

Wheat Market Outlook and Price Report: March 20, 2023 By Marlene Boersch/ A.P. Temple/ Michael Wilton Mercantile Consulting Venture Inc.

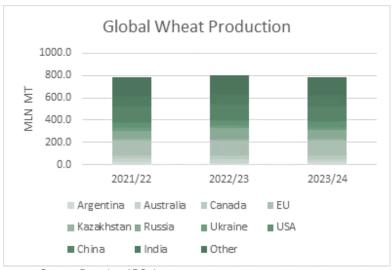
i) Background and Rationale for the Report

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 March 20, 2023

International Grains Council (IGC) March Outlook



Source: Based on IGC data

- The International Grains Council (IGC) put 2022/'23 global wheat production at a record high of 801 million mt. The increase was driven by more production in Kazakhstan, Australia, India, and the European Union. Global ending stocks for the 2022/'23 season were put 5 million mt higher than last month at 286 million mt.
- The IGC released their first estimates for wheat production for the 2023/'24 growing season. They
 put global wheat production at 787 million mt, down 2 per cent (14 million mt) from the previous
 year. Most of the decrease in global wheat production was in exporting countries, led by 20 per
 cent less production in Ukraine, 13 per cent less production in Russia, and a 29 per cent smaller
 crop in Australia.

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We think that most of the IGC's production estimates are reasonable, but they are likely at the
high end of what is possible. Their numbers for the Black Sea are higher than what had heard
from local analysts, and while their estimates for Australia and India are possible, they do not give
much room for the potential impact of the forecasted El Nino.

> 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.

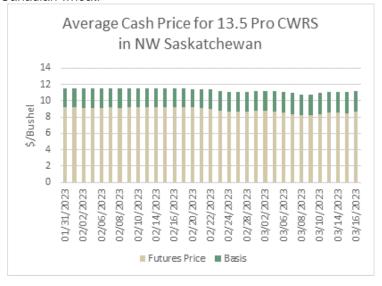
Futures:

- May 2023 contract Chicago winter wheat closed at \$710-4, up 11-4 cents Friday, up 31-2 cents on the week.
- May 2023 contract Kansas hard red winter wheat closed at \$825-6, up 16-0 cents on Friday, up 37-4 cents on the week.
- May 2023 Minneapolis hard red spring wheat closed at \$860-6, up 11-6 cents on Friday, up 36-2 on the week.
- US wheat futures are currently trading 6 to 10 cents lower at the time of writing.



Canadian Wheat

While future prices crashed over the past three weeks, average basis levels have cushioned the
fall in cash prices. Futures prices have fallen roughly 60 cents since the beginning of February,
while cash prices have fallen just 40 cents on average. The strength in basis was largely because
of the depreciating Canadian dollar, relatively cheap export prices off the West Coast, and strong
demand for Canadian wheat.



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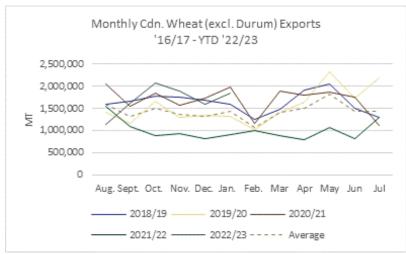
Source: Based on PDQ data

Canadian wheat exports remain strong. There were another 520.5k mt of wheat exported during
week 32, which brings the season total to 12.3 million mt, up 69 per cent from last year compared
to the AAFC's 57 per cent increase. Average weekly exports need to be 350k mt to meet the
AAFC's 19.3 million mt number. Wheat deliveries were also strong and will allow the export pace
to remain strong.

(CGC) Grain Handling Summary Wheat			Week 32	(Mar. 12'23)
('000 mt)	Producer Terminal Receipts		Bulk Exports	Domestic Disappearance
Week 32	459.2	422.1	520.5	42.6
Week ago	565.3	373.7	463.8	42.7
YTD	15,245.1	14,313.5	12,337.2	2,549.7
Last YTD	10,250.4	9,233.1	7,320.5	2,484.7
YTD less Last YTD	4,994.7	5,080.4	5,016.7	65.0
YTD over Last YTD	149 per cent	155 per cent	169 per cent	103 per cent

Source: Based on CGC data

• **Durum:** Durum exports in week 32 were 76.1k mt which is in-line with the average pace needed to make the AAFC's 4.8 million mt export number. The average pace of exports to date is 104.6k mt per week. Although we are entering the spring shipping season when exports tend to pick up (shipping out of the Great Lakes usually resumes in late March), there is not enough durum supply to maintain the current export pace. With that said, producer deliveries were 130.6k mt, causing an increase in visible supply. Most of the stocks are in primary elevators, but there is 120k mt in Vancouver terminals.



