

Wheat Market Outlook and Price Report: December 11th, 2017

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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).

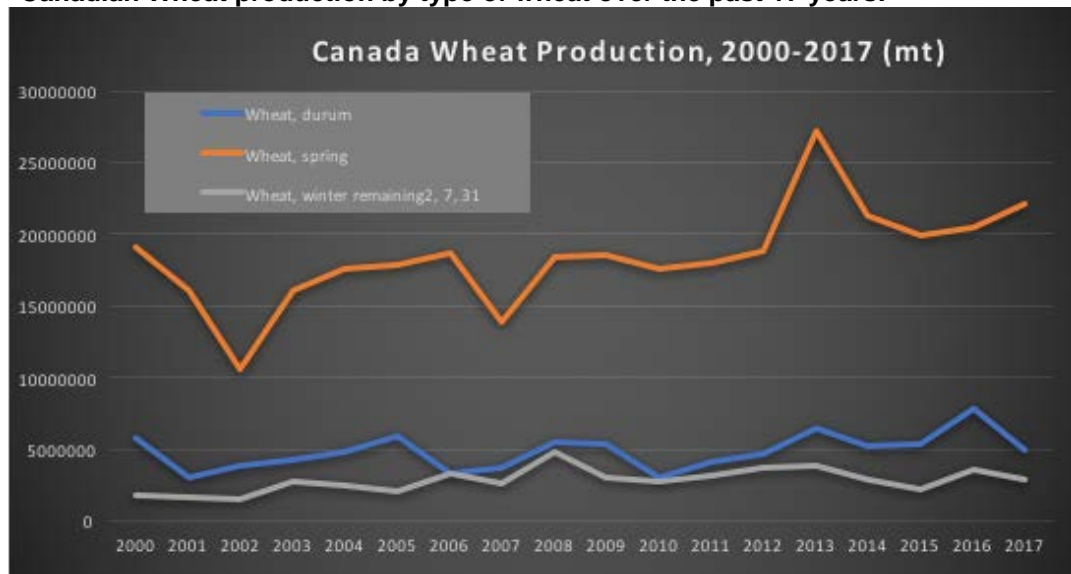
The report is made up of several sections. Following this section, a World Wheat overview is provided, which includes a summary of wheat market fundamentals, world production and trade, and a wheat market outlook. This is followed by several price tables, which include primary elevator bids at various 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 Dec. 11/17

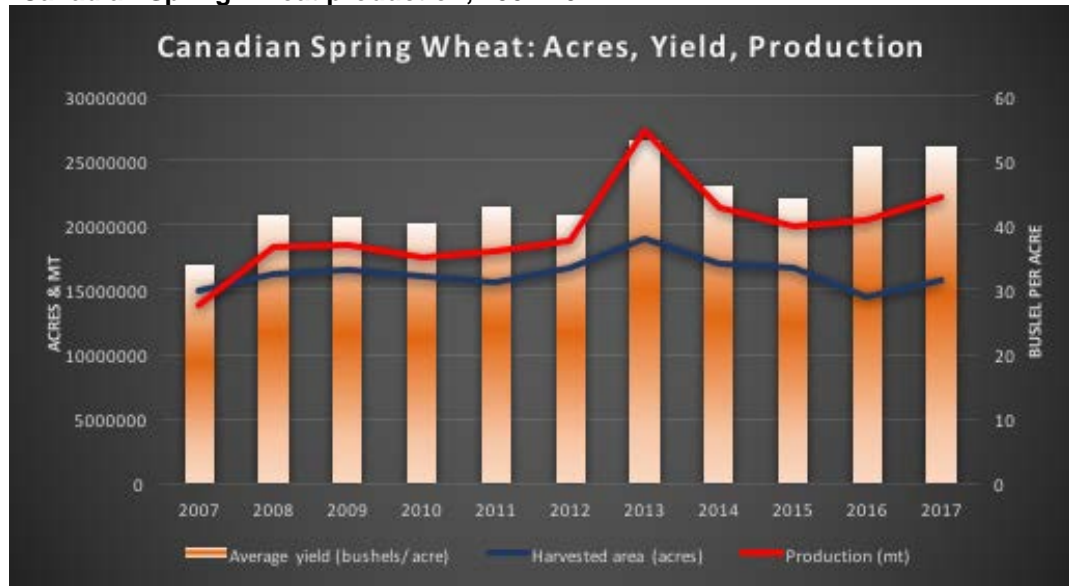
2017/18 World Wheat Overview:

- **Update on Canadian wheat production 2017**

Canadian Wheat production by type of wheat over the past 17 years:



