

Wheat Market Outlook and Price Report: October 9, 2018 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 Oct. 9, 2018

October 4/'18 AMIS¹ Market Monitor Report:

					in m	illion tonnes
***************************************			USDA 2017/18 2018/19		IGC 2017/18 2018/19 est. f'cast	
est.	6-Sep	4-Oct	est.	12-Sep	est.	27-Sep
756.9	721.8	722.4	758.3	733.0	758.1	716.7
1,012.0	995.4	995.5	1,015.4	1,007.4	1,002.0	983.5
737.6	740.9	741.0	741.0	746.1	735.1	733.8
176.7	173.6	174.0	181.4	181.4	176.0	173.1
273.1	252.3	255.5	274.4	261.3	266.9	249.8
	756.9 1,012.0 737.6 176.7	20 17/18 20 18 est. f'ce 6-Sep 756.9 721.8 1,012.0 995.4 737.6 740.9 176.7 173.6	2017/18 2018/19 est. f'cast 6-Sep 4-Oct 756.9 721.8 722.4 1,012.0 995.4 995.5 737.6 740.9 741.0 176.7 173.6 174.0	2017/18 2018/19 est. 6-Sep 756.9 721.8 722.4 758.3 1,012.0 995.4 995.5 737.6 740.9 741.0 176.7 173.6 174.0 181.4	2017/18 est. 2018/19 f'cast f'cast following f	FAO-AMIS 2017/18 2018/19 2017/18 2018/19 2017/18 2017/18 2017/18 2017/18 2017/18 est. f'cast est. 12-Sep 756.9 721.8 722.4 758.3 733.0 758.1 1,012.0 995.4 995.5 1,015.4 1,007.4 1,002.0 737.6 740.9 741.0 741.0 746.1 735.1 176.7 173.6 174.0 181.4 181.4 176.0

- Wheat production in 2018 increased slightly, but still is well below last year's record.
- Wheat utilization in 2018/19 is expected to expand despite a reduction in feed use of wheat.
- Wheat trade in 2018/19 (July/June) is heading for a small decline, though US exports are expected to increase, compensating for lower shipments by other major exporters.
- Wheat ending stocks (ending in 2019) were revised upwards on higher inventories in Australia and the Russian Federation, but are still well below their record high opening levels.

¹ AMIS = Agricultural Market Information System. The Analysis is a collective assessment of the market situation and outlook by ten organizations and entities that form the AMIS secretariat.



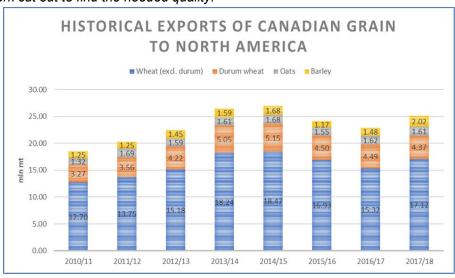
> Global wheat production and trade:

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 '18 contract Chicago winter wheat closed at 521-0 up 3-0 cents in Friday's trade and up 14-0 cents for the week.
 - Dec 18 contract Kansas hard red winter wheat closed up 2-0 cents at 524-2, up 13-0 cents for the week.
 - In Minneapolis, Dec '18 contract hard red spring wheat closed at 590-2, up 1-4 cents in Friday's trade and up 18-6 cents for the week, while Mar '19 hard red spring wheat closed at 603-4, up 0-6 cents for the day and 16-2 cents for the week.
- **Funds:** Neither Index nor Spec Funds were significant players in the markets last week and we don't expect that they will trade until after they have seen the new WASDE report.
- Matif: Matif rose €1-2/mt on the weak Euro, but premiums fell with the French market looking at the threat from both Argentine and Russian wheat competing into Algeria.