Source: Based on Stats Canada data



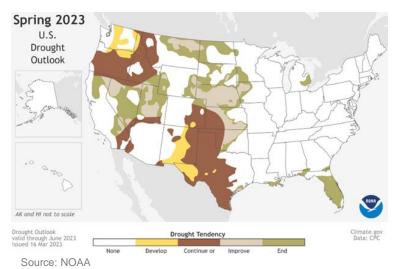
(CGC) Grain Handling	Week 32	(Mar. 12'23)		
('000 mt)	Producer Deliveries	Terminal Receipts	Bulk Exports	Domestic Disappearance
Week 32	130.6	137.6	76.1	2.2
Week ago	170.2	96.8	68.2	7.6
YTD	3,829.8	3,832.6	3,346.4	380.3
Last YTD	1,814.6	2,101.8	1,541.6	282.5
YTD less Last YTD	2,015.2	1,730.8	1,804.8	97.8
YTD over Last YTD	211 per cent	182 per cent	217 per cent	135 per cent

Source: Based on CGC data

We are 20 per cent sold new crop durum. There is some strong local demand by exporters who
have a new crop program on. In these cases, we would get up to 40 per cent sold.

US Wheat:

• The percentage of the US winter wheat crop experiencing drought conditions improved two points over the week and is now at 53 per cent. The areas experiencing the worst drought are Kansas, where 66 per cent of the crop is in extreme to exceptional drought, and Nebraska, where 70 per cent of the crop is in extreme drought. The spring drought outlook for the US shows the drought should improve in parts of the northern and central Plains over the next three months, but drought in parts of the southern High Plains will persist through to the end of June.



The first weekly US crop progress report is out in two weeks' time (April 3rd).

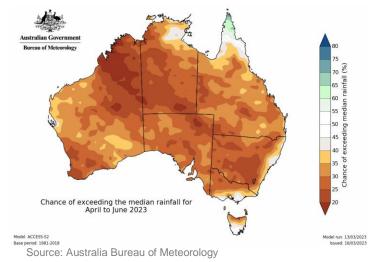
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• US HRS for April 2023 was valued at \$365.30/mt FOB PNW (up \$7.90/mt from last week), FOB Gulf HRW 11/12.5 pro is valued at \$361.70/mt (up \$15.50/mt from last week).

Australian wheat:

 The Meteorology Bureau in Australia says the forecasted El Nino may be earlier and more severe than initial thoughts.



- The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) is estimating that next year's wheat crop will be around 10 million mt less than last year at 28 million mt. This compares with local trader's thoughts of ~25 million mt.
- FOB values in Australia: April 2023 AWP WA is valued at \$305.00/mt (down \$15.00/mt from last week).

Argentine wheat:

- The wheat market in Argentina is completely stalled. December-March exports are just under 1.9 million mt. We think they only have an exportable surplus of 5-6 million mt.
- Exports from Brazil are taking up some of Argentina's shortfall. Brazil, which usually imports 6-8 million mt of wheat, has exported almost 2.6 million mt. Prices have risen in Brazil which has taken it out of the export market.

EU wheat:

- Contagion fears over the collapse of SVB and Credit Suisse caused the Euro to fall which helped Marche A Terme International de France (MATIF) wheat prices. The funds increased their short position on MATIF wheat by 14,000 contracts over the week to 78,000 contracts. Some of this was bought back last week.
- Low soil moisture does not seem to be affecting the French wheat crop as 95 per cent of the
 crop is considered to be in Gd/Ex condition. This hasn't changed from last week, and is three
 points higher than last year. French farmers are not selling at these prices which has caused
 some exporters to pull their bids altogether.
- Strategie Grains is estimating that durum production in the EU will increase by 10 per cent from last year's drought-impacted crop to 7.8 million mt. Most of the increase in production is expected to be in Italy, but production in Spain and Greece is also expected to be higher. Durum production in the EU is subject to the same weather concerns mentioned in the wheat section.
- FOB prices in the EU: April 2023 French 11.5 pro wheat closed at \$293.60/mt (up \$5.20/mt from last week); April 2023 German 12.5 pro wheat closed at \$293.50 (up \$3.50/mt from last week); April 2023 Baltic 14.0 pro wheat closed at \$309.30/mt (up \$4.20/mt from last week).



Black Sea wheat:

- There are reports that farmers in Ukraine only have about 35 per cent of the crop protection products they need. A lack of money is making sourcing all crop inputs difficult. Initial estimates are that total grain production could fall to 34 million mt compared to 54 million mt last year and the record 86 million mt in 2021. The IGC has their estimate for Ukraine's upcoming wheat crop at 20.2 million mt which is 20 per cent less than last year.
- The state agency, Rosstat estimates that their 2022/'23 crop was 104 million mt compared to the USDA's 92 million mt estimate and the IGC's 95 million mt number. Russia's actual production is likely closer to 100 million mt. The IGC put Russia's 2023/'24 crop down 13 per cent at 83 million mt, down 13 per cent.
- Russin wheat prices for April are around \$287/mt on a FOB basis (down \$3.00/mt from last week).

