

**Wheat Market Outlook and Price Report: December 5, 2022**

By Marlene Boersch/ A.P. Temple/ Michael Wilton  
Mercantile Consulting Venture Inc.

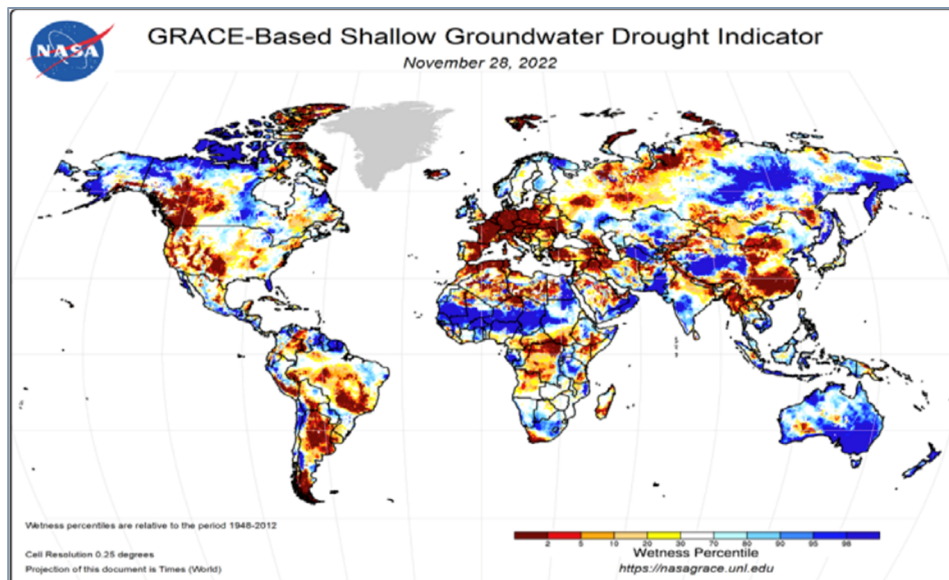
**i) Background and Rationale for the Report**

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 December 5, 2022**

**Summary Soil Moisture Conditions:**



Source: NASA, Nov. 28/22

- As we move towards Christmas, growers will start planning for next season’s crops. Weather and moisture conditions have played a significant role in the markets over the past three years. Below is an attempt to look at prevailing soil moisture conditions across some of the major growing areas.
- Northern Hemisphere, winter wheat crops: US-USDA reported winter wheat emergence at 91% in its final 2022 crop progress report on November 29, 1% above the 5-year average. Winter wheat rated good or excellent is at only 34%. Europe, Black Sea areas, North Africa and areas in the Middle East also show significant problems. The Black Sea areas have moved into dormancy of winter wheat with very little snow cover. This will need watching as temperatures are now well below freezing.

- Southern Hemisphere: Argentine wheat crop ratings remain unchanged at 8% Gd/Exc (compared to 65% last year). Parts of Brazil are far from perfect (mostly important for soybeans and corn). Australia - Too much rain in the east during harvest. Australian harvested quality of the wheat seems to be not as bad as feared.

### Developments in Wheat Demand:

There are reports that Mexico is continuing to buy Black Sea wheat, and Russian wheat got most of the recent tender business (Pakistan, Algeria, and Turkey). Black Sea wheat will take most of the nearby demand, but there are reports that EU farmers are 80% committed, which could cause tightness in the second half of the season.

### ➤ 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.

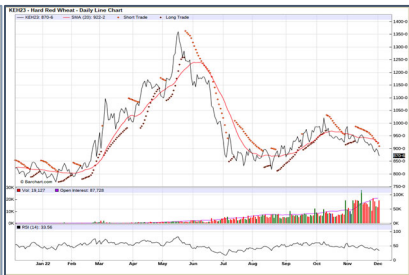
#### Futures:

- March '23 contract Chicago winter wheat closed at \$761-0, down 22 cents on Friday, *down 19 cents on the week.*
- March '23 contract Kansas hard red winter wheat closed at \$870-6, down 19-4 cents on Friday, *down 41 cents on the week.*
- March '23 Minneapolis hard red spring wheat closed at \$921-2, down 16-6 cents on Friday, *down 28-2 cents on the week.*
- *Wheat futures are currently trading 9-17 cents lower this Monday morning at the time of writing.*

**CBOT March 2023 Wheat (1 yr.)**



**KC March 2023 Wheat**



**Mpls. March 2023 Wheat**



### Canadian Wheat

- Statistics Canada (STC) published their final 2022 crop production report of the year last Friday. Yield assessments in the final report were generally closer to the yields assessed by the provincial agriculture agencies than in their September report. STC assessed total Canadian wheat production at 33.8 million mt, the third biggest Canadian wheat crop ever. Spring wheat was pegged at 25.7 million mt and durum at 5.4 million mt. *Perhaps most significantly, while the wheat crop is large, this final estimate is lower compared to the STC September estimate by 879k mt for all wheat, 374k mt for spring wheat, and 674k mt for durum wheat.* The trade was expecting a similar total wheat production estimate of 34.8 million mt. The trade estimate for spring wheat was 25.9 million mt, slightly higher than the STC number.
- The STC report can be viewed as slightly supportive of spring wheat and durum wheat this winter/spring.

