

Wheat Market Outlook and Price Report: July 18, 2022

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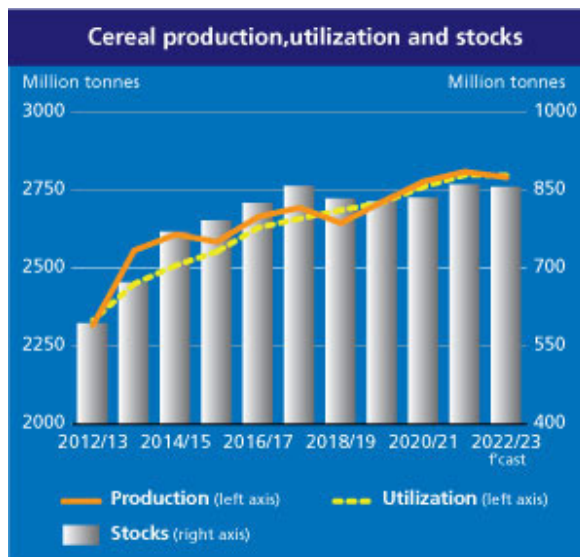
i) Background and Rationale for the Report

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 July 18, 2022

FAO Update on cereal production and utilization (July 8/22)



	Production ^{1/}	Supply ^{2/}	Utilization	Trade ^{3/}	Ending stocks ^{4/}	World stock-to-use ratio	Major exporters' stock-to-disappearance ratio ^{5/}
	million tonnes				percent		
2013/14	715.3	900.6	692.3	159.0	199.8	28.2	15.1
2014/15	735.6	935.4	708.5	156.4	228.5	31.8	16.0
2015/16	737.3	965.8	717.0	167.5	243.0	33.0	18.8
2016/17	763.4	1,006.4	736.9	177.1	266.2	36.0	18.0
2017/18	761.6	1,027.8	738.6	177.8	289.6	38.6	21.0
2018/19	731.4	1,021.0	749.8	168.6	274.2	36.7	18.1
2019/20	759.7	1,033.9	747.7	183.9	283.1	37.1	15.5
2020/21	776.5	1,059.6	762.3	189.2	291.9	37.8	15.6
2021/22	778.3	1,070.3	773.2	193.2	299.6	38.9	17.5
2022/23	770.3	1,069.9	770.6	190.6	299.3	38.0	18.0

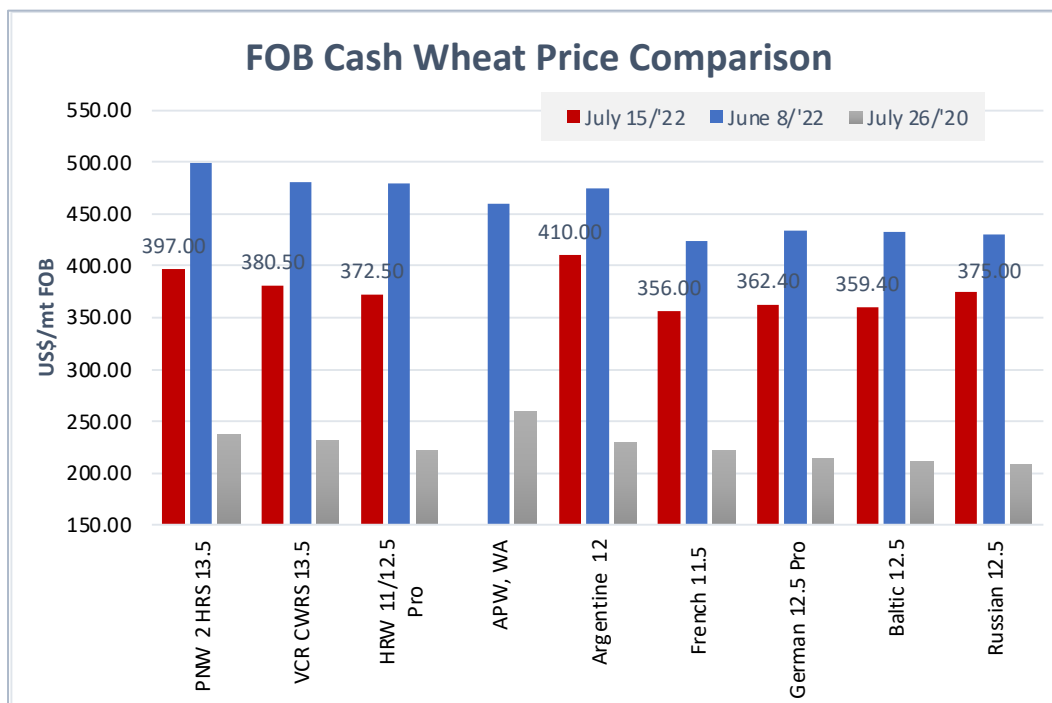
- The FAO forecast for **global cereal production** in 2022 has been raised by 7 million mt in July from the previous month and is now pegged at 2,792 million tonnes, however, still 0.6% short of the world output in 2021.
- The forecast for **world wheat production** in 2022 has been lowered only fractionally in July to 770.3 million mt, remaining 1.0% lower year-on-year. The marginally diminished outlook results from cuts to production forecasts for the European Union, where persisting dryness has impaired yield prospects, and to a lesser degree for Argentina and Iraq.
- These downgrades more than outweigh improved harvest expectations in Canada and Australia, where conducive weather at planting time and remunerative prices are encouraging area expansions. Additionally, continued beneficial weather in the Russian Federation has lifted yield prospects of the winter crop and further reinforced the country's good production prospects in 2022.
- **Utilization of wheat** was pegged at 700.6 million mt compared to 773.2 million mt last crop year.

