

Wheat Market Outlook and Price Report: November 14, 2022 By Marlene Boersch/ A.P. Temple/ Michael Wilton Mercantile Consulting Venture Inc.

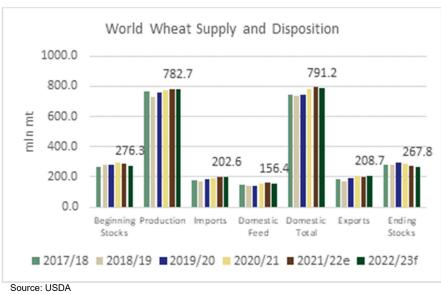
i) Background and Rationale for the Report

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 14, 2022

The November USDA Global Wheat Outlook



- The November USDA report was out on Wednesday which made minor changes to the global wheat balance sheet.
- Global wheat supply was raised by 1.3 million mt from increases in beginning stocks and production. Production grew by 1.0 million mt from last month to 782.7 million mt, as production increases in Australia, Kazakhstan, and the UK offset decreases in Argentina and the EU.
- In the report, higher feed and residual use (up 900k mt) was offset by lower (down 1.5 million mt) food, seed, and industrial use. Global trade was raised 300k mt to a record of 208.7 million mt driven by higher exports in Australia, Kazakhstan, and the UK offsetting smaller exports in Argentina.
- Overall, ending stocks were raised 300k mt from last month to 267.8 million mt, or 8.5 million mt (3%) less than last year.

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Developments in Wheat Demand:

There was a large volume of wheat purchased last week as buyers sourced cargoes before the Black Sea Grain Deal expires at the end of this week (November 19th). See the complete lineup of wheat purchases in the purchases/trades section. Breaking news the morning of November 14th was Saudi Arabia buying 1.0 million mt in their most recent tender, which is over 400k mt more than was expected.

> 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 \$813-6, up 10-2 cents on Friday, down 34-0 cents on the week.
- Dec '22 contract Kansas hard red winter wheat closed at \$943-4, up 18-2 cents on Friday, down 9-6 cents on the week.
- Dec '22 **Minneapolis hard red spring wheat** closed at \$945-6, up 14-2 cents on Friday, *down* 8-6 cents on the week.
- Wheat futures are currently trading 1-14 cents higher Monday morning at the time of writing.



Canadian Wheat

Canadian wheat exports for week 14 were strong again at 488.8k mt for a season total of 5.1 million mt. Average weekly exports for the remainder of the year need to be ~347k mt per week to meet the AAFC's number which should be met and possibly surpassed.

(CGC) Grain Handling Summary Wheat				(Nov.6'22)
('000 mt)	Prod. Divrs.	Terminal Rcpts.	Bulk exports	Dom. Disappearance
Week 14	428.9	428.9	488.8	117.6
Week ago	441.4	441.4	424.4	100.5
YTD	6,720.6	6,720.6	5,116.8	1,199.4
Last YTD	4,767.5	4,767.5	3,422.0	1,319.8
YTD less Last YTD	1,953.1	1,953.1	1,694.8	-120.4
YTD over Last YTD	141%	141%	150%	91%

Source: CGC

• In Canadian rail movement, CN and CP supplied 79% of the hopper cars ordered in week 12 and 86% of the hopper cars ordered in week 13. While both CN and CP posted all-time records for monthly grain movement in October, issues with Canada's export pipeline persist. Two of the current pressing issues are the delays at the Port of Vancouver due to the inability to load ships in the rain, and several rail labour agreements that will expire by the end of the year. Note a

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comment made in a recent Canada Grain and Feed Update released by the USDA Foreign Agricultural Service:

"Canadian National (CN) Railway and Canada Pacific (CP) Railway are expected to see a total of eight labour agreements expire in late 2022. In advance of a possible lockout or strike, the railway lines typically begin to reduce shipping pace to prepare for the possibility. If an actual stoppage occurs, possible outcomes include: the delay of farmer deliveries into the elevator system, vessel demurrage, contract extension penalties, defaults, declaring force majeure, deferring sales, and further damage to the reputation of Canada's grain handling system. Four labour contracts expired this year, in January and July. However, no major disruptions to the transportation of principle field crops occurred." - FAS - November 4, 2022

- **Durum:** Tunisia bought 4x25mt of durum wheat at \$528.89-\$537.68/mt cost and freight. There is a strong chance that some of this was Canadian. The price calculates to ~\$13.90/bu at the elevator in Saskatchewan. Prices in Italy were unchanged for the 3rd straight week at €493/mt. The rising Canadian dollar causes this price to calculate to just ~\$13.10 at the Saskatchewan elevator.
- There was another good export program of durum in week 14 as another 179.2k mt of Canadian durum was exported.

