

Wheat Market Outlook and Price Report: November 18, 2019 By Marlene Boersch/ A.P. Temple 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 Nov 14th, 2019

Traded C&F Values in the most recent Egyptian Wheat Purchase



- Despite GASC's insistence that Egypt is well covered and that they would likely not tender again until the new year, they returned last Thursday, buying 465,000 mt of wheat at \$232.03-\$233.78 C&F.
- The entirety of the tender was covered by the Black Sea (355k mt Russian and 110k mt Ukrainian) for an average C&F price \$0.81 cheaper than their Nov 5th purchase. Although average traded Fob was \$2.57 more expensive, average freight values were \$3.38 cheaper than last week at \$14.45 mln mt.



- Russian Fob traded \$0.54 lower to \$0.88 higher than it did on Nov 5th, while average traded Ukrainian Fob was \$216.67 (Ukraine did not trade in the last tender).
- There was just 60k mt of French wheat bid, and while it's Fob was competitive at \$216.36, freight was not at \$17.42.

> 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:** Dec '19 contract **Chicago** winter wheat closed at 502-6, down 5-0 cents for the day, down 7-0 cents for the week.
- Dec '19 contract **Kansas** hard red winter wheat closed at 417-0, down 5-2 cents for the day, down 4-0 cents for the week.
- In **Minneapolis**, Dec '19 contract hard red spring wheat closed at 503-6, down 9-0 cents for the day, down 13-2 cents for the week, while March '20 hard red spring wheat closed at 519-2, down 8-4 cents for the day, down 14-6 cents for the week.

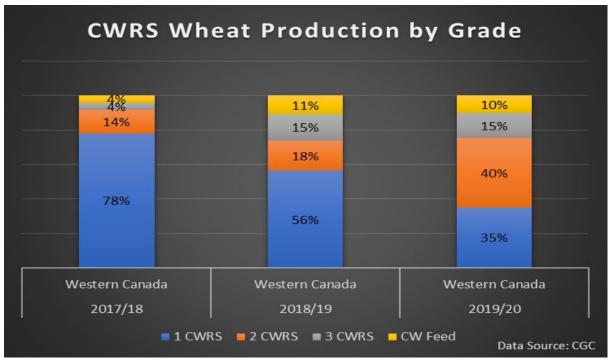
Canadian Wheat:

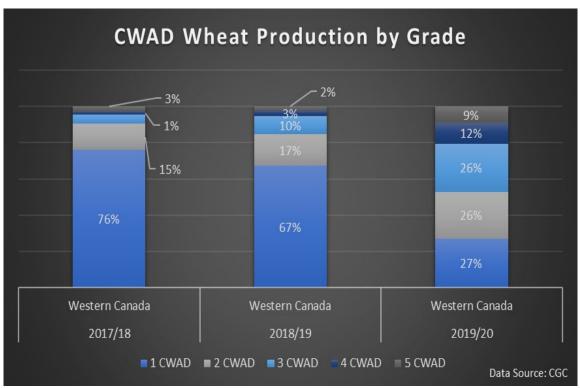
- MB Ag released their final crop summary for the year showing spring wheat harvest in the province was 98% complete as of Nov. 12th. According to MB Ag, 2.971 mln acres of spring wheat was planted in MB which leaves just under 60k acres unharvested (~97k mt worth of production). SAF has discontinued weekly reporting and their seasonal summary is out on the 21st. Their last report said SK spring wheat harvest was 92% done leaving ~695.7k acres unharvested, ~861k mt of production. There was no progress made in AB last week where spring wheat is 90% harvested with 678.5k acres remining to go, ~997k mt worth of production. *Thus, there is just under 2 mln mt worth of unharvested wheat in Western Canada.*
- According to the CGC sample grading program, as of Nov 12th, 35% of the CWRS in Western Canada made a No. 1 grade and 40% of the crop made a No. 2 grade, thus 75% of Western CRWS is either No.1 or 2. This is fairly similar to last year where 74% of the crop is said to have made a No. 1 or 2, but the allocation was significantly different [see graph]. We are skeptical about the figures from this year. It is unlikely that the percent of No. 3 and feed wheat in 2019 is the same as last year as, in our analysts, much of the crop harvested after October was unable to make a No. 2. While there was a good amount of participation in the sample program this year, its voluntary nature prevents it from being unbiased.
- According to the CGC harvest sample program, just 53% of Western Canada's durum crop was able to make a No. 1 or 2 CWAD (as of Nov. 12th) vs 84% last year.