Geography Harvest disposition	Canada					Prev. Sept. 14/'22 Est.		
	Production (metric tonnes)					2022	diff. to prev. est.	PCT od lst yr.
Type of crop	2019	2020	2021	2022	22/'21			
<b>Wheat, all</b>	32,669,800	35,437,200 <sup>f</sup>	22,296,100	<b>33,823,683</b>	152%	34,702,533	-878,850	
Wheat, durum	5,017,000	6,571,200	3,038,294	<b>5,443,476</b>	179%	6,117,469	-673,993	
Wheat, spring	25,952,300	26,092,100 <sup>f</sup>	16,250,398	25,679,132	158%	26,053,036	-373,904	
Wheat, winter remainin	1,700,500	2,773,900 <sup>f</sup>	3,007,390	2,701,075	90%	2,532,028	169,047	

- Export performance: Canadian wheat exports have been strong. Another 421.1k mt of wheat was exported in week 17 for a season total of 6.4 million mt. The average weekly export pace is 376.6k mt, which is well above the 340.0k mt per week that is needed to meet the AAFC's 18.3 million mt export number. At the current pace, Canada would export 19.5 million mt of wheat.

(CGC) Grain Handling Summary Wheat				Week 17	(Nov.27'22)
('000 mt)	Prod. Dlvs.	Terminal Rcpts.	Bulk exports	Dom. Disappearance	
Week 17	669.9	436.0	421.1	148.0	
Week ago	586.8	459.5	447.8	57.3	
YTD	8,262.0	8,039.9	6,402.1	1,460.6	
Last YTD	5,715.7	5,538.8	4,167.7	1,562.3	
<b>YTD less Last YTD</b>	<b>2,546.3</b>	<b>2,501.1</b>	<b>2,234.4</b>	<b>-101.7</b>	
<b>YTD over Last YTD</b>	<b>145%</b>	<b>145%</b>	<b>154%</b>	<b>93%</b>	

- Durum:** The final StatsCan durum production estimate at 5.4 million mt is a significant 674k mt smaller than the STC September estimate. The trade was still expecting durum production to come in at around 5.9 million mt. While the '22 Canadian durum crop still is 79% bigger than the small 2021 crop, it is more than 1 million mt smaller than the 2020 crop. *The final STC report is supportive of durum prices.*
- Export performance: Canadian durum exports are lagging the weekly amount needed to meet the AAFC's number. However, the past few weeks have been strong; 193.5k mt was exported in week 17, but average weekly exports are just 87.0k mt compared to the ~101.0k mt per week that is needed.

(CGC) Grain Handling Summary Durum				Week 17	(Nov.27'22)
('000 mt)	Prod. Dlvs.	Terminal Rcpts.	Bulk exports	Dom. Disappearance	
Week 17	170.6	130.9	193.5	19.2	
Week ago	186.0	156.4	205.2	4.8	
YTD	1,945.2	1,826.9	1,476.5	241.1	
Last YTD	1,280.8	1,302.3	1,068.4	136.6	
<b>YTD less Last YTD</b>	<b>664.4</b>	<b>524.6</b>	<b>408.1</b>	<b>104.5</b>	
<b>YTD over Last YTD</b>	<b>152%</b>	<b>140%</b>	<b>138%</b>	<b>177%</b>	

Source: CGC

- Regarding international values, we note that durum prices in Italy fell another €3.00/mt over the past week.