Canadian Spring Wheat production, 2007-2017:



- **Statistics Canada** published their final 2017 production numbers last Wednesday. National **all-wheat production** for Canada was estimated at 29.98 million mt, 5.5% lower than in 2016, but 2.9 million mt or **10.5% above the StatsCan September estimate**.
- StatsCan presented a huge 3.3 mln mt upward revision in the **Canadian spring wheat production** from 18.9 mln mt (Aug. report) to 22.2 mln mt (Dec. report); a 17% increase. If the numbers are correct, this means that the wheat ending stocks on the Prairies will increase substantially. In comparison, last year's spring wheat production was 20.5 mln mt.
- Spring Wheat **yields** this year matched those of the previous year at an average 52 bu/acre, the second highest on record. The graph above summarizes spring wheat acreage, yields and production over the past 10 years and shows the impact of high yields on production.
- We estimate world demand for strictly spring wheat quality at ~7.3 mln mt. Set against the Canadian spring wheat production of ~22 mln mt, plus ~10 mln mt in the US, plus spring wheat from eastern Russia, it becomes apparent why a lot of spring wheat has to compete with HRW wheat for HRW destinations.

➤ **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:** Nearby Chicago futures lost 5.4% on the week, with Dec KC wheat down 4.7% since last Friday. On Friday, Dec 17 CBOT Wheat closed at \$3.92, down 2 1/4 cents, Dec 17 KCBT Wheat closed at \$4.00 3/4, down 2 1/4 cents, Dec 17 MPLS Wheat closed at \$5.97 3/4, down 1 cent. *KC and the CBOT hit contract lows and MPLS made 7-month lows.*
- **Funds:** Index Funds did virtually zero on the week and hold their net overall long at 93 mln mt. We believe this long is held against inflation risk and don't see it changing any time soon. Spec Funds were much more active, after covering part of their short they resold heavily soybeans and some wheat and corn. Their overall position is now back to 45 mln mt short

and we expect they will add more and then hold the line at 50 mln mt short. Most likely they sell more corn or wheat.

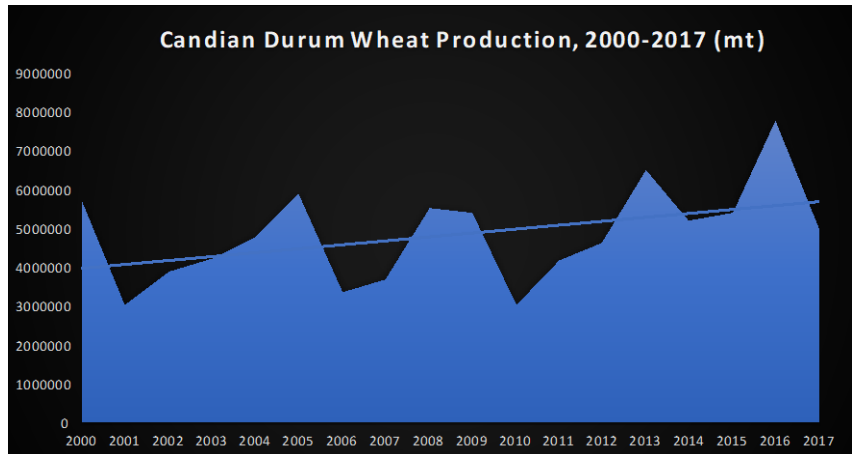
- **Matif:** Matif wheat futures in Europe were down just €0.50/mt, but EU shipments continue to run significantly below USDA projections for Europe. The shortfall amounts to about -8 mln mt YTD.

Canadian wheat:

- Week 18 weekly Cdn. wheat handling numbers were decent, with 417k mt delivered into the handling system, and 412k mt loaded for export shipment. However, commercial stocks show a high 3 mln mt, with 1.6 mln mt sitting in the primary elevator system. There were 184k mt of wheat loaded on rail week 18, which is not enough considering that 417k mt were delivered into the handling system the same week.

