW) ≈ 1 CWRS 13.5% in Vancouver
 - HRS in the Pacific North West (PNW) ≈ 2 CWRS 13.0% in Vancouver
 - \circ HRW in the Pacific North West (PNW) ≈ 3 CWRS in Vancouver
 - \circ SW (lowest price wheat) ≈ CPS red (mostly fed domestically)
 - HAD (Lakes) ≈ CWAD (Thunder Bay/ Lawrence)
 - Abbreviations: DNS (Dark Northern Spring Wheat); HRS (Hard Red Spring Wheat); HRW (Hard Red Winter Wheat); SW (Soft Wheat); HAD (Hard Amber Durum Wheat); CWRS (Canadian Western Red Spring Wheat); CPS (Canada Prairie Spring Wheat); CWAD (Canadian Western Amber Durum Wheat)

¹ Gray, R.S. (2015). The Economic Impacts of Elevated Export Basis Levels on Western Canadian Grain Producers 2012/13, 2013/14 and 2014/15.

[&]quot;The difference between FOB Vancouver prices and the Saskatchewan elevator cash bids to producers is referred to as export basis: Basis can refer to the difference between any two prices. As the largest volume port, Vancouver FOB, minus the elevator bid prices representative measure of the "export" basis for grains in Western Canada."



Hard wheat price calculations:

Exporters in Western Canada generally derive their primary elevator wheat prices from HRS values at the West Coast (Pacific Northwest - PNW).

Similarly, HRW values are used for lower grade (3) CWRS.

- West Coast HRS and HRW values essentially dominate the international hard wheat trade and determine its basic value.
- If premiums are paid for 1 CWRS 13.5, elevator companies are often able to retain the premium
- > <u>Durum wheat price calculations</u>:

The primary export route for Canadian durum wheat is still through Thunder Bay, not the West Coast of Canada.

- Nevertheless, the Pacific Coast has increased in importance for durum over time with 38% of total export volume crop year to date.
- Italy is the single biggest buyer of Canadian durum wheat with 27% of total Canadian durum exports YTD (East Coast shipments).
- Optional origin grain sales:

Most major international grain companies sell 'optional origin' wheat to their customers and often cover their sales 'at best' closer to the shipment position. The Canadian grain system is not conducive to servicing optional origin sales because the volume of wheat kept in storage in port today is much smaller than prior to deregulation of the Canadian wheat market.



Table 3: Relevant FOB Prices and calculated Basis, US & Canadian Dollars per MT

Relevear	nt FOB Prices and			September 6, 2022
	FOB Prices CDA ¹ (calculated)		Street Prices	Export Basis ²
Type of Wheat	West Coast (Cdn./mt\$)	Great Lakes (Cdn.\$/mt)	Rosetown (Cdn.\$/mt)	Basis: West Coast-Centr. SK (Cdn\$/mt)
DNS 14.0	\$470.45	\$856.66		
HRS	\$464.56			
HRW 11.5	\$483.83			
SWW 12.0	\$441.76			
1 CWRS 13.5 ³	\$470.45		\$378.83	\$91.61
2 CWRS 13.0 ³	\$464.56		\$364.13	\$100.43
3 CWRS ³	\$483.83		\$332.90	\$150.93
CPS ³	\$435.07		\$362.30	\$72.77
1 CWAD ⁴		\$409.70	\$396.84	\$136.24
Competing wheat:	US\$/mt			
Russia 12.5 (Black Sea, 25k mt)	\$315.00		October	
French 11.5 (Rouen)	\$335.00		October	
APW 10.5 (W Coast)	\$360.00		December	
Argentine 12.5	\$325.00		December	

¹ FOB Prices CDA = FOB US\$ converted into Canadian Currency

² Export Basis = FOB Prices CDA minus Cdn. Street Price

³ DNS 14% ≈ 1 CRWS 13.5%; HRS ≈ 2 CWRS 13.0%; HRW ≈ 3CWRS; SWW ≈ CPS

⁴ Values derived to Lakehead FOB