#### **US Wheat:**

- Weekly data showed that CBOT wheat speculative traders extended their net short by 666 contracts to 54,068 during the week that ended November 29. The funds were little changed on net in KC wheat, with +1.5k contracts added on both sides; their net long stayed at 17,129 contracts. In MGE wheat, spec traders were 1,429 contracts net short at the November 29 close, 777 contracts more net short via light net new selling.
- US wheat futures dropped to multi-month lows as Black Sea wheat filled significant demand by Turkey, Algeria, and Pakistan at big discounts to US wheat prices. There are also reports that Mexico is continuing to buy Black Sea wheat. Black Sea wheat will take most of the nearby demand, but there are reports that EU farmers are 80% committed, which could cause tightness in the second half of the season.
- US export sales fell behind further to 6% below last year's sales against the USDA's projected 3% decline.
- The US rail strike has mostly been averted by action of the government, forcing the unions to accept the deal given prior.
- Regarding new crop '23 wheat, USDA reported winter wheat emergence at 91% in its final 2022 crop progress report on November 29, a 4% increase from last week and 1% above the 5-year average. Winter wheat rated good or excellent increased by 2 points week-over-week at 34%. Winter wheat rated fair is 40%, advancing 5 points, while winter wheat rated poor or very poor is 26%, decreasing from 33% the week prior. The first weekly report of 2023 will be released on Monday, April 3, 2023.
- US HRS for January '23 was valued at \$409.00/ mt FOB PNW (*down \$7.20/mt from last week*), FOB Gulf HRW 11/12.5 pro is valued at \$395.10/mt (*down \$12.70/mt from last week*).

#### **Australian wheat:**

- Australian wheat futures headed for their lowest weekly close in 3 months, having shed A\$105 during the month of November (\$1.95 per bu).
- Australia's wheat harvest is progressing. Reports still state that yields in the west are strong and quality in the east is not as bad as originally feared.
- The Philippines and Thailand each bought 123k mt of Australian wheat at \$349/mt.

#### **Argentine wheat:**

- The crop update by Buenos Aires Grain Exchange (BAGE) put the wheat harvest at 23% complete, about half of last year's 45% and the 5-year average of 44%. Crop ratings were unchanged at 8% Gd/Exc (compared to 65% last year), and BAGE left the crop unchanged at 12.4 million mt despite an average yield so far of 'only' 1.56 mt/ha. The yield is below the reduced expectations, and their production number could end up lower than the 12.4 million mt stated by BAGE.

#### **EU wheat:**

- Marché à Terme International de France (Matif) wheat reversed Wednesday's gains, dropping back to its lowest intra-day close since mid-August, pushed by a 5-month high in the Euro and by Russia taking most of the export business.
- EU shipments are well ahead of the official data, farmers are already up to 80% committed and are not sellers, and cash wheat should become increasingly tight in the second half of the campaign.
- FOB prices in the EU: December '22 French 11.5 pro wheat closed at \$340.9/mt (*up \$1.90/mt from last week*); December '22 German 12.5 pro wheat closed at \$348.10/mt (*down \$1.00/mt from last week*); December '22 Baltic 14.0 pro wheat closed at \$389.1/mt (*down \$0.90/mt from last week*).

**Black Sea wheat:**

- Russian shipments suffered from bad weather, and Ukrainian shipments were slowed due to logistics and inspection delays in Turkey.
- The Black Sea Grain Initiative has been extended 120 days, but logistical issues continue. For example, there are 77 vessels awaiting inspection in Turkey. Ukrainian grain exports will be under 3.0 MMT in November, down from 4.2 MMT in October.
- The outlook for Southern Russia and Eastern Ukraine has some severe cold with no snow.
- However, close to 2 million mt of wheat was sold this week from the Black Sea.

➤ **Significant purchases/ trades:**

- **Turkey's** TMO bought 455k mt of December – January '23 wheat from Russia.
- **Jordan** passed on their tender.
- **Algeria** bought 450k mt of wheat for Jan at \$354-356, also from the Black Sea.
- **Pakistan** bought its 500k mt of wheat at low prices (likely from Russia), with offers at \$372/mt basis Karachi.
- **Thailand** bought 123k mt of Australian feed wheat for June at \$349/mt.
- The **Philippines** also bought 123k mt of Australian wheat at \$349/mt.
- **US weekly export sales** of 155k mt were well below trade estimates, and the season total of 494 million bu is now down 6% on last year against the USDA's projected 3% drop.

➤ **Wheat Market Outlook:**

**Significant events over the past week:**

- **Statistics Canada (STC)** assessed total Canadian wheat production at 33.8 million mt, the third biggest Canadian wheat crop ever. Spring wheat was pegged at 25.7 million mt and durum at 5.4 million mt. *Perhaps most significantly, while the wheat crop is large, this final estimate is lower compared to the STC September estimate by 879k mt for all wheat, 374k mt for spring wheat, and 674k mt for durum wheat.* The trade was expecting a similar total wheat production estimate of 34.8 million mt. The trade estimate for spring wheat was 25.9 million mt, slightly higher than the STC number. And the trade estimate for durum wheat was at 5.9 million mt, appreciably higher than the STC number.
- **US wheat futures** dropped to multi-month lows as Black Sea wheat filled significant demand by Turkey, Algeria, and Pakistan at big discounts to US wheat prices.
- **US wheat export sales** fell behind further to 6% below last year's sales.
- **US winter wheat** rated good or excellent increased by 2 points week-over-week at 34%.
- **Australia's wheat harvest** is progressing. Reports still state that yields in the west are strong and quality in the east is not as bad as originally feared.
- In **Argentina**, BAGE put the wheat harvest at 23% complete, about half of last year's 45% and the 5-year average of 44%. Crop ratings were unchanged at 8% Gd/Exc (compared to 65% last year).
- The Black Sea Grain Initiative has been extended 120 days, but logistical issues continue.
- Close to 2 million mt of wheat was sold this week from the **Black Sea**.

