

Wheat Market Outlook and Price Report: May 9, 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 May 9, 2022

	FAO-AMIS			USDA		IGC		
Wheat	2020/21 est	2021/22 f'cast		2020/21 est	2021/22 f'cast	2020/21 est	2021/22 f'cast	
^		7 Apr	5 May		8 Apr		21 Apr	
Prod.	776.7	776.5	776.6	776.3	778.8	774.9	780.9	s
ľ	642.4	639.6	639.6	642.0	641.9	640.6	643.9	u Z
Supply	1055.0	1065.5	1068.7	1073.1	1069.5	1049.9	1059.7	z
Sup	794.1	798.2	801.4	788.8	788.4	786.6	795.5	0
Utiliz.	759.8	770.4	765.2	782.4	791.1	771.1	778.1	
E	618.9	627.6	622.4	632.4	643.6	625.1	637.3	0
Trade	189.2	189.8	191.0	198.7	201.7	190.3	193.1	12
₽	178.4	180.3	181.5	188.1	192.2	179.3	183.4	-
cks	292.1	295.6	304.3	290.7	278.4	278.8	281.6	
Stocks	161.8	161.8	170.5	146.5	136.2	150.5	148.6	-

AMIS Market Monitor, World Supply-Demand Outlook

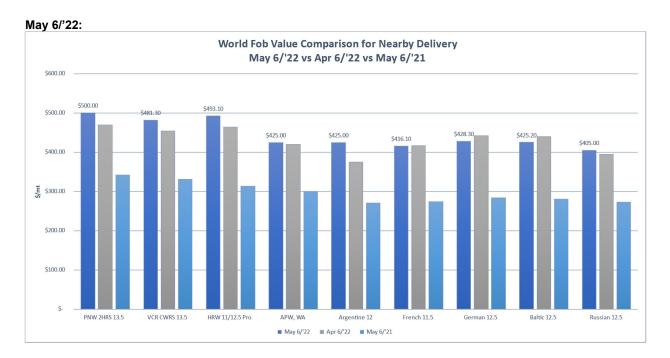
Source: AMIS, May 6, 2022

- AMIS released their May supply and demand outlook for 2021/22. They left global 2021 production unchanged at 776.6 million mt compared to the USDA's 778.8 million mt estimate.
- Use was decreased by 5.2 million mt from April driven by a 4.7 million mt decrease in India.
- Exports were raised 1.2 million mt from last month as projected increases in Brazil (+700k mt), Canada (+500k mt), India (+500k mt), and Russia (+2.0 million mt) off-set decreases in the EU (-1.5 million mt), and the US (-1.0 million mt).
- Ending stocks were raised 8.8 million mt to 304.3 million mt (292.1 million mt last year) driven by increases in the EU (+1.5 million mt) and India (+7.5 million mt).



Recent Developments in Wheat Demand:

There were no reports of significant wheat purchases last week. Buyers seem only prepared to cover nearby demand. End users appear to be covered through July. The price of US wheat continues to limit purchases to only the most inelastic of customers.



> 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:

- July 2022 contract Chicago winter wheat closed at 1108-4, up 2-0 cents on Friday, up 52-6 cents on the week.
- July 2022 contract Kansas hard red winter wheat closed at 1170-4, down 6-4 cents in Friday's trade, up 64-6 cents on the week.
- July 2022 Minneapolis hard red spring wheat closed at 1208-6, down 1-0 cent on Friday, up 42-6 cents on the week.



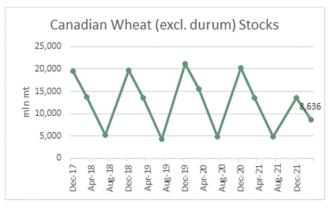


General Comment

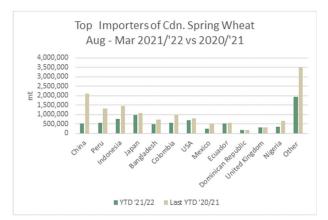
Wheat shot higher last week as the market saw the heat in India and low Canadian stocks as bullish. Poor winter wheat crop conditions in the US and a dry forecast are also supporting futures. There is a new WASDE report next week which will be closely watched and could prove bullish for wheat.

Canadian Wheat:

- Seeding has begun in the Canadian Prairies. Alberta and Saskatchewan are off to a fairly average start, while very little progress has been made in Manitoba where wet conditions are preventing fieldwork.
- Alberta released their first crop report of the season. As of May 3rd, 12.4% of Alberta's spring wheat area had been seeded. Surface soil moisture is generally favorable in the Peace, Northwest, and the North half of the Central region, but moisture levels deteriorate rapidly in the Southern region where 31.2% of the area has "poor" moisture conditions.
- Statistics Canada released their March 31 grain stocks report last week. They put Canadian nondurum stocks stored in all positions at 8.6 million mt, which is a full 5 million mt less than this time last year.



