

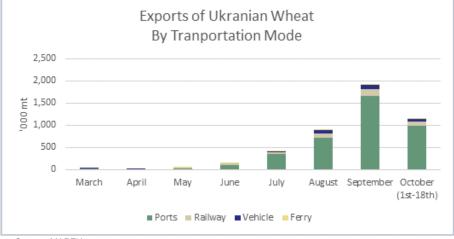
Wheat Market Outlook and Price Report: October 31, 2022 By Marlene Boersch/ A.P. Temple/ Michael Wilton Mercantile Consulting Venture Inc.

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 October 31, 2022



Wheat Exports from Ukraine by Mode of Transport

- Source: MAPFU
- The big news of the day is Russia's abandonment of the Black Sea Grain Initiative. The announcement came over the weekend after a drone attack on Russian ships. Moscow says it can no longer guarantee the protection of civilian ships in the Black Sea.
- The trade corridor has been very important for Ukrainian wheat. The initiative was signed on July 22nd. That month, Ukraine exported 349k mt of wheat through its ports. This accounted for 77% of all the wheat that was exported from Ukraine by all modes of transportation. Wheat exports through Ukraine's ports grew to 725k mt in August (81% of all wheat exports) and 1.7 million mt in September (87% of all wheat exports).
- Without the agreement, wheat exports from Ukraine could return to the ~1.0 million mt per month level. The Russian suspension is leaving 218 vessels stranded. Twenty-two are loaded in Ukrainian ports, 95 are loaded and waiting for inspection in Turkey and 101 vessels are empty



and waiting for clearance in Turkey. The UN and Turkey are hoping to proceed in moving some of these ships without Russia. The success, or lack thereof, will be closely watched.

Developments in Wheat Demand:

The news coming from the Black Sea will be very important to what the trade matrix will look like moving forward.

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 of last week's market events in the major wheat origins.

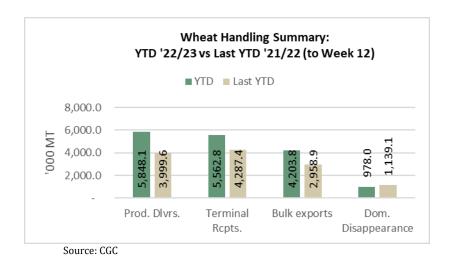
Futures:

- Dec '22 contract Chicago winter wheat closed at \$8.29, down 20 cents on the week.
- Dec '22 contract Kansas hard red winter wheat closed at \$9.25, down 16 cents on the week.
- Dec '22 Minneapolis hard red spring wheat closed at \$9.45, down 8 cents on the week.
- Wheat futures gapped 41-64 cents higher at the start of the overnight session and are currently trading 13-30 cents higher this Monday morning.



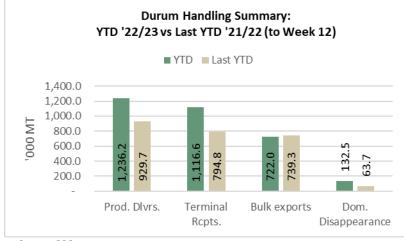
Canadian Wheat

• There was strong wheat movement in week 12 as 533.9k mt of Canadian wheat was shipped. Rail companies supplied 81% of the ordered cars in week 11.





• **Durum exports** for week 12 were strong at 161.7k mt. Exports to date have grown to 722.0k mt. Of this, 371.0k mt has left through Hudson's Bay and the Great Lakes while 255.4k mt has been exported from Vancouver.



- Source: CGC
- Durum prices in the EU continue to improve. While prices in Spain were unchanged, Italy's price rose another euro\$3/mt over the week to euros\$493/mt. This backs off to about CAD\$14.50/bushel at the elevator in Saskatchewan. We saw some of these prices briefly last week, but these bids have been pulled for now. Given the global prices, we know grain companies will be able to pay up when they decide to move durum again.

US Wheat:

• US winter wheat planting rose 10% over the week to 79%. Just under half of the crop has emerged. Seventy-four percent of the US winter wheat area is under drought conditions. Moisture conditions in Kansas and Oklahoma, where 35% of the US winter wheat is grown, are 9% and 2% adequate respectively.