- China is seen using more coarse grains for animal feed in place of wheat, feed use of wheat in the European Union is expected to decline in line with the overall expected drop in overall feed demand in the EU. In India, a tighter supply, due to lower production and higher exports, is seen diminishing the country's industrial use of wheat in 2022/23.
- The **stock-use ratio** for wheat is forecast to 18% in '22/23 compared to 17.5% in '21/22.

Developments in Wheat Demand:

FAO projects a lower feed use of wheat in the '22/23 crop year due to higher prices. Specifically, China is seen using more coarse grains for animal feed in place of wheat. (Acc. to Rabobank, ~20% of wheat utilization is for feed.)

FOB Cash Price Comparison:



➤ **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.

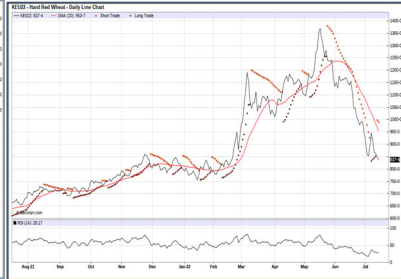
Futures:

- Sept '22 contract Chicago winter wheat closed at 776-6, down 18-2 cents on Friday, *down 114 cents on the week.*
- Sept '22 contract Kansas hard red winter wheat closed at 837-4, down 11-2 cents in Friday's trade, *down 109 cents on the week.*
- Sept '22 Minneapolis hard red spring wheat closed at 906-6, down 3-6 cents on Friday, *down 85 cents on the week.*
- Wheat futures are up this Monday morning by currently 28-36 cents.

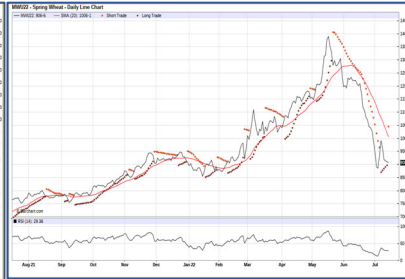
CBOT Sept. 2022 Wheat (1 yr.)



KC Sept. '22 Wheat



Minneapolis. Sept. '22 Wheat



Canadian Wheat

- Other than the crop reports, there are not a lot of Canada specific news in the wheat market. Rain in major North American growing regions also added some bearish pressure. Sask Ag rated spring wheat at 74% Gd/ Exc., 22% fair, and 4% poor. Alberta Ag rated spring wheat at 83% Gd/Exc. The recent rains have helped, but we are watching the heat this week.
- Canadian weekly wheat exports were poor at only 133k mt, for a YTD total of 10.5 million mt, compared to 18.8 million mt the year prior.

