

Wheat Market Outlook and Price Report: September 12, 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 September 12, 2022

Agricultural Market Information System (AMIS) Sept. '22 Market Monitor – Global Wheat Balance Sheet estimates

	FAO-AMIS		USDA		IGC			
Wheat			2/23 ast	2021/22 est	2022/23 f'cast	2021/22 est	2022/23 f'cast	
		7 Jul	8 Sep		12 Aug		18 Aug	
ğ	778.1	770.3	777.0	779.2	779.6	781.0	778.0	S
Prod.	641.1	633.4	638.5	642.3	641.6	644.0	640.0	Ш
Supply	1070.3	1069.9	1074.1	1069.5	1055.9	1059.7	1057.6	z
Sup	803.0	798.0	801.8	788.4	776.2	795.5	787.4	10
Utiliz.	773.4	770.6	772.8	793.2	788.6	780.2	782.7	z
3	630.6	631.9	634.1	645.2	644.6	639.3	641.6	0
Trade	194.9	190.6	191.3	204.5	208.1	196.7	192.8	<u>ا ا</u>
	185.1	182.8	183.5	194.9	198.6	186.8	184.4	Ξ
cks	297.1	299.3	299.1	276.3	267.3	279.6	274.9	z
Stocks	163.3	158.5	157.9	134.6	123.0	146.3	137.4	-

Source: Mercantile

- The global 2022 production forecast for wheat now is only slightly below the 2021 level following upwards revisions for several countries, including Canada, China, Russian Federation, and the US.
- Wheat utilization in 2022/2023 was lifted m/m and now is only marginally lower than the 2021/22 estimated level, underpinned by an expected fall in feed use.
- The forecast for wheat trade 2022/2023 (July/June) is nearly unchanged with greater shipments seen from the Russian Federation and Canada because of higher production forecasts offsetting lower export prospects for the EU and India.

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- Wheat ending stocks (ending in 2023) are unchanged month/month and are forecast to rise above opening levels, with much of the increase concentrated in China and the Russian Federation, as well as Canada and Ukraine to a lesser extent.
- We will have a United States Department of Agriculture-World Agricultural Supply and Demand Estimates (USDA-WASDE) update later today.

Developments in Wheat Demand:

Wheat import projections for Egypt and for Indonesia were lowered by 500k mt and 300k mt, respectively, due to the lower affordability of wheat. Import projections for the EU were increased by 800k mt due to drought-impacted crops there.

Crop Conditions:

EU: recent hot and dry conditions benefited final harvesting across northern Europe.

United Kingdom: harvest is wrapping up under favourable conditions.

Ukraine: harvesting is wrapping up with generally good yields away from the conflict zone and reduced yields near the war zone.

Russian Federation: harvesting of winter wheat is completing with exceptional yields. However, dry conditions have developed over spring wheat areas throughout August.

Turkey: harvesting is wrapping up aided by dry conditions. **China:** spring wheat harvesting is ongoing.

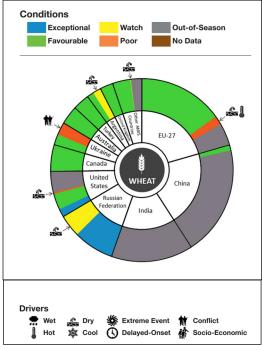
US: harvesting of winter wheat is wrapping up in the north, while spring wheat harvesting continues with exceptional conditions in the Dakotas.

Canada: winter wheat harvesting is wrapping up while spring wheat harvesting is beginning.

Australia: conditions are favourable across all states; however, ongoing wet conditions in parts of southern Queensland and northern and central New South Wales may reduce the intended sown area in those regions.

Argentina: sowing has finished as ongoing dry conditions

continue to be of concern; however, recent rainfall has improved conditions in Buenos Aires.



> 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:

- December 2022 contract Chicago winter wheat closed at 869-4, up 40-4 cents on Friday, up 58-4 cents on the week.
- December 2022 contract Kansas hard red winter wheat closed at 877-6, up 9-6 cents in Friday's trade, down 4-4 cents on the week.
- December 2022 Minneapolis hard red spring wheat closed at 890-0, up 3-4 cents on Friday, *down* 19-4 cents on the week.
- Futures are currently down by 10-16 c/bu. The trade is awaiting the new USDA-WASDE report this morning.

