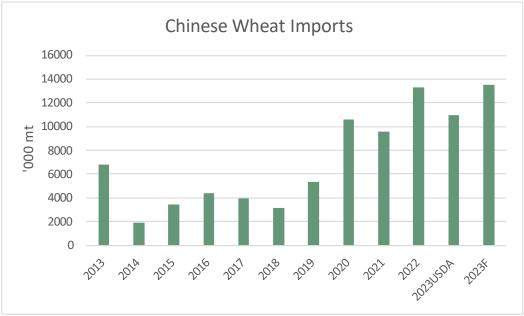
Wheat Market Outlook and Price Report: October 23rd, 2023 By Marlene Boersch/ A.P. Temple/ Michael Wilton Mercantile Consulting Venture Inc.

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 October 23, 2023

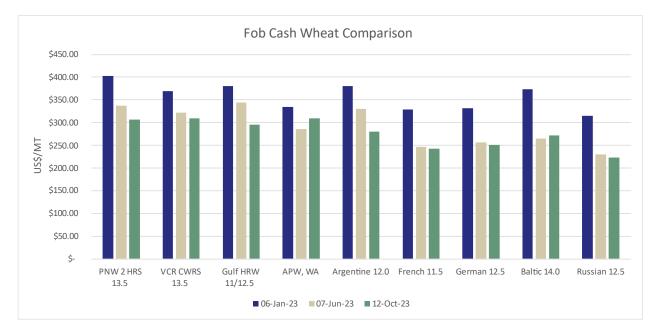


Chinese Wheat Imports: Marketing Year 2013-2023

Source: based on USDA and Merc data

- China's wheat crop was impacted by heavy rain and flooding in May-June. The overall impact of the rain is difficult to assess, but the recent Chinese buying spree could be an indication.
- Chinese wheat imports from January to the end of September are 10.2 million mt, up 54 per cent on last year. In the 2022/2023 marketing year, China imported a marketing year record of 13.3 million mt.
- The current pace of imports and recent purchases are suggesting a fresh record volume compared to the USDA's 11.0 million mt forecast.

FOB Wheat Price Developments:



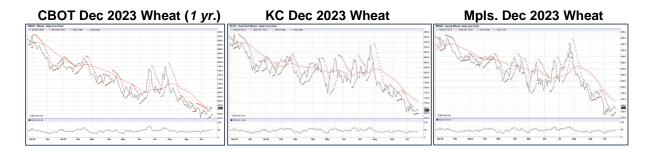
• FOB wheat values in exporting countries were generally higher last week. Wheat values in North America and the EU recovered most of the loss's experiences since the end of September. Russian wheat exports have been slowing. Russian FOB values remain ill-defined given the discrepancy between prices offered at public tenders and the prices in private deals.

> 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.

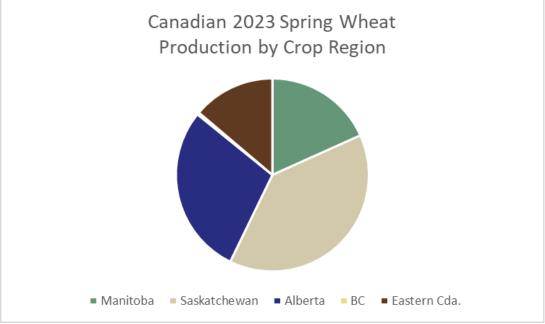
Futures:

- Dec. 2023 contract Chicago winter wheat closed at \$586-0, up 6-4 cents on the week.
- Dec. 2023 contract Kansas hard red winter wheat closed at \$670-0, up a penny on the week.
- Dec. 2023 Minneapolis hard red spring wheat closed at \$733-2, up 11-2 cents on the week.
- U.S. wheat futures are trading 7-13 cents higher while MATIF milling wheat futures are down by €0.75-€1.75 at the time of writing this Monday morning.



Canadian Wheat

• Sask. Ag raised their estimate of the province's average yield by three bushels per acre to 42.6 bushels per acre. If true, this is 0.6 bushels per acre above average and would add an additional 879k mt of supply to the Canadian spring wheat balance sheet. If correct, bigger production in Sask. would increase the national yield to 44.9 bushels per acre compared to Stats Canada's 42.6 bushel per acre number. Production would be 22.9 million mt compared to Stats Canada's 22.1 million mt estimate.