(CGC) Grain Handling Summary Wheat				
Week 49 (July 10/'22)				
('000 mt)	Prod. Divrs.	Terminal Rcpts.	Bulk exports	Dom. Disappearance
Week 49	218.9	263.5	133.3	71.6
Week ago,	241.9	303.1	302.9	38.7
YTD	13,959.7	13,778.1	10,537.8	3,800.4
Last YTD	21,121.1	21,876.1	18,828.6	3,840.5
YTD less Last YTD	-7,161.4	19,500.2	-8,290.8	-40.1
YTD over Last YTD	66%	63%	56%	99%

- Again, the market is struggling to reconcile adverse weather in Europe and North America against rising Russian production numbers and optimism about a Ukrainian export corridor against tepid buying and potentially reduced demand due to declining economic conditions in China and elsewhere.
- We think that markets will get stronger in the short term, so there is no rush to sell additional wheat.
- **Durum** – Sask Ag rated durum wheat at 58% Gd/ Exc., 32% fair, and 10% poor to very poor. Alberta Ag rated durum wheat at 64% Gd/Exc. Durum crop ratings are not great.
- North Dakota durum ratings are better, with 89% in Gd/ Exc. condition, 10% in fair condition, and 1% in poor condition. Montana did not provide a crop rating but said that 78% of durum is booted and 40% headed. 18% of the Montana crop land is abnormally dry.
- According to the latest USDA crop production estimates, US durum wheat production is forecast at 2.1 million mt (77.2 million bu), up twofold from 2021. Based on July 1 conditions, yields are expected to average 40.3 bu/ac, up 16 bushels from 2021. Area expected to be harvested for grain totals 1.92 million acres, up 25% from 2021.

Durum Wheat Area Harvested, Yield, and Production - States and United States: 2021 and Forecasted July 1, 2022

State	Area harvested		Yield per acre			Production	
	2021	2022	2021	2022		2021	2022
				June 1	July 1		
	1,000 acres		bushels			1,000 bushels	
Arizona	52	89	90.0	103.0	102.0	4,680	9,078
California	20	35	110.0	113.0	112.0	2,200	3,920
Idaho	7	6	77.0	(X)	85.0	539	510
Montana	635	770	16.0	(X)	30.0	10,160	23,100
North Dakota	820	1,015	24.0	(X)	40.0	19,680	40,600
United States	1,534	1,915	24.3	(X)	40.3	37,259	77,208

(X) Not applicable.

- Combined with the expected Canadian crop of 5.5-5.8 million mt, N American production should recover nicely from last year's drought-induced tightness.
- Nevertheless, record heat in N Italy and France (albeit at the end of the growing period) should keep EU buyers in the market.
- **Durum exports** for week 49 were an improved 105k mt, for a YTD total of 2.5 million mt, compared to 5.8 million mt last YTD.

(CGC) Grain Handling Summary Durum		Week 49 (July 10/22)		
('000 mt)	Prod. Dlvs.	Terminal Rcpts.	Bulk exports	Dom. Disappearance
Week 49	49.6	57.4	105.3	12.2
Week ago,	59.3	23.9	11.1	13.6
YTD	2,425.5	2,853.9	2,451.1	435.2
Last YTD	5,907.8	6,938.4	5,774.0	514.5
YTD less Last YTD	-3,482.3	-4,084.5	-3,322.9	-79.3
YTD over Last YTD	41%	41%	42%	85%

- We are content being sold out old crop and well-sold new crop. There is not much to be added to this right now.

US Wheat:

- We saw little change in the WASDE report. The trade thought demand a little too high considering recession, etc.
- **July global WASDE numbers:** Compared to the June WASDE, the USDA dropped global production by almost 2 million mt, due to reductions in Ukraine and the EU, both falling by 2 million mt to offset by an increase to Canadian wheat by 1 million mt, the US by 1.2 million mt, and Russia by 500k mt.
- **US numbers:** US HRS and durum production is expected to rebound. At 12.4 million mt, hard red spring wheat production would be up 54% over last year's. Still, old crop domestic use of U.S. HRS wheat was lowered by 25M bushels, so ending stocks increased substantially to 140 million bu. Given strong domestic and international demand, new crop '22/23 HRS ending stocks are expected to be even tighter at 126 million bu (or 3.4 million mt).

