

Wheat Market Outlook and Price Report: March 20, 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 March 20, 2017

2016/'17 and 2017/'18 Canadian Wheat Overview:

Canadian March Wheat Outlook Report (AAFC)¹:

											March	17, 2017
Grain and								Food &	Feed,	Total		
Crop Year	Area	Area			Imports	Total	Exports	Industrial	Waste &	Domestic	Carry-out	Average
(a)	Seeded	Harvested	Yield	Production	(b)	Supply	(c)	Use (d)	Dockage	Use (e)	Stocks	Price (g
	thousand ha t/ha thousand metric tonnes							\$/t				
Durum												
2015-2016	2,355	2,327	2.32	5,389	13	6,367	4,542	180	302	724	1,101	29
2016-2017f	2,505	2,367	3.28	7,762	10	8,873	4,500	200	1,177	1,573	2,800	270-29
2017-2018f	2,010	1,970	2.79	5,500	10	8,310	4,800	200	905	1,310	2,200	240-27
Wheat Exce	pt Durum											
2015-2016	7,445	7,250	3.06	22,205	95	28,425	17,179	3,298	3,156	7,175	4,070	22
2016-2017f	6,915	6,511	3.68	23,967	100	28,137	16,500	3,300	3,593	7,637	4,000	215-23
2017-2018f	7,140	7,000	3.30	23,100	100	27,200	16,500	3,350	3,094	7,200	3,500	220-25
All Wheat												
2015-2016	9,800	9,577	2.88	27,594	108	34,792	21,721	3,478	3,458	7,899	5,171	
2016-2017f	9,420	8,878	3.57	31,729	110	37,010	21,000	3,500	4,770	9,210	6,800	
2017-2018f	9,150	8,970	3.19	28,600	110	35,510	21,300	3,550	3,999	8,510	5,700	

AAFC showed no changes in March to their earlier (February) wheat numbers for either the 2016/17 or the 2017/18 Canadian wheat and durum crops.

¹ Based on the March'17 Agriculture and Agri-Food Canada (AAFC) report.



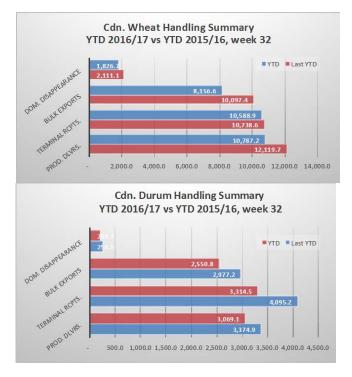
- This crop year's exports are forecast to fall by 4% from last crop year to 16.5 million mt.
 Exports of Ontario wheat account for a larger portion of the total exports at a forecast 700k mt compared to 240k mt for 2015-16. Western wheat exports dropped accordingly.
- o Overall carry-out stocks for 2016/'17 are forecast to fall by 2% to 4 million mt.
- For 2017-18, area seeded in Canada is forecast to rise by 3% as a 5% increase in spring
 wheat area more-than offsets a 12% decrease in the area seeded to winter wheat. The
 expected increase in spring wheat area is the result of a shift out of winter wheat and
 durum.
- Production of 2017/'18 wheat is forecast to decrease by 4% to 23.1 million mt because of a return to trend yields.
- o **Exports** are forecast to be unchanged from the current crop year at 16.5 million mt.
- o Carry-out stocks are forecast to fall by 12% to 3.5 million mt.

Global wheat and trade:

Below is a brief synopsis on this week's market events in the major wheat origins.

Canadian wheat:

- Canadian wheat exports during shipping week 32 were decent again. They amounted to 282k mt for the week and to 8.2 million mt year-to-date. This is still 19% or 1.9 million mt lower than last year-to-date.
- It will be very difficult to catch up on Canadian wheat exports with new crop European wheat starting to come on stream within only 3-4 months.
- Durum exports during week 32 amounted to 70k mt and 2.6 million mt year-to-date. This is 14% or 426k mt lower than last year-to-date.
- Canadian durum prices are being pressured by competition of Mexican and Spanish durum, especially since demand for lower to medium quality durum seems to be topping demand for high quality durum. Also,



harvest of Mexican new crop durum is just around the corner (May) and this will be followed by European durum in July.

US wheat:

- US wheat inspections were 519 k mt (season total is 736 million bu; up 28% over last year), sales were 264k mt for a season total 932 million bu up 37% against USDA's projected 32% rise. USDA announced 120kt to Algeria, which is assumed to be part of the 480kt purchase.
- There were reports that 10% to 15% of the SRW wheat crop in the US was affected by the cold temperatures in recent nights. It usually takes a week or two to verify the degree of damage.