Significant purchases/ trades:

- It was a big week with **Saudi Arabia**, **Algeria**, **Tunisia**, **Jordan** and **Egypt** all buying a total of around two million mt of wheat. Most of the trades were filled with Black Sea supplies. The Egyptian price was the lowest Mercantile has seen of recent.
- Japan bought 73,518 mt of food-grade wheat from the US, Canada and Australia in their weekly tender.
- **US weekly wheat sales** were good at 336.7k mt. Total US exports are 650 million bushels, down 5 per cent from last year.

Wheat Market Outlook:

Significant events over the past week:

- **Indonesia's government** approved the cultivation of the genetically modified wheat variety for human consumption.
- Wheat prices will follow corn, which, will be a function of old crop corn sales. China was a strong buyer last week, making four consecutive corn purchases ranging from 191k mt to 667k mt for a total of 2.1 million mt. There are thoughts that China is short on corn and more purchases will be made. US corn is the cheapest in the world and will remain that way until Brazil's new crop is available in July.
- Shipping rates continued to rise. The Baltic Dry Index rose 7 per cent over the week.

Outlook:

Russian wheat continues to dominate the wheat trade. Russian farmers had a big crop, and they are strong sellers at these prices. With a new wheat crop coming shortly in Europe, Mercantile doesn't presently see any independent strength in wheat. The wheat market will follow corn, which, in the short-term, will be a function the pace of US export sales. -Mercantile is sold out on current crop and will wait on weather developments before selling additional new crop.



iii) Primary Elevator Price Tables and Grade Spreads

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

				Date:	March 20, 2023	
NW Sask	Sp	Spot		Deferred		
	(bu.)	(mt)	NW Sask	May '23 (bu.)	May '23 (mt.)	
1 CWRS 13.5	\$11.14	\$409.33	1 CWRS 13.5	\$11.14	\$409.33	
1 CWAD 13.0	\$15.45	\$567.69	1 CWAD 13.0	\$12.38	\$454.89	
1 CPSR 11.5	\$10.69	\$392.79	1 CPSR 11.5	\$10.73	\$394.26	
SW Sask			SW Sask			
1 CWRS 13.5	\$10.93	\$401.61	1 CWRS 13.5	\$10.98	\$403.45	
1 CWAD 13.0	\$12.44	\$457.10	1 CWAD 13.0	\$12.36	\$454.16	
1 CPSR 11.5	\$10.48	\$385.08	1 CPSR 11.5	\$10.56	\$388.02	
NE Sask			NE Sask			
1 CWRS 13.5	\$10.85	\$398.67	1 CWRS 13.5	\$10.86	\$399.04	
1 CWAD 13.0	\$12.27	\$450.85	1 CWAD 13.0	\$12.25	\$450.11	
1 CPSR 11.5	n/a	n/a	1 CPSR 11.5	n/a	n/a	
SE Sask			SE Sask			
1 CWRS 13.5	\$10.76	\$395.37	1 CWRS 13.5	\$10.79	\$396.47	
1 CWAD 13.0	\$12.32	\$452.69	1 CWAD 13.0	\$12.30	\$451.95	
1 CPSR 11.5	\$10.36	\$380.67	1 CPSR 11.5	\$10.42	\$382.87	

Data source: PDQ. Mar. 20/'23

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, Mar. 20/'23

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:
 - o DNS 14% in the Pacific North West (PNW) ≈ 1 CWRS 13.5 per cent in Vancouver
 - o HRS in the Pacific North West (PNW) ≈ 2 CWRS 13.0 per cent 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 Wheat); CPS (Canada Prairie Spring Wheat); CWAD (Canadian Western Amber Durum Wheat)

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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.
- 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 per cent of total export volume crop year to date.
- Italy is the single biggest buyer of Canadian durum wheat with 27 per cent 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.

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

Releva	nt FOB Prices and	Export Basis		March 20, 2023
	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	\$480.65	Closed		
HRS	\$474.27			
HRW 11.5	\$495.21			
SWW 12.0	\$408.82			
1 CWRS 13.5 ³	\$480.65		\$400.88	\$79.77
2 CWRS 13.0 ³	\$474.27		\$389.85	\$84.42
3 CWRS ³	\$495.21		\$375.16	\$120.05
CPS ³	\$401.79		\$303.87	\$97.92
1 CWAD ⁴		Closed	\$459.30	
Competing wheat:	US\$/mt			
Russia 12.5 (Black Sea, 25k mt)	\$287.00		April	
French 11.5 (Rouen)	\$293.60		April	
APW 10.5 (W Coast)	\$305.00		April	
Argentine 12.5	\$340.00		April	

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

² Basis = FOB Prices CDA minus Street Price

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

⁴ Values derived to Lakehead FOB