('000 mt)	(CGC) Grain Handling Summary Wheat			week 18	(to Dec. 3/17)
	Prod. Divrs.	Terminal Rcpts.	Bulk exports	Dom. Disappearance	
week 18	416.7	402.8	412.0	57.0	
Week ago	406.1	341.6	351.6	78.1	
YTD	6,529.9	6,771.6	5,495.6	1,858.9	
Last YTD	6,063.0	7,091.8	5,020.5	1,080.6	
YTD less Last YTD (k mt)	466.9	-320.2	475.1	778.3	
YTD over Last YTD (%)	108%	95%	109%	172%	

- The much higher StatsCan wheat production numbers (especially for **spring wheat**) likely offset potential gains in world wheat cash markets due to US, Australian and Argentine crop problems. Cash buyers are already working on covering spring 2018 wheat requirements, so the question still is if there is enough current crop demand for wheat to push prices higher.
- The StatsCan production numbers for **durum** were also bigger than in the earlier StatsCan report. In August, StatsCan showed a 3.9 mln mt durum crop which was a 50% decrease from the previous year; the Dec StatsCan report lists a 4.96 mln mt durum crop, a 36% reduction from 2016 due to a 16% decline in seeded area and a 28% drop in average yield from the previous year. The change between the August and December reports represents more than a 1 mln mt change in a 5 mln mt crop!
- In other words, durum is not as tight as some thought. In fact, this year's production is not that much smaller than the 10-year average crop of 5.26 mln mt.
- Weekly handling numbers were not great, with 115k mt delivered into the system, but only 17k mt loaded for export in ports. Only 60k mt of durum were loaded to rail, so like with spring wheat, grower deliveries far outpace outbound shipping. Total commercial stocks of durum are a large 670k mt.



US wheat:

- US inspections were 410,000 mt (season total 469 mln bushels, down 7%), sales were 322,000 mt (season total 643 mln bushels down 10% on last year).
- We will receive the December WASDE report on Tuesday. Traders will want to see what changes the USDA sees in the markets. We expect there will be little that's bullish in their next estimates.

Australian wheat:

- Surprisingly, Australian FOB prices for wheat fell by \$10/mt during the week. Apparently, the rains last week were not as bad as feared, but a proper assessment of the quality left in the fields is still missing.
- ABARE lowered the Australian wheat crop by 1.3 mln mt from 21.6 mln mt to 20.3 mln mt. USDA's number for Australian wheat is at 21.5 mln mt, likely to be adjusted down tomorrow in their WASDE report.

Argentine wheat:

- Bage (Buenos Aires Grain Exchange in Argentina) pegged the Argentine wheat harvest at 45% complete, a 13% improvement on last week. Their wheat yield estimate improved to 2.56 mt/ha as yields in the central region are coming above average. USDA's yield number is still at an average of 3.1 mt/ha.
- Argentine FOB wheat values Argentine decreased by US\$1/mt.

EU wheat:

- YTD French wheat shipments continue to lag behind projections. EU shipments continue to run significantly below USDA projections for Europe. The shortfall amounts to about -8 mln mt YTD.
- French wheat remains uncompetitive, except to African destinations.

Black Sea wheat:

- Russian prices for December 12.5% protein wheat were at US\$190/mt FOB. The discount for 11.5% protein wheat stayed at at US\$8-9/mt. Feed wheat is worth another US\$2-3/mt less.
- It is estimated that Russia shipped another 4 mln mt of wheat for export during November 2017.

➤ **Significant purchases/ trades:**

- Re. spring wheat, **Japan** bought 154,694 mt from Australian, Canada, and the US in this week's wheat tender. 64,495 mt of this were of US origin.
- **US inspections** were 410,000 mt (season total 469 mln bushels, down 7%), sales were 322,000 mt (season total 643 mln bushels down 10% on last year).
- It was confirmed that **Saudi Arabia** bought 495,000 tmt of wheat for Feb-Apr '18 arrival at an average price of US\$228.25/mt CIF Jeddah.
- **Bangladesh** bought 50,000 mt wheat at US\$245.35/mt.
- **Jordan** bought 100,000 mt wheat for LH March/FH Apr '18 shipment at US\$224.50/mt.
- *Note that none of this business, other than the sale to Japan, required North American wheat.*

➤ **Wheat Market Outlook:**

➤ **Significant events:**

- Statistics Canada increased Canadian wheat production very significantly.
- ABARE lowered the Australian wheat crop by 1.3 mln mt from 21.6 mln mt to 20.3 mln mt.