• Canada exported 895.8k mt of non-durum wheat in March for a (August-March) season total of 8.1 million mt. This is 58% of last year's amount. Japan remains the top customer of Canadian wheat this year, importing 972.2k mt of supplies which is just 8% less than last year. Meanwhile, China has decreased imports by 75%, or 1.6 million mt having imported just 529.3k mt of supplies to date.



• Canadian week 39 wheat exports were 222.2k mt for a total export volume of 8.5 million mt, compared to 15.1 million mt last year-to-date.



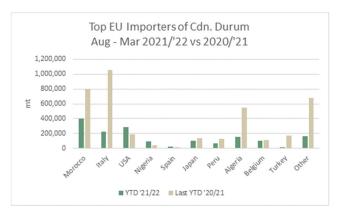
(CGC) Grain Handling	g Summary Whe	at	Wk. 39	(May 1/'21)
('000 mt)	Prod. Divrs.	Terminal Rcpts.	Bulk exports	Dom. Disappearance
Wk. 39	257.0	339.7	222.2	43.4
Week ago	230.3	282.6	218.9	115.2
YTD	12,131.6	11,013.0	8,517.1	3,059.1
Last YTD	16,979.0	17,377.3	15,078.7	3,032.6
YTD less Last YTD	-4,847.4	-6,364.3	-6,561.6	26.5
YTD over Last YTD	71%	63%	56%	101%

- The wheat market is becoming increasingly choppy as it becomes more and more weather driven. The premium for wheat over corn is too large. Wheat will have to decrease in price relative to corn. In the meantime, the WASDE report will likely be somewhat positive for wheat.
- **Durum:** The AB durum wheat crop is 53% seeded. Dry conditions in the Southern region (where the majority of AB's durum crop is grown) is causing concern.
- Stats Canada's stock report indicated that Canadian durum stocks stored in all positions are 1.5 million mt, which is just over half of last year's amount. Implied December-March disappearance was 627k mt compared to 1.3 million mt last year.



• Canadian durum exports during March were 180.0k mt for a season total of 1.7 million mt - just 42% of last year's August-March amount. Morocco continues to be Canada's largest durum customer importing a year-to-date total of 400.8k mt. This is exactly half of last year's to-date total. Exports are down to most destinations with a notable exception being the US, which, at 286.5k mt, has imported 49% more durum to date than last year due to their supply shortage.





There continue to be reports of new crop prices as strong at \$15.00/bu for a #1CWAD. Producers • would be advised to be 50% sold at these levels. Dry conditions in Southern Alberta and Montana are becoming increasingly important.

US Wheat:

- There was much-needed rain in the Central Plains and Montana last week, however, precipitation was absent in key areas of South Dakota, Nebraska, and Kansas.
- The US winter wheat crop condition was unchanged from last week at 27% Gd/Ex compared to • 48% Gd/Ex last year. With 23% of the crop heading, the damage is becoming irreversible. NDVI imagery (below) is looking quite dismal. The Oklahoma Grain Association put production in the state at 57 million bushels which is half of last year's amount.



NDVI Crop-masked Departure from Average (MODIS-Terra)

- US weekly wheat sales were at the low end of expectations at 119k mt for old crop, and well • below expectations for new crop at 43k mt. Total old crop commitments are 713 million bushels, down 24% from last year.
- US HRS for June '22 is valued at \$470.00/ mt FOB PNW (up \$5/mt from last week), FOB Gulf • HRW 11/12.5 pro is valued at \$454.4/mt (down \$3.70/mt from last week).

Australian wheat:

- Wheat futures in Australia are reaching new highs on both old and new crop contracts. •
- There is heavy rain across Queensland and northern NSW. These are not an issue for spring planting yet.
- Australian FOB APW wheat for August '22 was guoted at \$420.00/mt (up \$15.00/mt from last • week)

Argentine wheat:

- The start of planting is approaching, but soil moisture is falling and there is no rain in the forecast.
- June shipment Argentine 12% pro wheat was valued at ~\$425.00/mt FOB, unchanged from the previous week.



Indian wheat:

• India experienced their hottest March on record, causing the Indian Ag Min to decrease production expectations from 111.3 million mt to 105 million mt (-6%). Some think that production could decrease by 10% which would bring output to 100 million mt, a level that could prompt the government to restrict exports.

EU wheat:

- Year-to-date wheat exports in the EU are down 1.0 million mt tonnes (27%) compared to last year according to European Commission data. Earlier this week, the commission projected that wheat exports would reach 40.0 million mt in 2022/23, up 25% year-over-year.
- Dry conditions in the EU have expanded into France. Dry hot weather is forecasted over the next 10 days and is expected to cause irreversible damage to grain crops in the EU's largest grain-producing country.
- Some of the other wheat-producing areas in Europe that are experiencing adverse conditions are Germany, Italy, Turkey, Greece, and Slovakia.
- FOB prices in the EU: June '22 French 11.5 pro wheat closed at \$416.1/mt, down \$21.10/mt from last week; June German 12.5 pro wheat closed at \$428.30/mt, down \$14.70/mt. June Baltic 12.5 pro wheat was at \$425.00/mt, down \$12.50/mt.

