

Wheat Market Outlook and Price Report: October 10th, 2017 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 July. 14/'17

2017/'18 World Wheat Overview:

- > October 5th AMIS¹ Market Monitor Report:
 - o **World wheat production** for 2017/18 has again been increased, now by 1.3 million mt from last month's report due to bigger harvests in Russia and the European Union.
 - Amis estimates for Global Wheat Utilization for 2017/2018 has also been adjusted higher by 3.4 million mt from last month's report.
 - New projections for world ending wheat stocks are up only slightly by 0.7 million mt at 261.2 million mt.

	in million tor				illion tonnes		
	F	FAO-AMIS		USDA		IGC	
WHEAT	2016/17	2017	/ 18	2016/17	2017/18	2016/17	2017/18
	est.	f'cast		est.	f'cast	est.	f'cast
		7-Sep	5-Oct		12-Sep		28-Sep
Production	759.6	748.8	750.1	753.3	744.9	754.1	747.6
Supply	982.0	996.0	996.4	994.5	1,000.7	977.7	989.3
Utilization	732.4	730.9	734.3	738.7	737.5	736.0	741.5
Trade	175.8	174.7	174.7	181.7	180.0	175.7	174.0
Stocks	246.3	261.9	261.2	255.8	263.1	241.7	247.8

¹ AMIS = Agricultural Market Information System. It covers international markets for wheat, maize, rice and soybeans.



> Global wheat production and trade:

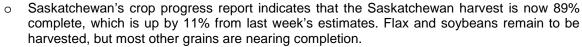
There is a lot of competition in the wheat markets as wheat is produced around the world. Below is a brief synopsis on this week's market events in the major wheat origins.

Futures: The wheat markets closed last week higher, with December contract Chicago wheat closing at 443.4, which is down by 4.6 cents for the week, but up by 2.6 cents in today's trade. In Kansas City, December contract hard red winter wheat closed the week at 436.6. which is down by 6 cents for the week, but up by 2.4 cents in today's trade. Minneapolis wheat moved higher Friday, but was mostly unchanged for the week. December contract hard red spring wheat closed at 623.6, which is up by 0.2 cents for the week, and up by 8.2 cents in today's trade. March 2018 contract hard red spring wheat was also higher, closing at 636.6 which is up by 0.2 cents for the week, and up by 7.6 cents into today's trade.

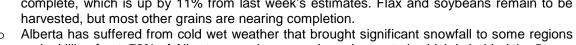
- **Funds** There was very little action by funds this week.
- Matif: Matif exchange in Europe dropped a small € 0.75/mt over the past week, and was down in Fridays trade.

Canadian wheat:

- According to the CGC, producers delivered 364k mt of wheat into the handling system, which is up from last week's 310.7k mt. Exports for week 9 were 301k mt, slightly down from last week's 306k mt, and up by 21% from last year's YTD exports.
- Elevator stocks are currently at 3.25 million mt with 1.6 million mt at primary elevators and most of the remaining inventory at port.
- Wheat visible stocks are a big 3.3 mln mt, as shipping/rail loadings continue to be much smaller than deliveries into the primary elevator system.
- Producers delivered 54k mt of durum into the handling system over the past week. Durum exports during week 9 amounted to 47k mt; 641k mt year-to-date. This is 57% ahead of last year's vear to date exports of 407k mt.
- The Manitoba harvest has been slowed by wet conditions, but is nearing completion for most cereal crops. 70 – 80% of the Manitoba harvest is
 - now complete, with most of the remaining crop being corn or soybeans. Winter wheat and fall rye crops are emerging with good establishment.

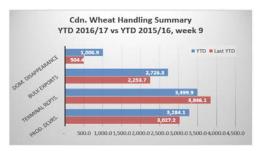


and a killing frost. 72% of Alberta crops have now been harvested, which is behind the 5-year average of 81.5% harvested for this year to date.



US wheat:

The US wheat growers released their quarterly report yesterday which gave some indication on the quality of the US wheat crop. For US spring wheat, average protein was 14.6% vs 14.2% last year, while falling number is 397 vs 413 last year. High protein wheat is required to make light breads used in western nations, while falling number is an indication of the milling quality. On average, protein levels this crop year are higher vs last year for both spring and winter wheat, while falling numbers are lower.







