

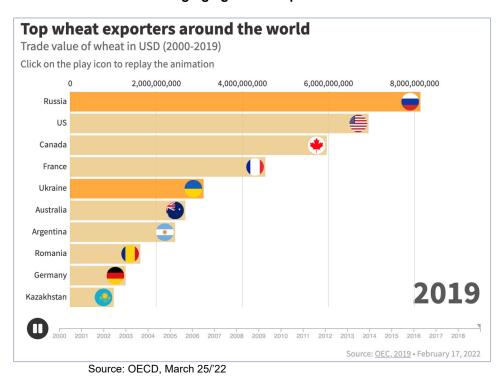
Wheat Market Outlook and Price Report: March 28, 2022 By Marlene Boersch/ A.P. Temple/ Michael Wilton Mercantile Consulting Venture Inc.

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 March 28, 2022

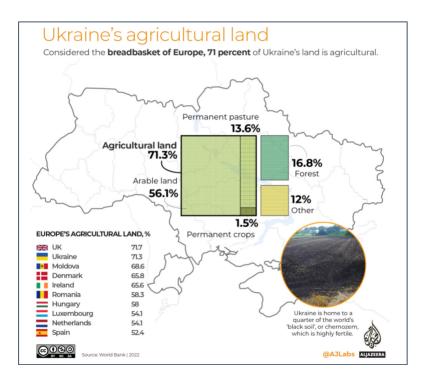


Some facts about Ukraine as an emerging agricultural power:

- Ukraine is the fifth largest exporter of wheat, accounting for seven percent of sales globally in 2019.
- Ukraine is considered the breadbasket of Europe; 71% of Ukraine's land is agricultural. It is also home to a quarter of the world's 'black soil', or chernozem, which is highly fertile.



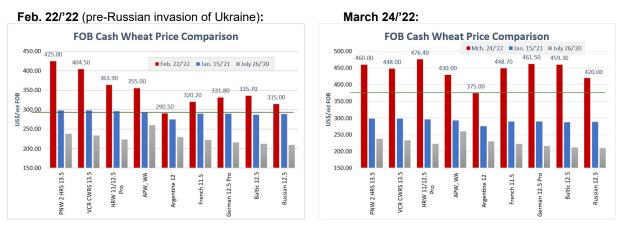
- Ukraine is already among the top three grain exporters and a world leader in areas such as sunflower oil. Ukrainian agricultural exports enjoy a growing profile in key global markets like China, Egypt, India, Turkey, and across the European Union.
- In March 2020, the Ukrainian parliament finally voted for agricultural land reform and canceled the moratorium on land ownership. Thanks to this historic decision, seven million Ukrainian landowners received the right to use their land at their own discretion. This will doubtlessly further fuel ag developments in Ukraine if it is left in peace to develop!



Recent Developments in Wheat Demand:

Africa is bracing for a food crisis. There are 26 African countries that rely on wheat from Russia and Ukraine for more than one-third of all their wheat imports. For 17 of these countries, more than half of their supplies come from Russia/Ukraine and two of the countries import all their wheat from Russia/Ukraine. Replacement origins will be more expensive due to lower supplies due to the war, potentially different (higher) qualities supplied by other origins, and due to higher logistic costs when shipping from other origins.





> 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:

- May '22 contract **Chicago winter wheat** closed at 1102-2, down 16-4 cents on Friday, *up* 38-4 *cents on the week*.
- May '22 contract **Kansas hard red winter wheat** closed at 1110-6, up 15-6 cents in Friday's trade, *up 40-2 cents on the week*.
- May '22 **Minneapolis hard red spring wheat** closed at 1104-2, up 21-4 cents on Friday, *up 44-0 cents on the week*.
- **Spec funds** were 45,789 contracts net long in Kansas City wheat futures and options, which was a 1,553 contract stronger net long. CFTC reported managed money as 14,222 contracts net long in Minneapolis wheat.
- Politics, a new COVID-19 outbreak in China, and the weather put virtually all commodities on a negative footing to start the week. This Monday morning, wheat markets are down by double-digit numbers, currently showing 27c to 46c/bu losses, with the biggest losses in Chicago.



General Comment

Markets will remain centered on actions or potential developments in Ukraine. Early calls suggest the markets will be down. We don't see what can return supplies to normal in the short term, even if a cease-fire were signed tomorrow. We have two important reports coming out this week: the USDA stocks and prospective new crop plantings in the US. These will be watched carefully.