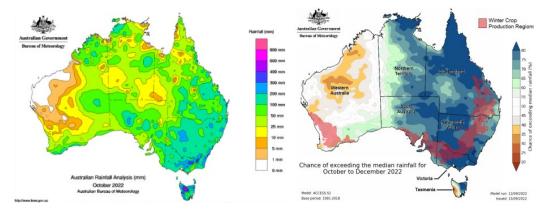


• US HRS for Nov. '22 was valued at \$422.8/ mt FOB PNW (*down* \$19.10/*mt from last week*), FOB Gulf HRW 11/12.5 pro is valued at \$427.10/mt (*down* \$6.40/*mt from last week*).



Australian wheat:

• The USDA attache in Australia is forecasting the country will grow its second largest crop on record to the tune of 34 million mt. The report, completed on October 21st, understates the impact that rain at harvest time is having on the crop. Large amounts of rain, especially in New South Wales where approximately 30% of the wheat crop is grown, will increase abandoned area and cause upwards of one-third of Australia's crop to be poor quality.



Argentine wheat:

• On-going drought conditions in Argentina has caused Rosario Grain Exchange to lower their crop forecasts again. They are now forecasting a crop ranging from 12.5-13.7 million mt compared to the 16.5 million mt they were expecting just two weeks ago. A 13.7 million mt crop would leave just 7.5 million mt for export. The government is already discussing export restrictions. The USDA is predicting a 17.5 million mt crop and Buenos Aires Grain Exchange left their estimate at 15.2 million mt. Gd/Ex conditions in Argentina were unchanged at 11%.

Brazil wheat:

• In Brazil, Parana, the second largest wheat-producing state in the country, is expected to harvest 3.5-3.7 million mt of wheat. Analysts think that late-season rains will cause half of the crop to have quality issues and upwards of 400k mt of the crop will not be milling quality.

EU wheat:

- EU wheat is struggling to compete with very cheap Russian-origin wheat. Brussels made small changes to the EU balance sheet but they left their (too high) export number unchanged.
- FOB prices in the EU: Nov. '22 French 11.5 pro wheat closed at \$343.40/mt (*up* \$6.00/mt from *last week*); Nov. '22 German 12.5 pro wheat closed at \$346.80/mt (*up* \$4.00/mt from last week); Nov. '22 Baltic 14.0 pro wheat closed at \$389.80/mt (up \$5.00/mt from last week).

Black Sea wheat:

- After weeks of threats, Moscow announced that it was stepping away from the Black Sea Trade Deal. The announcement came after a drone attack on Russian ships. Moscow says it can no longer guarantee the protection of civilian ships in the Black Sea. The suspension is leaving 218 ships stranded. Despite Russia's pull-out, the UN and Turkey say they hope to move forward with moving some of the ships without Russia's involvement.
- Last week, Russia was selling wheat for \$40.00/mt below North American values.



Significant purchases/ trades:

- Cash trade for wheat was slow. We await results on Pakistan's tender, and we wait to see what Egypt will do after their exchange rate slumps.
- US export sales were 533.2k mt, above trade expectations of 100-450k mt. Total sales are now 11.8 million mt compared to the USDA's 21.1 million mt projection for the year.

> Wheat Market Outlook:

Significant events over the past week:

- The USDA's attaché in **Australia** reported this week that Australia would likely produce its thirdconsecutive bumper grain crop in 2022/23. The attaché said the wheat harvest is projected to be the second-highest crop on record at 34 million mt. A good planting season, followed by above-average rainfall during the growing season, helped push the production projection up.
- Parana, the second-largest wheat-producing state in **Brazil**, will harvest between 3.7 and 3.5 million mt of wheat this season, said Deral, a state agency. Analysts said that around half the crop would have quality issues due to late-season rains while 300k-400k tonnes would be unusable as milling wheat.
- Argentina continues to suffer from dry weather. The Rosario Grain Exchange (BCR) has warned that the wheat crop could drop further, to 12.5-13.7 million mt. This is the third consecutive week of steep reduction forecasts by BCR. If realized, wheat production in Argentina would be down 40% compared to the all-time high produced last year, reported AgriCensus.
- The night markets on Sunday all opened stronger after the **Russians** declared they would no longer support the Black Sea initiative that supports Ukrainian exports.

