

Wheat Market Outlook and Price Report: October 17, 2022

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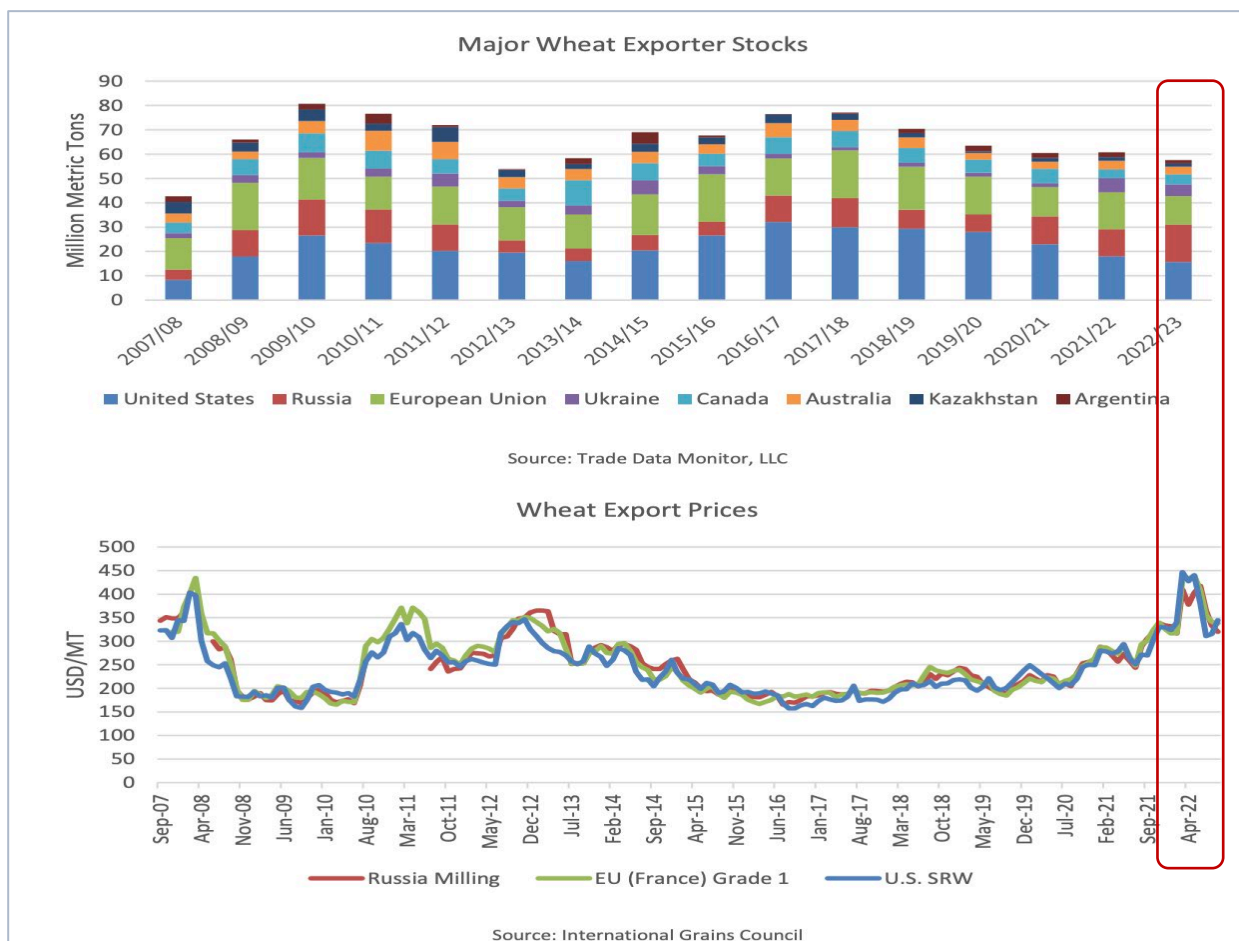
i) Background and Rationale for the Report

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).