Canadian Wheat:

- The situation in the Black Sea is an opportunity for Canada to draw down domestic wheat stocks as low as possible. This would serve buyers trying to replace Ukrainian purchases that are not coming into the market, as well as help Canadian farmers to draw down current crop stocks to a minimum at unprecedented prices. At 3.3 million mt, Canadian wheat ending stocks as currently forecast by AAFC, are higher than they should be given the situation. We hope tending stocks can be drawn lower, but shipping data has not been encouraging. A lower number will depend on farmers' willingness to sell their O/C grain and exporters' ability to sell (and ship) into this market.
- Just 154.6k mt of wheat was exported during week 33. The total year-to-date commitment of 7.5 million mt means that Canada's current shipping pace has been 226.5k mt per week compared to the weekly average of 301.3k mt needed to even meet AAFC's 13.2 million mt total export number.
- We think it is time to finish up old crop sales. We recommended getting 50% sold new crop at \$13.00/bu. The window for this has passed for now, but we would look to take advantage of future opportunities at similar levels.

(CGC) Grain Handling Summary Wheat			Week 33	(March. 20/'22)
('000 mt)	Producer Deliveries	Terminal Receipts	Bulk Exports	Domestic Disappearance
Week 33	439.1	183.0	154.6	46.2
Week ago	327.2	232.5	237.7	69.9
YTD	10,689.3	9,415.8	7,474.9	2,598.5
Last YTD	14,391.7	14,220.8	12,535.3	2,567.6
YTD less Last YTD	-3,702.4	-4,805.0	-5,060.4	30.9
YTD over Last YTD	74%	66%	60%	101%

- **Durum:** The European Union is debating implementing an EU-wide mandatory country-of-origin labeling (MCOOL) law for durum and other food products. There are several EU countries that have already implemented their own MCOOL laws (Italy), but so far there was nothing across the entire EU. When Italy implemented MCOOL in 2017 annual exports to Italy dropped to 561k mt compared to the 1.1 million mt exported in 2016. Since then, exports have returned to 839k mt in 2021. An EU-wide MCOOL program would be negative for Canadian durum demand. Lessons learned from Italy show that Europeans seem willing to pay a premium for local production. That said, they will continue to come to Canada when local supply is difficult to find. Year to date, EU countries have accounted for 19% of all Canadian durum exports.
- New crop durum prices have been mixed; we have seen \$11.00/bu bids (which is far too cheap) but have also heard of ~\$13.75/bu prices recently which is very strong. We are 20% sold.



Wk. 33

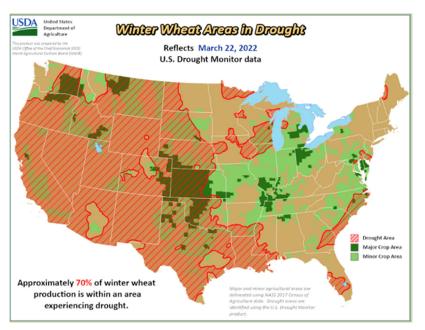
(CGC) Grain Handling Summary Durum

('000 mt)	Producer Deliveries	Terminal Receipts	Bulk Exports	Domestic Disappearance
Wk. 33	32.7	15.4	15.5	4.7
Week ago	27.4	24.8	37.8	4.3
YTD	1,847.4	2,117.1	1,557.1	287.3
Last YTD	4,177.2	4,551.5	3,867.1	359.9
YTD less Last YTD	-2,329.8	-2,434.4	-2,310.0	-72.6
YTD over Last YTD	44%	47%	40%	80%

US Wheat:

- Rainfall in the winter wheat belt was a benefit to the crop. The winter wheat area in drought fell 3% from last week to 70%.
- We have two important reports this week: The USDA stocks and prospective new crop plantings in the US. These will be watched carefully. We expect corn planting unchanged at 93.4 million acres and soybeans at 88.0 million acres.
- US wheat sales of 156k mt (5.6 million bushels) were at the low end of expectations. To date, total commitments are now 694 million bushels which means that old crop sales only need to be ~1.8 million bushels per week to meet the USDA's 800k mt number. This number should be well surpassed.
- US HRS for Apr. '22 is valued at \$460.00/ mt FOB PNW (up \$10/mt from last week, and up \$35/mt since February 14), FOB Gulf HRW 11/12.5 pro is valued at \$476.40/mt (*up \$19.80/mt from last week, up \$21.70/mt since Feb. 24*).





