

Wheat Market Outlook and Price Report: October 29, 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. 29, 2018

Global Wheat Estimates, International Grains Council (IGC), October Report

WORLD ESTIMATES						
15/16 16/17 17/18 18/19 est. fcast million tons 27.09 25.10						
WHEAT						
Production	737	753	767	717	729	
Trade	166	177	176	173	172	
Consumption	718	735	738	734	740	
Carryover stocks	227	244	273	250	262	
year/year change	19	18	29		-11	
Major exporters b)	68	79	82	64	65	

- In their October 25/'18 report, the IGC increased '18/19 global wheat production by 12 mln mt to 729 mln mt. It was primarily an improved crop outlook in China that led the IGC to raise its forecast for '18/19 world wheat production. China's wheat crop was increased by 12.2 mln mt from 122.5 mln mt to 134.7 mln mt.
- Global wheat trade was decreased by 1 mln mt.
- However, IGC increased global wheat consumption by 6 mln mt in the October report.
- 2018/19 **global wheat ending stocks** increased by 1 mln mt from last month, but are still estimated 17 mln mt lower than for 2017/18.



• The IGC forecasts an expansion in **world wheat area** for the **2019/20** harvest, the first gain in four years, but more rain is needed for planting and crop establishment in some major producing areas, especially in parts of the EU, Russia and Ukraine. Given current conditions, sizeable declines in rapeseed area are likely in the EU.

> 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.

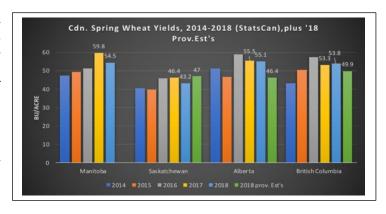
- **Futures:** Wheat closed the week from 28 1/4 cents lower to 5 cents higher.
- Funds: Index Funds were small buyers whereas Specs. were sellers on the week.
- Matif: Matif's €3-4/mt bounce on Friday left the market slightly higher on the week. But Friday's
 rally was totally counter-productive as French wheat is already way too expensive on the export
 market

Canadian wheat:

• The **Canadian spring wheat harvest** is coming towards its end. MB Ag is reporting 99% of spring wheat was harvested as of Oct. 22nd, SAF shows 92% of spring wheat harvested as of Oct. 22nd, and AB Ag is showing 81.6% harvested as of Oct. 23rd.

SAF also gave an update on provincials yields at 47 bu/acre for spring wheat. StatsCan currently is using 43.2 bu/ac for SK, so the 3.8 bu/ac bigger provincial yield estimate would indicate another 809k mt in SK spring wheat production than StatsCan is estimating.

However, AB Ag was estimating AB spring wheat yields last week at 46.4 bu/ac, vs 53.8 bu/acre used by StatsCan. Using the AB Ag provincial yield number would lower AB spring wheat production by almost 1.5 mln



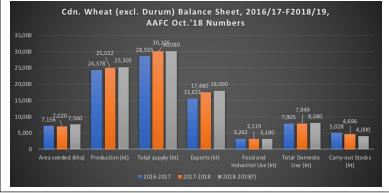
mt, for a net SK-AB yield effect of -700k mt. MB Ag does not publish their yield estimates.

 AAFC published their October Balance Sheets for Cdn. crops last week. They seem to match the StatsCan Sept. satellite-based production estimates. AAFC showed 25.3 mln mt of 2018 wheat (excl. durum) production compared to 24.5 in mt in the Aug. survey-based StatsCan estimate.

AAFC put total supply at 30.18 mln mt, down marginally from 30.12 mln mt last year.

On the demand side, AAFC is using 18 mln mt exports (vs. 17.5 mln mt last crop year; up 2.9%) and 3.18 mln mt for Food/Industrial use (3.12 mln mt last crop year).

Ending stocks are shown at 4 mln mt, a full 15% lower than last year's 4.7 mln mt.