(CGC) Grain Handling Summary Durum			Week 14	(Nov.6'22)
('000 mt)	Prod. Divrs.	Terminal Rcpts.	Bulk exports	Dom. Disappearance
Week 14	147.7	140.7	179.2	48.6
Week ago	96.7	116.3	101.5	4.4
YTD	1,480.5	1,389.0	1,002.7	185.5
Last YTD	1,066.8	1,027.2	928.5	86.8
YTD less Last YTD	413.7	361.8	74.2	98.7
YTD over Last YTD	139%	135%	108%	214%

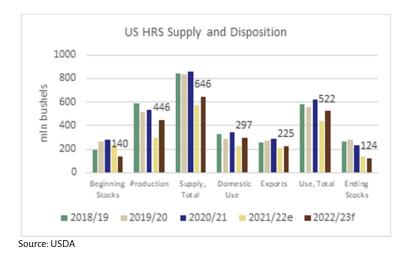
Source: CGC

US Wheat:

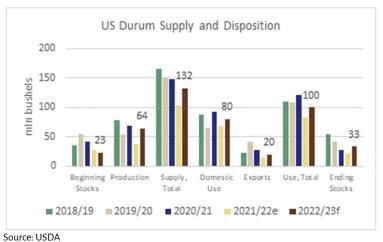
The USDA made several inter-class changes to the US wheat balance sheet that largely offset each other. The only change to the overall picture was a 5 million bushel increase in domestic use which resulted in ending stocks falling by 5 million bushels to 571 million bushels, down 13% from last year.

For the US hard red spring wheat (HRS) class, the USDA increased domestic use by 6 million bushels resulting in a respective decrease in ending stocks to 124 million bushels, down 11% (14 million bushels) from last year.





For durum, the USDA increased domestic use by 2 million bushels but lowered exports by 5 million bushels for a 3 million bushel increase in ending stocks to 33 million bushels, up 57% (12 million bushels) from last year.



- Ninety-two percent of the US winter wheat crop has been planted. Seventy-three percent of the crop has emerged. Crop conditions improved 2% over the week to 30% Gd/Ex. The US generally was hot and dry again last week although rain did offer some relief in central Kansas and Oklahoma.
- US weekly wheat sales were within trade expectations at 322.5k mt for a total of 12.5 million mt, down 6% from last year. The falling US dollar has caused US wheat to be more competitive.
- US HRS for Dec. '22 was valued at \$406.60/ mt FOB PNW (down \$4.20/mt from last week), FOB Gulf HRW 11/12.5 pro is valued at \$417.30/mt (down \$5.70/mt from last week).

Australian wheat:

- Harvest is in full swing in Australia's west where excellent yields are being reported. In the east, ongoing rain in the country has prevented most progress, and forecasts have rain persisting into February.
- Higher feed wheat from Australia because of the rain will likely replace some of the Asian corn demand.
- The USDA increased their production number for Australia by 1 million mt to 34.5 million mt
 which is too low considering that trade estimates are ranging from 37-40 million mt. The USDA
 raised Australian exports by 1 million mt to 26 million mt which is likely the maximum amount
 possible given logistical constraints and quality issues.



Argentine wheat:

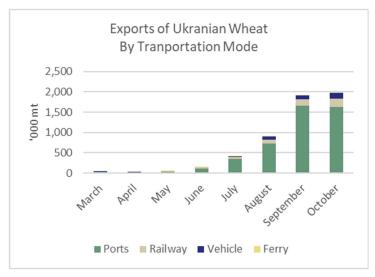
- Buenos Aires Grain Exchange (BAGE) decreased its production number for Argentina by 1.6 million mt to 12.4 million mt. Rosario GE also decreased their number to 11.8 million mt which would be the lowest since 2015/16. The USDA just reduced their number by 2 million mt to 15.5 million mt which is still too high.
- Crop ratings for Argentina's wheat crop fell to 8% Gd/Ex as harvest is 12% complete.

EU wheat:

- Marche a Terme International de France (Matif) wheat futures fell to a 10-week low last week as the euro rose to a 2-month high.
- The USDA decreased EU production by 450k mt which was essentially reflected by a respective decrease in ending stocks to 9.48 million mt. Feed use grew 500k mt which was entirely offset by higher imports.
- FOB prices in the EU: Dec. '22 French 11.5 pro wheat closed at \$338.40/mt (up \$1.00/mt from last week); Dec. '22 German 12.5 pro wheat closed at \$349.60/mt (up \$6.80/mt from last week); Dec. '22 Baltic 14.0 pro wheat closed at \$305.00/mt (down \$0.30/mt from last week).

Black Sea wheat:

- The USDA left Russia and Ukraine's wheat balance sheets unchanged. The USDA's number for Russian wheat production of 91 million mt is too low. More production will simply add to ending stocks as the USDA's export number for Russia of 45 million mt is already too high given their export capacity. For Ukraine, the USDA's export number is 11 million mt which is possible if the trade corridor remains open.
- Ukraine exported another 2.0 million mt of wheat during the month of October for a March-October total of 4.5 million mt.



Source: Ministry of Agrarian Policy and Food of Ukraine (MAPFU)

> Significant purchases/ trades:

Tunisia bought 200k mt of soft and durum wheat.

Jordon bought 50k mt of feed wheat.