Western Canadian Red Spring Wheat and Durum Wheat Production Grade

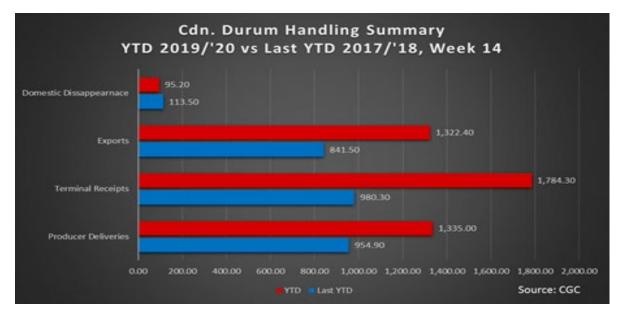
Canadian producers delivered 391.2k mt of wheat (excl. durum) into the Canadian grain handling system during week 14 of the 2019/20 marketing year. Exports during the week were 360.4k mt, for a YTD total of 4.57 mln mt, 419k mt (8%) less than this time last year as we continue to approach the AAFC's projected 4% decline in exports. Average weekly exports need to be 379.7k mt [dashed green line] in order to reach the AAFC's 19 mln mt number.

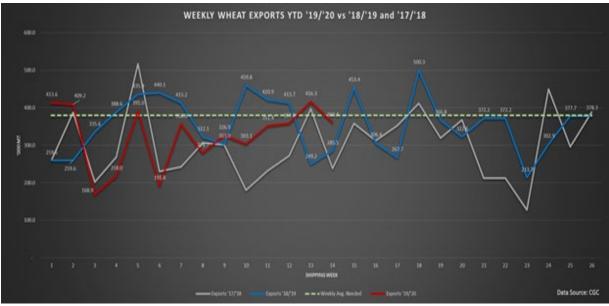






Canadian producers delivered 148.7k of durum into the grain handling system during week 14 of
the marketing year. Exports throughout the week were strong again at 138k mt for a YTD total of
1.322 mln mt, 57% (481k mt) more than this time last year. The Port of Churchill was active again,
exporting 33.6k mt of No. 3 CWAD (likely destined for Algeria). This makes for a total of 102.7k mt
worth of durum exported through the port this year.





Given the wheat values that have traded in recent weeks, Canada should be doing more wheat business, particularly in durum and lower grade wheat.

 Durum was traded for values that back off to ~US\$285/mt parity Thunder bay. Accounting for the exchange rate and backing off 112 car rail freight rates and actual handling expenditures calculates to C\$332/mt (\$9.05/bu) at the elevators in central SK. The current posted bid is \$8.00, for a generous \$38.41/mt margin after costs.



 Similarly, traded global feed wheat values are worth ~US\$200.00/mt parity Vancouver. Using a similar method as above, this backs off to C\$214.95/mt (\$5.85/bu) at the elevator in central SK vs the current posted bid of \$4.80. This is another healthy \$38.59/mt margin.

US wheat:

- On Nov. 12th there were reports of record-breaking cold temps causing potential dmg to winter crops as far south as TX. This support was short lived and temps were higher leading into the weekend.
- HRS export basis was supported in the Gulf by minimal farmer selling while the slight beginningof-the-week rise in HRW futures sparked some selling that pressuring basis levels in the Gulf. SRW basis continues to be supported by tight exportable supplies.
- The NASS crop report put winter wheat planting in-line with average at 92% complete (88% last year) while 78% of the crop is emerged. Crop ratings fell 3% from last week to 54% Gd/Ex (same as last year).

Australian wheat:

- Despite the \$AU falling to 5-week lows. Aussie wheat futures lost \$2 over the week on a pick-up in harvest pressure.
- Most analysts (ourselves included) think the USDA's 17.2 mln mt estimate is too high and lean more towards ABARES' 15.5 mln mt number. Regardless of the production amount, current APW WA Fob values of \$230 (down \$4 from last week) are too high to trade the ~7.5 mln mt of exportable surplus they will have.
- We heard rumors of SK elevators putting together low-quality/feed wheat programs destined for Australia.

Argentine wheat:

- Harvest in Argentina is 13% complete (vs 16% last year) on a crop that is rated just 10% Gd/Ex (41% last year).
- BAGE trimmed expectations for their wheat crop another 300k mt to 18.5 mln mt vs the USDA's 20 mln mt. A day before BAGE's revision, BCR put the Argentine crop at 19 mln mt.
- Partially compensating for the smaller production will be higher ending stocks as export licenses are just 10.6 mln mt vs the USDA's 12 mln mt.
- Argentina did not bid in the GASC tender last week despite large discounts to the Black Sea.
- Argentine Fob gained \$1-2 from last week as 12 pro is now bid \$190-194.

