Wheat Market Outlook and Price Report: December 3, 2018 By Marlene Boersch/ A.P. Temple Mercantile Consulting Venture Inc.

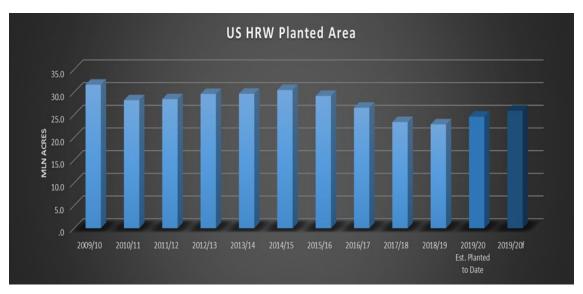
i) Background and Rationale for the Report

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 Dec. 3, 2018

US HRW Planted Area - 2019 US Wheat



- A thick blanket of snow is covering the US Central Plains causing HRW planting to be likely finished at just 95% complete of intended acreage.
- The USDA had estimated HRW acres to reach 25.9 mln acres this year. This would comprise a 3 mln acre increase over last year, but planting was halted at ~24.6 mln acres. This is a 7% increase from 2018/19 vs the USDA's projected 13% increase in HRW acres.

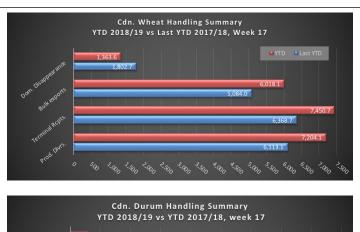
> Global wheat production and trade:

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.

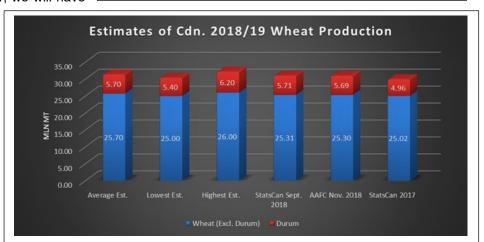
- **Futures:** Dec '18 contract **Chicago winter wheat** closed at 515-6, up 19-2 cents in Friday's trade and up 15-6 cents for the week.
 - Dec 18 contract **Kansas hard red winter wheat** closed up 20-4 cents at 486-4, up 21-4 cents for the week.
 - In Minneapolis, Dec '18 contract **hard red spring wheat** closed at 583-2, up 13-6 cents on Friday, up 9-4 cents for the week, while Mar '19 hard red spring wheat closed at 575-6, up 7-6 cents for the day and up 5-2 cents for the week.
- **Funds:** Index Funds did a little selling whilst Specs were big buyers. We wonder where the Specs got their prior notice of G-20 comments. It will be interesting to see how they handle their overall short this week.
- Matif: Matif followed the US increases in wheat last Friday, closing up €2/mt on the week.

Canadian wheat:

- Total YTD Cdn. wheat (excl durum) exports reached 6.018 mln mt, 934k mt higher than last year. Exports have tapered off somewhat these past 2 weeks now 18% ahead of last year vs the 22% last week. Wheat continues to generate the best elevator margins for Canadian grain companies/exporters. As of shipping week 17, total exports are at 33% of the 18 mln mt forecast by the AAFC. We expect this number will be surpassed by ~400k mt.
- Week 17 Canadian durum exports gained 3% on last year, but the YTD total of 1 mln mt is still 22% behind last years durum exports. The AAFC is projecting 4.3 mln mt worth of Canadian durum exports, but given the pace so far, we will have
 - a tough time reaching that number.
- Statistics Canada's December Canadian Crop Production Report will be issued on Dec. 6th. Reuters has released their pre-report survey of trade's production estimates. The average all wheat estimate was 31.40 mln mt. Wheat excl.



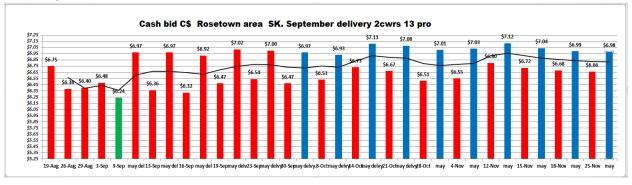




durum is estimated to be 25.7 mln mt, 390k mt higher than StatsCan's Sept. estimate (27% higher than 2017/18 production).

Average trade guesses for durum production are for 5.7 mln mt worth of production in 2018/19, 10k mt less than the Sept. estimate, but still 15% higher than last year.

