

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

Agriculture Market Information System (AMIS)¹ December Wheat Market Update:

Wheat	FAO-AMIS			USDA		IGC		IN MILLION TONNES
	2021/22 est	2022/23 f'cast		2021/22 est	2022/23 f'cast	2021/22 est	2022/23 f'cast	
		3 Nov	8 Dec		9 Nov		17 Nov	
Prod.	778.2	783.8	781.1	779.4	782.7	781.6	791.9	
	641.3	645.4	642.7	642.5	644.7	644.7	653.9	
Supply	1070.2	1077.5	1074.2	1070.1	1059.0	1059.8	1071.1	
	802.9	805.1	801.8	789.0	779.2	795.6	800.9	
Utiliz.	773.2	775.0	774.7	793.8	791.2	780.6	785.5	
	630.4	636.3	636.0	645.8	647.2	639.7	644.4	
Trade	195.7	193.7	194.0	205.1	206.6	196.7	192.8	
	186.0	185.7	186.0	195.5	197.1	186.8	184.4	
Stocks	293.0	299.6	300.1	276.3	267.8	279.2	285.6	
	159.1	158.3	158.8	134.6	123.5	145.9	148.1	

Note: Data shown in the second row refer to world aggregates without China; world trade data refer to exports, and world trade without China excludes exports to China.
Source: AMIS, June 2022

¹ AMIS: Agricultural Market Information System. Input comes from the ten organizations that form the AMIS Secretariat: FAO, IFAD, IFPRI, IGC, OECD, UNCTAD, World Bank Group, WFP, WTO, GLAM.

- **2022 wheat production** is still forecast to reach a record level, up 0.4 percent year-on-year, but lowered slightly this month on reduced production prospects in Argentina due to prolonged dry conditions.
- **Wheat utilization** in 2022/23 is headed for a marginal expansion from the 2021/22 level, with growth in food consumption offsetting a foreseen decline in feed use of wheat, mostly in China.
- **Wheat trade** in 2022/23 (July/June) is forecast to decline slightly from the 2021/22 level and virtually unchanged month-over-month, with higher expected shipments for Australia and the Russian Federation offsetting lower sales anticipated for Argentina and the EU.
- **Wheat ending stocks** (ending in 2023) are nearly stable month-over-month and are forecast to rise by 2.4 percent above opening levels, with most of the expected buildup concentrated in China and the Russian Federation.

Note: The December WASDE report had no significant changes, so basically, it is a non-market factor.

Crop Condition Monitor:

Australia: conditions are exceptional in most areas, despite ongoing flooding in parts of eastern Australia. Harvesting is well underway in northern and western cropping regions.

Argentina: yields are poor in most areas due to drought as harvesting is wrapping up in the north and beginning in the main producing areas; many plots have been used as forage.

EU: conditions are generally favourable, albeit with delayed sowing in the southern countries due to low soil moisture levels. In the UK, conditions are favourable.

Turkey: sowing is wrapping up under dry conditions in the west.

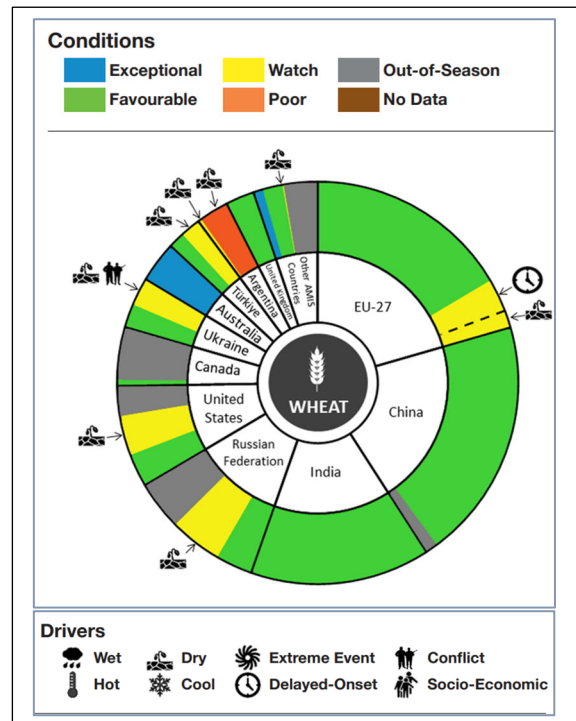
Ukraine: conditions are generally favourable, albeit with persistent dryness in Odessa and disruptions/security concerns in the southern and eastern regions due to the ongoing war.

Russian Federation: sowing is wrapping up under generally favourable conditions except for dryness in the southern Caucasus.

China: winter wheat is under favourable conditions with ample soil moisture. In India, sowing is beginning in the northern and central states.

US: dry conditions across the Great Plains from South Dakota to Texas continue to be a concern going into winter.

