

Wheat Market Outlook and Price Report: July 29, 2019 By Marlene Boersch/ A.P. Temple Mercantile Consulting Venture Inc.

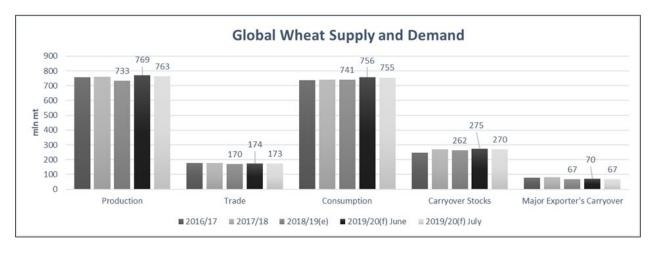
i) Background and Rationale for the Report

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 July 29, 2019

International Grains Council (IGC) July Projection of World Supply and Disposition



- The ICG lowered their **outlook for total grain (wheat and coarse grains) production for 2019/20** by 8 mln mt to 2,148 mln mt. Decreases were seen in world maize (China) and sorghum (US) production, but the largest contributor to the reduction was a 6 mln mt decrease in wheat production (Canada, the EU and Russia).
- Despite the reduction in expected wheat production, **global wheat production** is still expected to be a record of 763 mln mt, up 30 mln mt from last year.
- World wheat consumption estimates were lowered 1 mln mt from June to 755 mln mt, a 14 mln mt increase from last year. We think this is low as there will be more wheat used for feed due to the shortfall in corn production.
- The rise in production will well off-set the lower beginning stocks for a **final carryout** of 270 mln mt (+5 mln mt y/y).
- Carryout in major exporting countries (Argentina, Australia, Canada, EU, Kazakhstan, Russia, Ukraine, USA) however, is forecast to be similar to last year at 67 mln mt.



> Global wheat production and trade:

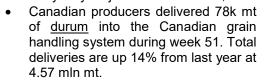
There is a lot of competition in the wheat markets as wheat is produced around the world. Below is a brief synopsis on last week's market events in the major wheat origins.

- **Futures:** Sept '19 contract **Chicago** winter wheat closed at 496-0, down 3-4 cents in Friday's trade, down 6-4 cents for the week.
- Sept '19 contract **Kansas** hard red winter wheat closed down 5-4 cents at 432-0, down 8-2 cents for the week.
- **Minneapolis**, Sept '19 contract hard red spring wheat closed at 524-4, up 1-4 cents in Friday's trade, down 4-4 cents for the week, while Dec '19 hard red spring wheat closed at 536-6, up 0-2 cents for the day, down 6-0 cents for the week.

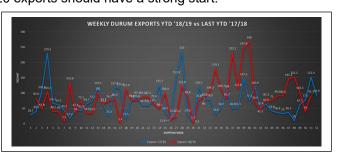
Canadian Wheat:

- Canadian producers delivered 256.3k mt of wheat (excl. durum) into the grain handling system during week 51, ending July 21th. YTD deliveries are now 20.72 mln mt, up 14% from last year.
- Exports through the week were 228.1k mt for a season total of 17.76 mln mt, up 12% (1.91 mln mt) from last year. Last week, AAFC raised wheat export projections another 200k mt to 19.2

mln mt. The remaining 1.4 mln mt will not be exported in the single week remaining in the MY, however, there is 982k mt worth of wheat sitting in Cdn. ports. So, while this year's exports will likely only be just over 18 mln mt, 2019/20 exports should have a strong start.



 Exports during the week were 91.3k mt for a season total of 4.43 mln mt, up 15% (581.1k mt) from last year. Just 68.7k mt worth of durum needs to be exported next week to reach the



CUMULATIVE WHEAT EXPORTS YTD '18/19 vs LAST YTD '17/18

AAFC's recently increased (+100k mt) estimate of 4.5 mln mt. There is currently 268.6k mt worth of durum sitting in Cdn. ports and we see no issues preventing us from reaching the AAFC's number.

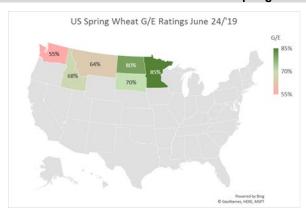
- Canadian producers delivered 108k mt of <u>durum</u> into the Canadian grain handling system during week 50. Total deliveries are up 16% from last year at 4.38 mln mt.
 Exports throughout the week were 39k mt for a season total of 4.3 mln mt, up 16% (+582k mt) from last year. AAFC has increased their '18/19 export forecast to 4.5 mln mt, which leaves ~170k mt to shipped to reach the revised forecast over the next 2 weeks.
- Manitoba agriculture says most of the MB spring wheat crop is in the milk stage, but hot and dry
 weather should cause this to advance rapidly. We expect producers in S MB will start harvesting
 winter wheat and fall rye this week while spring wheat harvest will likely begin in the next 2-3 weeks.
- Sixty-three percent of spring wheat in SK is in G/E condition. Sixty-seven percent of spring cereal development in SK is at normal development, while 31% of spring cereals are behind pace. Soil moisture through the majority of SK is very good.
- Wheat in AB is rated 75% G/E.

