

Wheat Market Outlook and Price Report: December 19, 2022 By Marlene Boersch/ A.P. Temple/ Michael Wilton Mercantile Consulting Venture Inc.

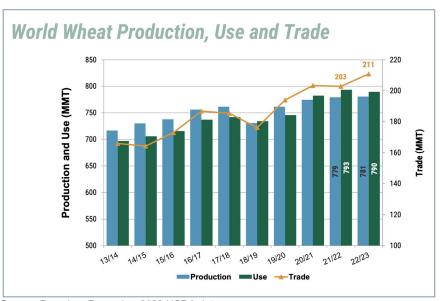
i) Background and Rationale for the Report

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 December 19, 2022

USDA Dec. 9 Report: Global Wheat Production, Use and Trade



Source: Based on December 9/'22 USDA data

- In their most recent report, USDA increased global wheat trade by 2.2 million mt to 210.9 million mt.
 - o Australian exports were raised 1.5 million mt to a near record 27.5 million mt
 - The **Ukrainian** export forecast increased by 1.5 million mt to 12.5 million mt based on the renewed Black Sea Corridor
 - EU wheat exports increased by 1.0 million mt to 36.0 million mt
 - Russia's wheat exports increased by 1.0 million mt to 43.0 million mt
 - Argentine wheat exports decreased to 7.5 million mt from 10.0 million mt in November, the lowest level since 2014/15

1



 U.S. 2022/23 exports remained unchanged from last month at 21.09 million mt, 690k mt less than 2021/22

> 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:

- March '23 contract Chicago winter wheat closed at 742-2, down 3-6 cents on Friday, and up 19-4 on the week.
- March '23 contract Kansas hard red winter wheat closed at 844, down 16-4 on Friday, and up 11 cents on the week.
- March '23 Minneapolis hard red spring wheat closed at 909-4, down 9-2 cents on Friday, and up 8 cents on the week.
- Wheat futures are currently trading down 4-7c/bu this Monday morning.



Canadian Wheat

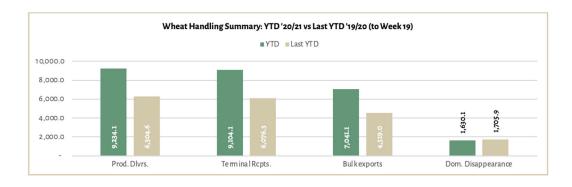
- Wheat was down on Friday but was up for the week by 8-19 cents/bu. HRW wheat was the biggest
 loser on Friday, with funds continuing to liquidate a net long position in this wheat class and shaking
 off potential bullish news of further power outages in Ukraine. We are also down to the final week
 before Christmas and trading volume is dropping by the day as everyone prepares for the holidays.
- Milling wheat bids on the Prairies have recovered a bit since the November slide, with most bids around \$11.50/bu. We are also moving into the final week before Christmas, so trading volumes are fading fast.
- In the markets, Japan booked 155k mt of wheat from the U.S., Canada, and Australia with 66k mt from the U.S. specifically via their regular tender.
- Canadian export performance: Canadian wheat exports remain good, with a big 526k mt of wheat delivered and 337k mt loaded for export in week 19. Season total exports are at 7 million mt compared to 4.5 million mt last year-to-date. At the current pace, we will export 19.3 million mt of wheat this crop year, but supplies could easily accommodate 20.5 to 21 million mt of wheat exports.

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(CGC) Grain Handling Summary Wheat	Week 19	(Dec. 11/'22)
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('000 mt)	Producer Deliveries	Terminal Receipts	Bulk Exports	Domestic Disappearance
Week 19	525.7	461.1	336.6	71.8
Week ago	446.5	470.9	302.5	97.7
YTD	9,234.1	9,104.1	7,041.1	1,630.1
Last YTD	6,304.6	6,076.3	4,519.0	1,705.9
YTD less Last YTD	2,929.5	19,500.2	2,522.1	-75.8
YTD over Last YTD	146%	150%	156%	96%

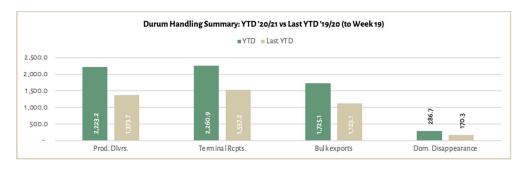


- Cash prices in the Middle East continue to be led by Russia and developments in Ukraine into the New Year. Expect wheat prices to be a little stronger in the New Year as the balance sheet remains tight and Russian prices should rally. Producers should consider waiting with new sales until the New Year.
- **Durum:** Durum bids in SK moved up a touch and are mostly posted at around \$13.50/bu delivered elevator.
- Note that in international markets, Tunisia bought another 125k mt of durum last week for January/February at US\$504.50-514.30/mt. With the Lakes nearing closing for the season, the workback calculation becomes more expensive, though there are still 220k mt of durum sitting in eastern ports. It is likely the sales price still works back to above \$14.50/bu elevator in Saskatchewan.
- Meanwhile, durum prices posted in Italy (Bologna) dropped by €5/mt to €470/mt last week. But trading activity is closing towards Christmas.
- Canadian durum exports for week 19 were at 96k mt, for a year-to-date total of 1.7 million mt, compared to 1.1 million mt last year-to-date. Durum export shipments have picked up over Nov./Dec., but still only average at 91k mt per week. AAFC expects 5 million mt of durum exports this crop year, which would leave us with ~900k mt of ending stocks (compared to 580k mt last year). It would be ideal to see 5.2-5.3 million mt of exports.