Egypt bought 200k mt at about \$350.00 FOB.



Algeria also bought, but we do not know the quantity or price.

Saudi Arabia tendered for 595k of hard wheat. News broke this morning that they purchased 1.0 million mt of wheat in the tender.

Iraq tendered for 50k mt (there are no results yet).

US weekly commercial sales were 322.5k mt.

Wheat Market Outlook:

Significant events over the past week:

- The USDA released its November World Agricultural Supply and Demand Estimates (WASDE) on Nov. 9. The global wheat outlook is for increased supplies, consumption, trade, and ending stocks. Global wheat production was raised to 782.6 million mt, 1 million mt higher than in October. U.S. ending stocks were lowered by 136k mt to 15.5 million mt, the lowest level since 2007/08.
- Barging on the Mississippi River continues to face significant hurdles due to low water levels.
 The president of the Memphis Riverboats said that the river is "a little less than half a mile wide
 instead of a mile." The river disruption has increased the cost of barges and put pressure on
 railroads to ship more grain, increasing the overall cost of shipping grain.
- From North Dakota to Kansas, conditions were dry again this week, and temperatures remained above normal. Rain did reduce the drought intensity in central Kansas, and Oklahoma received some rainfall, but the central part of the state remained dry. Wheat-growing areas of Texas also missed out on rain this week. Midwest SRW wheat areas also remained dry; across Ohio, drought intensity grew, while in Minnesota, degradations were observed. In the Pacific Northwest, another week of wet weather accompanied widespread improvements. Cooler than normal temperatures across the region were also recorded.
- The Rosario Grains Exchange further cut Argentina's wheat production estimate. The exchange said, "Argentine wheat is going through enormous uncertainty and there may continue to be further cuts." The latest estimate is for 11.8 MMT. If realized, this would be the lowest since 2015/16. This month, the USDA cut Argentina's wheat production estimate to 15.5 MMT, down 2 MMT from October.

Outlook:

The market will concentrate on Russia and the future of the Black Sea corridor. Expect wheat to firm somewhat along with corn particularly if the US dollar remains weaker. There should be more activity in cash grains as users attempt to add to their coverage. – It is not advisable to extend wheat sales for now.

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iii) Primary Elevator Price Tables and Grade Spreads

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

Date: 14/11/2022 **Deferred** Spot **NW Sask NW Sask** (bu.) Jan '23 (bu.) Jan '23 (mt.) (mt) 1 CWRS 13.5 \$11.65 \$428.07 1 CWRS 13.5 \$11.72 \$430.64 \$499.72 1 CWAD 13.0 \$13.61 \$500.09 1 CWAD 13.0 \$13.60 1 CPSR 11.5 \$11.09 \$407.49 1 CPSR 11.5 \$11.19 \$411.17 SW Sask SW Sask 1 CWRS 13.5 \$11.56 \$424.76 1 CWRS 13.5 \$11.62 \$426.97 1 CWAD 13.0 \$13.64 \$501.19 1 CWAD 13.0 \$13.65 \$501.56 1 CPSR 11.5 \$11.02 \$404.92 1 CPSR 11.5 \$11.14 \$409.33 **NE Sask NE Sask** 1 CWRS 13.5 \$11.28 \$414.47 1 CWRS 13.5 \$11.36 \$417.41 \$13.53 \$497.15 \$13.55 \$497.88 1 CWAD 13.0 1 CWAD 13.0 1 CPSR 11.5 1 CPSR 11.5 n/a n/a n/a n/a SE Sask SE Sask 1 CWRS 13.5 \$11.32 \$415.94 \$11.42 \$419.62 1 CWRS 13.5 1 CWAD 13.0 \$13.52 \$496.78 1 CWAD 13.0 \$13.54 \$497.51 1 CPSR 11.5 \$10.82 \$397.57 1 CPSR 11.5 \$10.92 \$401.24

Data source: PDQ, Nov. 14/'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 14/'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:
 - o 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
 - o HRW in the Pacific North West (PNW) ≈ 3 CWRS in Vancouver
 - 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

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."



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.
- o If premiums are paid for 1 CWRS 13.5, elevator companies are often able to retain the premium

Durum wheat price calculations:

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	November 14, 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	\$515.77	\$376.99		
HRS	\$509.68			
HRW 11.5	\$533.85			
SWW 12.0	\$443.98			
1 CWRS 13.5 ³	\$515.77		\$440.19	\$75.58
2 CWRS 13.0 ³	\$509.68		\$429.17	\$80.51
3 CWRS ³	\$533.85		\$416.31	\$117.54
CPS ³	\$437.14		\$415.57	\$21.56
1 CWAD ⁴		\$434.68	\$496.04	\$81.76
Competing wheat:	US\$/mt			
Russia 12.5 (Black Sea, 25k mt)	\$315.00		December	
French 11.5 (Rouen)	\$338.40		December	
APW 10.5 (W Coast)	\$390.00		December	
Argentine 12.5	\$380.00		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

⁴Values derived to Lakehead FOB