Canadian elevator bids:

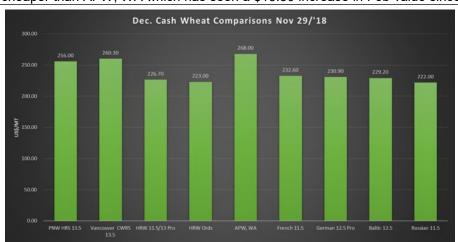


US wheat:

- US wheat closed last week 10-25¢/bu higher thanks to a sharp rally on Friday ahead of the G-20 summit
- During the week, the Dec KC-CBOT spread widened to a near record 43¢/bu before closing at just 29¢ on Friday.
- US Exports sales were 377,100 mt for a season total of 547 mln bu. Total US export commitments are now 54% of the USDA's total projection vs the 73% average for this time. With season total wheat sales at 547 mln bu, the rest of the season would have to run 77% above last year to reach the USDA's 1,025 mln bu estimate.
- Even though US Fob is becoming more competitive (esp. into 2019) it is doubtful this target will be reached. EU exports are down 30% (6.64 mln mt) from last year. Combined annualized EU and US exports are 13.5 mln mt below USDA's projections. There is a growing disconnect between what the USDA is projecting for global demand and what export numbers are saying.
- It has been a slow process, but US wheat is starting to price into the world market. Shrinking supplies in major exporting countries (Australia, the EU and Russia) has made high quality wheat harder to find. Combined with pressure on US wheat from a strong crop, has US wheat starting to be competitive. US PNW 13.5 pro HRS Fob has fallen \$22 since June 1st and is currently \$4.30 cheaper than Cdn. 13.5 pro in Vancouver (which Fob value has only fallen \$4.10 over the same time). It is also \$12 cheaper than APW, WA which has seen a \$15.50 increase in Fob value since

the beginning of June.

Meanwhile, the French 11.5 Fob price has risen \$21.3 to \$232.60. and Russian 11.5 pro has risen \$24 to \$222.00 while US HRW Ords is down \$16.60 since the beainning of June to \$239.60.



A thick blanket
 of snow is covering the US Central Plains causing HRW planting to be finished at just 95% complete.

Australian wheat:

- Harvest has been slow in Australia, and results are variable. ABARES' crop update next week will give a better idea of their situation. After a very dry growing season, the country is forecast to have a hotter-than-average summer (Dec 1-Feb 28).
- Australian futures were higher, Fob was slightly lower with harvest quality generally good and proteins generally higher than normal. Cash APW in WA was priced down at \$260/mt and ASW was priced at \$268/mt this week.
- Farmer deliveries are good in WA but much slower in SA and the East, as farmers are filling their own storage first with a much-reduced crop.

Argentine wheat:

- Argentina's wheat harvest advanced 10% over the week to 32% complete, just 0.5% behind average. Precipitation in Argentina during November was at a record, causing Gd/Exc. ratings to drop to 38%, well down from 73% last year. Despite rumors of an 18 mln mt crop, BAGE's estimate is unchanged at 19.2 mln mt (vs USDA's 19.5 mln).
- Argentine Dec. 12% protein wheat has a bid-offer spread at \$212-218/mt, plus \$2-5/mt carry per month. The protein discount fell to \$3 per half point.

EU wheat:

- EU shipping data showed the biggest deficit yet on last year.
- Matif closed up €2/mt on last week following the US increases in wheat last Friday.

Black Sea wheat:

- Both Ukraine and Russia have released statements that conflicts in the Azov Sea are not slowing exports for the time being, but future movement is unclear.
- Russia's SovEcon increased their export estimate by 0.5 mln mt to 34.7 mln (vs USDA's 35 mln).
 They also estimate Russia's 2019 wheat production will reach 77 mln mt, up 7 mln mt from 2018.
- Russian 12.5% protein wheat traded at \$226/mt Fob on Friday. Monthly carry is at \$4/mt per month. The discount for 11.5% protein is \$3/mt, and feed wheat is priced another \$9/mt less.

Chinese wheat:

It remains to be seen of the 90-day US-China truce has positive effects on Chinese imports of US wheat.

> Significant purchases/ trades:

A lot of cash business in wheat was concluded during this past week:

- **Algeria** bought 600,000 mt wheat at US\$250.50-252.50/mt for Jan shipment (December shipment if it is shipped from from S America).
- Iraq tenders Dec 3 for US/Can/Australian wheat (no Russian wheat allowed).
- **Jordan** returns Dec 4 for 120,000 mt wheat for Mar-Apr.'19
- Taiwan tenders for 110k mt of US specific wheat on Dec 5th.
- **Syria** announced its intention to tender for 200k mt (date unspecified).
- **US export inspections** were low at 252k mt for a season total of 370 mln bu, down 19% from last year.

Wheat Market Outlook:

Significant events:

The US and China called a truce for 90 days to see if they can work out their issues in the meantime.
 It seems clear the Chinese have agreed to buy US corn & beans for the state reserves; it remains to be seen if this means anything for US wheat to China.