- US Allendale Brokers surveyed US farmers in 33 states with respect to their planting intentions. For wheat, Allendale is estimating just under 46 million acres, the smallest acreage since records started being kept back in 1919. Last year's US wheat acreage was 50.15 million acres planted, and USDA is 46 million acres for this year. By type of wheat, Allendale estimated durum acreage at 2.05 million acres, other spring wheat acres at 11.25 million acres, and winter wheat at 32.68 million acres. Using trend line yields, this would suggest 1.86 billion bushels of wheat.
- Weekly soft wheat shipments were 255k mt for a season total 17.1 million mt, down 2.8 million mt or 14% on last year. But while exports in the first 5 months of the season were up 16% on last year thanks to big carry-over stocks of decent quality, the last 4 months have slumped 40% against a year ago due low quality crops and this looks likely to continue or even worsen with Saudi, Algeria and GASC now close to being finished buying old crop wheat.

Significant purchases: It was another big week for wheat trade. Unfortunately, Canadian wheat again did not feature in the tender business.

- to buy 420k mt of wheat at prices slightly below the level of 2 weeks ago. Published offers showed U.S. white wheat and hard red winter were competitive on a price basis. Freight costs likely affected buying decisions.
- Saudi Arabia purchased 735k mt of wheat for May-July'17.

JASC Wheat F Tonnage	Purchases Mch	. 15/1/	Ocean	
('000 mt)	Origin	FOB Px	Freight	US\$ C&F Px
60	Ukraine	\$195.00	\$12.74	\$207.74
60	Russia	\$195.90	\$13.39	\$209.29
60	Russia	\$197.00	\$12.39	\$209.39
120	Russia	\$197.65	\$12.50	\$210.15
60	Russia	\$197.70	\$12.50	\$210.20
60	France	\$195.84	\$15.05	\$210.89
420				

- o Indonesia: Indonesia bought 100,000 mt of Black Sea 11.5% protein wheat at a CIF price of US\$197/mt for July 2017. This was about US20/mt below Australian wheat values. In the past, Indonesia and other South East Asian countries have been mostly supplied by Australia, the US, or Canada, but with Black Sea wheat pricing competitively, this purchase may not be the last from that origin.
- Algeria: Bought 480k mt of wheat at US\$204-206/mt from France. USDA also announced a 120k mt to Algeria, which is assumed to be part of the 480k mt purchase.
- o Korea bought June feed wheat at US\$204.50/mt.
- o **Israel** passed on its feed wheat tender.
- Foreign Exchange: The Rouble made a 6-week low followed by a 3-week high, the Egyptian Pound made a 5-week low, as Egypt partly reversed an earlier move to lower bread subsidies.

Wheat Market Outlook:

- Significant events this past week:
 - Futures: US wheat futures ended down in Kansas City (HRW) and Chicago (SRW), higher in Minneapolis (spring wheat). Good volume activity on the export market, a weaker US\$ and ongoing dryness in the US Plains should have lent more support, but US export sales were low and Funds added to their net short.



- o **EU:** Matif slipped €1.75/mt as 5-week highs in the €uro offset Algeria's 480k mt purchase, particularly as US HRW had filled a quarter of the total. The price looked like a US\$5/mt discount against French replacement wheat and the HRW also looked aggressive.
- o **Australia:** Due to excellent and timely rains falling across most crop regions, Australian Fob values and futures slipped from last weeks near 4-month highs.
- o Argentina: Argentine Fob values were ill defined, but 11.5% protein wheat was nominally offered at US\$182/mt for April and 12% protein wheat showed a hefty US\$15/mt premium. The market also reported some logistics issues; some ports reportedly cannot receive wheat due to the delivery of corn and beans into the commercial flow. Argentine farmer sales of the current crop stand at 10.5 million mt, of which exporters own 8.4 million mt against export licences taken so far of 7.25 million mt (up 260k mt on the week).
- Russia: In the Black Sea, Russian wheat ended up little changed with the bid-offer on April 12.5% protein wheat in Black Sea port Novorossiysk at US\$190-192/mt while new crop 12.5% protein wheat remained around US\$174-177/mt.
- Turkey: There was no apparent reaction to Turkey's removal of Russia from the list of permitted (tariff-free) origins. Vessels sailing prior to March 15 are expected to be o.k; the current vessel line-up shows relatively few designated for Turkey. However, the market will be watching for any delays as Turkey may still have 800k mt of wheat to buy.
- Egypt: According to local sources, Egypt's monthly wheat consumption has increased by 200k mt since the currency devaluation. Annualised, this would be a 2.4 million mt increase. And if the federal requirement to carry 6 months of stocks still holds, this equates to a cumulative 3.6 million mt of additional demand for wheat.
- China: China's wheat imports are expected to rise to 4.5 million mt in the year to June 2017 from 3.48 million mt previously, as lower production and the poor quality of the domestic crop boost demand. Wheat production in China, the world's top consumer of the grain, is estimated to decline to 129 million mt during the year from 130.19 million mt in the prior period. According to JY Chow, food and agriculture expert at Mizuho Bank, "There is a big chase for higher quality wheat. Local crop is more feed grade, so I see higher imports than what has been estimated by the USDA." The U.S. Department of Agriculture (USDA) has estimated China's wheat imports during the year at 4 million mt.