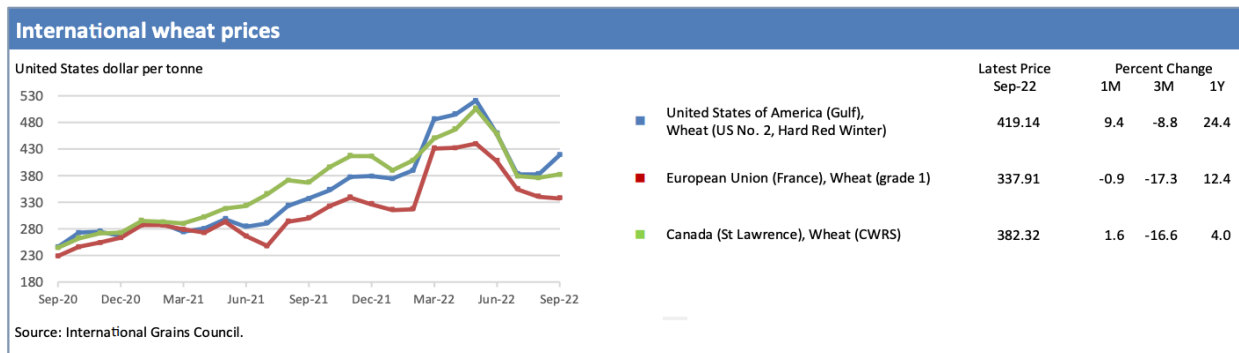
The report is made up of several sections. Following this section, a World Wheat overview is provided, which includes a summary of wheat market fundamentals, world production and trade, and a wheat market outlook. This is followed by several price tables, which include primary elevator bids at various 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 October 17, 2022

USDA-FAS: Wheat Prices Remain High as Major Wheat Exporter Stocks Contract



- According to the most recent USDA reports: Stocks held by exporters are often viewed as a measure of supplies available to the global market and are closely correlated with export prices. For **2022/23, exporter wheat stocks** are forecast to decline to the lowest level since 2012/13.
- While the **United States** is forecast to hold the largest volume of stocks among major exporters, its stocks are forecast to decline to the lowest level since 2007/08.
- Combined **European Union** and United Kingdom wheat stocks are forecast to decline. The region has a smaller crop as a whole, while consumption is forecast higher. In particular, wheat feed and residual demand are robust amid a decimated corn crop. Meanwhile, EU exports are set to rise to offset lower available supplies from Ukraine.
- **Ukraine** stocks soared in 2021/22 due to the naval blockade at the time. The grain corridor has enabled some wheat exports via seaports, with around 2 million mt exported in September. With reduced production, Ukrainian stocks are forecast to be lower, but still above historical levels.
- Among the major exporters, stocks are forecast higher for only two countries. **Canada** is forecast to rebound, given its improved crop this year compared to last year's drought-afflicted crop; however, the situation remains relatively tight. With an increase in exports projected for 2022/23, *the moderate increase in stocks results in a further reduction of the stocks-to-use ratio.*
- **Russia** is the other major exporter forecast to have an increase in stocks. The country began the marketing year with exceptionally high stocks due to its export restrictions, including an export tax and export quota in place. With large beginning stocks and a massive harvest, Russia will continue to be the top global wheat exporter. The initial pace of Russia exports has been relatively weak, but the monthly volumes are expected to increase as its prices remain competitive. Even so, *Russia is expected to have its largest ending stocks in 30 years.*



Developments in Wheat Demand:

Instead of the demand destruction that some had feared to see in last week's USDA report, the agency increased world feed demand and total demand was lowered by just 850k mt.

Still, there is definite concern about the effect of weak buyer currencies and a potential global recession.