Source: based on Sask Ag, MB Ag, AB Ag, STC and Merc data

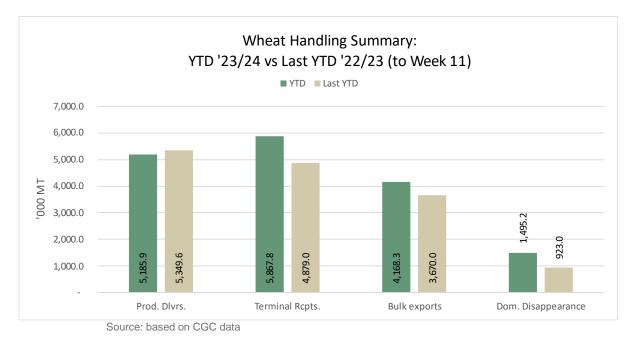
• There was some concern about the quality of the Sask. spring wheat crop given the low-test weight in some areas. According to Sask Ag, however, 94 per cent of Sask.'s production was a No. 1 or 2 CW. This is lower than last year, but above the 10-year average.

2023 Saskatchewan Spring Wheat Crop Quality

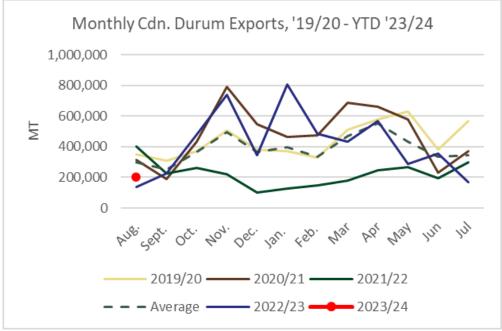
	1CW	2CW	3CW	CW feed
		Spring Whe	at	
2013	57	32	9	2
2014	9	42	29	20
2015	26	41	23	10
2016	10	42	28	20
2017	77	20	3	0
2018	46	28	19	7
2019	13	35	28	24
2020	67	26	5	2
2021	49	37	11	2
2022	74	22	3	1
10 yr avg	43	33	16	9
2023	59	35	5	1

Source: Sask Ag.

• Weekly Canadian wheat exports in shipping week 11 were just 326.9k mt for a season total of 4.2 million mt, up 14 per cent from last year. The pace on last year declined by one per cent from week 10.



- **Durum**: Sask Ag corrected their 33 bushel per acre yield estimate that was reported on Oct. 2 to a more reasonable 23.8 bushels per acre. Our national yield estimate is 27.7 bushels per acre which makes for a 4.4 million mt crop. This compares with the AAFC estimates of 25.6 bushels per acre and a 4.1 million mt crop. Canada's exportable surplus is ~3.6 million mt, down 30 per cent from last year.
- The pace of exports, until last week, had been running even with last year. Shipping week 11 **durum exports** were 84.6k mt for a season total of 525.2k mt, down six per cent from last year. Durum exports seasonally pick up into November. Competition from Turkey could slow Canadian exports into the new year. With that said, Turkey's exports are already slowing down. Durum prices in Turkey rose \$20/ mt over the week because of high export demand and diminishing exportable supplies.



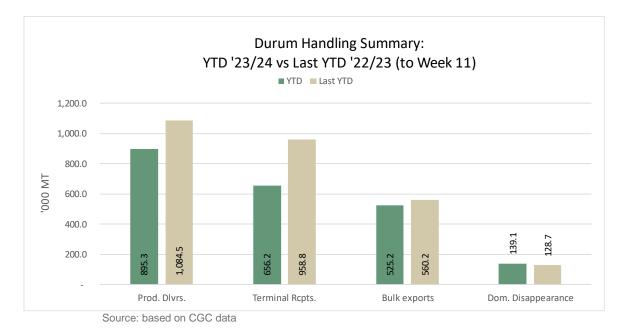
Source: based on STC data

• According to Sask Ag, the condition of Saskatchewan's durum crop seems to be good with the vast majority (82 per cent) of the crop falling under the 1CWAD and 2CWAD classes.