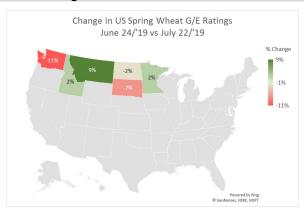


US wheat:

- The US HRS crop looks excellent and is progressing rapidly (harvest is expected to begin within the next 2 weeks). NASS left HRS condition ratings unchanged last week at 76% G/E, but 3% of this was moved from "good" to "excellent". Ninety-two percent of the crop has headed (in-line with the 5-year average), but just 15% of the crop has turned color (vs 44% avg.).
- Analysts expect HRS ratings to be steady to slightly higher this this afternoon.

US Spring Wheat Gd./Ex. Ratings





- The US spring wheat tour was conducted last week through ND and parts of MN and MO. The tour concluded with an average yield potential of 43.1 bpa, 5% higher than last year's average of 41.1 bpa.
- The Northern US durum crop lost some condition over the week. The ND crop is now rated 73% G/E while the MO crop is rated 61% G/E. Nine percent of the crop has turned color vs the 30% avg. The spring wheat tour conducted last week included estimates of US durum yields.
- The final day of the tour concluded with an average yield of 32 bpa, down from the 39.3 bpa last year and the 5-year average of 40 bpa.
- US winter wheat harvested is 69% complete, 10% behind average. Rain caused delays in SE NE and E CO, but warm dry weather supported harvest is most other regions. Average HRW grades is #1 HRW, consistent with last week. The final SRW samples were analyzed, and they did not change the overall average grade of #3 SRW. 2019's SRW was slightly heavier than last year (76.2 kg/hl vs 57.5), the falling number was lower (261 vs 265), protein was 0.6% lower at 9.3%, and DON values were 1.02 ppm higher than last year at 1.87 ppm.
- Wheat futures will continue to follow corn; we expect both markets to trail lower in the short-term leading into the Aug 12 WASDE report where we expect a large revision in corn planted/harvest acres. The shortfall in corn production creates the potential for feed wheat use to be large this year, otherwise quality is very strong, and the US winter wheat harvest is large.

Australian wheat:

• Showers benefited crops in the west and southeast, while drought remained entrenched in the northeast.

Argentine wheat:

 Warm, dry weather promoted growth of emerging winter grains and aided the final stages of summer crop harvesting.

EU wheat:

- The EU's crop monitoring service, MARS, lowered forecasts for soft wheat yields to 6.04 tph from 6.10 tph. This is still 1.6% higher than average and 7.3% better than last year.
- The French wheat harvest is 63% complete, up 30% from last week but still much behind the average pace of 88%.

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 Record hot temperatures in France caused condition ratings to deteriorate sharply last week, but the impact of this will likely be limited to speeding up harvest progress and will have minimal impact on yield.

Black Sea wheat:

- Sov Econ lowered it's estimates for the 2019 Russian wheat crop again. Production was lowered from 76.6 mln mt to 73.7 mln mt (USDA's 74.2 mln mt)
- Russian exports were also cut sharply from 37.6 mln mt to 31.4 mln mt (USDA's 34.5 mln mt).

Significant purchases/ trades:

It was a very quiet week last week.

- The only trade we heard of was Egypt who was said to have purchased 60,000 mt of Russian wheat at equal to US\$201.50/mt FOB or \$215.50 C&F.
- Net USA wheat sales as of July 11 of 347,000 mt for delivery in 2019/20 were 22% higher than last week's 284,000 mt and in line with trade expectations of 200,000 to 400,000 mt. Year-to-date commercial sales of 7.86 mln mt are 22% ahead of last year's pace. USDA forecasts 2019/20 U.S. wheat exports will total 25.9 mln mt, 6% higher than 2018/19 if realized.

Wheat Market Outlook:

Significant events:

- China announced last week that it would allow wheat imports from another Russian region which is a blow to the USA and Canada and not good news for any trade deal. China is already importing wheat from 6 other Russian regions.
- What the USDA does with their review of corn acres will be key to wheat futures prices. With
 extreme variability through the US, it is anyone's guess. We are confident the USDA will lower
 estimates for acres, but they will likely be conservative. The decrease in corn production makes
 the S&D very tight which makes us bullish feed grains and should be positive for wheat.
- Weather around the world: CANADIAN PRAIRIES: Locally heavy showers brought some relief from long-term dryness. EUROPE: Deteriorating conditions in the north and west contrasted with good to excellent summer crop prospects in the southeast. FSU: Widespread showers and cool temperatures were nearly ideal for reproductive summer crops, though pockets of dryness lingered in Ukraine. Excessive heat stressed reproductive spring grains in the west and flowering cotton in the south, while showers maintained excellent wheat prospects in eastern growing areas. BRAZIL: Light rain benefited wheat in southern production areas, while warm, dry weather aided corn and cotton harvesting farther north. INDIA: the monsoon is disappointing so far.

