

Wheat Market Outlook and Price Report: December 16, 2019 By Marlene Boersch/ A.P. Temple Mercantile Consulting Venture Inc.

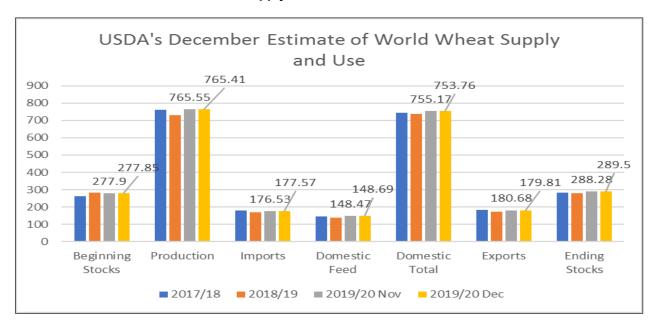
i) Background and Rationale for the Report

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 Dec 10, 2019

USDA December 2019 World Wheat Supply and Demand Outlook



• WASDE made largely offsetting revisions to world wheat supply: Australian wheat production was down 1.1 million mt to 16.1 million mt, Argentine wheat production was cut 1.0 million mt to 19 million mt, Canadian production was down 700k mt to 32.4 million mt, Chinese production was put 1.6 million mt higher to 133.6 million, EU and Russian production were each raised 500k mt to 153.5 million mt and 74.5 million mt respectively. Overall, world production was seen just 140k mt lower at 765.41 million mt (excluding China, world production was down 1.73 million mt).



- Global exports were cut 900k mt, because of reductions in Argentina, Australia and Canada. There were smaller increases for Russia and the US.
- As global use was seen 1.4 million mt lower, ending stocks were raised 1.2 million mt to a record 289.5 million mt (vs the trade's expected 286 ml mt). Excluding China, ending stocks are down 570k mt from last month at 142.04.
- There are still a number of issues with the USDA's current numbers: Australian wheat production at 16.1 million mt (vs ABARES 15.9 million and private estimates ranging from 15-15.5 million) is still too high, EU exports are likely too low as current EU exports are up 52% y/y vs the USDA's 24% increase, and finally, the EU crop is likely bigger than 153.5 million mt which is 2.3 million mt below Brussel's number.

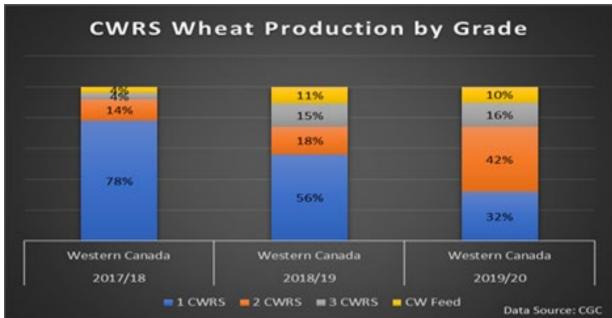
> Global wheat production and trade:

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: Mar '20 contract Chicago winter wheat closed at 532-4, up 2-2 cents for the day, up 8-4 cents for the week.
 - Mar '20 contract **Kansas** hard red winter wheat closed at 442-6, unchanged for the day, *up 12-0 cents for the week.*
 - In **Minneapolis**, Mar '20 contract hard red spring wheat closed at 525-6, up 2-6 cents for the day, up 14-2 cents for the week, while May '20 hard red spring wheat closed at 534-0, up 2-6 cents for the day, up 13-4 cents for the week.

Canadian Wheat:

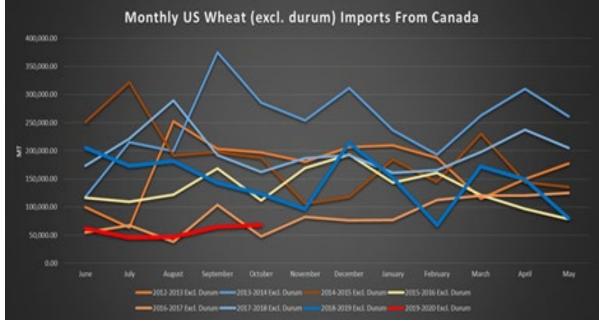
• Due to the late harvest across the Western Prairies, the CGC extended the deadline of the grain sample grading program through to the end of Dec 31st. The graph illustrates the latest update from the CGC about the quality of the Canadian CWRS crop vs the past two years.