Outlook:

- There is a lot of cash business being conducted in wheat, but in spite of the big volume traded, prices have NOT moved up.
- The market seems to feel that the combination of big current crop stocks and the lack of serious weather threats for new crop will keep the new crop market well supplied next year as well.
- We note that the apparent increase in wheat demand by Egypt may support new crop values of the Black Sea exporters.
- The supply picture for next year's spring wheat looks to be much tighter than for other wheat.
- Despite ongoing major volume business in the cash markets, prices are not moving higher in what still seems to be a big picture of significant old crop stocks ahead of an improving new crop weather outlook.
- However, Egypt/GASC may change the picture for Black Sea harvest wheat.
- We think Minneapolis Dec wheat is a god sale at \$5.70/bu or better.



Table 1: Canadian Primary Elevator Bids, in Canadian Dollars per Bu and per MT, (PDQ data)

Date: 20-Mar-17

NW Sask	Sį	oot	NW Sask	Deferred		
IVVV Jask	(bu.)	(mt)	IVVV Jask	May '17 (bu.)	May '17 (mt)	
1 CWRS 13.5	\$6.38	\$234.43	1 CWRS 13.5	\$6.49	\$238.47	
1 CWAD 13.0	\$7.15	\$262.72	1 CWAD 13.0	\$7.23	\$265.66	
1 CPSR 11.5	\$4.69	\$172.33	1 CPSR 11.5	\$4.85	\$178.21	
SW Sask			SW Sask			
1 CWRS 13.5	\$6.40	\$235.16	1 CWRS 13.5	\$6.50	\$238.84	
1 CWAD 13.0	\$7.21	\$264.92	1 CWAD 13.0	\$7.28	\$267.50	
1 CPSR 11.5	\$4.65	\$170.86	1 CPSR 11.5	\$4.78	\$175.64	
NE Sask			NE Sask			
1 CWRS 13.5	\$6.26	\$230.02	1 CWRS 13.5	\$6.36	\$233.69	
1 CWAD 13.0	\$7.17	\$263.45	1 CWAD 13.0	\$7.19	\$264.19	
1 CPSR 11.5	\$4.41	\$162.04	1 CPSR 11.5	\$4.59	\$168.65	
SE Sask			SE Sask			
1 CWRS 13.5	\$6.28	\$230.75	1 CWRS 13.5	\$6.38	\$234.43	
1 CWAD 13.0	\$7.17	\$263.45	1 CWAD 13.0	\$7.21	\$264.92	
1 CPSR 11.5	\$4.49	\$164.98	1 CPSR 11.5	\$4.63	\$170.12	

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 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
 - o 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:

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.

[&]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."



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.
- o 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 ar	nd Export Basis		Mch. 20, 2017	
	FOB Prices CD	A¹ (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	\$342.22	\$309.86			
HRS	\$334.86				
HRW 11.5	\$261.81				
SWW 12.0	\$243.18				
1 CWRS 13.5 ³	\$342.22		\$235.16	\$107.05	
2 CWRS 13.03	\$334.86		\$218.63	\$116.23	
3 CWRS ³	\$261.81		\$195.85	\$65.96	
CPS ³	\$236.31		\$152.49	\$83.83	
1 CWAD⁴		\$404.48	\$263.82	\$140.66	
Competing wheat:					
Russia 12.5 (Black Sea,					
25k mt)	\$19	0.00			
French 11.0 (Rouen)	\$19				
ASW 10.5 (W Coast)	\$19				
Argentine 12.0	\$188-\$	197.00			

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				Mch. 20, 2017
Canadian Funds			Grade		
PNW value/Vancouver	1CWRS13.5	2CWRS	3CWRS	Winter wht.	CPS
Dec./Jan. delivery	\$9.13	\$8.93	\$6.94	\$6.43	\$6.43
Parity Track Rosetown	\$7.63	\$7.43	\$5.44	\$4.93	\$4.93
Track Bid Rosetown Area	\$6.40	\$5.95	\$5.33	\$4.15	\$4.15
Gross Margin at Elevator (\$/bu)*	\$1.23	\$1.48	\$0.11	\$0.78	\$0.78
Gross Margin at Elevator (\$/mt)*	\$45.20	\$54.39	\$4.11	\$28.84	\$28.84
* to cover elevation, elevator market risk, mar	gin				