	1CW	2 CW	3CW	Other (4&5)
		Durum		
2013	21	34	34	11
2014	2	13	37	48
2015	20	40	25	15
2016	4	14	34	48
2017	72	23	4	1
2018	51	23	16	10
2019	12	26	33	29
2020	58	28	8	6
2021	39	36	21	4
2022	52	36	10	2
10 yr avg	33	27	22	17
2023	46	36	16	2

2023 Saskatchewan Durum Crop Quality

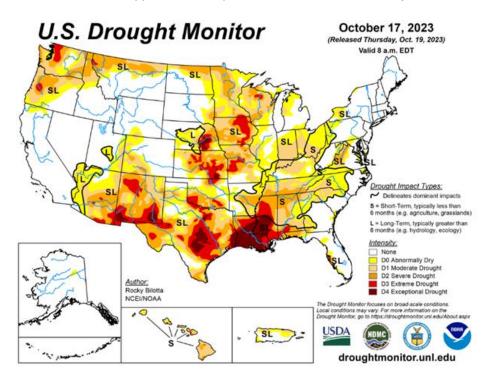
Source: Sask Ag



• Turkey (plus Russia/Kazakhstan) should run out of exportable supplies by the end of the of the calendar year which should force importers back to Canada. However, we do worry about the size of the premium to spring wheat.

U.S. Wheat:

 Wheat prices were supported last week as China continues to show itself to be a large buyer of wheat. Rain in parts of the winter wheat belt offered more relief to the drought. Meanwhile, low water levels on the Mississippi river are expected to continue into January.



- U.S. farmers planted another 11 per cent of the U.S. winter wheat crop. Seeding progress is now 68 per cent complete. This is in-line with the average pace.
- Weekly U.S. export sales were at the high end of expectations at 632,800 mt. Total commitments are now 10.7 million mt which is five per cent behind last year and inline with the USDA's expected year-over-year decline.
- U.S. HRS for Nov. 2023 was valued at \$314.00mt FOB PNW (*up* \$8.00/mt from last week), FOB Gulf HRW 11/12.5 pro is valued at \$304.00/mt (*up* \$9.00/mt from last week).

Australian Wheat:

- Harvest is progressing in Australia and yields are better than expected. Local analysts are talking about a 26-28 million mt crop compared to the USDA's 24.5 million mt estimate.
- FOB values in Australia: Nov. 2023 AWP, WA is valued at \$310.00/mt (*unchanged from last week*).

Argentine Wheat:

- BAGE decreased the condition of Argentina's wheat crop by two per cent to 11 per cent Gd/Ex. This is the same condition as last year's crop, but BAGE continues to think production will be 16.2 million mt. This would require a 30 per cent improvement in yield from last year. The country is receiving rain, which is welcome, but is likely to late to reverse much of the damage.
- FOB Argentine wheat (12 per cent pro) for Nov. was quoted at \$280.00/mt (unchanged from last week).

Indian Wheat

 In an attempt to have its farmers producer more wheat next year, the Indian government raised the procurement price for wheat by seven per cent to \$273.30/mt. The Indian government is currently expecting a 112.7 million mt crop compared to the USDA's 113.5 million mt number. Most analysts think the government's number is 10 per cent too high. The trade is again speculating about the country importing wheat as prices rise and stocks are low.

EU Wheat:

- MATIF milling wheat futures finish the week at five-week highs despite EU wheat exports being 22 per cent lower than last year.
- China is said to have bought approximately two million mt of French wheat, but this is for Dec.-Feb. shipment and there are currently no Chinese vessels in the French line-up.
- Winter wheat harvest in France is 38 per cent complete.
- EU FOB prices: Nov. 2023 French 11.5 pro wheat closed at \$250.00/mt (*up* \$7.00/mt from last week); Nov. 2023 German 12.5 pro wheat closed at \$257.00 (*up* \$6.00/mt from last week); Nov. 2023 Baltic 14.0 pro wheat closed at \$278.00/mt (*up* \$6.00/mt from last week).

Black Sea Wheat:

- Russian exports are slowing as October loadings are set to fall below last year's volume. This would be the first monthly year-over-year decrease this season. Some are saying the decrease is because of greater government intervention.
- Vessel loading in Ukraine's Danube has stalled on increased checks for VAT fraud.
- The winter wheat area in Ukraine remains dry.
- We would put effective Russian FOB values for 12.5 per cent protein wheat for Nov. at \$223/mt (*unchanged from last week*).

Significant purchases/ trades:

- South Korea bought 60k mt of optional origin January shipment feed wheat at \$272/mt.
- There were rumors of **Chinese** purchases, but nothing was confirmed.

