

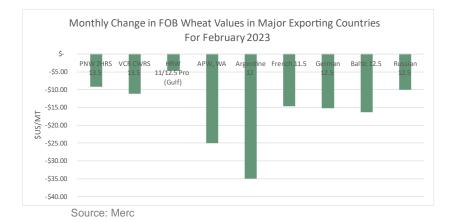
Wheat Market Outlook and Price Report: February 27, 2023 By Marlene Boersch/ A.P. Temple/ Michael Wilton Mercantile Consulting Venture Inc.

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 February 27, 2023



Monthly Change in Wheat Prices in Major Exporting Countries

- Global wheat prices on a free on board (FOB) basis have deteriorated over the month. A large
 portion of the monthly decline came over the past week.
- Argentina saw the largest decline, with their wheat price falling \$35/mt on a FOB basis. The entirety of the decrease came this past week as it was pressured by cheaper wheat from Brazil.
- Wheat prices in Australia have also seen a steep decline as the bulk of their wheat crop hit the market over the month.
- In North America, 13.5 pro HRS wheat prices fell \$9.20/mt in the PNW and \$11.10/mt in Vancouver over the month of February. In each case, all but \$1.00/mt of the decline occurred last week.
- Russian wheat remains the cheapest wheat in the world on a FOB basis. Russian 12.5 pro FOB values fell \$10.00/mt over the month and is now around \$300.00/mt.



> 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.

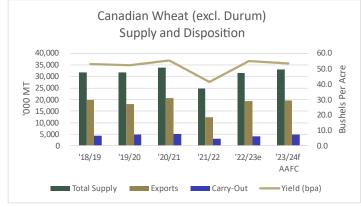
Futures:

- March '23 contract **Chicago winter wheat** closed at \$708-2, down 30-0 cents Friday, *down 56-6 cents on the week.*
- March '23 contract **Kansas hard red winter wheat** closed at \$841-6, down 20-0 cents on Friday, *down 56-6 cents on the week.*
- March '23 **Minneapolis hard red spring wheat** closed at \$885-4, down 22-4 cents on Friday, *down* \$44-6 cents on the week.
- US wheat futures are currently trading 9 to 11 cents lower the Monday morning at the time of writing.



Canadian Wheat

AAFC raised Canada's 2022/'23 non-durum wheat exports by 200k mt to 19.3 million mt. The increase in exports resulted in a respective decrease in ending stocks to 4 million mt. The decrease in beginning stocks for the 2023/'24 season led AAFC to decrease feed use in the upcoming season by 200k mt to keep ending stocks the same as before at 4.9 million mt.

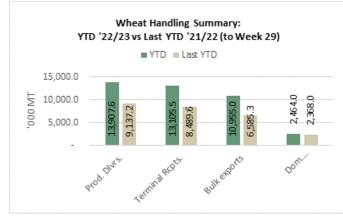


Source: Based on AAFC and Merc data

 Week 29 wheat exports were slower at 312.0k mt. Total exports to date are 11 million mt. With 56% of the export season complete, Canada has exported 57% of AAFC's recently raised export projection. Although exports have slowed, deliveries have remained steady, creating a buildup of



visible supplies. Visible supplies tend to build into the winter before being depleted in the spring shipping season.



Source: Based on CGC data

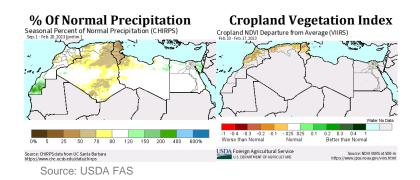
• **Durum:** Week 29 durum exports were strong again at 105.6k mt. Year to date durum exports are now 3.1 million mt which is 115% above last year's pace. Durum exports have been unseasonably strong considering Canadian durum exports usually hit their seasonal low in February and then pick up again in March-April when the Lakes open again. The strong pace of exports is helped by exporters taking advantage of the relatively cheap freight from the West Coast to North Africa. There is a large amount of visible durum supplies which will support the export pace over coming weeks.



Source: Based on CGC data

 North African countries are large durum buyers, but they also produce some of their own supply. Most of the crops in Northern Africa were off to a poor start because of poor conditions during planting season. A lack of moisture in southwestern Morocco prevented many of the wheat and barley fields from being planted. Some of the dry conditions in parts of Morocco were alleviated last week with heavy snow and rain. Tunisia was also dry, but recent rain has brought some relief. Weather conditions from late February to April are the most important for production in Northern Africa.