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Canadian Wheat

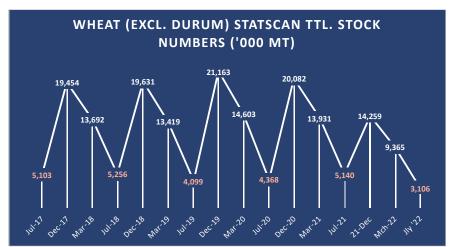
- Saskatchewan Ag reports that 40% of Saskatchewan spring wheat is harvested and assessed an average yield of 43 bu/acre. This would be lower than the five-year average for Saskatchewan (excluding 2021) of 47.5 bu/acre for Saskatchewan. The Canadian avg is 52.7 bu/acre.
- Spring wheat harvest in AB is 40% done. Alberta Ag assessed average yields at 52.8 bu/acre, which also is below the five-year average of 55.6 bu/acre.
- In Manitoba, spring wheat is 31% harvested, with average yields reported at 60-70 bu/acre against a 59.2 bu/acre average.
- North Dakota wheat was 62% harvested, well behind 93% last year, and behind 80% average.
 In Montana, spring wheat was 87% harvested versus 94% on average.
- Movement of wheat for week five was quite good with a very big 800k mt being taken into primary elevators and 248k mt loaded for export. We note that there are 324k mt of wheat sitting in Eastern export terminals waiting for loading, plus another 181k mt on the West Coast.

(CGC) Grain Handling Summary		Week5		
				Dom.
('000 mt)	Prod. Dlvrs.	Terminal Rcpts.	Bulkexports	Disappearance
Week 5	799.7	357.6	248.1	63.2
Weekago	320.4	255.3	265.6	127.9
YTD	1,572.5	1,634.7	1,176.4	414.8
Last YTD	1,671.1	2,045.6	1,535.5	539.0
YTD less Last YTD	-98.6	19,500.2	-359.1	-124.2
YTD over Last YTD	94%	80%	77%	77%

- Total **Canadian wheat exports** (excluding durum) during July 2022 amounted to almost 1.4 million mt compared to 816k mt in June. Total wheat exports for the 2021/2022 crop year added to 12.2 million mt, compared to 20.4 million mt the crop year prior.
- Wheat stocks (excluding durum): On September 7, StatsCan assessed Canadian all wheat stocks at 3.67 million mt as of July 31, 2022, down from 5.95 million mt t at the same time a year ago. This was also 229k mt below average market estimates. Wheat, excluding durum, was put at 3.1 million mt compared to 5.1 million mt the year prior.

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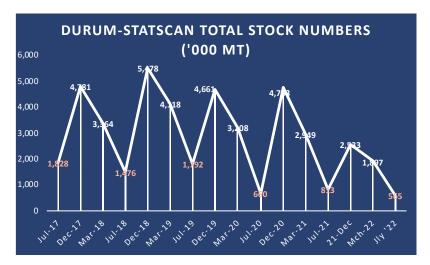
- Wheat remains supported, but harvest pressure and cheap Black Sea supplies are weighing on the market. We expect the wheat market to be supported further out.
- **Durum:** Saskatchewan Ag reports that 70% of Saskatchewan durum is harvested and assessed an average yield of 30 bu/ acre. This would be_significantly lower_than the five-year avg for Saskatchewan (excluding 2021) of 40 bu/acre for Saskatchewan. The Canadian avg is 40.3 bu/acre.
- Spring wheat harvest in Alberta is 73% done. Alberta Ag did not give a yield assessment for durum.
- North Dakota durum was 50% harvested, well behind 89% last year, and behind 70% average.
 In Montana, durum was 87% harvested versus 63% average.
- Grain company purchases of durum picked up in week 5: 116k mt were taken into primary elevators, though only 11k mt were loaded for export. We note that there are 165k mt of wheat sitting in Eastern export terminals waiting for loading, plus another 78k mt at the West Coast.

(CGC) Grain Handling Summary	Week5	(Sept. 4/'22)		
('000 mt)	Prod. Dlvrs.	Terminal Rcpts.	Bulkexports	Dom. Disappearance
Week5	116.4	63.2	11.0	4.7
Weekago	104.9	30.1	24.6	4.4
YTD	323.1	265.3	145.4	58.5
Last YTD	267.3	247.0	412.4	15.7
YTD less Last YTD	55.8	18.3	-267.0	42.8
YTD over Last YTD	121%	107%	35%	373%

• StatsCan stocks as of July 31: StatsCan assessed Canadian durum stocks at 565k mt as of July 31, 2022, down from 813k mt at the same time a year ago. This was in line with pre-report trade estimates.