(CGC) Grain Handling Summary Durum	Week 19	(Dec. 11/'22)

('000 mt)	Producer Deliveries	Terminal Receipts	Bulk Exports	Domestic Disappearance
Week 19	172.9	176.1	96.4	20.2
Week ago	105.1	207.6	152.4	25.5
YTD	2,223.2	2,260.9	1,725.1	286.7
Last YTD	1,373.7	1,537.2	1,123.1	170.3
YTD less Last YTD	849.5	723.7	602.0	116.4
YTD over Last YTD	162%	147%	154%	168%

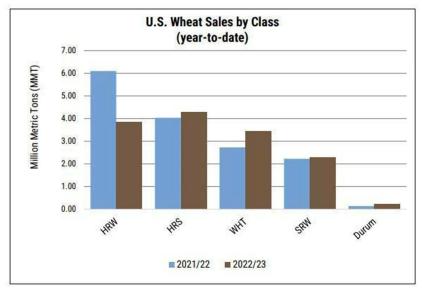


• Producers are advised to be 50% sold durum and should target an additional 50% at \$14.00/bu for a #1CWAD which is ~\$13.85/bu for a #3CWAD.

US Wheat:

- Again, while wheat futures were up by 9-19/bu cents last week, HRW wheat was the biggest loser
 on Friday, as funds continued to liquidate a net long position in this wheat class and shook off
 potential bullish news of further power outages in Ukraine. The markets are also down to the final
 week before Christmas and trading volume is dropping by the day as everyone prepares for the
 holidays.
- **US weekly export sales** of 469k mt were *above* trade guesses, but the season total of 518 million bu remains 7% down on last year.





Source: USDA

- **US winter wheat**: Aside from rains in southeast Kansas, much of the drought conditions in the High Plains remain the same. Rain and snow helped improve conditions throughout Idaho, southwest Montana, and the SW wheat-growing area of the Columbia River Gorge in Washington/Oregon.
- Futures will be thin over the holidays.
- US HRS for January '23 was valued at \$401.90/mt FOB PNW (up \$6.50/mt from last week), FOB Gulf HRW 11/12.5 pro is valued at \$384.20/mt (up \$11.20/mt from last week).

Australian wheat:

Australian futures had the first positive week in the past six.

Argentine wheat:

- In Argentina, the Rosario GE lowered their wheat crop estimate by 300k mt to 11.5 million mt (USDA is at 12.5 million mt), with abandonment at 900k ha of a total 5.9 million ha planted. BAGE stuck with their 12.4 million mt estimate.
- The harvest still is just 54% complete vs. 70% on average. Gd/Exc ratings increased by 2% to 10% Gd/Exc, but this remains well below last year's 81%.

EU wheat:

- The lower Matif brought French wheat into play against the Algerian (OAIC) sale, which had not been the case previously.
- FOB prices in the EU: January '23 French 11.5 pro wheat closed at \$325.90/mt (down \$2.20/mt from last week); Jan. '23 German 12.5 pro wheat closed at \$332.70/mt (down \$1.00/mt from last week); Jan. '23 Baltic 14.0 pro wheat closed at \$330.60/mt (down \$2.80/mt from last week).

Black Sea wheat:

- Russian and Ukrainian wheat were the origins that did trade into the Algerian tender (500k mt). However, it was notable that there were no actual Russian sellers willing to commit to the February execution. We think there are several potential reasons for that:
 - the weather remains very poor which lowered the pace of shipments,
 - Russian sellers are already heavily committed, the vessel line-up is huge, and the first part of the Algerian sale is just six weeks away.



- There also again is a concern in the insurance market: Initially, some major European reinsurance companies stated that from January 1st on, they wanted to exclude the cover of any risks related to the war. This was followed by some P&I clubs, also stating they would refuse cover on vessels loading Russian, Ukrainian or Belarus cargoes.
- Jan. 23 12.5% Pro Russian wheat is quoted at \$318.00/mt FOB (down \$2.00/mt from last week).