Canadian wheat:

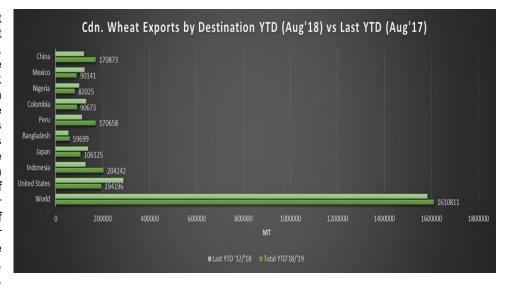
- **Spring wheat harvest** in SK has advanced 5% from last week to 58% as of Oct. 1st (vs 92% last year). Provincial HRS yields in SK are 44 bpa (vs 42 bpa last year, and StatsCan's est. of 43.2 bpa). Meanwhile, harvest in AB has progressed 6.9% over the week to 41.9% complete (vs 74.5% last year).
- 1.2 mln mt of Canada's durum crop remains to be harvested. 466.4k mt of Canadian durum has been exported, down 21% y/y.
- Canadian wheat exports have been strong compared to last year despite a concerningly slow harvest. The CGC has Canadian wheat excl. durum exports at a season total of 2.86 mln mt for the week ending Sept. 23/18. This is 18% higher than last year.
- The AAFC has '18/19 Canadian durum exports at 5 mln mt. Given the 4.51 mln mt of '17/'18 crop that has been harvested and the 1.4 mln mt worth of carry-in (= 5.91 mln mt) there is enough tonnage to cover exports. However, with 1.2 mln mt remaining in the field, both millers and exporters may have their work cut out to find the needed quality.
- NAFTA (now called "USMCA" for United States-Mexico-Canada) negotiations have concluded, thus securing portion aood Canada's wheat exports. The US and Mexico account for ~15% of Canadian wheat exports. The US, importing 2.3 mln mt of Canadian wheat annually, is Canada's second largest market, while Mexico imports 950k mt annually. Canada supplies ~90% of total US wheat imports annually.



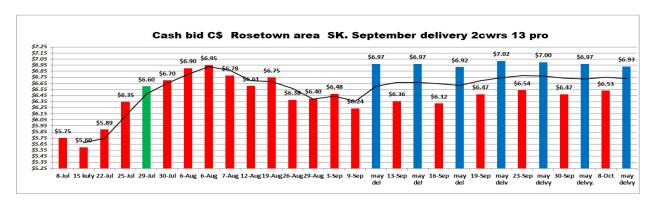
• StatsCan published export data by destination for August 2018. Indonesia has currently surpassed the US for the most imports of Cdn. wheat at 204k mt, while the US has imported 194k mt. Canada has seen increases in wheat exports to Indonesia (up 60%), Bangladesh (up 8%), Peru (up 52%) and China (up 40%). The US has only imported 67% of last year's number. Japan, Colombia, Nigeria and Mexico are counties also importing significantly lower amounts of Cdn. wheat vs last year, only importing 76% 70%, 81% and 72% respectively, of what they imported last YTD.



Canada did not participate in the last wheat tender to Iraq, but late Friday there were reports of a 50k mt private deal with Iraq. Although the price of this deal was undisclosed, it was probably comparable to last weekend when Iraq bought 50k mt of US hard wheat for \$338, and 50k mt of Aussie wheat for \$353. Once the exchange rate, freight, cleaning,



dockage, elevation and administration costs are factored in, the value of these sales back off to \$9.46/bu in West Central SK. Given the bid for #2CWRS in West Central SK was \$6.55/bu at the time, this would make for a very healthy \$106.85 margin.



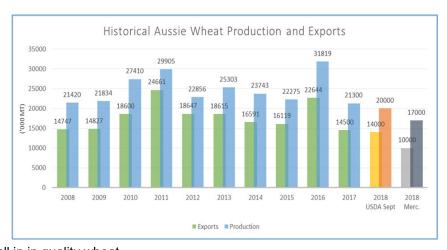
US wheat:

- After 3 days of trading higher, stalling, and closing below the \$5.19 resistance level, Chicago wheat finally closed marginally above to finish the week. Cash markets continue to be the main driver for wheat, and GASC paying \$8 more than their last purchase shows they are moving higher.
- On September 30, USDA reported U.S. spring wheat harvest was complete.
- Winter wheat planting in the US is 43% complete (34% last year) and 14% of the crop has emerged.
- With cold weather settling in across the U.S. Northern Plains, farmer selling of HRS was limited and supported export basis across the United States.
- USDA's weekly Export Sales Report included net wheat sales of 435,300 mt for marketing year 2018/19. Total known outstanding sales and accumulated exports of all classes of wheat for the 2018/19 marketing year were 11.3 mln mt, 19% behind last year's year-to-date total of 14.0 mlnmt. USDA expects 2018/19 U.S. wheat exports to reach 27.9 mln mt.
- U.S. export sales of wheat continue to lag the needed pace to make USDA projections for every
 class of wheat except white wheat. The USDA is seemingly counting on near record exports for
 the second half of the marketing year, yet they still have Russia exporting 35 million mt of wheat
 this year, which is unchanged from earlier in the year, making it a mystery as to where this extra
 demand is supposed to come from.
- Traders across the world will be watching what the USDA does to EU and Australian production and export numbers in next week's WASDE report.