➤ 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:

- December 2022 contract **Chicago winter wheat** closed at 859-6, down 32-4 cents on Friday, *down 20-4 cents on the week.*
- December 2022 contract **Kansas hard red winter wheat** closed at 952-2, down 30-0 cents in Friday's trade, *down 16-4 cents on the week.*
- December 2022 **Minneapolis hard red spring wheat** closed at 954-2, down 24-6 cents on Friday, *down 13-6 cents on the week.*
- *Wheat futures are currently down 1-3c/bu this Monday morning.*

CBOT December 2022 Wheat (1 yr.) KC December 2022 Wheat Mpls. December 2022 Wheat



Canadian Wheat

- Spring wheat harvest is essentially done in Saskatchewan and Alberta with just 7% more to harvest in Manitoba. The quality of the crop remaining to be harvested in Manitoba will be impacted by the recent rain/snow.
- The USDA put US spring wheat production at 446 million bushels, down 17 million bushels from last month. [See US section for details].
- Combined North American (US & Canada) spring wheat production is estimated at 37.7 million mt, up 58% from last year's drought-reduced crop, but still lower than the production of the preceding three years.

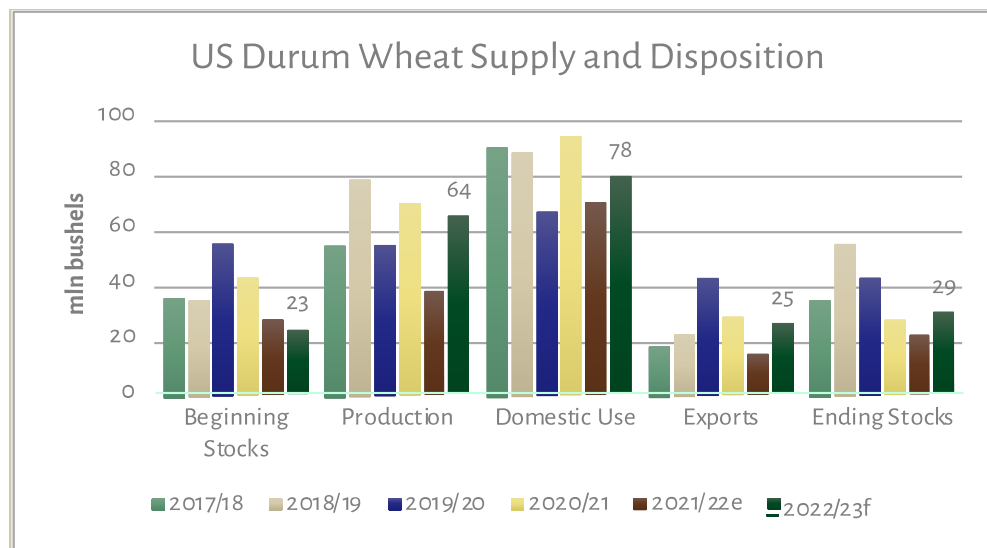
N Am. Sprng. Wht Prod'n	2018	2019	2020	2021	2022	Δ in %	Δ in mt
MB	4,717,400	4,955,700	5,184,500	3,668,359	5,051,461	138%	1,383,102
SK	10,084,900	10,924,400	10,874,500	6,377,062	10,614,450	166%	4,237,388
AB	8,771,600	9,512,800	9,555,900	5,713,091	9,935,576	174%	4,222,485
Ttl.	23,573,900	25,392,900	25,614,900	15,758,512	25,601,487	162%	9,842,975
US mln bu				297	446		
US Sprng wht	15,980,000	14,150,000	14,430,000	8,082,952	12,138,036	150%	4,055,084
Cda & US prod'n	39,553,900	39,542,900	40,044,900	23,841,464	37,739,523	158%	13,898,059

Source: Mercantile, based on STC & USDA numbers

- Canadian wheat exports for week 10 were quite good at 594k mt. Year-to-date, exports are ahead of last year's pace by 25%.

