

Wheat Market Outlook and Price Report: November 28, 2022 By Marlene Boersch/ A.P. Temple/ Michael Wilton Mercantile Consulting Venture Inc.

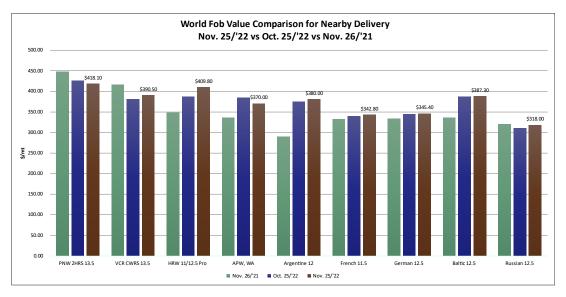
i) Background and Rationale for the Report

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 November 28, 2022

Global FOB Wheat Values by Origin



- While global prices have come off their highs of last summer, prices remain relatively strong, even when compared to last year. The average FOB wheat price in North America is \$2.40/mt higher than the same time last year and \$8.20/mt more than last month. The increase in price is from more expensive HRW, wheat which is up over \$60/mt from last year compared to spring wheat, which is worth around \$25/mt less than last year on a FOB basis.
- While prices in North America strengthen, FOB values in Europe are essentially unchanged, held steady by strong demand, the Black Sea deal, and the abundance of cheap Russian supplies.
- The divergence in wheat prices between the US and European origin has led to some unusual trade activity like EU wheat trading into the south-east US market, and Russian wheat selling to traditional American markets like Mexico and Brazil.
- Recently, there has been very strong cash business as buyers look to extend coverage. Recent trades indicate that buyers do not have much coverage beyond December.



Developments in Wheat Demand:

Cash trade remains strong as buyers look to extend coverage before the holidays. There is strong demand and most of the demand is for nearby positions. European wheat can price into US markets causing additional sorting to the trade matrix.

> 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:

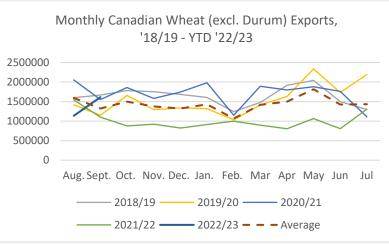
- Dec '22 contract **Chicago winter wheat** closed at \$775-4 down 18-0 cents on Friday, down 31-2 cents on the week.
- Dec '22 contract **Kansas hard red winter wheat** closed at \$922-0, down 8-2 cents on Friday, down 16-0 cents on the week.
- Dec '22 **Minneapolis hard red spring wheat** closed at \$957-2, down 0-4 cents on Friday, up 3-4 cents on the week.
- Wheat futures are currently trading 6-22 cents lower and the time of writing.



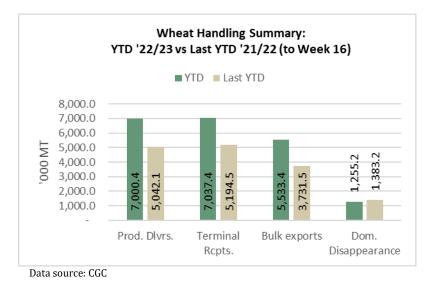
Canadian Wheat

- Iraq bought 200k mt of Australian and 100k mt of Canadian wheat last week. There were no
 price details. The US export report also showed Iraq buying 200k mt of US wheat the week
 previous. The entirety of this sale was HRS wheat. Iraq is excluding Russia from their wheat
 purchases and is having to pay much higher prices because of it. As of November 25, FOB
 values for Canadian, US and Australian HRS/APW wheat were \$390.50/mt, \$418.10/mt, and
 \$370.00/mt respectively.
- Canadian exports for week 16 were 447.8k mt, which remains well ahead of the pace needed to meet AAFC's 18.3 million mt export number. If we continue at this pace, Canada will export 19.5 million mt. Canadian non-durum wheat exports seasonally slow into the winter before picking up and peaking in late spring.



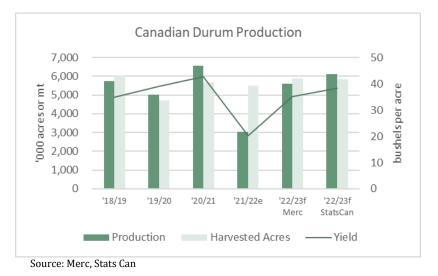


Data Source: CIMT



- **Durum:** Algeria bought between 300-450k mt of December-January durum on Tuesday at \$495/mt (for large panamax-sized bulk carriers) and \$502-\$503/mt (for smaller handysize ships). The tender was originally for 50k mt. The price of the sale calculates to be about ~C\$13.00/bushel at the elevator in Saskatchewan.
- This price is similarly reflected in the price in Italy where durum values fell €5/mt over the week to €483/mt. Changes in exchange rates cause this price to be essentially unchanged from last week at ~CA\$13.00/bu at the elevator in Saskatchewan.
- Stats Canada's next estimates are out on Friday, and we think they need to reduce durum production. Their current estimate for Canadian durum production is 6.1 million mt with a 38.4 bushel per acre yield. Provincial yield reports have us guessing the number is closer to 5.6 million mt with a yield of 35 bushels per acre.