Australian wheat:

• Australia had the driest September on record as the East received only 1/5 of its regular rainfall in Jul-Sept. Australian wheat production is seen the lowest in decades with estimates ranging from 15-17 mln mt vs the USDA's 20 mln mt. This could create an exportable Aussie surplus of just over 7 mln mt of wheat. We are somewhat less pessimistic in our estimates, but if quality is lost in Canada, the combination of these two



will create a significant shortfall in in quality wheat.

 Australian wheat futures made their 2nd straight lower weekly close. The trade is probably long and harvest is getting closer. Still, the export market remains the barometer with ASW still US\$40-50/mt higher than US white wheat on the PNW.

Argentine wheat:

- Argentine '18/'19 wheat production has been raised to a record, 19.7 mln mt, 8.8% higher than last year. Favourable growing conditions and expanded planting area were the reasons cited, however, frost, hailstorms and a return to droughty conditions make us sceptical of this number. Argentine farmers are not selling as soil moisture remains low.
- However, new crop Argentine Fob wheat fell US\$5/mt with bids a further \$5 less.

EU wheat:

- An Algerian delegation to Russia has the EU wheat market nervous. Very wide price spreads make it a matter of time before Algeria switches '19/'20 origins from France to Russia. Until then, it was looking like Argentina was going to take the Dec Algerian demand. This would be a huge hit to France as generally a large portion of French wheat goes to Algeria.
- Brussels already has EU exports down 32% y/y, more evidence that the USDA's 23 mln mt of EU exports is unreasonable. French wheat was about \$25 higher priced than Russian wheat in the GASC tender.

Black Sea wheat:

- Russia continues to throw confusion into the grain markets. On Tuesday there were reports that operations were being suspended in 30 interior gain loading points (for an upwards of 90 days) in two of Russia's major exporting regions. The suspensions were due to unacceptable phytotoxin levels in wheat. Then on Wednesday, Russian officials said that there are no immediate suspensions planned, rather, testing was going to be conducted, and the results are expected to be released early this week. The increased scrutiny is a result of complaints of falling crop standards from many major grain buyers. SovEcon says that the uncertainty of the checks will likely slow export volumes, but they "doubt that this is a federal campaign to stop exports" (which is something that analysts were/are speculating). Interestingly, 650k mt of the Russian wheat offered in the GASC tender was from these points that are potentially at risk of being shut down. Russian delegates are back to talking about a 25-35 mln mt exportable surplus in wheat.
- 12.5 protein Russian wheat for November was bid at US\$230/mt by consumers against offers at US\$235/mt.



> Significant purchases/ trades:

There was a decent volume of cash trades last week:

- **Egypt** (GASC) bought 180,000 mt of Russian at \$251.50-254.50, around \$8 above their previous purchase.
- Iraq bought 50,000 mt of Canadian wheat in a private deal (price not disclosed; we estimate around \$290.00 US/mt fob).
- Tunisia bought 25,000 mt of soft wheat at US\$249.11 and 75,000 mt of durum at US\$272.50/mt.
- Bangladesh bought 120,000 mt of US HRS wheat on Monday.
- **US** inspections were 369,000 tonnes (season total 254 myn bushels down 31%), sales were 435,000 tonnes (season total 415 myn bushels down 19%).

Wheat Market Outlook:

Significant events:

- "USMCA" negotiations have concluded, thus securing a good portion of Canada's wheat exports.
- Iraq bought 50,000 mt of Canadian wheat in a private deal at a very good price.
- Australia had the driest September on record as the East received only 1/5 of its regular rainfall in Jul-Sept. Australian wheat production is seen the lowest in decades with estimates ranging from 15-17 mln mt vs the USDA's 20 mln mt.
- An **Algerian** delegation to Russia has the EU wheat market nervous. Very wide price spreads make it a matter of time before Algeria switches '19/'20 origins from France to Russia.
- News reports had **Russia** suspending operations for 90 days at 30 loading points in Krasnodar and Rostov due to phytosanitary irregularities, but this was denied by Russia the following day.
- Traders across the world will be watching what the USDA does to EU and Australian production and export numbers in next **week's WASDE report** on Oct. 11th.