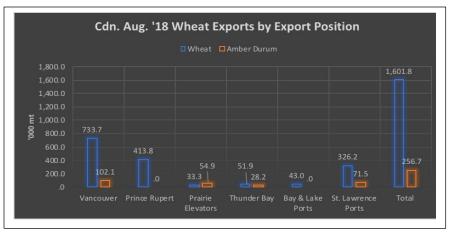
Canadian wheat exports:

According to CGC handling data summarising August exports, Canada exported 1.6 mln mt of wheat (excl. durum) during August 2018. This is 119k mt (+8%) more wheat than during August



2017. At the same time, durum exports this August were 200k mt (-44%) smaller than last year in August.

- 72% of all Aug. wheat shipments were loaded at the West Coast, while 26% were shipped from eastern ports, and 2% were shipped directly from Prairie Elevators.
- Peru was the single biggest destination for

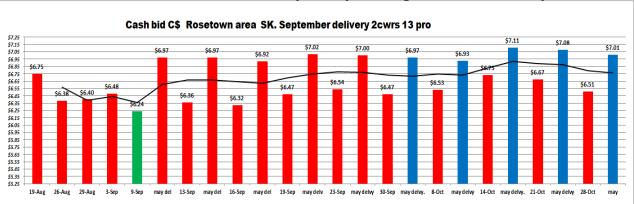


Cdn. wheat in August with 212k mt shipped, followed by Indonesia (200k mt) and China (198k mt). *Traditional quality wheat buyers took a combined 153k mt, or 9.6% of total exports (117k mt went to Japan, 36k mt to the UK).* 40% of Aug. '18 durum shipments left via Vancouver, while 39% were shipped via eastern ports and 21% directly from Prairie elevators.

- Wheat exports to week 12 reached 4.6 mln mt, which is 1 mln mt (or 30%) ahead of last year's pace.
- Canadian Durum wheat exports are 192k mt (-22%) behind last year's pace.
- Margins for elevators are quite good as railcar allocations remain light and growers are making good deliveries. The total elevator stocks are now over 7.3 mln mt so we can expect nearby "basis" levels to widen remain wide.
- Canadian markets are starting to trouble us, as there is no sign of more rail car loadings. In addition, yields that we are told of would suggest an increase in the next StatsCan estimates. We don't have much time for StatsCan numbers, but an increase would have bearish impetus.

(CGC) Grain Handling Su	ımmary Wheat		Week12	(to Oct. 21/'18)	
{'000 mt)	Terminal			Dom.	
(OOO IIII)	Prod. Divrs. Rcpts.		Bulk exports	Disappearance	
Current week	624.3	422.6	413.7	98.4	
Week ago	372.1	421.3	420.9	30.6	
ΥПО	5,251.0	5,683.8	4,455.7	1,004.2	
Last YTD	4,243.8	4,646.9	3,418.3	1,365.4	
YTD less Last YTD (kmt)	1,007.2	1,036.9	1,037.4	-361.2	
YTD over Last YTD (%)	124%	122%	130%	74%	
Based on weekly CGC Handlin	g Data				
(CGC) Grain Handling St	ımmary Durun	n	Week 12	(to Oct. 21/'18)	
-	ımmary Durun	n Terminal	Week 12	(to Oct. 21/'18)	
(CGC) Grain Handling St	mmary Durun		Week 12		
-		Terminal		Dom. Disappearance	
('000 mt)	Prod. Divrs.	Terminal Repts.	Bulk exparts	Dam. Disappearance	
('000 mt) Current week	Prod. Divrs.	Terminal Repts. 123.6	Bulk exparts	Dom. Disappear ance 2.5	
('000 mt) Current week Week ago	Prod. Dhrs. 73.5 64.9	Terminal Repts. 123.6 15.2	Bulk exports 33.5 34.4	Dom. Disappear ance 2.5 1.2 63.0	
('000 mt) Current week Week ago YTD	Prod. Dhvrs. 73.5 64.9 788.7	Terminal Repts. 123.6 15.2 784.0	Bulk exports 33.5 34.4 663.2	Dom. Disappear ance 2.5 1.2 63.0 179.7	

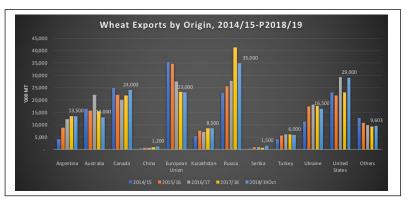
- Let's see how the markets respond to the Egypt news before selling additional tonnage. But we are thinking about increasing wheat sales and looking for a firm spot.
- Canadian elevator bids were lower for nearby delivery, unchanged for deferred delivery.