- US durum: At 2.1 million mt, US durum would be more than double last year's harvest. Despite a doubling of exports, the '22/23 balance sheet for U.S. durum will be less tight than HRS, with ending stocks of 30M bushels (or 816.5k mt), 9 million bu, higher than the 2021/22 old crop's carryout of 21 million bu.
- Almost of greater importance in the sell-off following the publication of the reports were the macros: Crude oil slumped 8% to 3-month lows and the US dollar continued its rally amidst building concern for a worldwide recession and even depression, ahead of the US inflation figures that came in at a 40- year high!
- CFTC data had the Soft Red Wheat speculative traders as 6,444 contracts net short as of 7/12. In Kansas City wheat, speculative traders sold 5,650 contracts reducing their net long to 16,387 contracts. The long liquidation left the Funds at their weakest net long since June of last year. Managed money firms were 2,477 contracts less net long in MPLS wheat as from 7/5 to 7/12. The group was still 2,654 contracts net long.
- It is interesting to note that USA Soft Red wheat is the cheapest FOB wheat.
- US HRS for Aug. '22 was valued at \$397.00/ mt FOB PNW (*up \$2.70/mt from last week*), FOB Gulf HRW 11/12.5 pro is valued at \$372.50/mt (*down \$11.90/mt from last week*).

Australian wheat:

- Australian crop conditions remain generally excellent,
- There are rumours that China also bought up to 1 million mt of Australian wheat over the last 2 weeks.

Argentine wheat:

- BAGE put plantings at 91% complete against 96% last year, but on a 7.5% smaller acreage.
- Crop ratings fell 3% to 18% GD/EX against 59% last year with 43% of the crop suffering from dryness.
- Aug. shipment 12% pro Argentine wheat was valued at ~\$380.50/mt.

China wheat:

- According to China's National Statistics Bureau, the domestic wheat crop had risen 1% in 2022 to 135.76 million mt. According to the Crop Management Department at the Ministry of Agricultural and Rural Affairs, "the quality of wheat is the best in recent years."
- At the same time, the US sold 265k mt of wheat to China, there are rumours that China also bought up to 1 million mt of Australian wheat over the last 2 weeks, and Canada is also thought to have sold 3-400k mt of wheat to China.

EU wheat:

- Matif traded in a €14/mt range before closing down €2-4/mt on Friday, despite the Euro breaking dollar parity.
- France's Ag Ministry reported the French wheat crop reached 50 million mt harvested.
- Stratégie Grains on Thursday cut all its forecasts for this year's grain crops in the EU. The EU wheat crop was expected at 123.3 million tonnes, down from 124.4 million projected in June and below the revised 129.9 million tonnes harvested last year.
- *There is concern over the impact of the heat and dryness in Northern Europe and while concerns over export quality in the south are growing.*
- Fob prices in the EU: Aug. '22 French 11.5 pro wheat closed at \$356.00/mt (*down \$0.70/mt from last week*); Aug. German 12.5 pro wheat 359.40/mt (*down \$4.70/mt from last week*), Aug. Baltic 12.5 pro wheat was at \$359.40/mt (*down \$3.60/mt from last week*).

Black Sea wheat:

- Russia's Ag Ministry estimates 20 million mt of '22/23 grain has been harvested to date. That included 15.5 million mt of wheat.
- Re: exports, there seems to be increasing optimism for the creation of a Ukrainian wheat and corn export corridor, with another meeting planned next week which (according to participants) will give the details of the plan.
- Russian Fob prices for 12.5 pro July delivery wheat were quoted at \$375.00/mt, *down \$10.00/mt from last week*. But these values are nominal.

➤ **Significant purchases/ trades:**

It was a seemingly slow week cash trade, but:

- The US sold 265k mt of wheat to **China**, and there are rumours that **China** also bought up to 1 million mt of Australian wheat over the last 2 weeks.
- Canada is also thought to have sold 3-400k mt of wheat to **China**.
- **Korea** bought 65kt Australian feed for 13 Sep-5 Oct at \$369.88/mt.
- **Jordan** returns July 19 for 120k mt of hard wheat for Nov-Dec.
- **Japan's** MAFF locked in 131k mt of wheat from the U.S., Canada, and Australia.
- The **Philippines** purchased 110k MT of wheat in an international tender.
- During the weekend, **Egypt** (GASC) announced a tender for Tuesday, with just US, Canada, Australia, Argentina, and Brazil as possible origins. EU and Russian wheat seem to be excluded.
- **US weekly wheat** sales of 1 million mt showed China taking 265k mt with a mix of SWW, HRS and SRW.