• There was another strong week of durum movement last week with 186k mt delivered into the elevator system and 205k mt being exported. Most (121k mt) of the exports were from Vancouver.

(CGC) Grain Handling	Summary Durum			(Nov.20'22)
('000 mt)	Prod. Dlvrs.	Terminal Rcpts.	Bulk exports	Dom. Disappearance
Week 16	186.0	156.4	205.2	4.8
Week ago	105.6	97.4	75.2	31.8
YTD	1,774.8	1,642.8	1,283.0	221.9
Last YTD	1,194.8	1,195.3	1,046.1	123.7
YTD less Last YTD	580.0	447.5	236.9	98.2
YTD over Last YTD	149%	137%	123%	179%

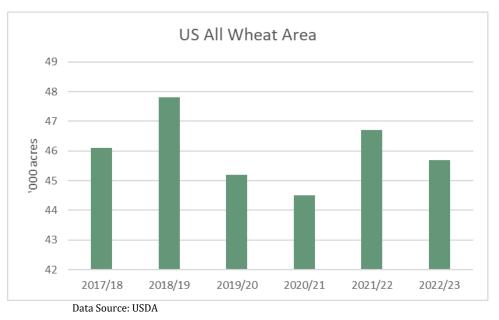
Data Source: CGC

• Consider selling additional tonnes \$14.50/bu for a #1CWAD which is ~\$14.35/bu for a #3CWAD.

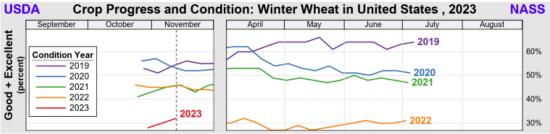
US Wheat:

• The USDA tentatively put the 2023 US wheat area at 47.5 million acres. This would be down 2% (1.0 million acres) from last year.





- US export sales for the week ending November 17th were at the high end of expectations at 511.8k mt. Iraq was the largest buyer, taking 200k mt of the total amount.
- The US winter crop condition was unchanged from last week at 32% Gd/Ex vs 44% Gd/Ex last year. This is the lowest crop rating for this time of year since records began in 1986





• US HRS for Dec. '22 was valued at \$418.10/ mt FOB PNW (*down* \$0.30/mt from last week), FOB Gulf HRW 11/12.5 pro is valued at \$409.80/mt (*down* \$2.90/mt from last week).

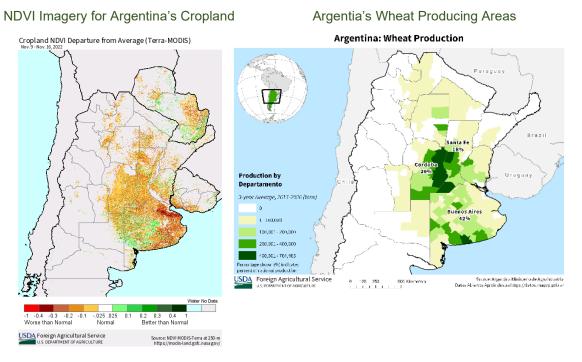
Australian wheat:

- Weather in Australia is more conducive to harvest and will allow for better progress. Yields in the west continue to be strong, and there are reports that quality in the east is better than initially feared.
- Spring wheat prices in North America have been supported by the flooding in Australia, but some of this may dissipate if quality continues to be better than expected. APW fob values in Australia are down \$15/mt from last month at \$370.00/mt. This is still \$35.00/mt more than the same time last year.



Argentine wheat:

• Crop ratings were unchanged at 8% Gd/Ex and harvest is now 13% complete. NDVI values in Buenos Aires, where 42% of Argentina's wheat crop is grown, are the lowest on record.



- BAGE left their estimate for Argentina's wheat crop at 12.4 million mt. The current range of analyst estimates are from 11.8-15.5 million mt, but it seems that the majority are gravitating towards the sub-12 million mt number (especially when considering the crop also suffered frost damage in September/October/November).
- A crop failure, and the renewal of the Black Sea Corridor, will cause wheat exports from Argentina to struggle. Rosario GE lowered their export number for Argentina's wheat to 7.0 million mt. This is nearly 50% of last year's amount.

EU wheat:

- There is still a strong line-up of upcoming wheat purchases. Most of these will be scooped up by Russia, but EU wheat should be able to capture some of these sales. Most of the sales are for nearby shipments.
- With some EU wheat being sold to the US southeast, EU wheat can price into US markets which will pressure US prices.
- Fob prices in the EU: Dec. '22 French 11.5 pro wheat closed at \$342.80/mt (down \$2.70/mt from last week); December 2022 German 12.5 pro wheat closed at \$345.40/mt (down \$7.90/mt from last week); December 2022 Baltic 14.0 pro wheat closed at \$387.30/mt (down \$7.90/mt from last week).



