

Wheat Market Outlook and Price Report: July 25, 2022 By Marlene Boersch/ A.P. Temple/ Michael Wilton Mercantile Consulting Venture Inc.

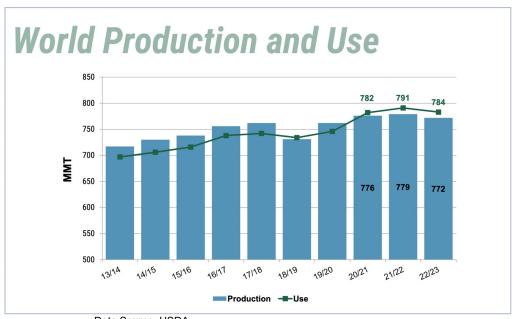
i) Background and Rationale for the Report

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 July 25, 2022

USDA - Global Wheat Production & Usage, July 12 Report:



Data Source: USDA

- The 2022/23 **global wheat production** is projected at 771.6 million mt, 1.8 million mt less than the June estimate but 1% higher than the 5-year average.
- Global wheat consumption is expected to be smaller at 784.2 million mt, down 1.8 million mt from the June forecast.
- World wheat trade was raised from last month to 205.5 million mt, 7% higher than the 5-year average.
- Global wheat ending stocks were raised by 670k mt from June and are projected at 267.5 million mt.

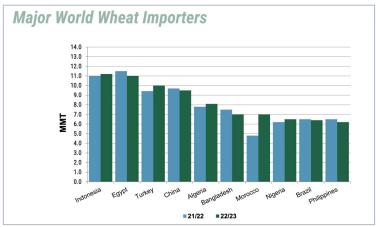
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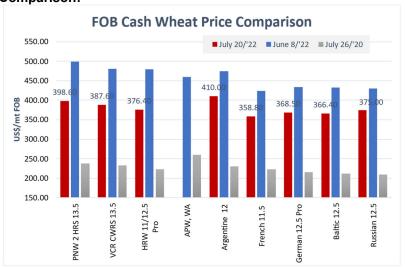
Developments in Wheat Demand:

USDA estimated **global wheat consumption** is expected to be smaller at 784.2 million mt, down 1.8 million mt from the June forecast.



Data Source: USDA

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:

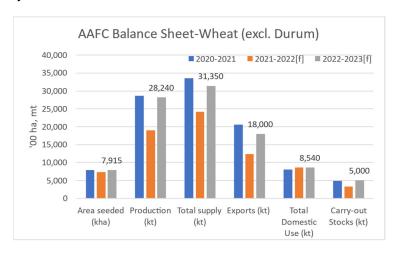
- Sept '22 contract Chicago winter wheat closed at 759-0, down 47-2 cents on Friday, *down 7-6* cents on the week.
- Sept '22 contract Kansas hard red winter wheat closed at820-2, down 41 cents in Friday's trade, down 17-2 cents on the week.
- Sept '22 Minneapolis hard red spring wheat closed at 871-0, down 41-4 cents on Friday, down 35-6 cents on the week.
- Wheat futures are up this Monday morning by currently 12-18 cents.





Canadian Wheat

- The dominant discussions late last week centered around the announcement that an agreement was to be signed on Friday afternoon in Istanbul, allowing Ukrainian export grain shipments to resume. The market took note and all wheat markets closed down heavily at the prospect of renewed volume exports from Ukraine. The export agreement was later confirmed by the UN. However, the next day Russia bombed Odessa, putting the execution of the agreement again in question.
 - Ukraine is reportedly still preparing for exports to restart, but even before Saturday's attack, we believe that most vessel insurers and owners would be extremely hesitant to put either their vessels or crew at risk to load in Odessa.
 - All eyes are still on the Russia-Turkey-Ukraine agreement, trying to get a handle if this agreement can actually be executed.
- In Canada, the latest Saskatchewan and Alberta spring wheat ratings were at 74% and 83% Gd/ Ex and, if anything, the rains last week should have improved that.
- In North Dakota, spring wheat rated 80% Gd/Ex, although the wheat headed was 63%, well behind 92% last year and 91% average.
- The crops look pretty good and at least average yields should be assumed.
- The **July AAFC balance sheets** for wheat indeed project much-improved production, and better exports, but also again increasing ending stocks. Compared to their June report, AAFC increased wheat production by 826k mt, exports by 200k mt, and deceased domestic use by 174k mt. *Ending stocks rose by 1 million mt over the June estimate to 5 million mt.*



• Canadian weekly exports were poor again at 166k mt, for a year-to-date total of 10.7 million mt, compared to 19 million mt last year.