US wheat:

- After a difficult week, Dec '18 contract Chicago winter wheat closed at 505-2, up 18-0 cent in Friday's trade. Dec 18 contract Kansas hard red winter wheat closed up 13-6 cents at 500-2. In Minneapolis, Dec '18 contract hard red spring wheat closed at 577-6, up 8-2 cents for the day, while Mar '19 hard red spring wheat closed at 586-0, up 7-6 for the day.
- **US export sales** were at 443k mt, leaving the season total 461 mln bu, down 17% from last year's sales, catching a little ground from last week. *US wheat is becoming more competitive on the export markets*.
- Regarding major wheat export business, Egypt (GASC) announced its latest wheat tender last
 Thursday for cargos between 55k mt and 60k mt of milling wheat for Dec. 11-20 shipment
 (unspecified total tonnage). In its previous tender (Oct. 4), GASC bought three 180kmt of Dec 1-10
 Russian wheat, but his time importantly, US was needed to fulfill the Egyptian tender, and prices
 firmed.
- Basically, the discussion about export volumes by origin continues in the market, because export capabilities by origin differ greatly this year from last vear. Especially Russia's potential export volume Dec. forward and who stands to gain remain the biggest question. Last year, Russian wheat exports soared to 41.4 mln mt from 27.8 mln mt the



previous year, changing the wheat matrix profoundly. This year, Russian wheat production decreased by ~15 mln mt due adverse weather, and EU wheat production fell by ~14.2 mln mt for the same reason. USDA has '18/19 Russian and EU wheat exports at 35 mln mt and 23 mln mt, respectively, but these numbers are considered too high by the local trade. Even the US Ag Attaché for Russia has Russian exports at a more moderate 33.4 mln mt; EU exports are currently down 25% YTD. Similarly, USDA has Australian wheat exports at 13 mln mt, vs. 9-10 mln mt by the trade. USDA has Argentine exports at 14.2 mln mt, vs their Ag Attaché at 13.6 mln mt.

• We now need to see how the market reacts to the latest Egypt trade. The lack of sufficient Russian offers 'may be' the start of a more bullish world wheat market.

Australian wheat:

- ABARES lowered the Australian wheat crop to a 16.6 mln mt. It projected production in E Australia to drop 53% below the 20-year average with NSW the worst hit area at 65% below average, which will be only partially offset by a good crop in WA.
- In spite of ABARES' crop revision, Australian wheat futures fell sharply. Harvest is just a couple of weeks away and with a near non-existent export program, domestic sellers started to come forward.

Argentine wheat:

- Buenos Aires Grain Exchange (BAGE) cut their wheat crop estimate by 300k mt to 19.4 mln mt due dry soil conditions, although Gd/Exc. co condition ratings actually rose 1% on the week to 34%.
 Harvest was put at 3% complete, in line with last year.
- New crop Fob values for Argentine wheat were offered down to US\$223/mt for Dec 12.5% protein wheat, less \$5/mt per half point of protein.

EU wheat:

- Friday's rally in the MATIF was counter-productive as French wheat is already way too expensive on the export market.
- Algeria's purchase of French wheat had brought little support, Tunisia's purchase brought a new low in Algeria-Tunisia price spreads.



There is talk that the very low water levels in the rivers Rhine and Danube (making them unnavigable) will cut EU corn imports and lead to higher wheat feeding.

Black Sea wheat:

- Black Sea markets were quiet and tough to call, but over 1 mln mt of wheat were offered to Egypt.
- There are reports that the Russian wheat milling and livestock producers are complaining about high domestic prices. However, last Friday's meeting between the Russian Gvmt. and exporters brought little new information about a potential export tax. The Russian Gvmt. still talks of 32-34 mln mt Russian wheat exports, but private sources day there simply is not enough quality wheat to reach that export number. Time will tell.
- Russian 12.5 protein wheat was quoted around US\$231/mt for FH November (down \$2.00/mt on the week); the nominal monthly carry narrowed to \$5 but with no firm sellers for deferred positions.

> Significant purchases/ trades:

There were significant trades concluded this week; at least 1.5 mln mt of wheat were sold:

- **Japan** bought for 105k mt of hard wheat in their weekly tender with 70k mt from the US, the remainder from Canada.
- **Egypt** (GASC) bought 470,000 mt of Black Sea and US wheat at US\$248.80-253.97/mt C&F Egypt. 350k mt of this wheat will come from Russia, 60k mt from the Ukraine, and 60k mt will be SRW wheat from the US.
- Algeria bought 5-600,000 mt of Dec French wheat at \$256-258/mt.
- Tunisia bought 100,000 mt wheat for Nov-Jan at \$253-255.50 and 50,000 mt of durum at \$273.70-275.70/mt.
- Syria bought 200,000 mt of Russian wheat at \$255/mt C&F.
- Reports surfaced in the market of Asian millers looking for March-June offers of US/Canadian wheat in anticipation of a lack of supplies from Russia and Australia.
- US inspections were 385,000 tonnes (season total 302 myn bushels, (down 24%), sales were 443,000 tonnes (season total 461 myn bushels down 17%).