Significant purchases/ trades:

- Algeria's OAIC bought up to 540k mt of milling wheat in a tender last Wednesday and at \$348-349/mt paid around ~\$7/mt less than at its previous tender. Most of the tonnage will be sourced from the EU and the Black Sea (Russia and Ukraine), but also some could still be supplied from France.
- Tunisia bought 125k mt of durum wheat for Jan.-Feb.'23 at \$504.50-514.30/mt.
- **Japan** bought about 200,000 tonnes of Australian/Canadian/USA wheat.
- **Iraq** pushed its US/Canada/Australian tender back to Sunday. (We expect Iraq to buy 50,000 tonnes of wheat).
- **US weekly export sales** of 469k mt were above trade guesses, but the season total of 518 million bu remains 7% down on last year.

Wheat Market Outlook:

Significant events over the past week:

- Wheat futures were down on Friday but up for the week by 8-19 cents/bu. HRW wheat was the
 biggest loser on Friday, with funds continuing to liquidate a net long position in this wheat. We are
 also down to the final week before Christmas and trading volume is dropping by the day as everyone
 prepares for the holidays.
- Tunisia bought another 125k mt of durum last week for January/ February at US\$504.50-514.30/mt.
- **US weekly export sales** of 469k mt were *above* trade guesses, but the season total of 518 million bu remains 7% down on last year.
- In **Argentina**, the Rosario GE lowered their wheat crop estimate by 300k mt to 11.5 million mt (USDA is at 12.5 million mt). Gd/Exc ratings increased by 2% to 10% Gd/Exc, but this remains well below last year's 81%.
- The lower Matif brought **French wheat** into play against the Algerian (OAIC) sale, which had not been the case previously.
- There again is a concern in the vessel insurance market about covering vessels loading Russian, Ukrainian or Belarus cargoes.

Outlook:

There still are several issues/ problem areas surrounding wheat that will need to be monitored:

- Next week's expected severe cold in the US Plains (effect on winter wheat?),
- The size of Argentina's wheat crop, which continues to decline due to dryness,
- Russia's late-planted wheat remains at risk to cold temperatures,
- It is unclear how the renewed insurance problems will impact Black Sea exports.

And sourcing grain in Europe from now into January (orthodox holidays) may be difficult, so cash market developments will be interesting.

Expect wheat prices to be a little stronger in the New Year because the balance sheet remains tight and Russian prices should rally. Producers should wait for new sales until the New Year.



iii) Primary Elevator Price Tables and Grade Spreads

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

			Date: 19-12-2		
NW Sask	Spot		NIM/ Cook	Deferred	
INVV Sask	(bu.)	(mt)	NW Sask	Feb.'23 (bu.)	Feb. '23 (mt)
1 CWRS 13.5	\$11.62	\$426.97	1 CWRS 13.5	\$11.75	\$431.74
1 CWAD 13.0	\$13.54	\$497.51	1 CWAD 13.0	\$13.58	\$498.98
1 CPSR 11.5	\$11.00	\$404.18	1 CPSR 11.5	\$11.06	\$406.39
SW Sask			SW Sask		
1 CWRS 13.5	\$11.54	\$424.03	1 CWRS 13.5	\$11.66	\$428.44
1 CWAD 13.0	\$13.54	\$497.51	1 CWAD 13.0	\$13.57	\$498.62
1 CPSR 11.5	\$10.73	\$394.26	1 CPSR 11.5	\$11.04	\$405.65
NE Sask			NE Sask		
1 CWRS 13.5	\$11.26	\$413.74	1 CWRS 13.5	\$11.44	\$420.35
1 CWAD 13.0	\$13.33	\$489.80	1 CWAD 13.0	\$13.47	\$494.94
1 CPSR 11.5	n/a		1 CPSR 11.5	n/a	
SE Sask			SE Sask		
1 CWRS 13.5	\$11.29	\$414.84	1 CWRS 13.5	\$11.42	\$419.62
1 CWAD 13.0	\$13.39	\$492.00	1 CWAD 13.0	\$13.45	\$494.21
1 CPSR 11.5	\$10.64	\$390.96	1 CPSR 11.5	\$10.80	\$396.84

Data source: PDQ, Dec. 19/'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 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, Dec. 19/22



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

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8

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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."



- 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

> <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% of total export volume crop year to date.
- o 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

Releveant FOB Prices and Export Basis 19-12-2022					
	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	\$499.89	\$592.47			
HRS	\$492.39				
HRW 11.5	\$486.38				
SWW 12.0	\$429.84				
1 CWRS 13.5 ³	\$499.89		\$425.50	\$74.40	
2 CWRS 13.0 ³	\$492.39		\$414.47	\$77.92	
3 CWRS ³	\$486.38		\$405.29	\$81.10	
CPS ³	\$422.83		\$391.32	\$31.51	
1 CWAD ⁴		\$585.46	\$499.35	\$86.11	
Competing wheat:	US\$/mt				
Russia 12.5 (Black Sea, 25k mt)	\$320.00	Jan.'23			
French 11.5 (Rouen)	\$325.90	Jan.'23			
APW 10.5 (W Coast)	\$348.00	Jan.'23			
Argentine 12.0	\$375.00	Jan.'23			

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