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- Bids for durum have picked up over the past week with up to \$11.75/bu bid for deferred positions (March 2023) as some poorer yield assessments trickle in.
- Mercantile does not recommend selling additional volume right now until we know more about yields.

US Wheat:

- The USDA reported that 71% of spring wheat, including durum, was harvested through September 4, progressing 21 points from last week's 50% but below the five-year average of 83%. The same report showed winter wheat planting at 3%, even with the five-year average.
- US wheat futures reversed direction again on Friday amidst questions if the Ukraine grain corridor
 will prevail against Putin's latest comments. Of course, there is no way of knowing whether the
 corridor will extend beyond the first 120 days, but the remarks by both Vladimir Putin and Sergei
 Lavrov certainly make it a dangerous bet.
- US HRS for October 2022 was valued at \$395.00/ mt FOB PNW (down \$5.70mt from last week), FOB Gulf HRW 11/12.5 pro is valued at \$409.00/mt (up \$21.90/mt from last week).

Australian wheat:

- Australian futures were higher on the week.
- La Nina is keeping Eastern Australia wet, raising expectations of a good crop, but with only midto-low protein levels.

Argentine wheat:

- According to the Buenos Aires Grains Exchange (BAGE), the frosts over the past two weeks in Argentina have caused some damage to the 2022/2023 wheat crop. The frost damage adds to the impact caused by drought seen in recent months, and BAGE cut its wheat planting forecast from an initial level of 6.6 million ha to 6.1 million ha.
- Nevertheless, BAGE left crop ratings unchanged at 17% GD/EX (47% last year).

India wheat:

 India banned exports of broken rice and imposed a 20% duty on exports of various grades of rice last Thursday. India is the world's biggest exporter of rice and is trying to augment supplies and calm local prices after below-average monsoon rainfall curtailed planting. Some analysts expect India's decision to curb rice exports to lift world prices of rice and trigger a rally in rival wheat and corn markets, deepening concerns over food inflation.



EU wheat:

- Matif (Marché à Terme International de France) wheat in Europe also closed up by Euro12.50/mt for December. We note that the export market is already buying very little as interior consumption is paying better levels.
- FOB prices in the EU: October 2022 French 11.5 pro wheat closed at \$334.20/mt (down \$0.80/mt from last week); October 2022 German 12.5 pro wheat closed at \$347.60/mt (down \$0.70/mt from last week); October 2022 Baltic 14.0 pro wheat closed at \$379.60/mt.

Black Sea wheat:

- The partial re-opening of Ukraine's Black Sea ports relieved pressure from global food markets before weather-related concerns impacted market sentiments in the second half of August. Wheat markets eased, driven also by improved production prospects in main exporting countries.
- However, US wheat futures reversed direction again last Friday amidst questions if the Ukraine grain corridor will prevail against Putin's latest comments. Of course, there is no way of knowing whether the corridor will extend beyond the first 120 days, but the remarks by both Vladimir Putin and Sergei Lavrov certainly increased the risks.
- Yet another large private estimate put the Russian crop and exportable surplus to close to 100
 million mt. While many broadly agree with the numbers, the big remaining question is how much
 Russia will physically be able to move into the world market, and for now, this still could end up
 being well below the USDA's 42 million mt estimate.
- FOB prices in the Black Sea: October 2022 Russian 12.5 pro closed at \$315.00/mt (unchanged from last week).

Significant purchases/ trades:

- There were no import tenders of note and there was no US export sales report last week.
- **Korea** bought 65k mt of Australian feed wheat for December-January at \$352 and 55k mt January-February 2023 at \$349.30/mt.

Wheat Market Outlook:

Significant events over the past week:

- Sask Ag reports that 40% of **Saskatchewan spring wheat** is harvested and assessed an average yield of 43 bu/ acre.
- Sask Ag reports that 70% of **Saskatchewan durum** is harvested and assessed an average yield of 30 bu/ acre. This would be_significantly lower_than the five-year avg for Saskatchewan (excluding 2021) of 40 bu/acre for Saskatchewan.
- According to BAGE, the frosts over the past two weeks in Argentina have caused some damage to the 2022/2023 wheat crop. The frost damage adds to the impact caused by drought seen in recent months, and BAGE cut its wheat planting forecast from an initial level of 6.6 million ha to 6.1 million ha.
- The **flooding in Pakistan** has not been a feature in the newswires on ag markets, but we think that it could have a potentially significant effect on import demand going forward.
- Another large private estimate put the Russian crop and exportable surplus to close to 100 million
 mt. While many broadly agree with the numbers, the big remaining question is how much Russia
 will physically be able to move into the world market, and for now, this still could end up being
 well below the USDA's 42 million mt estimate.
- US wheat futures reversed direction again last Friday amidst questions if the **Ukraine grain corridor** will prevail against Putin's latest comments. Of course, there is no way of knowing whether the corridor will extend beyond the first 120 days, but the remarks by both Vladimir Putin and Sergei Lavrov certainly increased the risks.
- We have the next USDA-WASDE report later this Monday.