Canada: winter wheat sowing is complete and under favourable conditions going into winter dormancy.



➤ **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 7.34, down 27 cents on the week.
- March ‘23 contract **Kansas hard red winter wheat** closed at 833, down 38 cents on the week.

- March '23 Minneapolis hard red spring wheat closed at 901-0, down 20 cents on the week.
- Wheat futures are currently trading up 16-22 cents this Monday morning at the time of writing. The Ukrainian port of Odesa was not operating on Sunday after the latest Russian attack on the region's energy system.

CBOT Mch. 2023 Wheat (1 yr.)



KC Mch. 2023 Wheat



Mpls. Mch. 2023 Wheat

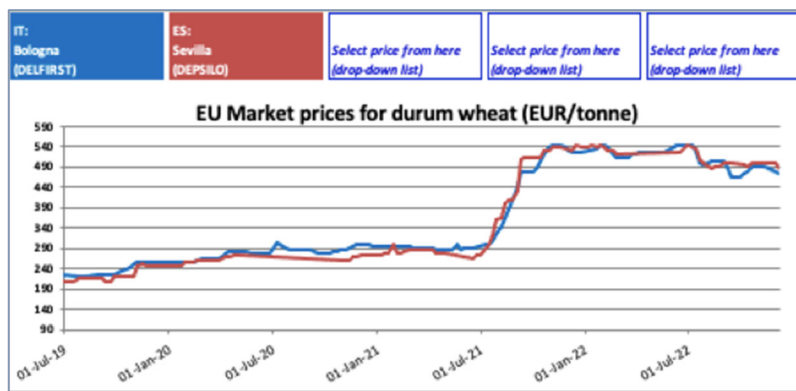


Canadian Wheat

- **March '23 Minneapolis hard red spring wheat** closed at 901-0 last week, down 8 cents on Friday and down 20 cents on the week. Managed money firms were selling short spring wheat through the week and expanded their net short by 1,619 contracts to 3,048 as of December 6th.
- Wheat bids in Saskatchewan are ranging from \$11.15 to 11.70/bu, depending on location and delivery period, with feed wheat at \$10-10.50/bu. Buyers are becoming more passive as we move close to the holiday period; they do not want to carry inventory through the holiday period as the market is winding down for the year end.
- **Canadian export performance:** Canadian wheat exports have been decent, though given the recovery in crop size this year, we would like to see more aggressiveness by exporters in the markets. Another 303k mt of wheat was exported in week 18 for a season total of 6.7 million mt. The average weekly export pace is 373k mt, which is above the 340.0k mt per week needed to meet the AAFC's 18.3 million mt export number. At the current pace, we would export 19.4 million mt of wheat, but supplies could easily accommodate 20.5 to 21 million mt of wheat exports.

(CGC) Grain Handling Summary Wheat			Week 18	(Dec. 04/'22)
('000 mt)	Prod. Dlvs.	Terminal Rcpts.	Bulk exports	Dom. Disappearance
Week 18	446.5	470.9	302.5	97.7
Week ago	669.9	436.0	421.1	148.0
YTD	8,708.5	8,607.9	6,704.6	1,558.2
Last YTD	6,050.7	5,824.5	4,329.1	1,637.7
YTD less Last YTD	2,657.8	19,500.2	2,375.5	-79.5
YTD over Last YTD	144%	148%	155%	95%

- **Cash prices in the Middle East will continue to be led by Russia and developments in Ukraine into the New Year. Russian cash prices remain lower than those of other exporters, but HRW values are getting closer to trade. Producers should wait for new sales until the New Year.**
- **Durum:** The StatsCan production number for durum at 5.4 million mt was smaller than expected (the trade was expecting 5.9 million mt), but spot durum bids have dropped a bit at around \$13.50-13.75/bu delivered elevator. However, we are moving into the holiday period, and elevators do not want to carry extra inventory into the New Year.
- Similarly, durum prices posted in Italy (Bologna) dropped by €5/mt to €475/mt last week. This market remains hard to read. But as we saw last year, once the US buyers back off from the Canadian market, prices take a step back on the Canadian side as well.



Source: European Commission data

- **Canadian durum exports** for week 18 were at 152k mt, for a year-to-date total of 1.6 million mt, compared to 1.1 million mt last year-to-date. Durum export shipments have picked up over the past few weeks but still only average 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). We would like to see 5.2-5.3 million mt of exports, but the export sales pace would have to pick up, and that is not going to happen in the month of December.

(CGC) Grain Handling Summary Durum		Week 18	(Dec. 04/22)
('000 mt)	Prod. Dlvs.	Terminal Rcpts.	Dom. Disappearance
Week 18	105.1	207.6	152.4
Week ago	170.6	130.9	193.5
YTD	2,050.4	2,061.1	1,628.8
Last YTD	1,336.5	1,432.4	1,119.8
YTD less Last YTD	713.9	628.7	509.0
YTD over Last YTD	153%	144%	145%

We are a little concerned about this market and would like to get more sold when the opportunity arises early next year.

