

Wheat Market Outlook and Price Report: September 24, 2018 By Marlene Boersch/ A.P. Temple Mercantile Consulting Venture Inc.

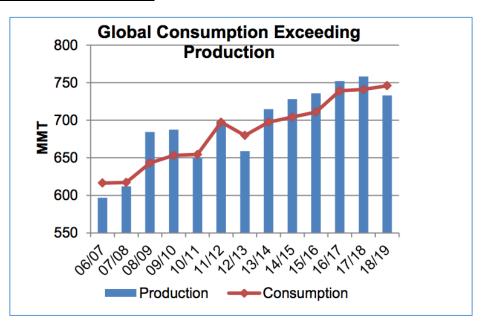
i) Background and Rationale for the Report

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 Sept. 17, 2018

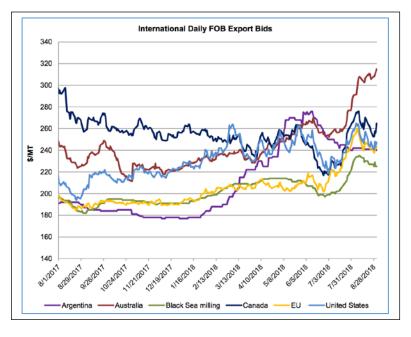
September USDA Wheat Numbers - The Basics:



 According to USDA, global wheat production is forecast down 3 percent from last year to the lowest level in 4 years. The largest year-to-year reductions are for the European Union and Russia, down by a combined 28 million tons, while U.S. production is forecast higher by nearly 4 million mt.



- Global consumption is forecast to continue growing and is set to exceed production by 13 million mt in 2018/19, the largest global shortfall in 6 years. Food, Seed, and Industrial consumption of wheat is projected to continue rising, more than offsetting lower Feed and Residual use.
- Wheat prices are already on the upswing in most major exporting countries.



> Global wheat production and trade:

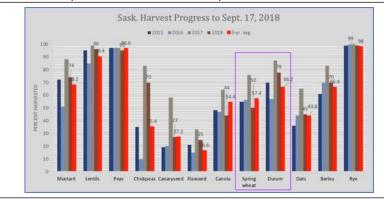
There is a lot of competition in the wheat markets as wheat is produced around the world. Below is a brief synopsis on last week's market events in the major wheat origins.

- Futures: U.S. wheat futures ended last week up supported by a weakening U.S.\$, improved U.S. exports and harvest delays in Canada. CBOT December wheat futures ended the week about 10 cents up at \$5.22/bu, KCBT added 9 cents to \$5.25/bu and MGEX gained 16 cents.
- **Funds:** Last week we saw Funds get less bullish on wheat. Funds are near square in Chicago, and while still long in KC, their KC wheat position dropped by ~21%. Fund managers went net short for the first time in several months on Minneapolis hard red spring wheat prices. Any sustained rally in wheat will have to be led by the cash markets.
- Matif: Matif wheat followed the US and Black Sea markets to a higher close.

Canadian wheat:

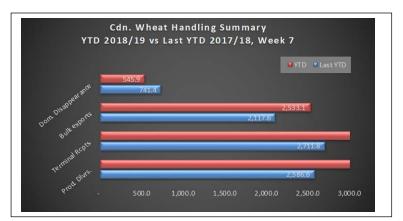
On the Cdn. prairies, a wet and cool week stalled most harvest operations. In addition to the rain/snow mix, frost has been highly variable. According to SAF, 62% of all crops is now in the bins in SK. The five-year (2013-2017) average is 53% for this time of year. Rain fell over the majority of the province, with the largest amounts being reported in the central and northern regions. Many areas in these regions recorded more than 30 mm of rain over the past week. Snow was reported in the northwest

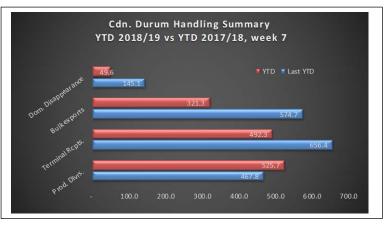
region. Spring wheat is 50%harvested versus the 5-year average of 57.4%, while durum is 78% harvested versus the 5-year average of 66.2%. There is increasing worry about the quality of the spring wheat yet to be harvested, especially in the northeast and northwest regions, where spring wheat harvest progress is at only 32% and 13%, respectively. Alberta spring wheat is 31.3% harvested, with only 5.2% progress in the Peace River area.