EU wheat:

- Planting in the EU continues to be slow because of wet conditions.
- EU all-wheat shipments advanced over 800,000 mt over last year to a total 10.16 mln mt, up 45% on last year. With the average wheat yield in the EU at 133 bpa and bids around C\$7.50 per bushel, EU farmers are quite happy.
- France's AgMin trimmed their old crop number 200k mt to 39.5 mln mt (24 mln last year) while raising their export projection 300k mt to 12 mln mt, 24% higher than last year
- There was just 60k mt of French wheat bid at the GASC tender, and while it's Fob was competitive at \$216.36; freight was not at \$17.42. Despite this, French premiums firmed on news of 250k mt of sales to Lithuania and another 190k mt of sales to China (in addition to the 350k mt already shipped to China this season).
- French 11.5 pro is bid at \$201.67 (down \$1 wk/wk), German 12.5 pro is down \$0.18 wk/wk at \$203.32, and Baltic 12.5 pro is \$0.37 higher than last week at \$203.14.

Black Sea wheat:

- SovEcon raised 2019 Russian production 1.2 mln mt to 75.6 mln mt (USDA's 74 mln mt). They are also estimating that the 2020 planted area will reach 16.7 mln ha, up 6% from last year.
- Ukraine put their crop down to 28.1 mln mt, well below USDA's 29 mln mt. Planting for the 2020 crop has covered 5.9 mln ha, down 3% from last year.



- The Black Sea is becoming increasingly dry which will hinder winter crop germination but is not of great concern yet.
- With the Black Sea winning the entirety of the GASC tender, Fob values were largely unchanged from last week with Russian 12.5 pro bid at \$208.

Significant purchases/ trades:

- GASC (Egypt) bought 465,000 mt of Russian/Ukrainian wheat for Jan 5-15 at around \$232.50/mt. The Black Sea C&F values were mostly a couple of dollars below the previous tender, while French wheat (which was not booked) was \$1.50 above.
- Korea bought 60,000 mt Jan-Feb feed wheat at \$228.70 (most likely USA origin ex-PNW).
- **Ethiopia** again postponed both the 200,000 mt and 400,000 mt tenders, this time to Nov 25-26, and they added a further 80,000 mt.
- **USA** inspections were 529,000 mt (season total 421 mln bu, up 23%), sales were 239,000 mt (season total 558 mln bu, now up just 7% on last year).
- The Baltic Panamax freight index has fallen 50% from the September highs.

Wheat Market Outlook:

Significant events:

- Technical selling, uncertainty about a trade deal with China and lower Black Sea prices offered in a recent GASC tender pressured all U.S. wheat futures prices week-over-week. Soft red winter (SRW) December futures fell 7 cents from last week to end at \$5.02/bu and hard red winter (HRW) December futures lost 4 cents to close at \$4.17/bu. Hard red spring (HRS) December futures fell 15 cents to close at \$5.04/bu. CBOT December corn futures lost 6 cents week-over-week to end at \$3.71/bu. CBOT January soybean futures fell 13 cents to close at \$9.18/bu
- Minimal farmer selling supported Gulf HRS export basis for December and January deliveries.
 A slight increase in farmer selling due to higher futures values at the beginning of the week pressured Gulf HRW export basis. Tight exportable supplies supported SRW export basis for nearby and deferred deliveries.
- CN Rail revealed intentions to lay off 1,600 workers because of the weakening Canadian economy. A day after this was confirmed, the CN union gave a strike notice which will begin midnight tonight unless a deal is reached. Officially, the strike is not a result of the layoffs as the strike vote happened in September and workers have been working without a contract since July 23rd. We can't help but think that the timing of both announcements are because of positioning.

Weather around the world:

- The USA was very cold and mostly dry with declining soil moisture levels in the Plains. Europe remained split in two with the west staying cold and wet whilst Germany and all parts east as far as the Caspian Sea were very warm and dry. Argentina saw light rain but less than expected, whilst Australia remained almost completely dry.
- It will be mostly dry this week with temperatures above seasonal norms. Europe Rain remains essentially confined to the Mediterranean and Iberia, with temperatures still below normal. The east, Balkans and Black Sea however remain warm and very dry. South America Significant rain is expected across most of Argentina's crop regions, but south and central Brazil will stay generally dry. South Africa has rain in the north. Australia remains dry.