US Wheat:

- **USDA-WASDE report:** In Friday's USDA-WASDE report, USDA did not change its 2022/23 outlook of the **U.S. wheat S & D**. USDA estimated a slight increase in export volume for HRS and SW wheat, but that was offset by a reduction in expected SRW exports. USDA expects U.S. wheat futures prices to ease.

22/23 US Wheat by Class Ending Stocks						
	HRW	HRS	SRW	WHITE	DURUM	ALL WHEAT
Nov #'s	259	124	87	69	33	571
Dec #'s	259	119	97	64	33	571

- USDA reduced their **2022/23 global wheat** supply estimate (the big surprise was that Russia remains at 91 million mt, and Argentine wheat production was lowered by 3 million mt to 12.5 million mt), but USDA also estimated a reduction in global disappearance due to lower feed and residual use in the EU and Ukraine. USDA increased Ukrainian exports by 1.5 million mt to 12.5 million mt. USDA reduced Argentine wheat exports to 7.5 million mt, the lowest level since 2014/15. Projected global'22/23 ending stocks were lowered by 500k mt to 267.3 million mt, only slightly less than its estimate of 267.5 million mt in July 2022, which is the lowest ending stocks estimate since 2016/17. -- *US and EU futures interpreted the USDA report as slightly negative, but there really were no surprises in the report.*
- March 2023 Minneapolis hard red spring wheat closed at 901-0, down 8 cents on Friday and down 20 cents on the week. Managed money firms were selling short spring wheat through the week and expanded their net short by 1,619 contracts to 3,048 as of December 6th.
- Regarding **new crop 2023 wheat**, the major US HRW and hard white wheat production region in the High Plains, Oklahoma and Texas stayed generally dry with below-normal temperatures. In SRW states, rain reduced dry conditions in eastern Ohio, but Moderate Drought expanded in southern Illinois. *USDA estimates 73% of U.S. winter wheat production is within an area experiencing drought.*
- US weekly wheat sales of 189,900 mt were disappointing and at the bottom of trade guesses.
- US HRS for January 2023 was valued at \$395.40/mt FOB PNW (*down \$13.60/mt from last week*), FOB Gulf HRW 11/12.5 pro is valued at \$373.00/mt (*down \$22.10/mt from last week*).

Australian wheat:

- ABARES forecast a record Australian crop at 36.6 million mt, up 14% from the September forecast. (Last year's wheat crop was a record at 36.3 million mt.)
- Australian wheat futures were down ~A\$20/mt on the week.

Argentine wheat:

- The USDA lowered Argentine wheat production by 3 million mt to 12.5 million mt, and reduced Argentine wheat exports to 7.5 million mt, the lowest level since 2014/15.
- The BAGE wheat estimate was unchanged last week at 12.4 million mt, with harvest 42% complete against 57% average.
- Company StoneX commented today that the drought situation in Argentina is similar to that in 2008-09, which was a big disaster.

EU wheat:

- Matif wheat was flat ahead of the USDA report, with cash premiums at or near record highs, but it closed lower as the USDA raised EU end stocks by 1 million mt, despite raising exports by a similar amount.
- FOB prices in the EU: January 2022 French 11.5 pro wheat closed at \$328.10/mt (*down \$12.80/mt from last week*); January 2022 German 12.5 pro wheat closed at \$333.70/mt (*down \$14.40/mt from last week*); January 2022 Baltic 14.0 pro wheat closed at \$333.20/mt (*down \$16.90/mt from last week*).

Black Sea wheat:

- Black Sea prices were largely unchanged: the USDA made no changes to crop estimates but raised exports by 1 Mmt in Russia and 1.5 Mmt in Ukraine.
- Egypt (GASC) continued to buy volume Russian wheat in private deals.
- Black Sea wheat values remain hard to define, but they are clearly moving progressively higher, as exhibited by the rising export tax calculation. Another issue that is gaining increasing notice and press coverage is the outright and open theft by Russia of grain that was produced in Ukraine. Estimates of the dollar values involved now are as high as \$2 billion (maybe 6 million mt at current values). The BBC, amongst others, has shown satellite imagery which is said to prove the accusations. This helps explain why Russia has been quite aggressive in pushing wheat into the markets.

➤ Significant purchases/ trades:

- **Egypt** (GASC) continued to buy Russian wheat in volume through private deals.
- US weekly wheat sales of 189,900 mt were disappointing and at the bottom of trade guesses.
- total of 494 million bu is now down 6% on last year against the USDA's projected 3% drop.