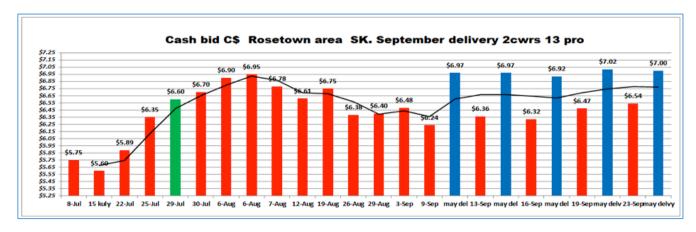


- Temperatures in Canada remain well below normal accompanied by widespread snow/precipitation. There also was very heavy rain reported in South Dakota, lowa, Minnesota and parts of North Dakota; confirmed reports had the rain totals from 3 to 11 inches in the last 72 hours.
- Wheat handling in Canada for the new '18/19 crop year is well ahead of last year's YTD data. Grower deliveries at 2.6 mln mt YTD are 21% ahead of last years. Export terminal receipts at 2.9 mln mt are 20% ahead of last years. And importantly, exports at 2.1 mln mt are 13% ahead of last years. Only domestic disappearance at 443k mt YTD lags last years by 14% (-10k mt). We can only hope exporters keep up the pace, because market conditions should allow then to do so.
- Contrary to wheat, the handling numbers for durum wheat are severely lagging last years. Only 321k mt have been exported compared to 575k mt last year to date.





• Regarding **Canadian grower bids for wheat**, note that the blue columns show the bids for deferred delivery. There are better bids than the one's shown. Deferred bids are not too bad.



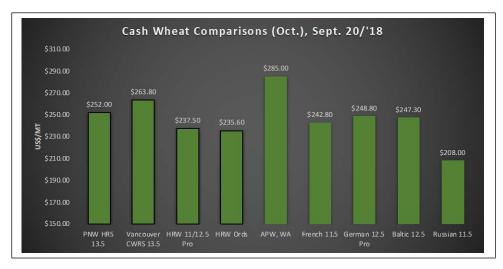
US wheat:

- Acc. to NASS ystdy this week, the US spring wheat crop was 97% harvested, 5% more than the avg. progress. The winter wheat crop was reported 13% planted vs. 12% avg. at this time.
- The nearby export basis for wheat softened slightly as exporters tried to fill out their October export
 program. Slow farmer and commercial warehouse selling continues to offset weaker export
 demand. With the typical fall PNW soybean program missing in action, PNW export basis softened
 due to increased export capacity and decreased freight costs.
- US export sales of 469k mt left the season total 375 mln bu still down 22% vs. last year, but were
 on the high side of expectations.



- Most FOB wheat prices (except for Russian 11.5% pro wheat) have been adjusted back up this week after the losses incurred following the recent USDA-WASDE reports. Good volume cash business since the report and concerns about the Australian wheat crop resurfaced. HRW is around \$13/mt below comparable EU wheat. And basis the much larger carrying charges in the Black Sea, HRW is even money with Russian wheat by Dec/ Jan. North American wheat should feature in the cash markets much more prominently than last crop year.
- For the Oct. position, Russian wheat still remains the cheapest wheat, as exporters are front-end loading wheat exports before export tariffs may be implemented. At \$285/mt, Australian APW wheat

remains the world's most pricey wheat. At current prices, EU wheat should stav mostly out of the world trade matrix. Australia will not have much for export; Russia cannot continue shipping at its current pace beyond January; the Ukraine does not have much milling wheat; Argentina is getting concerned over dryness, but



the US seems to have surprisingly good yields.