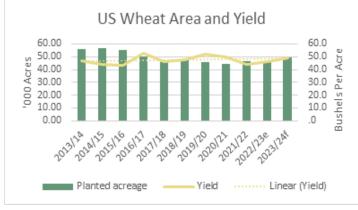




 Durum bids were moved up last week. If not sold, we would use this opportunity to finish sales. The seasonal trend is for prices to decrease from here until late spring. Producers may want to sell 20% of new crop at \$12.00/bu.

US Wheat:

 The USDA's Outlook Forum put US wheat area at 49.5 million acres, which was 1 million acres above trades guesses and 3.8 million acres (8%) above last year. If realized, this would be the largest wheat area in 7 years. Yield is expected to be 49.2 bushels per acre, up 2.8 bushels from last year. Ending stocks were put at 608 million bushels, a 40-million-bushel increase from last year. The Outlook Forum numbers are usually used as a starting point for the subsequent farmerbased USDA reports.



- Source: Based on CGC data
- Rain in northern and eastern Kansas and southern and eastern Nebraska helped alleviate drought conditions in those regions, but much more will be needed. There is additional rain and snow forecast for the Southern Plains which will bring additional relief.
- US wheat sales last week were 339k mt (12.4 million bushels) which was in the middle range of trade expectations. Wheat sales for the remainder of the year need to be ~3.9 million bushels per week to meet the USDA's 775-million-bushel export number. Last year, average US wheat exports over that timeframe were 3.5 million bushels. Total wheat commitments are 619 million bushels, down 6% from last year compared to the USDA's 3% decline. The surge in the US dollar will be negative for US sales moving forward.
- US HRS for March 2023 was valued at \$396.30/mt FOB PNW (*down* \$8.20/mt from last week), FOB Gulf HRW 11/12.5 pro is valued at \$381.00/mt (*down* \$19.00/mt from last week).



Australian wheat:

- Harvest in Australia is complete and farmers there are now on holidays.
- FOB values in Australia: March 2023 AWP WA is valued at \$325.00/mt (*down* \$25.00/mt from last week).

Argentine wheat:

FOB values in Argentina were pressured last week from competition with Brazilian wheat. Brazil
has been exporting more volume than Argentina as of late.

EU wheat:

- The winter wheat crop in the EU is coming out of dormancy and is in generally good condition. The lack of moisture in France is concerning, but the FranceAgriMer rated their crop at 95% Gd/Ex. Crops in Germany and Poland are benefitting from rain and mild weather.
- The EU Commission took 400,000 tonnes off their new crop wheat production estimate, now at 126 million mt, citing the low soil moisture reserves coming into the growing season.
- FOB prices in the EU: March 2023 French 11.5 pro wheat closed at \$311.50/mt (*down* \$13.40/mt from last week); March 2023 German 12.5 pro wheat closed at \$316.80 (*down* \$13.40/mt from last week); March 2023 Baltic 14.0 pro wheat closed at \$357.50/mt (*down* \$13.40/mt from last week).

Black Sea wheat:

• The current Black Sea Grain Initiative is scheduled to expire on March 18th. We expect that it will be renewed. There was additional pressure on the wheat market on Friday as China publicly called for its renewal. China has been relying on the grain corridor to access cheap Ukrainian grain.

Significant purchases/ trades:

- **Iraq** bought 240,000 mt of wheat at \$428.00 Delivered.
- Egypt bought 240,000 mt of Russian wheat for FH April at \$317.50/mt.
- **Turkey** made a direct purchase from the Russians of 500,000 mt, but no price was reported.
- Turkey is expected to buy an additional 790,000 tonnes of wheat for March-May.
- **US** weekly export sales were 339k mt for a season total of 619 million bushels which is still down 6% on last year.

> Wheat Market Outlook:

Significant events over the past week:

- Corn came under pressure on Thursday from **bearish numbers from the USDA Outlook Forum**. The USDA Outlook Forum put US corn area at 91 million acres. This was in line with trade guesses, but a strong increase from the 88.6 million acres of corn that was planted last year. The Outlook Forum's yield of 181.5 bushels per acre is 4.8 bushels above the record set in 2021, and 5.5 bushels above the trend line. Ending stocks were put at 1.89 billion bushels, which would be the largest stocks in 4 years. These estimates are based on the USDA's ideas, and farmer survey results will not be published until May.
- The US Dollar Index rose from 104.3 to a seven-week high of 105.2 over the week. The increase was due to data from the Commerce Department showing an 1.8% increase in consumer spending which reinforced sentiment of further increases in the interest rate.



