

Wheat Market Outlook and Price Report: October 22, 2018 By Marlene Boersch/ A.P. Temple Mercantile Consulting Venture Inc.

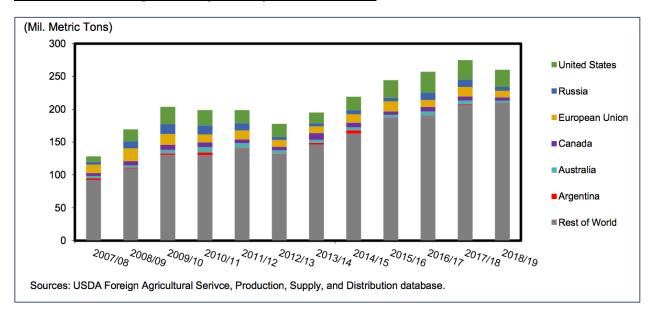
i) Background and Rationale for the Report

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. 22, 2018

Global Wheat Ending Stocks by Country, USDA FAS data



- The October USDA/ WASDE reports, reduced 2018/19 all-wheat production for Australia and Russia collectively by 2.5 million mt. These cuts more than offset a slight production increase for the U.S. and help to tighten the global all-wheat balance sheet.
- At 260.2 million mt, global ending stocks are now 5 percent below last year's record-large carryout.



• **Increasing global usage**, fueled by expanding demand for wheat, contributes to balance sheet tightness and provides support for maintenance of the U.S. export figure at 27.9 million mt, despite sluggish first quarter exports.

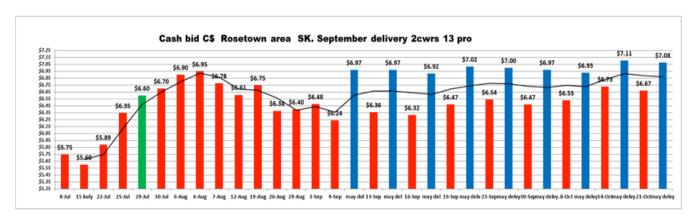
> Global wheat production and trade:

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 514-6, up 1-6 cents in Friday's trade, down 3-4 for the week.
 - 18 contract Kansas hard red winter wheat closed up 1-4 cents at 516-2, down 8 cents for the week. In Minneapolis, Dec '18 contract hard red spring wheat closed at 588-6, up 3-6 cents for the day, down 8-2 cents for the week, while Mar '19 hard red spring wheat closed at 598-4, up 3-4 cents for the day, down 4-6 cents for the week.
- **Funds:** Index Funds were buyers (+5.3 mln mt overall, incl. 600k mt wheat); we think for concerns over inflation and poor economic indicator reasons. Spec Funds took the opposite view and were sellers based on harvest pressure and better weather conditions accelerating harvest 9-4.6 mln mt, icnl. -300k mt wheat).
- Matif: Matif wheat ended the week down €3-4/mt.

Canadian wheat:

- **Spring wheat harvest** in SK progressed 7% over the week and is now 72% complete as of Oct. 16th (98% last year). Meanwhile, AB spring wheat is 59.6% complete as of Oct. 16th, up 7.1% from last week, but down 29.2% from last year's pace. We expect that the dry weather experienced this week will drastically improve these numbers in next week's crop reports.
- **Durum harvest** is 86% complete (89% last year) in SK, and 70.4% complete in AB (100% last year).
- Week 11 **wheat exports** reached 421k mt, for a YTD total of 4 mln mt. This is 29% (+904k mt) bigger than last YTD! In contrast week 11 **durum exports** were at 34k mt, for a YTD total of 620k mt, 17% (-128k mt) smaller than last YTD.
- The USDA is not going to increase their export number until there is actual evidence of a significant increase in export demand. This will not happen in a real way as long as Russian exports are unrestricted. We believe this will happen come 2019. Wheat prices in Western Canada have been creeping up ever so slowly, especially in the deferred positions. Storage and patience are key this year.
- The sale of feed wheat to Korea for January shipment represents a price of about C\$7.30 per bushel track Vancouver for feed wheat, but Canadian elevator cash bids remain about unchanged on the week. We remain friendly to the wheat markets particularly better-quality hard wheat.
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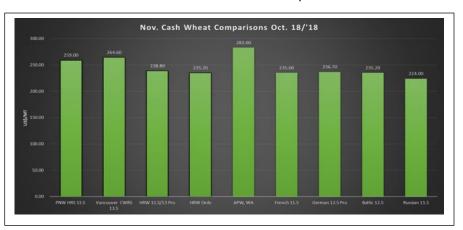