> Outlook:

Wheat will continue to drift lower in the short-term as harvest progresses and supply looks large. Russian/FSU wheat will continue to be the cheapest wheat offered with the EU getting more aggressive as harvest ramps up. We don't expect any pressure from North America until the corn estimate is released. The USDA will lower corn planted acres on Aug 12th, but we suspect the will be conservative. The decrease in corn production will be supporting to wheat.



iii) Primary Elevator Price Tables and Grade Spreads

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

	·			Date:	July 29, 2019	
NW Sask	Sp	Spot		Deferred		
INVV Sask	(bu.)	(mt)	NW Sask	Oct. '19 (bu.)	Oct. '19 (mt.)	
1 CWRS 13.5	\$6.19	\$227.45	1 CWRS 13.5	\$5.94	\$218.26	
1 CWAD 13.0	\$6.56	\$241.04	1 CWAD 13.0	\$6.23	\$228.92	
1 CPSR 11.5	\$5.66	\$207.97	1 CPSR 11.5	\$5.08	\$186.66	
SW Sask			SW Sask			
1 CWRS 13.5	\$6.06	\$222.67	1 CWRS 13.5	\$5.93	\$217.89	
1 CWAD 13.0	\$6.59	\$242.14	1 CWAD 13.0	\$6.31	\$231.85	
1 CPSR 11.5	\$5.16	\$189.60	1 CPSR 11.5	\$4.95	\$181.88	
NE Sask			NE Sask			
1 CWRS 13.5	\$5.94	\$218.26	1 CWRS 13.5	\$5.70	\$209.44	
1 CWAD 13.0	\$6.73	\$247.29	1 CWAD 13.0	\$6.37	\$234.06	
1 CPSR 11.5	\$5.48	\$201.36	1 CPSR 11.5	\$4.81	\$176.74	
SE Sask			SE Sask			
1 CWRS 13.5	\$5.94	\$218.26	1 CWRS 13.5	\$5.75	\$211.28	
1 CWAD 13.0	\$6.80	\$249.86	1 CWAD 13.0	\$6.47	\$237.73	
1 CPSR 11.5	\$5.33	\$195.85	1 CPSR 11.5	\$4.81	\$176.74	

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 14.0	0.05	1.89		
1 CWRS 13.5	Base Grade	Base Grade		
2 CWRS 13.5	(0.05)	-1.84		
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	(0.35)	-12.86		

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)
 - 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.

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Table 3: Relevant FOB Prices and calculated Basis, US & Canadian Dollars per MT

Relevear	nt FOB Prices and	Export Basis		July 29, 2019
	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	\$301.85	\$6.76	65), di III	
HRS	\$297.88	\$0.70		
HRW 11.5	\$276.26			
SWW 12.0	\$303.79			
			4007.45	A-1.1.
1 CWRS 13.5 ³	\$301.85		\$227.45	\$74.41
2 CWRS 13.0 ³	\$297.88		\$216.42	\$81.45
3 CWRS ³	\$276.26		\$209.07	\$67.18
CPS ³	\$297.02		\$204.66	\$92.36
1 CWAD ⁴		\$305.72	\$0.00	\$305.72
Competing wheat:	US\$/mt			
Russia 12.5 (Black Sea, 25k mt)	\$195.00			
French 11.5 (Rouen)	\$197.10			
APW 10.5 (W Coast)	\$232.00			
Argentine 12.0	n/a			

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

				July 29, 2
		Grade		
1CWRS13.5	2CWRS	3CWRS	Winter wht.	CPS
\$8.03	\$7.92	\$7.33	\$8.08	\$8.08
\$6.53	\$6.43	\$5.84	\$6.59	\$6.59
\$6.19	\$5.89	\$5.69	\$5.57	\$5.57
\$0.34	\$0.54	\$0.15	\$1.02	\$1.02
\$12.66	\$19.71	\$5.44	\$37.37	\$37.37
	\$8.03 \$6.53 \$6.19 \$0.34	\$8.03 \$7.92 \$6.53 \$6.43 \$6.19 \$5.89 \$0.34 \$0.54	1CWRS13.5 2CWRS 3CWRS \$8.03 \$7.92 \$7.33 \$6.53 \$6.43 \$5.84 \$6.19 \$5.89 \$5.69 \$0.34 \$0.54 \$0.15	1CWRS13.5 2CWRS 3CWRS Winter wht. \$8.03 \$7.92 \$7.33 \$8.08 \$6.53 \$6.43 \$5.84 \$6.59 \$6.19 \$5.89 \$5.69 \$5.57 \$0.34 \$0.54 \$0.15 \$1.02