Australian wheat:

- Australian wheat is already mostly committed through June and is suffering from some logistics issues in the east following heavy rainfalls. However, the rain is favourable for new crop prospects.
- Australian FOB APW wheat for April '22 was quoted at \$430.00/mt, down \$20/mt over the past week.

Argentine wheat:

- Argentina's current crop is essentially already committed. There is little tonnage left to fill much of the gap in supplies left by the Black Sea conflict.
- April shipment Argentine 12% pro wheat was valued at ~\$375.00/mt FOB, down \$10/mt from the previous week.

EU wheat:

- Matif May wheat closed the week up €5.50/mt and near the highs of the day. New crop September rose €4/mt to a 3rd straight contract high close.
- Matif May milling wheat currently is down €11.50/mt this Monday.
- The trade increasingly expects a long-drawn-out war in Ukraine, and (beyond theoretical values for Russian wheat), French wheat is easily the world's cheapest wheat in the early new crop positions, 'if' shipments from the Black Sea are significantly reduced due to sanctions and damaged infrastructure.
- There are parts of the EU that could benefit from some rain, specifically in Southern Germany and Hungary. This is not a problem yet but needs to be watched.
- The French wheat condition assessment was steady at 92% good/very good as of March 21st, according to FranceAgriMer.
- FOB prices in the EU: April '22 French 11.5 pro closed at \$448.70/mt, up \$19.10/mt from last week (up \$128.50/mt since February 24). April German 12.5 pro wheat closed at \$461.50/mt, up \$18.10/mt (up \$129.50/mt since February 24). April Baltic 12.5 pro wheat was at \$459.30/mt, up \$18.10/mt (up \$127.40/mt since February 24).



China:

- Chinese officials in Shanghai are effectively putting some 26 million people on COVID lockdown this week to curb a new wave spreading through the area.
- China conducted another state grain reserve auction in which they sold almost all the wheat offered at \$12.30/bu, about \$.20/bu less than in the last auction.
- There is precipitation in areas where China was forecasting their "worst winter wheat crop ever", and some analysts say they'll reverse course almost fully thanks to the moisture.

Black Sea wheat:

- Inflation of prices, including shortages of goods, is beginning to be felt in Russia bringing more talk of possible further export restrictions.
- The trade's full attention remains on the war in Ukraine. All corn trade from Ukraine remains halted and it is impossible to know how many corn and spring wheat acres will be planted in Ukraine as the war drags on. APK-Inform estimates that Ukraine's 2022 all-grain harvest is likely to fall by 55% to 38.9 million mt. They think that all grain exports will fall by 32% to 30 million.
- This Monday morning there seems to be some credence that the reported shift Russia's stance in Ukraine would be positive for spring plantings. We continue to have doubts.
- We don't see what can return supplies to normal in the short term, even if a cease-fire were signed tomorrow.
- In response to acres that will likely be lost in Ukraine, the EU is incentivizing farmers to grow crops on fallow land and will allow them to plant on "set-aside acres". If all set-aside acres were used, this could allow the total planted area (across all commodities) to grow by 6%. There is a similar petition to the USDA to allow CRP acres to be planted as well. We would guess that corn would be the main crop planted in these areas.
- Cash wheat values in the Black Sea remain nominal and Russian shipment data remains very sketchy, while Ukrainian shipments are virtually zero.
- Russian domestic wheat and flour prices remain at or near record levels. This is fostering more talk of potential additional export restrictions.

Significant purchases/ trades:

- **Turkey** bought 455,000 mts of optional origin wheat for April shipment.
- Kuwait bought Australian wheat at about \$412.00/mt fob Australia.
- Iraq was looking for a nominal 50k mt of hard milling wheat,
- Lebanon was seeking 50k mt of Indian wheat due to the absence of Ukrainian wheat.
- Algeria is expected to tender again on Wednesday for June shipment and Jordan is expected back on for 120k mt of wheat for May-July.
- **US wheat sales** of 156k mt were at the low end of expectations. To date, total commitments are 694 million bushels (18.9 million mt).

Wheat Market Outlook:

Significant events:

• The trade's full attention remains on the **war in Ukraine**. All corn trade from Ukraine remains halted and it is impossible to know how many corn and spring wheat acres will be planted in Ukraine as the war drags on. APK-Inform estimates that Ukraine's 2022 all-grain harvest is likely to fall by 55% to 38.9 million mt. They think that all grain exports will fall by 32% to 30 million.