US wheat:

- Wheat futures closed lower for the week as warmth across the US Plains and Canadian Prairies allowed for further winter wheat planting in the US, and HRS harvest in the Cdn. Prairies. The USDA/ NASS reported that 65% of the winter wheat crop was planted as of Oct. 14th, lagging the average pace by 2%. Emergence was 47% versus normal at 44%. The Cdn. Prairies look dry for the short term before another cold front moves in in the 8-15-day forecast.
- Final **US** durum quality data has been released by the US Wheat Associates. Despite slight decreases in falling number and HVAC from last week (due to wetter conditions), the US crop averaged a 1 HAD. The final falling number was 418 seconds (384 last year) and % HVAC was 88.3 (83% last year).
- **US wheat export commitments** are 18% smaller than last year at this time, but unshipped sales are down only 4%, so the picture looks a little better going forward. USDA stuck to their 1.025 bln bu projection last week, while export commitments are 44% of that total and are normally 62% by this time.
- FOB wheat prices retreated slightly over the week. HRW is priced even money to comparable EU wheat. Basis the larger carrying charges in the Black Sea, SRW is cheaper than Russian wheat by Jan/Feb. For the Nov. position, Russian wheat remains the cheapest wheat, but in December Argentine wheat takes over as the cheapest origin. At \$283/mt, Australian APW wheat remains the world's most expensive wheat. Australian APW is still US\$18.4/mt more expensive than Canadian

wheat and is \$45/mt above US HRW. Australian ASW (~US\$275/mt) is \$40/mt above US white wheat (~US232/mt) in the PNW, which begs the question where the USDA is going to allocate 13 mln mt of Australian wheat There will exports. have to be further changes to the trade matrix this year.



• The chairman of the USDA World Agricultural Outlook Board said yesterday they also expect a strong second half of the '18/19 wheat export season, when shipments from Russia are expected to slow.

Australian wheat:

- Australian wheat futures ended down A\$4/mt and A\$13/mt off the contract highs.
- Private wheat crop estimates are dropping to the 15-16 mln mt range.
- Given domestic demand of ~7 mln mt and unchanged ending stocks, this would leave an exportable surplus of only 8-9 mln mt. USDA is using a 13 mln mt exportable surplus (last years was 14.5 mln mt).
- The Philippines purchased of Australian feed wheat last week at US\$283/mt, which equated to ~US\$260/mt Fob WA compared to US\$283/mt for APW and US\$277/mt for ASW.

Argentine wheat:

- Harvest progress in Argentina was very limited at just 1.2% (versus 1.5% last year) with yields so far poor at 1.38 mt/ha. Crop ratings fell again with Gd./Exc. just 34% compared to 37% last week and 51% a year ago.
- Wheat production estimates remain in a 19-mln mt with a more favourable weather outlook.



 New crop Fob values for Argentine wheat were offered down to US\$226/mt for Dec 12.5% protein wheat, less \$6/mt per half point of protein.

o EU wheat:

- Matif wheat futures ended the week down €3-4/mt.
- Export demand remains very slow with a French vessel line-up of just 110k mt to Algeria and nothing else showing.

Black Sea wheat:

• The USDA Attaché in Russia has released further information regarding the supply and distribution of Russian grains. As of Oct. 2nd, 67.8 mln mt of wheat (18% less than last year) has been harvested from 23.4 mln ha, putting harvest at 89.1% complete. Average yields are down in all regions except Siberia for an overall 12% decrease in yields. Wheat quality is ~2% lower this year, with amounts of wheat rated in the 4th class and as feed is up 0.3% and 0.2% respectively. The Attaché (finally)

lowered 2018/'19 production to 68.5 mln mt and exports to 33.5 mln mt vs the USDA's 70 mln and 35 mln mt respectively. We believe these are much more reasonable numbers. Higher stocks carrying into the year, and lower exports has stocks ending relatively



unchanged at 6.9 mln mt.

 Russian 12.5 protein wheat remained quoted around US\$233/mt for FH November, the nominal monthly carry narrowed to \$6 but with no firm sellers.

> Significant purchases/ trades:

It was a quiet week with few trades reported.

- **Syria** tendered for 200,000 mt of wheat but with no results as yet.
- **Jordan** bought 60,000 mt of LH Dec hard wheat at US\$263/mt.
- Korea bought 65,000 mt of January '19 feed wheat at US\$245.00/mt. The Korea trade represents
 a price of about C\$7.30 per bushel track Vancouver for feed wheat. Canadian elevator cash bids
 are about unchanged on the week.