Black Sea wheat:

- Spring seeding in Ukraine has reached 50% complete. Spring wheat planting is now 96.9% complete on the estimated area. So far, 186,100 hectares have been seeded which is 89% of last year's amount.
- There are reports that Russia is actively stealing Ukrainian farm equipment and shipping it to Russian farms. It was also reported that Ukrainian grain is being stolen and taken to Crimea, a Russian-held province of Ukraine. The Kremlin has denied the accusations.
- Crops in Russia continue to look strong and are experiencing favorable conditions.
- There is no real Black Sea FOB market. The few reported bid-offer spreads are too wide to trade. That said, Russian grain is finding its way to market, prompting AMIS to raise their Russian 2021/'22 export number by 2.0 million mt from last month.

> Significant purchases/ trades:

- Tunisia bought 100k mt June-July wheat at \$446-\$464.
- US export sales were small at 119k mt for old crop and 43k mt for new corp.

Wheat Market Outlook:

Significant events:

- There was much-needed rain in the **US** Central Plains and Montana last week.
- India suffered their hottest March on record causing production estimates to fall by 6-10%. Output levels are turning towards 100 million mt levels which could prompt the government to restrict exports.
- **Statistics Canada** is estimating that Canadian all wheat stocks are 39% less than last year at just 10.1 million mt. Stocks stored on farms fell by 53% while commercial stocks rose by 9%.
- We are hearing rumblings that a shortage of rail equipment is slowing exports. Some elevators have indicated that they cannot get an allocation and might not be able to empty before the new crop is ready.



Outlook:

The market will be looking toward the WASDE report this week. In the short term, the report will likely be positive for wheat. Looking further out, the wheat market is becoming increasingly choppy as it becomes progressively more weather driven. The premium for wheat over corn is too large. Wheat will have to decrease in price relative to corn.

Producers are advised to be fully sold on old crop and being 40% sold new crop spring wheat.

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		NW Sask	Deferred		
INVV Sask	(bu.)	(mt)	INVV Sask	Sept '22 (bu.)	Sept '22 (mt.)	
1 CWRS 13.5	\$14.62	\$537.20	1 CWRS 13.5	\$14.09	\$517.72	
1 CWAD 13.0	\$15.33	\$563.29	1 CWAD 13.0	\$13.84	\$508.54	
1 CPSR 11.5	\$13.82	\$507.80	1 CPSR 11.5	\$13.62	\$500.45	
SW Sask			SW Sask			
1 CWRS 13.5	\$14.54	\$534.26	1 CWRS 13.5	\$13.95	\$512.58	
1 CWAD 13.0	\$15.43	\$566.96	1 CWAD 13.0	\$13.87	\$509.64	
1 CPSR 11.5	\$13.71	\$503.76	1 CPSR 11.5	\$13.46	\$494.57	
NE Sask			NE Sask			
1 CWRS 13.5	\$14.43	\$530.22	1 CWRS 13.5	\$13.77	\$505.96	
1 CWAD 13.0	\$15.83	\$581.66	1 CWAD 13.0	\$14.32	\$526.17	
1 CPSR 11.5	n/a		1 CPSR 11.5	n/a		
SE Sask			SE Sask			
1 CWRS 13.5	\$14.46	\$531.32	1 CWRS 13.5	\$13.80	\$507.07	
1 CWAD 13.0	\$15.65	\$575.04	1 CWAD 13.0	\$14.18	\$521.03	
1 CPSR 11.5	\$13.57	\$498.62	1 CPSR 11.5	\$13.30	\$488.70	

Data source: PDQ, May 6/'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	0.00	0.00
2 CWAD 13.5	(0.09)	(3.31)
2 CWAD 12.5	(0.11)	(4.04)

Data source: PDQ, May 6/'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

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."



- \circ 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.
- $\circ\,$ 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.



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

Relevear	nt FOB Prices and E	Export Basis		May 9, 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	\$621.30	\$856.66			
HRS	\$620.71	,			
HRW 11.5	\$615.10				
SWW 12.0	\$538.33				
1 CWRS 13.5 ³	\$621.30		\$541.61	\$79.69	
2 CWRS 13.0 ³	\$620.71		\$537.93	\$82.78	
3 CWRS ³	\$615.10		\$528.75	\$86.36	
CPS ³	\$531.66		\$487.23	\$44.43	
1 CWAD ⁴		\$594.89	\$514.42	\$257.56	
Competing wheat:	US\$,	/mt			
Russia 12.5 (Black Sea, 25k mt)	\$395.00		June		
French 11.5 (Rouen)	\$416.10		June		
APW 10.5 (W Coast)	\$425.00		August		
Argentine 12.5	entine 12.5 \$425.00		June		
APW 10.5 (W Coast) Argentine 12.5 ¹ FOB Prices CDA = FOB US\$ conv ² Export Basis = FOB Prices CDA r ³ DNS 14% ≈ 1 CRWS 13.5%; HRS ⁴ Values derived to Lakehead FOI	\$425 erted into Canadia ninus Cdn. Street F ≈ 2 CWRS 13.0%; H	5.00 an Currency Price	June		