➤ **Wheat Market Outlook:**

Significant events:

- **Futures** were down again significantly last week but are rebounding some early this week.
- Important in the **futures sell-off** following the publication of the reports were the macros: Crude oil slumped 8% to 3-month lows and the US dollar continued its rally amidst building concern for a worldwide recession and even depression, ahead of the US inflation figures that came in at a 40- year high!
- We saw little change in the **WASDE report**. The trade thought demand a little too high considering recession, etc.
- **Spring wheat ratings** in the US and Canada have improved significantly.
- **Durum ratings** in Canada are mixed, but good in the US.
- There is concern over the impact of the **heat and dryness in Northern Europe** and while concerns over export quality in the south are growing.
- **China** has been in the market for wheat recently. Given reports, we estimate they bought a total of ~1.6 million mt of wheat.

Outlook:

We expect markets to be stronger this week based on the hot weather reports coming out of Europe. We don't expect too much cash wheat trade as delivered prices remain very high based on a stronger dollar, although Egypt called a tender for Tuesday. Futures could be volatile on thin trade. We think that markets will get stronger in the short term, so there is no rush to sell additional tonnage.

iii) Primary Elevator Price Tables and Grade Spreads

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

Date: 18-07-2022

NW Sask	Spot		NW Sask	Deferred	
	(bu.)	(mt)		Sept. '22 (bu.)	Sept. '22 (mt)
1 CWRS 13.5	\$11.36	\$417.41	1 CWRS 13.5	\$10.65	\$391.32
1 CWAD 13.0	\$12.49	\$458.93	1 CWAD 13.0	\$12.29	\$451.58
1 CPSR 11.5	\$9.99	\$367.07	1 CPSR 11.5	\$9.82	\$360.83
SW Sask			SW Sask		
1 CWRS 13.5	\$11.16	\$410.06	1 CWRS 13.5	\$10.42	\$382.87
1 CWAD 13.0	\$12.55	\$461.14	1 CWAD 13.0	\$12.41	\$455.99
1 CPSR 11.5	\$9.84	\$361.56	1 CPSR 11.5	\$9.71	\$356.78
NE Sask			NE Sask		
1 CWRS 13.5	\$11.12	\$408.59	1 CWRS 13.5	\$10.36	\$380.67
1 CWAD 13.0	\$13.01	\$478.04	1 CWAD 13.0	\$12.74	\$468.12
1 CPSR 11.5	n/a		1 CPSR 11.5	n/a	
SE Sask			SE Sask		
1 CWRS 13.5	\$11.04	\$405.65	1 CWRS 13.5	\$10.38	\$381.40
1 CWAD 13.0	\$12.86	\$472.53	1 CWAD 13.0	\$12.69	\$466.28
1 CPSR 11.5	\$9.86	\$362.30	1 CPSR 11.5	\$9.48	\$348.33

Data source: PDQ, July 18/22

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

Avg. Grade Spread/ Pro Discounts	Cdn\$/bu.	Cdn.\$/mt
1 CWRS 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, July 18/22

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:
 - DNS 14% in the Pacific Northwest (PNW) ≈ 1 CWRS 13.5% in Vancouver
 - HRS in the Pacific Northwest (PNW) ≈ 2 CWRS 13.0% in Vancouver
 - HRW in the Pacific Northwest (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

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.

“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.”

- 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				18-07-2022
Type of Wheat	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)
DNS 14.0	\$488.94	\$666.17		
HRS	\$479.43			
HRW 11.5	\$475.16			
SWW 12.0	\$434.29			
1 CWRS 13.5 ³	\$488.94		\$430.27	\$58.67
2 CWRS 13.0 ³	\$479.43		\$426.23	\$53.20
3 CWRS ³	\$475.16		\$417.04	\$58.11
CPS ³	\$427.64		\$355.68	\$71.96
1 CWAD ⁴		\$659.52	\$440.93	\$218.59
Competing wheat:	US\$/mt			
Russia 12.5 (Black Sea, 25k mt)	\$375.00	Aug.		
French 11.5 (Rouen)	\$356.00	Aug.		
APW 10.5 (W Coast)	n/a	Aug.		
Argentina 12.0	\$380.50	Aug.		

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

² Export Basis = FOB Prices CDA minus Cdn. Street Price

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

⁴ Values derived to Lakehead FOB