(CGC) Grain Handling Summary Wheat		Wk. 10	(October 9, 2022)	
('000 mt)	Producer Deliveries	Terminal Receipts	Bulk Exports	Domestic Disappearance
Wk. 10	477.7	334.3	593.9	63.3
Week ago	459.8	580.1	380.4	73.3
YTD	4878.3	4334.9	3336.8	828.3
Last YTD	3271.1	3749.9	2677.5	1003.5
YTD less Last YTD	1,607.2	585.0	659.3	-175.2
YTD over Last YTD	149%	116%	125%	83%

- Wheat prices have continued to strengthen. We expect prices to remain firm and would continue to hold additional sales for now.
- **Durum:** Canadian durum production is estimated at around 6.1 million mt, about double last year's Canadian production (StatsCan numbers).
- In the US, the USDA last week raised beginning stocks by 2 million bushels and decreased US durum production by 10 million bushels to 64 million bushels. The decrease in production was entirely offset by smaller domestic use (-5 million bushels) and exports (-5 million bushels). Thus, ending stocks were raised by 2 million bushels to 29 million bushels which is 8 million bushels more than last year, but well below average.

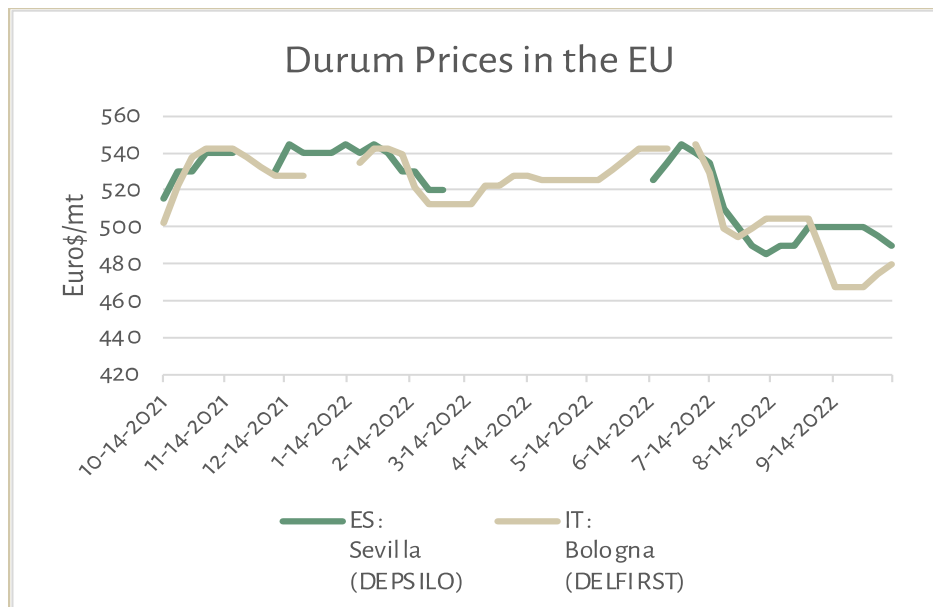


- Combined 2022 US & Canadian durum production should add to 7.9 million mt, 93% more than the year before.

N Am. Dur. Prod'n	2018	2019	2020	2021	2022	Δ in %	Δ in mt
MB		27,300	35,300	20,982	41,583	198%	20,601
SK	4,636,100	4,342,400	5,211,200	2,416,061	4,664,657	193%	2,248,596
AB	1,134,100	647,300	1,324,700	598,923	1,411,229	236%	812,306
Ttl.	5,770,200	5,017,000	6,571,200	3,035,966	6,117,469	201%	3,081,503
US mln bu				38	64		
US Dur. wht	2,080,000	1,460,000	1,850,000	1,034,182	1,741,781	168%	707,599
Cda & US prod'n	7,850,200	6,477,000	8,421,200	4,070,148	7,859,250	193%	3,789,102

Source: Mercantile, based on STC & USDA numbers

- Durum prices in the EU continue to converge. Prices in Estonia fell by Euro\$5/mt, while prices in Italy rose by Euro\$5 to Euro\$480. Italy's price backs off to about \$12.50 at the elevator in Saskatchewan.



- Durum exports were 48.6k mt for a season total of 429.3 million mt. The vast majority of exports in week 10 were out of Vancouver. Visible supplies have grown to 886.2k mt.
- If you are not well sold durum, we would increase sales to 50% at \$12.50-13.00/bu.