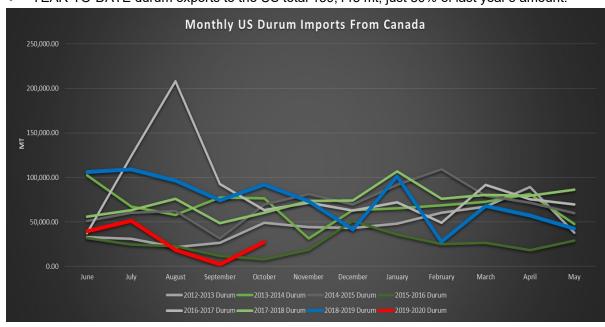
- According to the CGC, 74% of the 5,085 samples received made a No. 1 or 2 CWRS grade. This
 is exactly the same % as last year. The large difference between the two years is that 56% of the
 2018 crop made a No. 1 grade last year while just 32% of the crop made a No 1 grade in 2019.
- The average protein of the 2019 CWRS crop is 13.3% pro with a standard deviation of 1.3 vs 13.64% and 1.4 respectively last year.



We doubt that the quality of the Canadian crop is as high as is being reported and must note that
as participation in the Sample Program is voluntary, it is impossible to not have a biased sample.
The lower grade of the Canadian. crop is likely further hindering exports as most of Canada's wheat
exports are a No 1 or 2. More blending will be needed this year, and new markets will need to be
found.



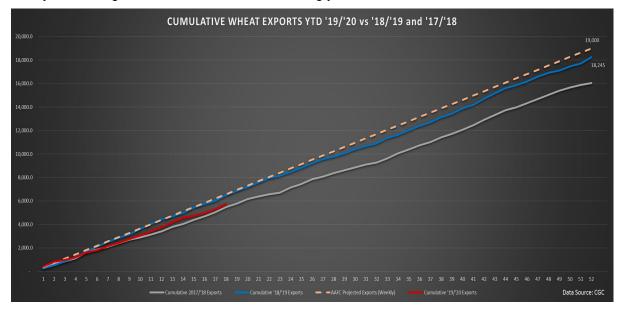
- The USDA decreased US HRS and durum imports from Canada by 5 million bu and 10 million bu respectively. According to US customs data, Canadian wheat (excl. durum) exports to the US YEAR-TO-DATE Jun-Oct are 478,945 mt, just 58% of last year's amount. So far, exports are tracking with marketing year 2016/17, where the US imported a total of 1.04 million mt of wheat (excl. durum) from Canada.
- YEAR-TO-DATE durum exports to the US total 139,445 mt, just 30% of last year's amount.



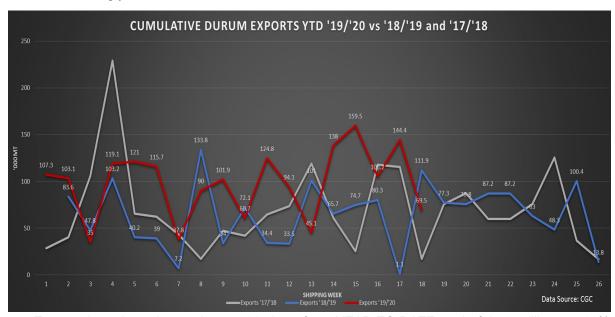


Monthly Exports of Canadian Wheat and Durum to the US YEAR-TO-DATE Jun-Oct

• Canadian producers delivered 481.1k mt of wheat (excl. durum) into the Canadian grain handling system during week 18 of the 2019/20 marketing year.



- Exports during the week were up to 456.1k mt for a YEAR-TO-DATE total of 5.78 million mt, <u>733.9k</u> mt (11%) less than this time last year.
- Canadian producers delivered 143.6k of durum into the grain handling system during week 18 of the marketing year.



- Exports throughout the week were 69.5k mt for a YEAR-TO-DATE total of 1.79 million mt, 60% (670.6k mt) more than this time last year.
- Given the wheat values that have traded in recent weeks, Canada should be doing more wheat business, particularly in durum and lower grade wheat.
 - Durum was traded for values that reflect ~US\$280/mt parity Thunder bay.
 Accounting for the exchange rate and backing off 112 car rail freight rates and actual handling expenditures calculates to C\$324.19/mt (\$8.82/bu) at the elevators in

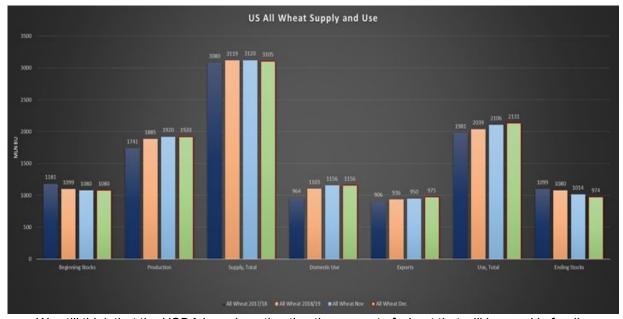


central SK. The current posted bid is \$8.00, making a generous \$30.27/mt margin after costs.