➤ Wheat Market Outlook:

Significant events over the past week:

- Last Friday's **USDA-WASDE report** did not change its 2022/23 outlook of the **U.S. wheat S & D**. USDA reduced their **2022/23 global wheat** supply estimate (the big surprise was that remains Russia at 91 million mt, while Argentine wheat production was lowered by 3 million mt to 12.5 million mt), but USDA also estimated a reduction in global disappearance due to lower feed and residual use in the EU and Ukraine. Projected global 2022/23 ending stocks were lowered by 500k mt to 267.3 million mt, only slightly less than its estimate of 267.5 million mt in July 2022, which is the lowest ending stocks estimate since 2016/17. -- *US and EU futures interpreted the USDA report as slightly negative, but there really were no surprises in the report.*
- **N/C winter wheat**: USDA estimates 73% of **U.S. winter wheat production** is within an area experiencing drought.
- **US weekly wheat sales** of 189,900 mt were again disappointing and at the bottom of trade guesses.
- **ABARES** forecast a record Australian crop at 36.6 million mt, up 14% from the September forecast. (Last year's wheat crop was a record at 36.3 million mt.)
- **Black Sea wheat values** remain hard to define, but they are clearly moving progressively higher, as exhibited by the rising export tax calculation.
- Another issue that is gaining increasing notice and press coverage is the outright and **open theft by Russia of grain that was produced in Ukraine**. Estimates of the dollar values involved now are as high as \$2 billion (maybe 6 million mt at current values). The BBC, amongst others, has

shown satellite imagery which is said to prove the accusations. This helps explain why Russia has been quite aggressive in pushing wheat into the markets.

- **Wheat futures** are currently trading up 16-22 cents this Monday morning. The Ukrainian port of Odesa was not operating on Sunday after the latest Russian attack on the region's energy system. (The upshot is that the three Ukrainian ports that are allowed to ship grain per the Export Corridor agreement were without power over the weekend after continued Russian attacks on the power grid in Ukraine. Technically Russia did not attack the ports, but only one is functioning well at the moment).

Outlook:

Cash prices in the Middle East will continue to be led by Russia and developments in Ukraine into the New Year. Russian cash prices remain lower than those of other exporters, but HRW values are getting closer to trade. 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: 12-12-2022					
NW Sask	Spot		NW Sask	Deferred	
	(bu.)	(mt)		Feb.'23 (bu.)	Feb. '23 (mt)
1 CWRS 13.5	\$11.48	\$421.82	1 CWRS 13.5	\$11.54	\$424.03
1 CWAD 13.0	\$13.57	\$498.62	1 CWAD 13.0	\$13.56	\$498.25
1 CPSR 11.5	\$10.82	\$397.57	1 CPSR 11.5	\$10.84	\$398.30
SW Sask			SW Sask		
1 CWRS 13.5	\$11.37	\$417.78	1 CWRS 13.5	\$11.45	\$420.72
1 CWAD 13.0	\$13.50	\$496.04	1 CWAD 13.0	\$13.53	\$497.15
1 CPSR 11.5	\$10.51	\$386.18	1 CPSR 11.5	\$10.79	\$396.47
NE Sask			NE Sask		
1 CWRS 13.5	\$11.11	\$408.23	1 CWRS 13.5	\$11.19	\$411.17
1 CWAD 13.0	\$13.37	\$491.27	1 CWAD 13.0	\$13.42	\$493.10
1 CPSR 11.5	n/a		1 CPSR 11.5	n/a	
SE Sask			SE Sask		
1 CWRS 13.5	\$11.15	\$409.70	1 CWRS 13.5	\$11.23	\$412.64
1 CWAD 13.0	\$13.38	\$491.63	1 CWAD 13.0	\$13.43	\$493.47
1 CPSR 11.5	\$10.46	\$384.34	1 CPSR 11.5	\$10.58	\$388.75

Data source: PDQ, Dec. 12/22

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. 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 Basis² (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 North West (PNW) ≈ 1 CWRS 13.5% in Vancouver
 - HRS in the Pacific North West (PNW) ≈ 2 CWRS 13.0% in Vancouver
 - 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.

² 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.”

- 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				12-12-2022
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	\$507.56	\$600.25		
HRS	\$500.54			
HRW 11.5	\$499.04			
SWW 12.0	\$437.91			
1 CWRS 13.5 ³	\$507.56		\$422.19	\$85.37
2 CWRS 13.0 ³	\$500.54		\$410.80	\$89.74
3 CWRS ³	\$499.04		\$396.84	\$102.20
CPS ³	\$430.90		\$401.61	\$29.29
1 CWAD ⁴		\$593.24	\$499.35	\$93.88
Competing wheat:	US\$/mt			
Russia 12.5 (Black Sea, 25k mt)	\$320.00	Jan.'23		
French 11.5 (Rouen)	\$328.10	Jan.'23		
APW 10.5 (W Coast)	\$345.00	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