> Wheat Market Outlook:

Significant events over the past week:

- The news services were centered on events that concerned Israel and Hamas. Missiles reportedly fired from Lebanon into Israel were seen as they could escalate the war to a second front. An escalation of the war could affect the crude oil price and internet service and could lead to rebound in commodity prices.
- Chinese wheat imports in September were 620k mt, up 66 per cent from the same month last year. Jan.-Sept. wheat imports are now 10.2 million mt, up 54 per cent on last year. Meanwhile, the USDA is forecasting that Chinese wheat imports will fall by 17 per cent year-over-year.
- Russia reportedly signed an agreement to supply 70 million mt of grain and oilseeds to China over the next 12 years. There are some questions as to the validity of this, but the underlying point of the concerted effort to enhance trade between the two economies remains.

Outlook:

Mercantile says the funds are short and believes more buying by China must be a concern to them. Currency remains a restriction to demand. South American weather, Ukraine logistics, Chinese demand, and a widening window for U.S. exports of wheat will be the market drivers according to Mercantile. In Mercantile's view, wheat is getting too cheap, so they still think holding to the New Year, when they expect better prices, is the best strategy.

				Date:	October 23, 202	
NW Sask	Sp	Spot		Deferred		
	(bu.)	(mt)	NW Sask	Jan '24 (bu.)	Jan '24 (mt.)	
1 CWRS 13.5	\$9.17	\$336.94	1 CWRS 13.5	\$9.14	\$335.84	
1 CWAD 13.0	\$13.00	\$477.67	1 CWAD 13.0	\$12.84	\$471.79	
1 CPSR 11.5	\$8.01	\$294.32	1 CPSR 11.5	\$8.39	\$308.28	
SW Sask			SW Sask			
1 CWRS 13.5	\$9.21	\$338.41	1 CWRS 13.5	\$9.21	\$338.41	
1 CWAD 13.0	\$13.03	\$478.77	1 CWAD 13.0	\$12.79	\$469.96	
1 CPSR 11.5	\$7.86	\$288.81	1 CPSR 11.5	\$8.12	\$298.36	
NE Sask			NE Sask			
1 CWRS 13.5	\$8.92	\$327.76	1 CWRS 13.5	\$8.90	\$327.02	
1 CWAD 13.0	\$12.94	\$475.47	1 CWAD 13.0	\$12.54	\$460.77	
1 CPSR 11.5	n/a	n/a	1 CPSR 11.5	n/a	n/a	
SE Sask			SE Sask			
1 CWRS 13.5	\$8.95	\$328.86	1 CWRS 13.5	\$8.95	\$328.86	
1 CWAD 13.0	\$13.03	\$478.77	1 CWAD 13.0	\$12.44	\$457.10	
1 CPSR 11.5	\$7.72	\$283.66	1 CPSR 11.5	\$7.95	\$292.11	

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

iii) Primary Elevator Price Tables and Grade Spreads

Data source: PDQ, Oct. 23/'23

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

Table 2: Grade Spreads, in Canadian Dollars per Bu and per MILLION MT

Data source: PDQ, Oct. 23/'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:
 - DNS 14 per cent in the Pacific Northwest (PNW) ≈ 1 CWRS 13.5 per cent in Vancouver
 - o HRS in the Pacific Northwest (PNW) ≈ 2 CWRS 13.0 per cent in Vancouver
 - o HRW in the Pacific Northwest (PNW) ≈ 3 CWRS in Vancouver
 - \circ 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)
- 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 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:

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."

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.

	FOB Prices CD/	A ¹ (calculated)	Street Prices	Export Basis ²
Type of Wheat	West Coast (Cdn./mt\$)	Great Lakes (Cdn.\$/mt)	Rosetown <mark>(</mark> Cdn.\$/mt)	Basis: West Coast-Centr. (Cdn\$/mt)
DNS 14.0	\$423.09	\$402.49		
HRS	\$416.71			
HRW 11.5	\$369.83			
SWW 12.0	\$353.75			
1 CWRS 13.5 ³	\$423.09		\$340.25	\$82.84
2 CWRS 13.0 ³	\$416.71		\$329.23	\$87.49
3 CWRS ³	\$369.83		\$305.34	\$64.48
CPS ³	\$346.71		\$282.56	\$64.15
1 CWAD ⁴		\$639.16	\$481.35	\$157.81
Competing wheat:	US\$	/mt		
Russia 12.5 (Black Sea, 25k mt)	\$223.00		November	
French 11.5 (Rouen)	\$250.00		November	
APW 10.5 (W Coast)	\$310.00		November	
Argentine 12.5	\$280.00		November	

Table 3: Relevant FOB Prices and calculated Basis, U.S. & Canadian Dollars per MT