- Meanwhile, feed wheat prices that traded last week make Canadian country elevator prices look way too low. The Philippines bought 100,000 tonnes of Mar-Apr feed at \$239.00/mt and Korea bought 60,000 tonnes of feed also at \$239.00/mt. These prices reflect about C\$292.00/C\$7.94 per bushel FOB Vancouver which backs off to \$6.50/bu at the elevator in Central SK. Compared with the current bid of \$5.29 gives a huge \$1.30/bu (\$48.12/mt) margin.
- Canadian basis levels continue to lag US levels, while firming Minneapolis futures have allowed grain elevators to increase offered prices without improving basis. World values continue to trade at levels that provide Cdn. elevators ample room for basis improvement, something that will happen later in the winter when higher quality supplies is harder to find. We do not see any reason to sell before Christmas, especially given current Canadian prices.

US wheat:

- The USDA put US wheat supplies to a 5-year low because of the rise in US exports and decreases in imports. US all wheat ending stocks were put 40 million bu lower than last month to 974 million bu as imports were down 15 million but and exports were raised 25 million bu to 975 million bu (a 4% increase over last year).
- By-class, HRW exports were raised 10 million bu, HRS was up 5 million bu and durum was up 10 million bu. HRS and durum supply was reduced 5 million bu and 10 million bu, respectively, because of lower projected imports (from Canada). This causes ending stocks to be 10 million bu lower for HRS (to 269 million bu) and 20 million bu lower for durum (to 26 million bu).



- We still think that the USDA is underestimating the amount of wheat that will be used in feeding as the slow US harvest has HRW remaining at a discount to corn. Finally, there is more talk that 2020/21 SRW stocks are going to be tight to the point that the market will have to slow wheat feeding. Deferred CBOT wheat will post additional gains to deferred KC wheat.
- US weekly wheat sales were just above trade's 200-500k mt expectations at 502,700 mt.
- HRS made up the bulk of last week's sales, accounting for 219,303 mt.
- Now halfway through the marketing year, average weekly US sales are 472k mt/week, up 5.04% from the same time last year.
- Shipments are an average of 475.6k mt/week, up 18% from last year.



Australian wheat:

- Harvest in Australia is 75% complete, and disappointing yields have some analysts dropping production forecasts below 15 million mt (vs ABARES 15.9 million and USDA's 16.1 million).
- The USDA decreased Aussie production by 1.1 million mt, they also lowered exports 600k mt and added to domestic use.
- Sorghum harvest is ongoing, poor yields are making the extremely tight feed situation even more
 evident.
- Aussie Fob values rose \$5/mt from last week and APW is now priced \$250.00/mt FOB.

Argentine wheat:

- Harvest in Argentina is 61% complete (60% last year). BAGE kept their crop estimate at 18.5 million (vs USDA's 19 million).
- The USDA lowered Argentina's wheat production by 1 million mt, which came straight out of exports.
- There were conflicting statements about Argentina's new government's export tariff regime. Reuters reported that the export tax on wheat and corn will rise from 7% to 12%, while local sources say that it will rise to just 9%. Adding to the confusion, is the government's announcement that it would halt issuing further licenses.
- Argentine Fob wheat was nominally \$0.50/mt lower than last week at \$196.00-\$200.00/mt.

EU wheat:

- Precipitation across Europe brought a definitive halt to field work making it likely that 10% of the French crop will not be planted while the UK could be as high as 30%.
- France reported that their durum crop is 1.545 million mt, down from 1.795 million mt. The higher than expected yield was offset by a 29% decrease in harvested area.
- France's farm ministry decreased their '20/21 winter wheat area just 5% to 4.73 million ha 5.6% below the past 5-year average (which likely is too optimistic). They also said that the 2020/21 planted area to durum is expected to fall another 7%, pointing towards another y/y decrease in production.
- Strategie Grains is expecting 2020/21 EU wheat production to be slightly lower at 140.5 million mt
 vs this year's large 145.8 million mt production. Wheat is expected to be planted on 23.2 million ha,
 vs 23.8 million this year.
- Fob values in the EU were stronger again to finish the week with French 11.5 pro bid at \$208.93 (+\$1.13 from last week), German 12.5 pro bid at \$212.11 (+\$1.70) and Baltic 12.5 pro was bid at \$212.11 (+\$212.11).