➤ **Outlook:**

The Statistics Canada revision to their Canadian wheat estimate likely killed any bullish sentiments in the wheat market and ensures a revision to higher carryovers in the next WASDE report. With some of the world's major importers already buying out as far as April 2018, the question is where the market can find enough old crop demand to take prices higher. Russia/FSU appears capable of shipping more wheat into world markets than the trade expected. To get prices higher, we will need a major weather event or much reduced spring plantings. Unfortunately, large carrying charges make deferred prices not too bad, especially for eastern European producers, so they are likely to plant wheat again.

iii) Primary Elevator Price Tables and Grade Spreads

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

Date: December 11, 2017					
NW Sask	Spot		NW Sask	Deferred	
	(bu.)	(mt)		Mch. '18 (bu.)	Mch. '18 (mt.)
1 CWRS 13.5	\$6.61	\$242.88	1 CWRS 13.5	\$6.71	\$246.55
1 CWAD 13.0	\$7.29	\$267.86	1 CWAD 13.0	\$7.34	\$269.70
1 CPSR 11.5	\$4.76	\$174.90	1 CPSR 11.5	\$4.85	\$178.21
SW Sask			SW Sask		
1 CWRS 13.5	\$6.62	\$243.25	1 CWRS 13.5	\$6.67	\$245.08
1 CWAD 13.0	\$7.48	\$274.85	1 CWAD 13.0	\$7.41	\$272.27
1 CPSR 11.5	\$4.54	\$166.82	1 CPSR 11.5	\$4.82	\$177.11
NE Sask			NE Sask		
1 CWRS 13.5	\$6.39	\$234.79	1 CWRS 13.5	\$6.46	\$237.37
1 CWAD 13.0	\$7.31	\$268.60	1 CWAD 13.0	\$7.29	\$267.86
1 CPSR 11.5	\$4.51	\$165.72	1 CPSR 11.5	\$4.58	\$168.29
SE Sask			SE Sask		
1 CWRS 13.5	\$6.44	\$236.63	1 CWRS 13.5	\$6.48	\$238.10
1 CWAD 13.0	\$7.44	\$273.38	1 CWAD 13.0	\$7.44	\$273.38
1 CPSR 11.5	\$4.52	\$166.08	1 CPSR 11.5	\$4.65	\$170.86

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 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:
 - DNS 14% in the Pacific North West (PNW) ≈ 1 CWRS 13.5% in Vancouver
 - HRS in the Pacific North West (PNW) ≈ 2 CWRS 13.0% in Vancouver
 - HRW in the Pacific North West (PNW) ≈ 3 CWRS in Vancouver

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.

"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."

- 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).
- 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

Relevant FOB Prices and Export Basis				Dec. 11, 2017
Type of Wheat	FOB Prices CDA ¹ (calculated)		Street Prices	Export Basis ²
	West Coast (Cdn./mt\$)	Great Lakes (Cdn.\$/mt)	Rosetown (Cdn.\$/mt)	Basis: West Coast-Centr. SK (Cdn\$/mt)
DNS 14.0	\$352.28	\$327.98		
HRS	\$345.27			
HRW 11.5	\$264.44			
SWW 12.0	\$248.09			
1 CWRS 13.5 ³	\$352.28		\$235.53	\$116.75
2 CWRS 13.0 ³	\$345.27		\$233.69	\$111.58
3 CWRS ³	\$264.44		\$230.02	\$34.43
CPS ³	\$241.55		\$158.73	\$82.82
1 CWAD ⁴		\$377.51	\$253.17	\$124.34
Competing wheat:	US\$/mt			
Russia 12.5 (Black Sea, 25k mt)	\$190.00			
French 11.5 (Rouen)	\$192.82			
APW 10.5 (W Coast)	\$225.00			
Argentina 12.0	\$173-178.00			
<p>¹ FOB Prices CDA = FOB US\$ converted into Canadian Currency</p> <p>² Export Basis = FOB Prices CDA minus Cdn. Street Price</p> <p>³ DNS 14% ≈ 1 CRWS 13.5%; HRS ≈ 2 CWRS 13.0%; HRW ≈ 3CWRS; SWW ≈ CPS</p> <p>⁴ Values derived to Lakehead FOB</p>				

ADDENDUM

Futures Driven Basis Calculation, Canadian Dollars per MT

Canadian Wheat - World Price Parities					Dec. 11, 2017
Canadian Funds				Grade	
PNW value/Vancouver	1CWRS13.5	2CWRS	3CWRS	Winter wht.	CPS
Dec./Jan. delivery	\$9.41	\$9.22	\$7.02	\$6.57	\$6.57
Parity Track Rosetown	\$7.91	\$7.72	\$5.52	\$5.08	\$5.08
Track Bid Rosetown Area	\$6.41	\$6.36	\$6.26	\$4.32	\$4.32
Gross Margin at Elevator (\$/bu)*	\$1.50	\$1.36	-\$0.74	\$0.76	\$0.76
Gross Margin at Elevator (\$/mt)*	\$55.22	\$50.05	-\$27.10	\$27.83	\$27.83
* to cover elevation, elevator market risk, margin					