Outlook:

There is little in the mix to support a rally in old crop wheat prices. The funds sold many of their long positions, and there is little to suggest them buying in. There could be a rally in spring wheat as the chart looks oversold. If it does, any remaining old crop should be sold. The strong dollar is making purchases of North American grain difficult in local currencies. Hopefully growers have sold old crop.

Producers may want to hold new crop sales as the old crop/new crop inverse is large and weather rallies cannot be excluded.

iii) Primary Elevator Price Tables and Grade Spreads

Date: February 27, 2023 Deferred Spot NW Sask **NW Sask** Apr '23 (bu.) Apr '23 (mt.) (bu.) (mt) 1 CWRS 13.5 \$413.00 1 CWRS 13.5 \$11.26 \$413.74 \$11.24 1 CWAD 13.0 \$12.52 \$460.03 1 CWAD 13.0 \$12.53 \$460.40 1 CPSR 11.5 \$10.66 \$10.58 \$388.75 1 CPSR 11.5 \$391.69 SW Sask SW Sask 1 CWRS 13.5 1 CWRS 13.5 \$11.09 \$407.49 \$11.06 \$406.39 1 CWAD 13.0 \$12.41 \$455.99 1 CWAD 13.0 \$12.52 \$460.03 1 CPSR 11.5 \$10.42 \$382.87 1 CPSR 11.5 \$10.39 \$381.77 NE Sask NE Sask 1 CWRS 13.5 \$10.95 \$402.35 1 CWRS 13.5 \$11.01 \$404.55 1 CWAD 13.0 \$12.41 \$455.99 1 CWAD 13.0 \$12.43 \$456.73 1 CPSR 11.5 1 CPSR 11.5 n/a n/a n/a n/a SE Sask SE Sask 1 CWRS 13.5 \$10.88 \$399.77 1 CWRS 13.5 \$10.95 \$402.35 1 CWAD 13.0 \$12.39 \$455.26 1 CWAD 13.0 \$12.43 \$456.73 1 CPSR 11.5 1 CPSR 11.5 \$10.38 \$381.40 \$10.41 \$382.51

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

Data source: PDQ, Feb. 27/'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, Feb. 27/'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 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: $P_{1} = P_{1} = P_{2} = P_{1} = P_{2} = P$
 - \circ 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
- HRW in the Pacific North West (PNW) ≈ 3 CWRS in Vancouver
- \circ 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.
 - $\circ\,$ 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				
FOB Prices CDA	¹ (calculated)	Street Prices	Export Basis ²	
West Coast (Cdn./mt\$)	Great Lakes (Cdn.\$/mt)	Rosetown (Cdn.\$/mt)	Basis: West Coast-Centr. SK (Cdn\$/mt)	
\$482.10	Closed			
\$475.79				
\$483.60				
\$416.22				
\$482.10		\$398.30	\$83.80	
\$475.79		\$396.47	\$79.33	
\$483.60		\$374.42	\$109.18	
\$409.24		\$303.87	\$105.36	
	Closed	\$462.97		
US\$/	mt			
\$300.00		March		
\$311.50		March		
\$325.00		March		
\$345.00		March		
	West Coast (Cdn./mt\$) \$482.10 \$475.79 \$483.60 \$416.22 \$482.10 \$475.79 \$483.60 \$409.24 US\$/ \$300. \$311. \$325.	West Coast (Cdn./mt\$) Great Lakes (Cdn.\$/mt) \$482.10 Closed \$475.79 \$483.60 \$416.22 \$482.10 \$445.79 \$483.60 \$445.79 \$483.60 \$483.60 \$483.60 \$409.24 Closed U\$\$/mt \$300.00 \$311.50 \$325.00	West Coast (Cdn./mt\$) Great Lakes (Cdn.\$/mt) Rosetown (Cdn.\$/mt) \$482.10 Closed \$475.79 - \$483.60 - \$4462.20 - \$482.10 \$398.30 \$416.22 - \$482.10 \$398.30 \$475.79 \$396.47 \$483.60 \$374.42 \$409.24 \$303.87 Closed \$462.97 U\$\$/mt - \$300.00 March \$311.50 March	