(CGC) Grain Handling Summary Durum

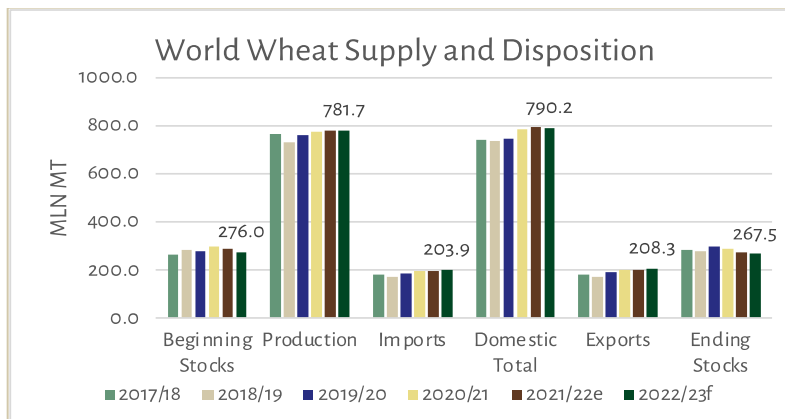
Wk. 10

(Oct. 9, 2022)

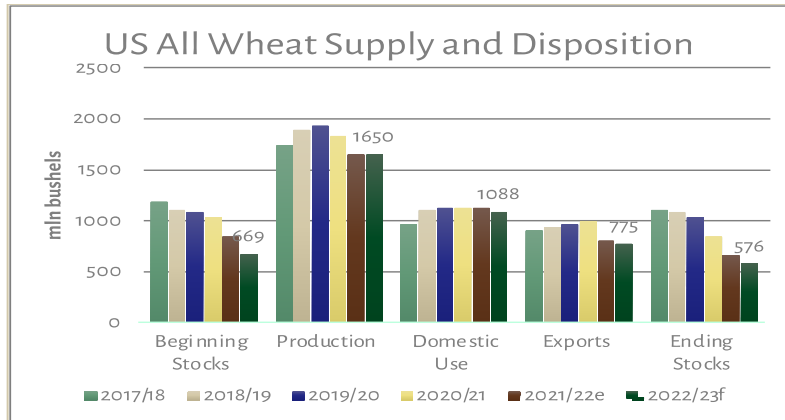
('000 mt)	Producer Deliveries.	Terminal Receipts	Bulk Exports	Domestic Disappearance
Wk. 10	149.6	125.5	48.6	3.4
Week ago	134.5	116.4	75.9	3.2
YTD	959.7	796.6	429.3	98.3
Last YTD	743.6	629.1	671.1	47.2
YTD less Last YTD	216.1	167.5	-241.8	51.1

US Wheat:

- United States Department of Agriculture (USDA) wheat numbers were largely in line with expectations. The USDA decreased **global wheat production** by 2.2 million mt to 781.7 million mt. The decrease was a result of lower production in the US (-3.6 million mt) and Argentina (-2.5 million mt) offsetting increases in the EU (+2.65 million mt) and Brazil (+0.5 million mt). Domestic use and exports were reduced by 0.9 million mt and 0.6 million mt respectively for a 1.0 million mt decrease in global ending stocks at 267.5 million mt. This is down 8.1million mt (3%) from last year.



- For the **US**, the USDA reduced production by 133 million bushels to 1.6 billion bushels. Production for all classes of wheat were reduced, but the largest decreases were in HRW (-45 million bushels) and SRW (-44 million bushels). Domestic use and exports were reduced by 30 million bushels and 50 million bushels respectively. Ending stocks were thus reduced by 34 million bushels to 576 million bushels, down 13% from last year.