Outlook:

This week will initially be driven by the USDA report on Monday and Tuesday's report on the August inflation rate. Beyond these, world weather, questions about global demand, macros and the politics around Black Sea exports will quickly become more important. There also is the possibility of a US rail strike, which would hurt harvest movement.

Specifically for wheat, dryness in the US and Argentina, problems with the Black Sea export corridor and likely reduced fertilizer will give support to the market. At the same time, world macro and economic problems have resulted in questions about the depth of demand. We also caution of possible major needs in Pakistan and/or India this season.

- If you already have some sales on the books and have cash flow for this fall, Mercantile recommends holding further sales for now.

iii) Primary Elevator Price Tables and Grade Spreads

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

	Date:		Date:	12-09-2022		
and the second						
NW Sask	Spot		NIM/ Cools	Def	Deferred	
INVV 3dSK	(bu.)	(mt)	NW Sask	Nov. '22 (bu.)	Nov. '22 (mt)	
1 CWRS 13.5	\$10.70	\$393.16	1 CWRS 13.5	\$10.87	\$399.41	
1 CWAD 13.0	\$10.71	\$393.53	1 CWAD 13.0	\$10.80	\$396.84	
1 CPSR 11.5	\$10.22	\$375.52	1 CPSR 11.5	\$10.28	\$377.73	
SW Sask			SW Sask			
1 CWRS 13.5	\$10.52	\$386.55	1 CWRS 13.5	\$10.72	\$393.90	
1 CWAD 13.0	\$10.68	\$392.43	1 CWAD 13.0	\$10.76	\$395.37	
1 CPSR 11.5	\$10.18	\$374.05	1 CPSR 11.5	\$10.20	\$374.79	
NE Sask			NE Sask			
1 CWRS 13.5	\$10.39	\$381.77	1 CWRS 13.5	\$10.60	\$389.49	
1 CWAD 13.0	\$10.58	\$388.75	1 CWAD 13.0	\$10.67	\$392.06	
1 CPSR 11.5	n/a		1 CPSR 11.5	n/a		
SE Sask			SE Sask			
1 CWRS 13.5	\$10.32	\$379.20	1 CWRS 13.5	\$10.56	\$388.02	
1 CWAD 13.0	\$10.49	\$385.44	1 CWAD 13.0	\$10.62	\$390.22	
1 CPSR 11.5	\$9.91	\$364.13	1 CPSR 11.5	\$9.91	\$364.13	

Data source: PDQ, Sept. 12/'22

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

Avg. Grade Spread/ Pro Discounts	Cdn\$/bu.	Cdn.\$/mt	
1 CWRS 13.5	Base Grade	Base Grade	
2 CWRS 13.5	(0.10)	(3.67)	
1 CWRS 12.5	(0.02)	(0.85)	
1 CWAD 13.0	Base Grade	Base Grade	
1 CWAD 13.5	0.01	0.37	
2 CWAD 13.5	(0.09)	(3.31)	
2 CWAD 12.5	(0.11)	(4.04)	

Data source: PDQ, Sept. 12/'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 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% 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 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

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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."



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

Releveant FOB Prices and Export Basis 12-09-2022						
	FOB Prices CD	A 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	\$486.87	\$538.37				
HRS	\$478.76					
HRW 11.5	\$507.85					
SWW 12.0	\$459.69					
1 CWRS 13.5 ³	\$486.87		\$390.59	\$96.28		
2 CWRS 13.0 ³	\$478.76		\$385.81	\$92.95		
3 CWRS ³	\$507.85		\$360.09	\$147.76		
CPS ³	\$453.01		\$376.63	\$76.39		
1 CWAD ⁴		\$531.69	\$404.18	\$127.51		
Competing wheat:	US\$/mt					
Russia 12.5 (Black Sea,						
25k mt)	\$315.00	Oct.				
French 11.5 (Rouen)	\$334.20	Oct.				
APW 10.5 (W Coast)	\$360.00	Dec.				
Argentine 12.0	\$325.00	Dec.				

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

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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

⁴ Values derived to Lakehead FOB