Cash markets remain the key drivers in this market.

Australian wheat:

- Australia got some heavy frosts with readings as low as 16°F (-9°C). At the same time, virtually the whole of the country remained dry.
- Australian wheat futures reached new highs last week. Futures rose A\$20 on the ongoing dry forecast and on fears that frost damage might have taken another 1-2 mln mt off the crop.
- Australian exporters have signed one of Australia's first N/C wheat export deals with 50k mt sold to Thailand. APW wheat was sold to flour millers in Thailand at ~US\$280/mt C&F for Dec/Jan arrival. Typically, ~3 mln mt of wheat have been sold by this time of year for shipments starting Dec. forward.

Argentine wheat:

- Rain in Argentina was confined to the east with the driest central regions missing out on precipitation.
- Argentine new crop 12% protein Fob wheat prices fell by US\$2/mt, but 12.5% protein wheat was unchanged taking the spread to almost US\$10/mt. But once again near zero export licences were taken last week.
- The Argentine Peso rallied almost 7% this week.

EU wheat:

- Matif in Europe closed above the 50-day moving average last Thursday.
- Cocereal in Europe pegged its estimate for the EU wheat crop at 129.9 mln mt, dropping almost 9 mln mt from its June est., leaving production down 8.1% on the year. Avg. EU yields came to 5.62 mt/ha, down from from 6.02 mt/ha in June. Yields in France and Germany (the EU's largest producers) fell to 7.11 mt/ha from 7.55 mt/ha in France, and to just 6.59 mt/ha from 7.6 mt/ha last year in Germany.



- We expect France to lose their Algerian wheat demand to Argentina December onwards (its only remaining major destination).
- We figure that with EU shipments already 41% down from last years plus GASC now buying 100% Black Sea wheat, there simply is no way the EU can achieve the USDA's 23 mln mt export number.

Black Sea wheat:

- In Russia, IKAR trimmed their wheat production estimate by 400k mt to 69.2 mln mt, and consultancy SovEcon cut Russia's wheat export projection by 900k mt to 33 mln mt.
- Nearby Black Sea wheat prices ended little changed on the week, but the monthly carries on the offered side rose to US\$10/mt.

> Significant purchases/ trades:

There was a good volume of cash trades last week:

- Saudi Arabia bought 635,000 mt of wheat for Nov-Dec arrival at an average \$268 basis Jeddah.
- Egypt (GASC) bought 475,000 mt of wheat for 1-20 Nov at around \$244.25/mt.
- Syria bought 20,000 mt of Russian wheat at a seemingly very cheap US\$224.50/mt.
- Turkey tenders Sep 25 for 250,000 mt wheat for 2-22 Oct. delivery.
- Japan bought 150,000 mt of US/ Canadian hard wheat in their weekly tender.
- **US** inspections were 406,000 tonnes (season total 224 myn bushels down 30%), sales were 469,000 tonnes (season total 375 myn bushels, down 22%).

Wheat Market Outlook:

Significant events:

- Cash markets for wheat have been unusually active, and remain the key drivers in this market.
- Traders seem to have increased worry about the **Australian wheat crop** (dryness and recent frost) and about Argentina's crop (lack of rain).
- The quality of Russian wheat is also getting added attention.
- It has also been noted that **Egypt** ended up paying more for wheat in their latest tender for the first time in several rounds of buying.
- It is too bad that the **Cdn. prices** for wheat consistently show a discount to world price levels. Having said that, deferred bids for spring wheat are quite decent as the chart in the introduction shows.
- Cash markets are moving higher.

Outlook:

Black Sea cash prices are rising, importers are faced with declining supplies of quality Russian wheat, US and EU wheat are more expensive nearby but are competitive in forward positions. It is very tough for the EU wheat market to go down when the interior is paying better levels for domestic use wheat than the export market. Cash markets are moving higher.