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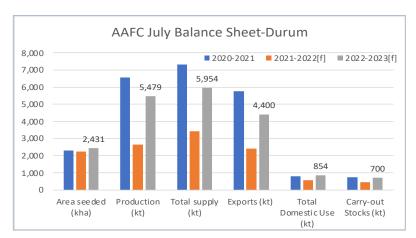
(CGC) Grain Handling	g Summary Wh	Week 50	(July 17/'22)	
('000 mt)	Producer Deliveries	Terminal Receipts	Bulk Exports	Domestic Disappearance
Week 50	261.4	339.5	166.4	105.7
Week ago	218.9	263.5	133.3	71.6
YTD	14,221.7	14,118.2	10,704.2	3,909.0
Last YTD	21,443.3	22,254.9	19,091.7	3,910.4
YTD less Last YTD	-7,221.6	19,500.2	-8,387.5	-1.4
YTD over Last YTD	66%	63%	56%	100%

- The markets are confused by the Russian attacks and what the West will do to counter. We expect markets to open firmer and would leave them alone for now.
- **Durum Durum exports** for week 49 were at only 40k mt, for a year-to-date total of 2.5 million mt, compared to 5.9 million mt last year-to-date.

(CGC) Grain Handling	g Summary Du	Week 50	(July 17/'22)	
('000 mt)	Producer Deliveries	Terminal Receipts	Bulk Exports	Domestic Disappearance
Week 50	97.5	57.1	40.1	21.9
Week ago	49.6	57.4	105.3	12.2
YTD	2,523.0	2,910.9	2,491.3	456.9
Last YTD	6,016.2	7,069.8	5,943.1	521.3
YTD less Last YTD	-3,493.2	-4,158.9	-3,451.8	-64.4
YTD over Last YTD	42%	41%	42%	88%

- **AAFC** expects Canadian durum production to reach 5.5 million mt and supply ~6 million mt. Exports were assessed at 4.4 million mt, leaving ending stocks at 700k mt, similar to the '20/21 ending stocks. We think production could be higher at ~5.8-5.9 million mt this year.
 - Compared to the AAFC June report, the changes were as follows: AAFC decreased durum acres and production by 88k ha and 298k mt, respectively. '22/23 exports stayed the same (4.4 million mt), but they increased this year's exports by 100k mt to 2.4 million mt. This lowers the '22/23 ending stocks rose by 300k mt over the June estimate to 1 million mt.





- We expect durum wheat to be fairly balanced this year, as opposed to undersupplied/oversold last fall.
- A look at US durum production: USDA expects US production to recover to 2.1 million mt from ~1 million mt last year. Including imports, supply should move back to 3.9 million mt, the highest in three years.
 - o In North Dakota, durum ratings are quite good, with 84% in Gd/Ex condition (down 5% from last week due to heavy rains), 15% in fair condition, and 1% in poor condition. Montana showed 94% of durum is booted and 62% headed. The land in Montana still under abnormally dry conditions has decreased from 18% to 13.3% over the last week.

USDA - US Durum Outlook					
(Million mt)	21/22	E22/23	Δ		
Beginning stocks	0.80	0.60	75%		
Production	1.00	2.10	210%		
implied imports	1.60	1.20	75%		
Total Supply	3.40	3.90	115%		
Dom. Use	2.40	2.30	96%		
Exports	0.40	0.80	200%		
Total Usage	2.90	3.10	107%		
Ending Stocks	0.50	0.80	160%		
Stock-to-Use Ratio	21%	26%	123%		

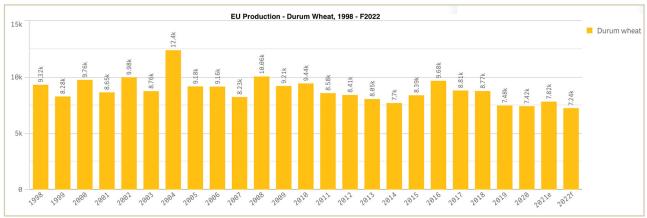
• **EU production durum**: The European Commission currently pegs EU durum production at 7.2 million mt, down 7% from the '21 production of 7.8 million mt.

The total use of durum in the EU is estimated at ~10 million mt, so the EU Commission expects durum imports in '22/23 to increase to 2.5 million mt (from 1.5 million mt in '21/22).