- US Exports sales were 377,100 mt for a season total of 547 mln bu. Total US export commitments
 are now 54% of the USDA's total projection vs the 73% average for this time. With season total
 wheat sales at 547 mln bu, the rest of the season would have to run 77% above last year to reach
 the USDA's 1,025 mln bu estimate.
- The Dec KC-CBOT wheat spread widened to a near record 43¢/bu before closing at just 29¢, and KC wheat (HRW) hit contract lows because of another week of poor export data.

> Outlook:

We need to see more details regarding the comments from the G-20 that the "Chinese have agreed to buy more Ag products". Initially we expect this to be positive to current prices, but we need to know the details to see if the terms make them sustainable. Currently wheat exports are behind expectations.

iii) Primary Elevator Price Tables and Grade Spreads

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

			·	Date:	December 3, 2018	
NW Sask	Spot		NIM Cook	Deferred		
	(bu.)	(mt)	NW Sask	May.'19 (bu.)	May '19 (mt.)	
1 CWRS 13.5	\$7.08	\$260.15	1 CWRS 13.5	\$7.31	\$268.60	
1 CWAD 13.0	\$5.79	\$212.75	1 CWAD 13.0	\$6.06	\$222.67	
1 CPSR 11.5	\$6.23	\$228.92	1 CPSR 11.5	\$6.46	\$237.37	
SW Sask			SW Sask			
1 CWRS 13.5	\$6.93	\$254.64	1 CWRS 13.5	\$7.19	\$264.19	
1 CWAD 13.0	\$5.81	\$213.48	1 CWAD 13.0	\$6.09	\$223.77	
1 CPSR 11.5	\$6.18	\$227.08	1 CPSR 11.5	\$6.35	\$233.32	
NE Sask			NE Sask			
1 CWRS 13.5	\$6.84	\$251.33	1 CWRS 13.5	\$7.05	\$259.05	
1 CWAD 13.0	\$5.93	\$217.89	1 CWAD 13.0	\$6.06	\$222.67	
1 CPSR 11.5	\$5.99	\$220.10	1 CPSR 11.5	\$6.22	\$228.55	
SE Sask			SE Sask			
1 CWRS 13.5	\$6.82	\$250.59	1 CWRS 13.5	\$7.00	\$257.21	
1 CWAD 13.0	\$6.00	\$220.46	1 CWAD 13.0	\$6.19	\$227.45	
1 CPSR 11.5	\$5.99	\$220.10	1 CPSR 11.5	\$6.20	\$227.81	

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

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Avg. Grade Spread/ Pro Discounts	Cdn\$/bu.	Cdn.\$/mt	
1 CWRS 13.5	Base Grade	Base Grade	
2 CWRS 13.5	(0.01)	(0.37)	
1 CWRS 12.5	(0.15)	(5.51)	
1 CWAD 13.0	Base Grade	Base Grade	
1 CWAD 13.5	0.00	0.00	
2 CWAD 13.0	(0.10)	(3.67)	
2 CWAD 12.5	(0.20)	(7.35)	

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)
 - o HAD (Lakes) ≈ CWAD (Thunder Bay/ Lawrence)

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."

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.
- 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

Releveant FOB Prices and Export Basis December 3, 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	\$344.61	\$318.44				
HRS	\$337.34					
HRW 11.5	\$325.71					
SWW 12.0	\$309.71					
1 CWRS 13.5 ³	\$344.61		\$259.41	\$85.20		
2 CWRS 13.0 ³	\$337.34		\$250.23	\$87.11		
3 CWRS ³	\$325.71		\$224.14	\$101.57		
CPS ³	\$302.93		\$228.18	\$74.75		
1 CWAD ⁴		\$316.50	\$201.72	\$114.78		
Competing wheat:	US\$/mt					
Russia 12.5 (Black Sea,						
25k mt)	\$230.00					
French 11.5 (Rouen)	\$234.36					
APW 10.5 (W Coast)	\$268.00					
Argentine 12.0	\$215.00					

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					
Canadian Funds			Grade		
PNW value/Vancouver	1CWRS13.5	2CWRS	3CWRS	Winter wht.	CPS
May/June delivery	\$9.19	\$9.00	\$8.68	\$8.24	\$8.24
Parity Track Rosetown	\$7.70	\$7.50	\$7.18	\$6.75	\$6.75
Track Bid Rosetown Area	\$7.06	\$6.81	\$6.10	\$6.21	\$6.21
Gross Margin at Elevator (\$/bu)*	\$0.64	\$0.69	\$1.08	\$0.54	\$0.54
Gross Margin at Elevator (\$/mt)*	\$23.43	\$25.34	\$39.80	\$19.76	\$19.76
* to cover elevation, elevator market risk, r	margin				