Wheat Market Outlook:

Significant events:

- The chairman of the USDA World Agricultural Outlook Board said yesterday they also expect a strong second half of the '18/19 season, when shipments from Russia are expected to slow.
- The USDA Attaché in Russia has released further information regarding the supply and distribution of Russian grains. The Attaché lowered 2018/'19 production to 68.5 mln mt and exports to 33.5 mln mt vs the USDA's 70 mln and 35 mln mt respectively. We believe these are much more



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> Outlook:

How the export pace for the EU and Black Sea develops over the next few weeks will determine the direction of the wheat market, particularly given the difficult planting season so far in the N. Hemisphere. The next 6 weeks will be critical for European and Black Sea winter crops in terms of plantings and emergence. Still, no major changes will happen until Russia slows exports.

• We remain friendly to the wheat markets particularly better-quality hard wheat.

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		ANAL Cook	Deferred		
	(bu.)	(mt)	NW Sask	May.'19 (bu.)	May '19 (mt.)	
1 CWRS 13.5	\$6.98	\$256.47	1 CWRS 13.5	\$7.21	\$264.92	
1 CWAD 13.0	\$5.67	\$208.34	1 CWAD 13.0	\$5.81	\$213.48	
1 CPSR 11.5	\$5.93	\$217.89	1 CPSR 11.5	\$6.39	\$234.79	
SW Sask			SW Sask			
1 CWRS 13.5	\$6.92	\$254.27	1 CWRS 13.5	\$7.09	\$260.51	
1 CWAD 13.0	\$5.84	\$214.58	1 CWAD 13.0	\$5.88	\$216.05	
1 CPSR 11.5	\$5.80	\$213.12	1 CPSR 11.5	\$6.29	\$231.12	
NE Sask			NE Sask			
1 CWRS 13.5	\$6.71	\$246.55	1 CWRS 13.5	\$6.94	\$255.00	
1 CWAD 13.0	\$5.80	\$213.12	1 CWAD 13.0	\$5.74	\$210.91	
1 CPSR 11.5	\$5.68	\$208.71	1 CPSR 11.5	\$6.11	\$224.51	
SE Sask			SE Sask			
1 CWRS 13.5	\$6.73	\$247.29	1 CWRS 13.5	\$6.94	\$255.00	
1 CWAD 13.0	\$5.88	\$216.05	1 CWAD 13.0	\$5.91	\$217.16	
1 CPSR 11.5	\$5.69	\$209.07	1 CPSR 11.5	\$6.12	\$224.87	

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 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
 - HRW in the Pacific North West (PNW) ≈ 3 CWRS in Vancouver
 - SW (lowest price wheat) ≈ CPS red (mostly fed domestically)

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."



- 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 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

Releveant FOB Prices and Export Basis October 22, 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	\$343.62	\$314.26			
HRS	\$334.47				
HRW 11.5	\$320.52				
SWW 12.0	\$306.08				
1 CWRS 13.5 ³	\$343.62		\$251.33	\$92.29	
2 CWRS 13.0 ³	\$334.47		\$237.00	\$97.48	
3 CWRS ³	\$320.52		\$224.14	\$96.38	
CPS ³	\$299.34		\$205.77	\$93.58	
1 CWAD ⁴		\$295.01	\$215.69	\$79.32	
Competing wheat:	US\$/mt				
Russia 12.5 (Black Sea,					
25k mt)	\$233.00				
French 11.5 (Rouen)	\$235.75				
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% \approx 1 CRWS 13.5%; HRS \approx 2 CWRS 13.0%; HRW \approx 3CWRS; SWW \approx CPS

⁴ Values derived to Lakehead FOB



ADDENDUM

Futures Driven Basis Calculation, Canadian Dollars per MT

Canadian Wheat - World Price Parities					
Canadian Funds		Grade			
PNW value/Vancouver	1CWRS13.5	2CWRS	3CWRS	Winter wht.	CPS
May/June delivery	\$9.17	\$8.92	\$8.54	\$8.15	\$8.15
Parity Track Rosetown	\$7.67	\$7.42	\$7.04	\$6.65	\$6.65
Track Bid Rosetown Area	\$6.84	\$6.45	\$6.10	\$5.60	\$5.60
Gross Margin at Elevator (\$/bu)*	\$0.83	\$0.97	\$0.94	\$1.05	\$1.05
Gross Margin at Elevator (\$/mt)*	\$30.57	\$35.75	\$34.66	\$38.59	\$38.59
to cover elevation, elevator market risk, m	argin				