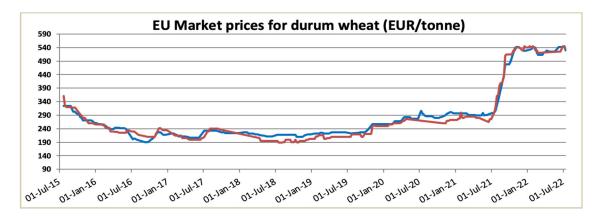
Durum in N Italy is currently quoted at US\$530-\$535/mt. This roughly equates to ~\$13.85/ bu delivered elevator Saskatchewan (before margins).

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Source: European Commission



US Wheat:

- US soft red winter wheat is about 98% harvested. Hard red winter wheat is 48% harvested; combines are rolling in the remaining HRW states with Colorado 61% complete, Nebraska 75%, South Dakota 34%, Wyoming 18% and Montana 17%; the PNW states are less than 3% harvested. Quality and yields are higher-than-expected in drought areas, and as harvest moves north, above-average yields and quality are expected. Montana sources are reporting a shorter than average crop, but heads are filling out nicely and fields are turning colour.
- Weekly US export sales of 511k mt took the season total to 279 million bu, right in line with last year.
- Below is a listing US wheat production by type of crop (based on USDA numbers) and we are highlighting the US spring wheat balance sheet. USDA expects US HRS production to reach 12.4 million mt (149% of last year's), but supply is just up by 6% due to the low carry-in. We note that given the USDA HRS exports at 6.3 million mt, carryout would actually be lower than this years at 3.4 million mt!

	2016	2017	2018	2019	2020	2021	2022	△ in %	△ in mt
Hard Red Winter	29.45	20.42	18.02	23.00	17.93	20.40	15.90	78%	-4.50
Hard Red Spring	13.37	10.46	15.98	14.15	14.43	8.09	12.40	153%	4.31
Hard White	0.90	1.01	0.89	0.87	0.65	0.55		0%	-0.55
Durum	2.80	1.44	2.08	1.46	1.85	1.01	2.10	207%	1.09
Soft White	6.90	6.20	6.50	6.60	7.60	4.00	7.80	195%	3.80
Soft Red Winter	9.40	7.77	7.77	6.53	7.25	9.82	10.20	104%	0.38
Total	62.82	47.30	51.24	52.61	49.71	43.87	48.50	111%	4.63

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USDA - US. HRS Outlook						
(Million mt)	21/22	E22/23	Δ			
Beginning stocks	6.40	3.80	59%			
Production	8.30	12.40	149%			
implied imports	1.90	1.40	74%			
Total Supply	16.60	17.60	106%			
Dom. Use	7.40	7.90	107%			
Exports	6.00	6.30	105%			
Total Usage	13.40	14.20	106%			
Ending Stocks	3.80	3.40	89%			
a. 1						
Stock-to-Use Ratio	28%	24%	84%			

• US HRS for August '22 was valued at \$398.60/ mt FOB PNW (up \$1.60/mt from last week), FOB Gulf HRW 11/12.5 pro is valued at \$376.40/mt (up \$3.90/mt from last week).

Australian wheat:

- Reports of crop concerns are starting to emerge, but here it is a case of too much rain rather than too little. Perhaps this is premature as September is the most crucial month for Australia.
- Australia reportedly sold another 1 million mt of wheat to China.

Argentine wheat:

- Argentina expects showers in week two but has removed the moisture from this week's forecast.
- BAGE made its 5th reduction to planted acres with another 100k ha drop to 6.1 million ha. Plantings are called 97% complete. Crop ratings fell again with just 16% rated Gd/Ex against 18% a week ago and 57% last year.
- August shipment 12% protein Argentine wheat was valued at ~\$410.00/mt (up \$29.50/mt from last week).

China wheat:

• According to reports, China bought several cargoes of French wheat.

EU wheat:

- Matif fell sharply on Friday to end flat on the week.
- The EU eased some sanctions on Russian banks and the week ended with an agreement to resume Ukraine exports being signed, though Russia has since bombed Odessa.
- FOB prices in the EU: August '22 French 11.5 pro wheat closed at \$358.80/mt (*up* \$2.80mt from last week); August German 12.5 pro wheat 368.50/mt (*up* \$9.10/mt from last week), August Baltic 12.5 pro wheat was at \$366.40/mt (up \$7.00/mt from last week).

Black Sea wheat:

• The EU eased some sanctions on Russian banks and the week ended with a **signed agreement** in Istanbul on Friday to resume Ukrainian exports. This sent futures 40¢ lower on the day. The export agreement was confirmed by the UN. However, the next day Russia bombed Odessa, confirming Putin is completely unreliable. Ukraine is reportedly still preparing for exports to restart, but even before Saturday's attack, we believe that most vessel insurers and owners will be loath to put either their vessels or crew at risk to load in Odessa.