Outlook:

Russia's actions in the Black Sea suggest markets for cash to destination markets will be higher. However, last week's trades by Russia were at least \$40.00/mt below North American prices. Russia needs money – do they put their grain prices up? It is hard to say. If December corn can break through the \$7.00 per bushel resistance, wheat will follow corn higher. *We would not extend wheat sales for now.*



iii) Primary Elevator Price Tables and Grade Spreads

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

			Date:		31/10/2022	
NW Sask	Spot		NW Sask	Deferred		
	(bu.)	(mt)	INVV SASK	Dec '22 (bu.)	Dec '22 (mt.)	
1 CWRS 13.5	\$11.91	\$437.62	1 CWRS 13.5	\$11.92	\$437.99	
1 CWAD 13.0	\$13.40	\$492.37	1 CWAD 13.0	\$13.41	\$492.74	
1 CPSR 11.5	\$11.32	\$415.94	1 CPSR 11.5	\$11.42	\$419.62	
SW Sask			SW Sask			
1 CWRS 13.5	\$11.68	\$429.17	1 CWRS 13.5	\$11.83	\$434.68	
1 CWAD 13.0	\$13.39	\$492.00	1 CWAD 13.0	\$13.40	\$492.37	
1 CPSR 11.5	\$11.08	\$407.12	1 CPSR 11.5	\$11.36	\$417.41	
NE Sask			NE Sask			
1 CWRS 13.5	\$11.51	\$422.92	1 CWRS 13.5	\$11.56	\$424.76	
1 CWAD 13.0	\$13.23	\$486.12	1 CWAD 13.0	\$13.24	\$486.49	
1 CPSR 11.5	n/a	n/a	1 CPSR 11.5	n/a	n/a	
SE Sask			SE Sask			
1 CWRS 13.5	\$11.52	\$423.29	1 CWRS 13.5	\$11.59	\$425.86	
1 CWAD 13.0	\$13.13	\$482.45	1 CWAD 13.0	\$13.14	\$482.82	
1 CPSR 11.5	\$10.95	\$402.35	1 CPSR 11.5	\$11.11	\$408.23	

Data source: PDQ, Oct. 31/'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 14.0	0.05	1.89
1 CWRS 13.5	Base Grade	Base Grade
2 CWRS 13.5	(0.10)	-3.67
1 CWRS 12.5	(0.30)	-11.02
1 CWAD 13.0	Base Grade	Base Grade
1 CWAD 13.5	0.00	0.00
2 CWAD 13.0	(0.10)	-3.67
2 CWAD 12.5	(0.15)	-5.51

Data source: PDQ, Oct. 31/'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 Canadian. FOB Prices minus primary elevator bids, the FOB prices are translated into Canadian. 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

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."



- o 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
- SW (lowest price wheat) ≈ CPS red (mostly fed domestically)
- HAD (Lakes) \approx 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)
- 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

Relevan	October 31, 2022			
	FOB Prices CDA ¹ (calculated)		Street Prices	Export Basis ²
Time of Million	West Coast (Cdn./mt\$)	Great Lakes <mark>(</mark> Cdn.\$/mt)	Rosetown (Cdn.\$/mt)	Basis: West Coast-Centr. SK (Cdn\$/mt)
Type of Wheat	é522.22	605 <i>5</i> ,55		
DNS 14.0	\$533.22	\$856.66		
HRS	\$526.87			
HRW 11.5	\$550.26			
SWW 12.0	\$460.55			
1 CWRS 13.5 ³	\$533.22		\$439.83	\$93.39
2 CWRS 13.0 ³	\$526.87		\$426.60	\$100.27
3 CWRS ³	\$550.26		\$408.59	\$141.66
CPS ³	\$453.54		\$419.25	\$34.29
1 CWAD ⁴		\$419.98	\$496.04	\$76.77
Competing wheat:	US\$/mt			
Russia 12.5 (Black Sea, 25k mt)	\$310.00		November	
French 11.5 (Rouen)	\$343.40		November	
APW 10.5 (W Coast)	\$385.00		December	
Argentine 12.5	\$375.00		December	

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

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

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

⁴ Values derived to Lakehead FOB