- We don't see what can return supplies to normal in the short term, even if a cease-fire were signed tomorrow.
- **Cash wheat values** in the Black Sea remain nominal and Russian **shipment data** remains very sketchy, while Ukrainian shipments are virtually zero.
- **Russian domestic wheat** and flour prices remain at or near record levels. This is engendering more talk of potential additional export restrictions.
- **China** conducted another state grain reserve auction in which they sold almost all the wheat offered at \$12.30/bu, about \$.20/bu less than in the last auction.
- **French wheat** now is easily the world's cheapest wheat in the early new crop positions, 'if' shipments from the Black Sea are significantly reduced due to sanctions and damaged infrastructure.
- According to FranceAgriMer, the **French wheat condition** assessment was steady at 92% good/very good as of March 21st.
- In the **USA**, rainfall in the winter wheat belt was a benefit to the crop. The winter wheat area in drought fell 3% from last week to 70%.
- We have two important reports this week: The **USDA stocks and prospective new crop plantings** in the US. We expect corn planting unchanged at 93.4 million acres and soybeans at 88.0 million acres. These reports will be watched carefully by traders.

Outlook:

Market attention will remain centered on actions or potential developments in Ukraine. We don't see how supplies can return to normal in the short term, even if a cease-fire were signed tomorrow.

Inflation of prices, including shortages of goods, is beginning to be felt in Russia bringing more talk of possible further export restrictions. Otherwise, we have two important reports this week: the USDA stocks and prospective new crop plantings reports in the US. These will be watched carefully.

We have no great opinions on wheat. We prefer to be fully sold on old crop. Otherwise, we don't see any reason to sell grains this week until we see more details on Ukraine and the USA stocks and planting reports.



iii) Primary Elevator Price Tables and Grade Spreads

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

				Date:	28-03-2022	
NW Sask	SI	Spot		Def	Deferred	
	(bu.)	(mt)	NW Sask	Aug. '22 (bu.)	Aug. '22 (mt)	
1 CWRS 13.5	\$13.17	\$483.92	1 CWRS 13.5	\$11.93	\$438.36	
1 CWAD 13.0	\$15.59	\$572.84	1 CWAD 13.0	\$11.38	\$418.15	
1 CPSR 11.5	\$12.12	\$445.34	1 CPSR 11.5	n/a		
SW Sask			SW Sask			
1 CWRS 13.5	\$13.13	\$482.45	1 CWRS 13.5	\$11.80	\$433.58	
1 CWAD 13.0	\$15.59	\$572.84	1 CWAD 13.0	\$11.69	\$429.54	
1 CPSR 11.5	\$12.18	\$447.54	1 CPSR 11.5	\$11.32	\$415.94	
NE Sask			NE Sask	Sept. '22		
1 CWRS 13.5	\$12.96	\$476.20	1 CWRS 13.5	\$11.98	\$440.19	
1 CWAD 13.0	\$15.80	\$580.56	1 CWAD 13.0	\$13.01	\$478.04	
1 CPSR 11.5	n/a		1 CPSR 11.5	n/a		
SE Sask			SE Sask	Sept. '22		
1 CWRS 13.5	\$12.93	\$475.10	1 CWRS 13.5	\$11.89	\$436.89	
1 CWAD 13.0	\$15.54	\$571.00	1 CWAD 13.0	\$12.68	\$465.91	
1 CPSR 11.5	\$11.94	\$438.72	1 CPSR 11.5	\$11.30	\$415.21	

Data source: PDQ, March. 28/22

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, March. 28/'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

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 Northwest (PNW) ≈ 3 CWRS in Vancouver
- SW (lowest price wheat) \approx CPS red (mostly fed domestically)
- HAD (Lakes) \approx 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
- > <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.
- 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

Releve	ant FOB Prices a	nd Export Basis		28-03-2022
	FOB Prices CD	FOB Prices CDA ¹ (calculated)		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	\$539.40	\$752.86		
HRS	\$532.03			
HRW 11.5	\$546.78			
SWW 12.0	\$513.59			
1 CWRS 13.5 ³	\$539.40		\$479.51	\$59.89
2 CWRS 13.0 ³	\$532.03		\$475.83	\$56.19
3 CWRS ³	\$546.78		\$466.65	\$80.13
CPS ³	\$507.13		\$417.41	\$89.72
1 CWAD ⁴		\$746.41	\$551.16	\$195.25
Competing wheat:	US\$/mt			
Russia 12.5 (Black Sea,				
25k mt)	\$420.00	April		
French 11.5 (Rouen)	\$448.70	April		
APW 10.5 (W Coast)	\$430.00	April		
Argentine 12.0	\$375.00	April		

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