Black Sea wheat:

- Russian Dec exports are expected to be 2.2 million mt, bringing the season total to 20.3 million mt vs 24.7 million mt last year. This decrease is being offset by Ukraine where Jul-Nov exports total 13.7 million mt vs 9.5 million mt last year.
- Russian wheat prices are on the rise due strong demand from exporters and domestic stockpiling by processors. Black Sea values are up \$4.00 from last week with Russian 12.5 pro Fob valued at \$216.00 while Ukrainian was bid at \$206.00

Significant purchases/ trades:

- **Egypt** (GASC) bought 355,000 mt of Russian, Romanian, Ukraine and French wheat for Feb 5-15 at an average \$238.25/mt C&F, a season high price and \$2.50 above the previous level.
- The Philippines bought 100,000 mt of Mar-Apr feed wheat at \$239.00/mt.
- Korea bought 60,000 mt of feed wheat, also at \$239.00/mt.
- Tunisia bought 92,000 mt of Jan-Feb soft wheat at \$236.25, plus 125,000 mt of Jan-Mar durum at \$318.50/mt.
- Syria tenders on Jan 20 for 200,000 mt of Russian wheat, in addition to the Dec 18 tender for 150,000 mt.



- **USA** inspections were 314,000 mt (season total 478 million bu, <u>up 18%</u>), sales were 503,000 mt (season total 623 million bu, up 4% and in line with the USDA revision).
- **EU** shipments rose by 800,000 mt to 11.95 million mt, <u>up 55%</u> on last year.
- Canadian exports year to date are <u>down 11%</u> with a large carryover.
- Weather Around the World:
 - The weekend saw good rains in northern **Argentina**, but the south was dry, and the forecast maintains a similar pattern for the coming week. Central and southern **Brazil** will see good rains but the north-east remains dry. **Europe** maintains a west-east wet-dry split with above normal in the west, and much above from the Balkans to the Caspian. **Australia** remains completely dry and could see record breaking and life-threatening heat this week.

Wheat Market Outlook:

Significant events:

- Optimism remains high as a US-China trade deal has been agreed to in principle. The agreement effectively delays the new round of US tariffs that were to come into effect Sunday. While many news wires jumped to the story saying that the deal has been completed, this is simply not true (yet). China still has concerns about the hard ag purchase targets (which are currently far too high).
- WASHINGTON, Dec. 12, 2019 Private exporters reported to the U.S. Department of Agriculture reported export sales of 1,600,200 metric tons of corn for delivery to Mexico. Of the total, 1,074,420 metric tons is for delivery during the 2019/2020 marketing year and 525,780 metric tons is for delivery during the 2020/2021 marketing year.
- All wheat futures ended up week-over-week after USDA raised its 2019/20 US wheat exports estimate on stronger than expected commercial sales. Soft red winter (SRW) March futures gained 8 cents on the week to end at \$5.32/bu. Hard red winter (HRW) March futures gained 12 cents to close at \$4.43/bu. Hard red spring (HRS) March futures gained 14 cents to close at \$5.26/bu.
- Lower rail rates and increased farmer selling following the Dec. 12 futures rally pressured Pacific Northwest (PNW) and Gulf HRS export basis for nearby and deferred deliveries. News of a USDA tender for 60,000 metric tons (MT) of white wheat for shipment to Yemen increased soft white (SW) export prices for delivery in January. Strong domestic demand and tight exportable supplies supported SRW export basis for nearby delivery. The Great Lakes St. Lawrence Seaway System will close for the season on December 31, 2019 and will re-open in March 2020.
- US corn harvest is up another 3% from last week at 92% complete. North Dakota is just 43% done, while Wisconsin and Michigan are both just 74% done.
- Weather around the world:
 - Argentina is the most concerning with another dry week expected, with temperatures above normal and declining soil moisture as the early corn crop moves into pollination. Brazil will see near normal rainfall and building soil moisture levels. Significant rain will persist in Western Europe (except for Iberia) whilst the east and Black Sea will stay dry. Temperatures remain above/much above normal everywhere. Winter plantings remain a problem in Europe. Australia remains totally dry and hot.

> Outlook:

In their WASDE report, the USDA partially offset crop losses in the Southern Hemisphere by increases in the EU and Black Sea, and non-China world wheat stocks fell by 600,000 tonnes from last month.

We note that US wheat inspections were 314,000 tonnes (season total 478 myn bushels, <u>up 18%</u>), sales were 503,000 tonnes (up season total 623 myn bushels up 4% and in line with the USDA revision).