Wheat Market Outlook:

Significant events:

- Prices firmed at week's end when US wheat was needed to fulfill the Egyptian wheat tender.
- Reports surfaced of Asian millers looking for March-June offers of US/Canadian wheat in anticipation of a lack of supplies from Russia and Australia.

> Outlook:

We need to see how the market reacts to the latest wheat trade to Egypt. The lack of Russian offers maybe the start of a more bullish world wheat market.

Canadian markets are starting to trouble us, as there is no sign of more rail car loadings and yields that we hear would suggest we could see an increase in the wheat production in the next StatsCan estimates. We don't have much time for StatsCan numbers, but an increase in yields would have a bearish impetus.

Let's see how the markets respond to the Egyptian news before selling additional tonnage. We are thinking about increasing wheat sales and are looking for a firm spot.



iii) Primary Elevator Price Tables and Grade Spreads

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

				Date:	October 29, 2018	
NW Sask	Spot		NW Sask	Deferred		
NVV Sask	(bu.)	(mt)	INVV SASK	May.'19 (bu.)	May '19 (mt.)	
1 CWRS 13.5	\$6.90	\$253.53	1 CWRS 13.5	\$7.18	\$263.82	
1 CWAD 13.0	\$5.67	\$208.34	1 CWAD 13.0	\$5.91	\$217.16	
1 CPSR 11.5	\$5.88	\$216.05	1 CPSR 11.5	\$6.27	\$230.38	
SW Sask			SW Sask			
1 CWRS 13.5	\$6.81	\$250.23	1 CWRS 13.5	\$7.07	\$259.78	
1 CWAD 13.0	\$5.74	\$210.91	1 CWAD 13.0	\$5.93	\$217.89	
1 CPSR 11.5	\$5.70	\$209.44	1 CPSR 11.5	\$6.18	\$227.08	
NE Sask			NE Sask			
1 CWRS 13.5	\$6.63	\$243.61	1 CWRS 13.5	\$6.93	\$254.64	
1 CWAD 13.0	\$5.80	\$213.12	1 CWAD 13.0	\$5.75	\$211.28	
1 CPSR 11.5	\$5.62	\$206.50	1 CPSR 11.5	\$5.98	\$219.73	
SE Sask			SE Sask			
1 CWRS 13.5	\$6.66	\$244.72	1 CWRS 13.5	\$6.88	\$252.80	
1 CWAD 13.0	\$5.88	\$216.05	1 CWAD 13.0	\$5.91	\$217.16	
1 CPSR 11.5	\$5.63	\$206.87	1 CPSR 11.5	\$6.01	\$220.83	

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
 - 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.

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."



 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 29, 2018						
	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	\$340.70	\$311.78				
HRS	\$333.47					
HRW 11.5	\$318.05					
SWW 12.0	\$306.48					
1 CWRS 13.5 ³	\$340.70		\$247.65	\$93.04		
2 CWRS 13.0 ³	\$333.47		\$232.96	\$100.51		
3 CWRS ³	\$318.05		\$220.10	\$97.95		
CPS ³	\$299.73		\$203.19	\$96.54		
1 CWAD ⁴		\$308.41	\$215.69	\$92.72		
Competing wheat:	US\$/mt					
Russia 12.5 (Black Sea,						
25k mt)	\$231.00					
French 11.5 (Rouen)	\$23	\$235.49				
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 - Worl	d Price Parities				October 29, 201
Canadian Funds			Grade		
PNW value/Vancouver	1CWRS13.5	2CWRS	3CWRS	Winter wht.	CPS
May/June delivery	\$9.09	\$8.89	\$8.47	\$8.16	\$8.16
Parity Track Rosetown	\$7.59	\$7.40	\$6.98	\$6.66	\$6.66
Track Bid Rosetown Area	\$6.74	\$6.34	\$5.99	\$5.53	\$5.53
Gross Margin at Elevator (\$/bu)*	\$0.85	\$1.06	\$0.99	\$1.13	\$1.13
Gross Margin at Elevator (\$/mt)*	\$31.31	\$38.78	\$36.22	\$41.56	\$41.56
* to cover elevation, elevator market risk,	margin				