> Outlook:

The Southern Hemisphere crop volume remains in question, it is too wet in Europe, too dry in the Black Sea and US Plains, and China appears to have an appetite for wheat. The market tends to think that Russian wheat stocks are much lower than they originally thought. All of which suggests a degree of caution. But the USDA has world stocks rising 11 mln mt this year to a record 288 mln mt. We think the USDA numbers are too high, but without a change in the USDA's statistics and a real demand driver in the short term, finding upside to wheat remains tough. - We think Canadian elevator bids are too low compared to the world price values, but as the Lakes are closing, we don't see much pressure on elevator companies to narrow their "basis" levels especially when the Railroads are talking about reducing staff. We heard of some bids at \$7.00/bu for wheat, which we think should be considered.

iii) Primary Elevator Price Tables and Grade Spreads

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

NW Sask	Spot		NIM Sook	Deferred		
IVVV Sask	(bu.)	(mt)	NW Sask Jan. '	Jan. '20 (bu.)	Jan. '20 (mt.)	
1 CWRS 13.5	\$5.89	\$216.42	1 CWRS 13.5	\$5.98	\$219.73	
1 CWAD 13.0	\$7.21	\$264.92	1 CWAD 13.0	\$7.25	\$266.39	
1 CPSR 11.5	\$5.12	\$188.13	1 CPSR 11.5	\$5.12	\$188.13	
SW Sask			SW Sask			
1 CWRS 13.5	\$5.79	\$212.75	1 CWRS 13.5	\$5.90	\$216.79	
1 CWAD 13.0	\$7.20	\$264.56	1 CWAD 13.0	\$7.25	\$266.39	
1 CPSR 11.5	\$4.82	\$177.11	1 CPSR 11.5	\$4.86	\$178.58	
NE Sask			NE Sask			
1 CWRS 13.5	\$5.70	\$209.44	1 CWRS 13.5	\$5.75	\$211.28	
1 CWAD 13.0	\$7.56	\$277.78	1 CWAD 13.0	\$7.62	\$279.99	
1 CPSR 11.5	\$4.86	\$178.58	1 CPSR 11.5	\$4.84	\$177.84	
SE Sask			SE Sask			
1 CWRS 13.5	\$5.75	\$211.28	1 CWRS 13.5	\$5.79	\$212.75	
1 CWAD 13.0	\$7.54	\$277.05	1 CWAD 13.0	\$7.61	\$279.62	
1 CPSR 11.5	\$4.77	\$175.27	1 CPSR 11.5	\$4.77	\$175.27	



Table 2: Grade Spreads, in Canadian Dollars per Bu and per 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	(0.15)	-5.51
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	(0.20)	-7.35

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/tonne. During the 2013/14 crop year the export basis for wheat widened to approximately C\$250/tonne, 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 Cdn. FOB Prices minus primary elevator bids, the FOB prices are translated into Cdn. 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/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
 - o 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).

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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."



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	Export Basis		November 18, 2019	
	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	\$336.64	\$326.45			
HRS	\$331.79				
HRW 11.5	\$294.44				
SWW 12.0	\$295.41				
1 CWRS 13.5 ³	\$336.64		\$216.42	\$120.22	
2 CWRS 13.0 ³	\$331.79		\$194.01	\$137.78	
3 CWRS ³	\$294.44		\$155.43	\$139.01	
CPS ³	\$288.62		\$181.15	\$107.47	
1 CWAD ⁴		\$372.78	\$0.00		
Competing wheat:	US\$/mt				
Russia 12.5 (Black Sea, 25k mt)	\$208.00				
French 11.5 (Rouen)	\$20	0.92			
APW 10.5 (W Coast)	\$230.00				
Argentine 12.5	\$190-194				

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



ADDENDUM

Futures Driven Basis Calculation, Canadian Dollars per MT

Canadian Funds			Grade		
PNW value/Vancouver	1CWRS13.5	2CWRS	3CWRS	Winter wht.	CPS
May/June delivery	\$8.98	\$8.84	\$7.83	\$7.85	\$7.85
Parity Track Rosetown	\$7.48	\$7.35	\$6.33	\$6.36	\$6.36
rack Bid Rosetown Area	\$5.89	\$5.28	\$4.23	\$4.93	\$4.93
Gross Margin at Elevator (\$/bu)*	\$1.59	\$2.07	\$2.10	\$1.43	\$1.43
Gross Margin at Elevator (\$/mt)*	\$58.44	\$76.00	\$77.23	\$52.48	\$52.48