EU shipments rose 800,000 tonnes to 11.95 Mmt, up 55% on last year.

In contrast, Canadian exports year to date are <u>down 11 percent</u> – with a large carryover.



Thanks to the good demand, Black Sea prices soared to season highs late week with Jan 12.5 pro trading Friday at US\$216.00/mt and the 11.5 pro and feed wheat discounts were very nominal.

Cash prices continue to rally to fresh season highs; farmers in Europe will wrap up shop until the New Year. A break in the market is unlikely until 2020, particularly given the seeming confirmation of a US-China Phase One trade agreement. We don't see any need to sell before Christmas especially given the depressed Canadian bids for food or feed grains.

iii) Primary Elevator Price Tables and Grade Spreads

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

NW Sask	Spot		NIM CI-	Deferred		
	(bu.)	(mt)	NW Sask	Feb. '20 (bu.)	Feb. '20 (mt.)	
1 CWRS 13.5	\$6.09	\$223.77	1 CWRS 13.5	\$6.21	\$228.18	
1 CWAD 13.0	\$7.37	\$270.80	1 CWAD 13.0	\$7.42	\$272.64	
1 CPSR 11.5	\$0.00	\$0.00	1 CPSR 11.5	\$0.00	\$0.00	
SW Sask			SW Sask			
1 CWRS 13.5	\$6.03	\$221.57	1 CWRS 13.5	\$6.07	\$223.04	
1 CWAD 13.0	\$7.41	\$272.27	1 CWAD 13.0	\$7.47	\$274.48	
1 CPSR 11.5	\$4.97	\$182.62	1 CPSR 11.5	\$5.02	\$184.45	
NE Sask			NE Sask			
1 CWRS 13.5	\$5.82	\$213.85	1 CWRS 13.5	\$5.97	\$219.36	
1 CWAD 13.0	\$7.45	\$273.74	1 CWAD 13.0	\$7.53	\$276.68	
1 CPSR 11.5	\$0.00	\$0.00	1 CPSR 11.5	\$0.00	\$0.00	
SE Sask			SE Sask			
1 CWRS 13.5	\$5.89	\$216.42	1 CWRS 13.5	\$6.02	\$221.20	
1 CWAD 13.0	\$7.54	\$277.05	1 CWAD 13.0	\$7.61	\$279.62	
1 CPSR 11.5	\$5.01	\$184.09	1 CPSR 11.5	\$5.02	\$184.45	

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	0.05	1.89	
1 CWRS 13.5	Base Grade	Base Grade	
2 CWRS 13.5	(0.10)	-3.67	
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)

Mercantile - Wheat

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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."



- 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 (Canadia 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 YEAR-TO-DATE (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

Relevear	December 16, 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	\$349.51	#VALUE!			
HRS	\$343.53				
HRW 11.5	\$305.58				
SWW 12.0	\$298.82				
1 CWRS 13.5 ³	\$349.51		\$224.14	\$125.37	
2 CWRS 13.0 ³	\$343.53		\$200.25	\$143.27	
3 CWRS ³	\$305.58		\$161.67	\$143.90	
CPS ³	\$292.06		\$197.32	\$94.74	
1 CWAD ⁴		#VALUE!	\$293.95	#VALUE!	
Competing wheat:	US\$/mt				
Russia 12.5 (Black Sea, 25k mt)	\$216.00				
French 11.5 (Rouen)	\$208.93				
APW 10.5 (W Coast)	\$247.00				
Argentine 12.5	\$195.00-200.00				

¹ FOB Prices CDA = FOB US\$ converted into Canadian Currency

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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

^{*}Note: The Great Lakes are closed, thus no bids posted were #VALUE is shown. *



ADDENDUM

Futures Driven Basis Calculation, Canadian Dollars per MT

Canadian Wheat - World Price F	arities				December 16, 2019
Canadian Funds			Grade		
PNW value/Vancouver	1CWRS13.5	2CWRS	3CWRS	Winter wht.	CPS
May/June delivery	\$9.33	\$9.17	\$8.13	\$7.95	\$7.95
Parity Track Rosetown	\$7.83	\$7.67	\$6.64	\$6.45	\$6.45
Track Bid Rosetown Area	\$6.10	\$5.45	\$4.40	\$5.37	\$5.37
Gross Margin at Elevator (\$/bu)*	\$1.73	\$2.22	\$2.24	\$1.08	\$1.08
Gross Margin at Elevator (\$/mt)*	\$63.62	\$81.53	\$82.16	\$39.76	\$39.76
* to cover elevation, elevator market risk, margin					