Outlook:

It will be interesting to see whether the USDA updates its wheat supplies in this week's WASDE report. Traders continue to believe the USDA overestimates both EU and Australian production. However, the most significant market factor is if/when Russia starts to put the brakes on exports. Longer-term, poor winter plantings in Europe will become a supportive factor.



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		NW Sask	Deferred		
	(bu.)	(mt)	NVV Sask	May.'19 (bu.)	May '19 (mt.)	
1 CWRS 13.5	\$6.85	\$251.70	1 CWRS 13.5	\$7.15	\$262.72	
1 CWAD 13.0	\$5.71	\$209.81	1 CWAD 13.0	\$5.93	\$217.89	
1 CPSR 11.5	\$5.88	\$216.05	1 CPSR 11.5	\$6.29	\$231.12	
SW Sask			SW Sask			
1 CWRS 13.5	\$6.77	\$248.76	1 CWRS 13.5	\$7.04	\$258.68	
1 CWAD 13.0	\$5.83	\$214.22	1 CWAD 13.0	\$5.96	\$218.99	
1 CPSR 11.5	\$5.76	\$211.65	1 CPSR 11.5	\$6.21	\$228.18	
NE Sask			NE Sask			
1 CWRS 13.5	\$6.60	\$242.51	1 CWRS 13.5	\$6.90	\$253.53	
1 CWAD 13.0	\$5.66	\$207.97	1 CWAD 13.0	\$5.80	\$213.12	
1 CPSR 11.5	\$5.64	\$207.24	1 CPSR 11.5	\$6.01	\$220.83	
SE Sask			SE Sask			
1 CWRS 13.5	\$6.63	\$243.61	1 CWRS 13.5	\$6.89	\$253.17	
1 CWAD 13.0	\$5.77	\$212.01	1 CWAD 13.0	\$5.96	\$218.99	
1 CPSR 11.5	\$5.66	\$207.97	1 CPSR 11.5	\$6.04	\$221.93	

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	0.11	4.15	
1 CWRS 13.5	Base Grade	Base Grade	
2 CWRS 13.5	(0.18)	(6.61)	
1 CWRS 12.5	(0.37)	(13.60)	
1 CWAD 13.0	Base Grade	Base Grade	
1 CWAD 13.5	0.03	1.10	
2 CWAD 13.0	(0.79)	(29.03)	
2 CWAD 12.5	(0.97)	(35.64)	

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 Basis² (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:

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."



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		October 9, 2018	
	FOB Prices CD	A 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	\$336.20	\$311.47			
HRS	\$327.16				
HRW 11.5	\$313.37				
SWW 12.0	\$300.53				
1 CWRS 13.5 ³	\$336.20		\$248.76	\$87.44	
2 CWRS 13.0 ³	\$327.16		\$232.22	\$94.94	
3 CWRS ³	\$313.37		\$219.36	\$94.01	
CPS ³	\$293.88		\$203.56	\$90.31	
1 CWAD ⁴		\$291.50	\$215.69	\$75.81	
Competing wheat:	US\$/mt				
Russia 12.5 (Black Sea,					
25k mt)	\$233.00				
French 11.5 (Rouen)	\$238.91				
APW 10.5 (W Coast)					
Argentine 12.0					

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 Wheat - World Price Parities					October 9, 2018	
Canadian Funds		Grade				
PNW value/Vancouver	1CWRS13.5	2CWRS	3CWRS	Winter wht.	CPS	
May/June delivery	\$8.97	\$8.72	\$8.35	\$8.00	\$8.00	
Parity Track Rosetown	\$7.47	\$7.23	\$6.85	\$6.50	\$6.50	
Track Bid Rosetown Area	\$6.77	\$6.32	\$5.97	\$5.54	\$5.54	
Gross Margin at Elevator (\$/bu)*	\$0.70	\$0.91	\$0.88	\$0.96	\$0.96	
Gross Margin at Elevator (\$/mt)*	\$25.80	\$33.30	\$32.37	\$35.33	\$35.33	
* to cover elevation, elevator market risk,	margin					