- The US winter wheat crop is 55% sown and 26% of the crop has emerged. The drought in the winter wheat belt expanded another 3% from last week, and now covers 66% of the US winter wheat area. Despite dry conditions, some analysts believe that US farmers will plant 7% more HRW acres in 2023 than in 2022.
- US weekly wheat sales were at the low end of expectations at 211,800 mt. There was 135,600 mt worth of exports to China.
- US HRS for October 2022 was valued at \$447.90/ mt FOB PNW (*down \$7.50/mt from last week*), FOB Gulf HRW 11/12.5 pro is valued at \$443.60/mt (*down \$13.60/mt from last week*).

Australian wheat:

- Australia is expected to get a couple of days of drier conditions, but more rain is in the forecast and quality remains a big concern in the east.

Argentine wheat:

- Argentine production estimates continue to slide, with both the Buenos Aires Grain Exchange (BAGE) and the Rosario Grain Exchange lowering their estimates by 500k mt to 16.5 million mt and 16 million mt respectively. The USDA lowered their Argentine crop estimate 1.5 million mt to 17.5 million mt last Wednesday.
- Crop ratings dropped another 2 points to a new low of 12% Gd/Exc (vs. 48% last year), with 49% of the crop rated Poor/Very Poor.
- If Argentine exports are capped at 9 million mt, that would be 7 million mt below last year.

EU wheat:

- Marché à Terme International de France (Matif) in Europe soared €17/mt on the Russian war escalation and doubts over the extension of the export corridor but gave most back when Algeria bought 500k mt of Russian wheat significantly below EU price levels.
- War headlines and politics are likely to dictate market moves for months to come.
- FOB prices in the EU: October 2022 French 11.5 pro wheat closed at \$354.20/mt (*down \$4.50/mt from last week*); October 2022 German 12.5 pro wheat closed at \$360.50/mt (*down \$4.50/mt from last week*); October 2022 Baltic 14.0 pro wheat closed at \$400.60/mt (*down \$2.60/mt from last week*).

Black Sea wheat:

- Russian replacement wheat is put at around \$308/mt against FOB quotes of around \$325/mt, and exports appear to be slowing due to logistics and bad weather in the Black Sea.
- Russia has turned drier, but a portion of winter wheat acres have likely been irrevocably lost.
- Ukrainian plantings are more than 60% down on last year and have only been completed on about 45% of the expected total. Ukraine winter wheat acres are seen falling by up to 50-70%.
- The Russian export tax rises by around \$16/mt this week.
- The USDA's unchanged Russian crop estimate of 91 million mt caused much debate and is considered significantly too low, with several estimates above 100 million mt.

➤ **Significant purchases/ trades:**

- Algeria bought 400,000 mt of Russian wheat, but this was at levels lower than EU prices and much lower than North American prices.
- The Philippines reportedly bought 3 cargoes of January-March 2023 feed wheat. We think they purchased Australian wheat.
- Iraq bought nothing at their recent tender and cancelled it.
- Turkey announced another 495k mt wheat tender on Friday with shipment/ex-store dates of November 1, 2022 and November 21 to December 13, 2022.
- US weekly wheat sales were at the low end of expectations at 211,800 mt. There were 135,600 mt worth of exports to China.

➤ **Wheat Market Outlook:**

Significant events over the past week:

- According to the most recent USDA reports:
 - **2022/23, exporter wheat stocks** are forecast to decline to the lowest level since 2012/13.
 - While the **United States** is forecast to hold the largest volume of stocks among major exporters, its stocks are forecast to decline to the lowest level since 2007/08.
 - On the **demand side**: Instead of the demand destruction that some had feared to see in last week's USDA report, the agency increased world feed demand and total demand was lowered by just 850k mt. Still, there is definite concern about the effect of weak buyer currencies and a potential global recession.
 - The USDA's unchanged **Russian crop estimate** of 91 million mt caused much debate and is considered significantly too low, with several estimates above 100 million mt.
- Combined **North American (US & Canada) spring wheat production** is estimated at 37.7 million mt, up 58% from last year's drought reduced crop, but still lower than the production of the preceding three years.
- Combined **2022 US & Canadian durum production** should add to 7.9 million mt, 93% more than the year before.
- Regarding **next year's winter wheat crop**: The US winter wheat crop is 55% sown and 26% has emerged. The drought in the winter wheat belt expanded another 3% from last week, and now covers 66% of the US winter wheat area. Despite dry conditions, some analysts believe that US farmers will plant 7% more HRW acres in 2023 than in 2022.
- **Argentine production** estimates continue to slide, with both BAGE and the Rosario Grain Exchange lowering their estimates by 500k mt to 16.5 million mt and 16 million mt respectively.
- **Russia** has turned drier, but a portion of winter wheat acres have likely been irrevocably lost.
- **Ukraine** winter wheat acres are seen falling by up to 50-70%.
- **Algeria** bought 400,000 mt of Russian wheat, but this was at levels lower than EU prices and much lower than North American prices.