US winter wheat planting progress continues, but emergence could be less than ideal as drought still prevails in northern regions of the US wheat belt. The weekly US drought monitor indicates that 20% of US winter wheat growing regions are currently affected by drought.

Australian wheat:

Australia is still in serious drought, although rains have aided regions of eastern Australia. The USDA will be releasing its October WASDE report on Thursday October 12th, and expectations are the Australian wheat production estimates will be revised downward from the current 23.5 million mt number. Some estimates for Australian production are as low as 18 million mt, but the USDA will likely be more moderate and we are expecting a 1-3 million mt reduction.

 Australian farmers have stopped selling wheat and Australian Fob values for wheat have risen to levels that are wholly uncompetitive on the world export markets.

Argentine wheat:

The Buenos Aires Grain Exchange now estimates that 13.4 million acres or nearly half of Argentine wheat acres are currently impacted by excessive moisture. However, weather has improved with mostly dry conditions recently prevailing, and with a 6-10 day forecast for dryer improved growing conditions. Argentine Fob values are little changed, but domestic cash markets have been slightly higher.

EU/Russian wheat:

Recent reports from Russia are indicating that the Russian wheat crop could be a staggering 87 million mt. This would be a 6 million mt increase from the USDA's September estimate of 81 million mt, and is significantly higher vs the USDA's August estimate of 77 million mt. For comparison, the International Grains Council's last estimates for the Russian wheat crop came in at 82 million mt.

- The UK Ag Ministry has announced that this year's wheat harvest will be 15.2 million mt, which is higher than the international grains councils estimate of 13.9 million mt, but UK wheat carryout remains tight due to ethanol usage. Total EU wheat exports are reported to be down by 2 million mt compared to this YTD last year, which is a significant export loss. German wheat is of poorer quality this year and France is currently the only major player in EU wheat exports. However, Russia's aggressive export program is hampering the EU's ability to compete.
- The French export vessel line-up is increasingly thin (just 80k mt to Algeria, Africa and Cuba), as is the German/Baltic port data. Germany is concerned about preventing quality wheat leaving the country becasue domestic markets continue to outbid export values.

Black Sea wheat:

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Black Sea wheat values paused this week with 12.5% protein wheat for Oct/Nov shipment closing around US\$193/mt and the carrying charges at just US\$1/mt per month through February '18. The 11.5% protein discount closed at around US\$6/mt.

Significant purchases/ trades:

- Tunisia bought 100k mt of durum wheat from unknown destinations for prices ranging from \$286 – \$289 Fob Tunisia. This is works backwards to \$6.84 - \$7.00 per bushel Canadian Fob Saskatchewan which is well below some of the current cash bids. While \$7.00 seems undervalued given the reductions in North American durum production, it should be noted that the quality of the durum that Tunisia purchased was not specified and this could be sub-par quality.
- Egypt's (GASC) purchased 180k mt of wheat from Russia in the past week at an average purchase price of \$213 C&F, which is only \$1 per tonne above their last tender for 175k mt two weeks ago. While Black Sea wheat has been trading slowly higher over the past several weeks, GASC's cost was little changed, partially due to lower freight costs which are the lowest since June, and partially due to harvest pressure. With a record Russian crop, sellers eager to make a deal.
- o Japan is tendering for US and Canadian wheat, but details are still unavailable.



Wheat Market Outlook:

Significant events:

- The USDA quarterly stocks report was bearish for wheat with stocks 50 million bushels above expectations. Spring wheat production was actually increased on the small grains report which shocked the market.
- Canadian spring wheat yields have been coming in larger than expected which has helped pressure US DNS prices. Supplies of DNS may still get tight this year, but as harvest finishes, the volume of wheat that is moving to market is more than what is needed at this time.
- This week, Egypt (GASC) unveiled a tender overnight, and Ethiopia announced 400,000 mt tender on Monday. It will be interesting to see if the GASC will book anything but Russian wheat this week. Of the 3.27 mln mt of wheat GASC has booked so far during 2017/ '18, 2.32 mln mt (71%) have been Russian origin wheat. Much of the remainder was sourced from other eastern European origins.
- Canadians are offering CWRS at 30 cents per bushel under DNS in Vancouver, but they are not finding buyers.