**Outlook:**

December is always a difficult month to predict. Expect it to end with little change from the current levels. Cash prices in the Middle East will continue to be led by Russia and by developments in Ukraine. The balance sheets will likely remain tight and there is little reason to expect a lot of change in the next WASDE report. Russian cash prices remain lower but will be less aggressive in the New Year.

Mercantile's recommendation remains the same: no new sales until the New Year.



**iii) Primary Elevator Price Tables and Grade Spreads**

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

Date: **02-12-2022**

NW Sask	Spot		NW Sask	Deferred	
	(bu.)	(mt)		Feb.'23 (bu.)	Feb. '23 (mt)
1 CWRS 13.5	\$11.58	\$425.50	1 CWRS 13.5	\$11.63	\$427.33
1 CWAD 13.0	\$13.42	\$493.10	1 CWAD 13.0	\$13.41	\$492.74
1 CPSR 11.5	\$11.07	\$406.76	1 CPSR 11.5	\$11.10	\$407.86
<b>SW Sask</b>			<b>SW Sask</b>		
1 CWRS 13.5	\$11.42	\$419.62	1 CWRS 13.5	\$11.53	\$423.66
1 CWAD 13.0	\$13.41	\$492.74	1 CWAD 13.0	\$13.41	\$492.74
1 CPSR 11.5	\$10.80	\$396.84	1 CPSR 11.5	\$11.03	\$405.29
<b>NE Sask</b>			<b>NE Sask</b>		
1 CWRS 13.5	\$11.18	\$410.80	1 CWRS 13.5	\$11.25	\$413.37
1 CWAD 13.0	\$13.17	\$483.92	1 CWAD 13.0	\$13.22	\$485.76
1 CPSR 11.5	n/a		1 CPSR 11.5	n/a	
<b>SE Sask</b>			<b>SE Sask</b>		
1 CWRS 13.5	\$11.21	\$411.90	1 CWRS 13.5	\$11.27	\$414.10
1 CWAD 13.0	\$13.21	\$485.39	1 CWAD 13.0	\$13.24	\$486.49
1 CPSR 11.5	\$10.66	\$391.69	1 CPSR 11.5	\$10.76	\$395.37

Data source: PDQ, Dec. 2/22

**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, Dec. 2/22

#### **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 Basis<sup>1</sup> (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

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

“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.”

- HRS in the Pacific North West (PNW)  $\approx$  2 CWRS 13.0% in Vancouver
- HRW in the Pacific North West (PNW)  $\approx$  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

➤ 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**

Relevant FOB Prices and Export Basis				05-12-2022
Type of Wheat	FOB Prices CDA <sup>1</sup> (calculated)		Street Prices	Export Basis <sup>2</sup>
	West Coast (Cdn./mt\$)	Great Lakes (Cdn.\$/mt)	Rosetown (Cdn.\$/mt)	Basis: West Coast-Centr. SK (Cdn\$/mt)
DNS 14.0	\$501.39	\$597.68		
HRS	\$493.41			
HRW 11.5	\$490.42			
SWW 12.0	\$431.05			
1 CWRS 13.5 <sup>3</sup>	\$501.39		\$416.68	\$84.72
2 CWRS 13.0 <sup>3</sup>	\$493.41		\$405.65	\$87.76
3 CWRS <sup>3</sup>	\$490.42		\$396.84	\$93.58
CPS <sup>3</sup>	\$424.07		\$395.37	\$28.70
1 CWAD <sup>4</sup>		\$590.70	\$499.35	\$91.35
<b>Competing wheat:</b>				
	US\$/mt			
Russia 12.5 (Black Sea, 25k mt)	\$320.00	Jan.'23		
French 11.5 (Rouen)	\$342.80	Jan.'23		
APW 10.5 (W Coast)	\$365.00	Jan.'23		
Argentine 12.0	\$375.00	Jan.'23		

<sup>1</sup> FOB Prices CDA = FOB US\$ converted into Canadian Currency

<sup>2</sup> Export Basis = FOB Prices CDA minus Cdn. Street Price

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

<sup>4</sup> Values derived to Lakehead FOB