> Significant purchases/ trades:

- **Egypt** (GASC) added 120k mt of wheat purchases to the 640k mt that was bought last Wednesday, for a total of 760k mt.
- There are reports that **China** had bought another 1 million mt of Australian wheat this week.
- Weekly **US export sales** of 511k mt took the season total to 279 million bu, right in line with last year.

Wheat Market Outlook:

Significant events:

- The dominant discussions late last week centered around the announcement that an agreement was to be signed on Friday afternoon in Istanbul, allowing Ukrainian export grain shipments to resume. The market took note and all wheat markets closed down heavily at the prospect of renewed volume exports from Ukraine. The export agreement was later confirmed by the UN. However, the next day Russia bombed Odessa, putting the execution of the agreement again in question.
- Last week, the **International Grains Council (IGC)** lifted their wheat outlook by 1 million tonnes from June to 770 million tonnes. Last year's production was 781. Carryout was also down by 1 million tonnes to 272, and now is 10 million tonnes below the '21/22 carryout.
- **Heat** continues in Europe, but North American wheat crops look improved.
- **China** again seems to have purchased more wheat.
- The markets are confused by the Russian attacks on Odessa and what the West will do to counter.

Outlook:

With Russia bombing Odessa after the grain export agreement was signed, the market is again confused about the future export potential of Ukrainian grain. Ukraine is reportedly still preparing for exports to restart, but most vessel insurers and owners will be unlikely to put either their vessels or crew at risk to load in Odessa. The markets should open higher. Mercantile sees markets initially stronger, but weaker later on if the weather continues to cooperate.



iii) Primary Elevator Price Tables and Grade Spreads

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

NW Sask	Spot		ADM Cool	Deferred		
	(bu.)	(mt)	NW Sask	Oct. '22 (bu.)	Oct. '22 (mt)	
1 CWRS 13.5	\$10.75	\$395.00	1 CWRS 13.5	\$10.09	\$370.75	
1 CWAD 13.0	\$12.29	\$451.58	1 CWAD 13.0	\$12.16	\$446.81	
1 CPSR 11.5	\$9.40	\$345.39	1 CPSR 11.5	\$9.45	\$347.23	
SW Sask			SW Sask			
1 CWRS 13.5	\$10.55	\$387.65	1 CWRS 13.5	\$9.86	\$362.30	
1 CWAD 13.0	\$12.33	\$453.05	1 CWAD 13.0	\$12.23	\$449.38	
1 CPSR 11.5	\$9.36	\$343.92	1 CPSR 11.5	\$9.26	\$340.25	
NE Sask			NE Sask			
1 CWRS 13.5	\$10.52	\$386.55	1 CWRS 13.5	\$9.79	\$359.72	
1 CWAD 13.0	\$12.64	\$464.44	1 CWAD 13.0	\$12.37	\$454.52	
1 CPSR 11.5	n/a		1 CPSR 11.5	n/a		
SE Sask			SE Sask			
1 CWRS 13.5	\$10.44	\$383.61	1 CWRS 13.5	\$9.79	\$359.72	
1 CWAD 13.0	\$12.54	\$460.77	1 CWAD 13.0	\$12.36	\$454.16	
1 CPSR 11.5	\$9.39	\$345.03	1 CPSR 11.5	\$9.05	\$332.53	

Data source: PDQ, July 25/'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 25/'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
 - o HRS in the Pacific Northwest (PNW) ≈ 2 CWRS 13.0% in Vancouver
 - o 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)

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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% 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.

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

Releve	ant FOB Prices a	nd Export Basis		25-07-2022
	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	\$464.86	\$663.00		
HRS	\$457.76			
HRW 11.5	\$455.87			
SWW 12.0	\$427.50			
1 CWRS 13.5 ³	\$464.86		\$400.88	\$63.98
2 CWRS 13.0 ³	\$457.76		\$397.20	\$60.56
3 CWRS ³	\$455.87		\$388.02	\$67.85
CPS ³	\$420.88		\$347.97	\$72.91
1 CWAD ⁴		\$656.38	\$399.77	\$256.60
Competing wheat:	US\$/mt			
Russia 12.5 (Black Sea, 25k mt)	\$375.00	Aug.		
French 11.5 (Rouen)	\$358.80	Aug.		
APW 10.5 (W Coast)	n/a	Aug.		
Argentine 12.0	\$410.00	Aug.		

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

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