Outlook:

- Russian wheat will continue to do most of the cash business for the present. EU wheat is starting to get competitive, North American wheat is presently not competitive in cash markets.
- We don't see wheat prices improving over the short term, except Minneapolis Dec wheat, which could become technical due to out of position short hedges by Canadian companies.

iii) Primary Elevator Price Tables and Grade Spreads

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

Date: October 10, 2017 Spot Deferred **NW Sask NW Sask** Dec. '17 (bu.) Dec. '17 (mt) (bu.) (mt) 1 CWRS 13.5 \$241.78 \$6.45 \$237.00 1 CWRS 13.5 \$6.58 1 CWAD 13.0 \$7.09 \$260.51 1 CWAD 13.0 \$7.20 \$264.56 1 CPSR 11.5 \$4.64 \$170.49 1 CPSR 11.5 \$4.48 \$164.61 SW Sask **SW Sask** 1 CWRS 13.5 \$6.49 \$238.47 1 CWRS 13.5 \$6.59 \$242.14 1 CWAD 13.0 \$7.13 \$261.98 1 CWAD 13.0 \$7.24 \$266.03 1 CPSR 11.5 \$4.62 \$169.76 1 CPSR 11.5 \$4.46 \$163.88 **NE Sask NE Sask** 1 CWRS 13.5 \$6.29 \$231.12 1 CWRS 13.5 \$6.37 \$234.06 1 CWAD 13.0 \$7.12 \$261.62 1 CWAD 13.0 \$7.19 \$264.19 1 CPSR 11.5 \$4.42 \$162.41 1 CPSR 11.5 \$4.27 \$156.90 SE Sask SE Sask 1 CWRS 13.5 1 CWRS 13.5 \$6.34 \$232.96 \$6.40 \$235.16 1 CWAD 13.0 \$7.22 \$265.29 1 CWAD 13.0 \$7.30 \$268.23 1 CPSR 11.5 \$4.44 \$163.14 1 CPSR 11.5 \$4.30 \$158.00



Table 2: Grade Spreads, in Canadian Dollars per Bu and per MT

Avg. Grade Spread/ Pro Discounts	Cdn\$/bu.	Cdn.\$/mt
1 CWRS 13.5	Base Grade	Base Grade
2 CWRS 13.5	(0.20)	(7.35)
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)

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.



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)
 - o 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.

[&]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."



Table 3: Relevant FOB Prices and calculated Basis, US & Canadian Dollars per M

Releve	ant FOB Prices a	•		Oct. 10 2017
	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	\$352.22	\$322.83		
HRS	\$345.33			
HRW 11.5	\$273.23			
SWW 12.0	\$253.49			
1 CWRS 13.5 ³	\$352.22		\$234.06	\$118.16
2 CWRS 13.0 ³	\$345.33		\$203.56	\$141.77
3 CWRS ³	\$273.23		\$202.83	\$70.41
CPS ³	\$247.06		\$161.31	\$85.75
1 CWAD⁴		\$401.81	\$245.82	\$155.99
Competing wheat:	US\$/mt			
Russia 12.5 (Black Sea,				
25k mt)	\$193.00			
French 11 (Rouen)	\$193.90			
APW 10.5 (W Coast)	\$249.00			
Argentine 12.0	\$18	5.00		

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 Oct. 10 201						
Canadian Funds			Grade			
PNW value/Vancouver	1CWRS13.5	2CWRS	3CWRS	Winter wht.	CPS	
Dec./Jan. delivery	\$9.41	\$9.22	\$7.26	\$6.72	\$6.72	
Parity Track Rosetown	\$7.91	\$7.73	\$5.76	\$5.23	\$5.23	
Track Bid Rosetown Area	\$6.37	\$5.54	\$5.52	\$4.39	\$4.39	
Gross Margin at Elevator (\$/bu)*	\$1.54	\$2.19	\$0.24	\$0.84	\$0.84	
Gross Margin at Elevator (\$/mt)*	\$56.74	\$80.35	\$8.99	\$30.77	\$30.77	

^{*} to cover elevation, elevator market risk, margin