Outlook:

There are several drivers which will dictate the forward trajectory of the wheat markets:

- The Russian war and politics (regarding the grain corridor) will dictate nearby prices;
- Regarding the longer-term picture, the US/Argentine drought;
- Australian wheat quality following the recent rains;
- and importer purchasing power will be watched.

Expect the strong dollar to make buyers hard to find and that the next week will be quiet with pressure on futures from the harvest pressure. There is no reason to sell additional tonnage at this time. After the harvest is in the bin, expect some better prices. It is likely the USDA has overestimated the export supplies of wheat in its last World Agricultural Supply and Demand Estimates (WASDE) report.

iii) Primary Elevator Price Tables and Grade Spreads

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

Date: 17-10-2022					
NW Sask	Spot		NW Sask	Deferred	
	(bu.)	(mt)		Jan. '23 (bu.)	Jan. '23 (mt)
1 CWRS 13.5	\$11.83	\$434.68	1 CWRS 13.5	\$12.00	\$440.93
1 CWAD 13.0	\$13.02	\$478.41	1 CWAD 13.0	\$13.10	\$481.35
1 CPSR 11.5	\$11.20	\$411.53	1 CPSR 11.5	\$11.38	\$418.15
SW Sask			SW Sask		
1 CWRS 13.5	\$11.68	\$429.17	1 CWRS 13.5	\$11.84	\$435.05
1 CWAD 13.0	\$12.99	\$477.30	1 CWAD 13.0	\$13.07	\$480.24
1 CPSR 11.5	\$11.11	\$408.23	1 CPSR 11.5	\$11.36	\$417.41
NE Sask			NE Sask		
1 CWRS 13.5	\$11.47	\$421.45	1 CWRS 13.5	\$11.67	\$428.80
1 CWAD 13.0	\$13.07	\$480.24	1 CWAD 13.0	\$13.14	\$482.82
1 CPSR 11.5	n/a		1 CPSR 11.5	n/a	
SE Sask			SE Sask		
1 CWRS 13.5	\$11.48	\$421.82	1 CWRS 13.5	\$11.67	\$428.80
1 CWAD 13.0	\$12.87	\$472.90	1 CWAD 13.0	\$13.05	\$479.51
1 CPSR 11.5	\$10.93	\$401.61	1 CPSR 11.5	\$11.11	\$408.23

Data source: PDQ, Oct. 17/2022

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, Oct. 17/2022

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 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.
 - 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

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.

“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.”

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				17-10-2022
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	\$527.14	\$582.53		
HRS	\$519.59			
HRW 11.5	\$545.77			
SWW 12.0	\$460.18			
1 CWRS 13.5 ³	\$527.14		\$424.03	\$103.12
2 CWRS 13.0 ³	\$519.59		\$411.90	\$107.69
3 CWRS ³	\$545.77		\$396.84	\$148.94
CPS ³	\$453.13		\$398.67	\$54.46
1 CWAD ⁴		\$575.48	\$487.23	\$88.25
Competing wheat:	US\$/mt			
Russia 12.5 (Black Sea, 25k mt)	\$325.00	Oct.		
French 11.5 (Rouen)	\$354.20	Oct.		
APW 10.5 (W Coast)	\$385.00	Dec.		
Argentine 12.0	\$380.00	Dec.		

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