Canadian bids for deferred delivery wheat are pretty good. Note the chart on page 3; it shows that carry charges have widened and the prices bid in SK for May wheat are not too bad.



iii) Primary Elevator Price Tables and Grade Spreads

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

				Date:	September 24, 2018
NW Sask	Spot		NW Sask	Deferred	
	(bu.)	(mt)	IVVV Sask	May.'19 (bu.)	May '19 (mt.)
1 CWRS 13.5	\$6.76	\$248.39	1 CWRS 13.5	\$7.07	\$259.78
1 CWAD 13.0	\$5.77	\$212.01	1 CWAD 13.0	\$6.10	\$224.14
1 CPSR 11.5	\$5.79	\$212.75	1 CPSR 11.5	\$6.23	\$228.92
SW Sask			SW Sask		
1 CWRS 13.5	\$6.68	\$245.45	1 CWRS 13.5	\$6.99	\$256.84
1 CWAD 13.0	\$5.99	\$220.10	1 CWAD 13.0	\$6.15	\$225.98
1 CPSR 11.5	\$5.67	\$208.34	1 CPSR 11.5	\$6.15	\$225.98
NE Sask			NE Sask		
1 CWRS 13.5	\$6.44	\$236.63	1 CWRS 13.5	\$6.74	\$247.65
1 CWAD 13.0	\$5.72	\$210.18	1 CWAD 13.0	\$5.98	\$219.73
1 CPSR 11.5	\$5.55	\$203.93	1 CPSR 11.5	\$5.96	\$218.99
SE Sask			SE Sask		
1 CWRS 13.5	\$6.49	\$238.47	1 CWRS 13.5	\$6.83	\$250.96
1 CWAD 13.0	\$5.82	\$213.85	1 CWAD 13.0	\$6.14	\$225.61
1 CPSR 11.5	\$5.56	\$204.30	1 CPSR 11.5	\$6.00	\$220.46

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
 - 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:

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.
- 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 a	,	September 24, 2018		
	FOB Prices CDA ¹ (calculated)		Street Prices	Export Basis ²	
	West Coast	Great Lakes	Rosetown	Basis: West Coast-	
Type of Wheat	(Cdn./mt\$)	(Cdn.\$/mt)	(Cdn.\$/mt)	Centr. SK (Cdn\$/mt)	
DNS 14.0	\$327.75	\$303.05			
HRS	\$315.88				
HRW 11.5	\$315.88				
SWW 12.0	\$297.35				
1 CWRS 13.5 ³	\$327.75		\$245.08	\$82.67	
2 CWRS 13.0 ³	\$315.88		\$230.38	\$85.49	
3 CWRS ³	\$315.88		\$215.69	\$100.19	
CPS ³	\$290.70		\$204.66	\$86.04	
1 CWAD ⁴		\$311.13	\$216.05	\$95.07	
Competing wheat:	US\$/mt				
Russia 12.5 (Black Sea,					
25k mt)	\$220.00				
French 11.5 (Rouen)	\$241.92				
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% \approx 1 CRWS 13.5%; HRS \approx 2 CWRS 13.0%; HRW \approx 3CWRS; SWW \approx CPS

⁴Values derived to Lakehead FOB



ADDENDUM

Futures Driven Basis Calculation, Canadian Dollars per MT

Canadian Wheat - World Price Parities					September 24, 2018	
Canadian Funds		Grade				
PNW value/Vancouver	1CWRS13.5	2CWRS	3CWRS	Winter wht.	CPS	
May/June delivery	\$8.74	\$8.42	\$8.42	\$7.91	\$7.91	
Parity Track Rosetown	\$7.24	\$6.92	\$6.92	\$6.42	\$6.42	
Track Bid Rosetown Area	\$6.67	\$6.27	\$5.87	\$5.57	\$5.57	
Gross Margin at Elevator (\$/bu)*	\$0.57	\$0.65	\$1.05	\$0.85	\$0.85	
Gross Margin at Elevator (\$/mt)*	\$21.04	\$23.86	\$38.56	\$31.05	\$31.05	
* to cover elevation, elevator market risk i	marain					

to cover elevation, elevator market risk, margin