Black Sea wheat:

- The Black Sea market was quiet. Russia has the cheapest wheat by far and is taking most of the wheat sales, but limited capacity should allow for some of this demand to slip past them.
- Ukraine's ports are operating, but very slowly. Just five vessels have left Ukraine since the trade deal was renewed.

Significant purchases/ trades:

- GASC (**Egypt**) bought 175k mt of Russian (140k mt) and Ukrainian (35k mt) wheat for the December-January movement at \$361/mt C&F.
- Algeria bought between 300-450k mt of December-January durum on Tuesday at \$495/mt (for large panamax-sized bulk carriers) and \$502-\$503/mt (for smaller handysize ships). The tender was originally for 50k mt.
- Iraq bought 200k mt of wheat from Australia and 100k mt of wheat from Canada.
- Pakistan was supposed to tender today for 500k mt of wheat but postponed it to the 30th.
- Jordan tenders Tuesday for 120k mt of March-April wheat.
- **Turkey** tenders for 455k mt of December-February wheat on Tuesday (this will likely be from Russia).
- **US** wheat export sales were strong at 511.8k mt boosted by 200k mt of sales to Iraq. The trade was expecting sales in the 300-600k mt range.

> Wheat Market Outlook:

Significant events over the past week:

- **USA futures fell to multi-week lows** as EU wheat traded into the southeast at \$75 below HRW, Russian wheat traded to Mexico and Brazil, Iraq bought Canadian and Aussie and US wheat.
- Aussie futures made their lowest weekly close in ten weeks with solid yields in the west, better than expected quality in the east, and open harvest weather for the next 2 weeks.
- Matif wheat was flat, but cash bids were firm amidst big vessel line-ups.
- A possible US rail strike and ongoing issues with the Mississippi river added additional weight to the US market.

Outlook:

Expect the markets to start slowly after the Thanksgiving weekend. Wheat could be lower due to European wheat being competitively priced into the USA markets. However, there is very good cash business in wheat and users are uncovered beyond December. Wheat futures will be stronger near the end of the week. It is advisable to sell 25% more durum wheat (see Canadian wheat section) but continue to hold milling wheat 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:	November 28, 2022	
NW Sask	Sp	Spot		Deferred		
	(bu.)	(mt)	NW Sask	Jan '23 (bu.)	Jan '23 (mt.)	
1 CWRS 13.5	\$11.79	\$433.21	1 CWRS 13.5	\$11.85	\$435.42	
1 CWAD 13.0	\$13.50	\$496.04	1 CWAD 13.0	\$13.51	\$496.41	
1 CPSR 11.5	\$11.34	\$416.68	1 CPSR 11.5	\$11.43	\$419.98	
SW Sask			SW Sask			
1 CWRS 13.5	\$11.64	\$427.70	1 CWRS 13.5	\$11.70	\$429.90	
1 CWAD 13.0	\$13.46	\$494.57	1 CWAD 13.0	\$13.49	\$495.68	
1 CPSR 11.5	\$11.10	\$407.86	1 CPSR 11.5	\$11.22	\$412.27	
NE Sask			NE Sask			
1 CWRS 13.5	\$11.41	\$419.25	1 CWRS 13.5	\$11.46	\$421.09	
1 CWAD 13.0	\$13.34	\$490.16	1 CWAD 13.0	\$13.39	\$492.00	
1 CPSR 11.5	n/a	n/a	1 CPSR 11.5	n/a	n/a	
SE Sask			SE Sask			
1 CWRS 13.5	\$11.46	\$421.09	1 CWRS 13.5	\$11.52	\$423.29	
1 CWAD 13.0	\$13.33	\$489.80	1 CWAD 13.0	\$13.41	\$492.74	
1 CPSR 11.5	\$10.98	\$403.45	1 CPSR 11.5	\$11.08	\$407.12	

Data source: PDQ, Nov. 28/'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, Nov 28/'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
 - o HRS in the Pacific North West (PNW) ≈ 2 CWRS 13.0% 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."



- HRW in the Pacific North West (PNW) ≈ 3 CWRS in Vancouver
- SW (lowest price wheat) \approx 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	t FOB Prices and E	xport Basis		November 28, 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	\$508.84	Closed		
HRS	\$502.64	ciocod		
HRW 11.5	\$508.35			
SWW 12.0	\$438.76			
1 CWRS 13.5 ³	\$508.84		\$422.56	\$86.28
2 CWRS 13.0 ³	\$502.64		\$411.53	\$91.11
3 CWRS ³	\$508.35		\$398.67	\$109.67
CPS ³	\$431.85		\$404.55	\$27.30
1 CWAD ⁴		\$449.75	\$499.72	\$104.37
Competing wheat:	US\$/mt			
Russia 12.5 (Black Sea, 25k mt)	\$318.00		December	
French 11.5 (Rouen)	\$342.80		December	
APW 10.5 (W Coast)	\$370.00		December	
Argentine 12.5	\$38	0.00	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