

Wheat Market Outlook and Price Report: October 4, 2021

By Marlene Boersch/ A.P. Temple/ Michael Wilton
Mercantile Consulting Venture Inc.

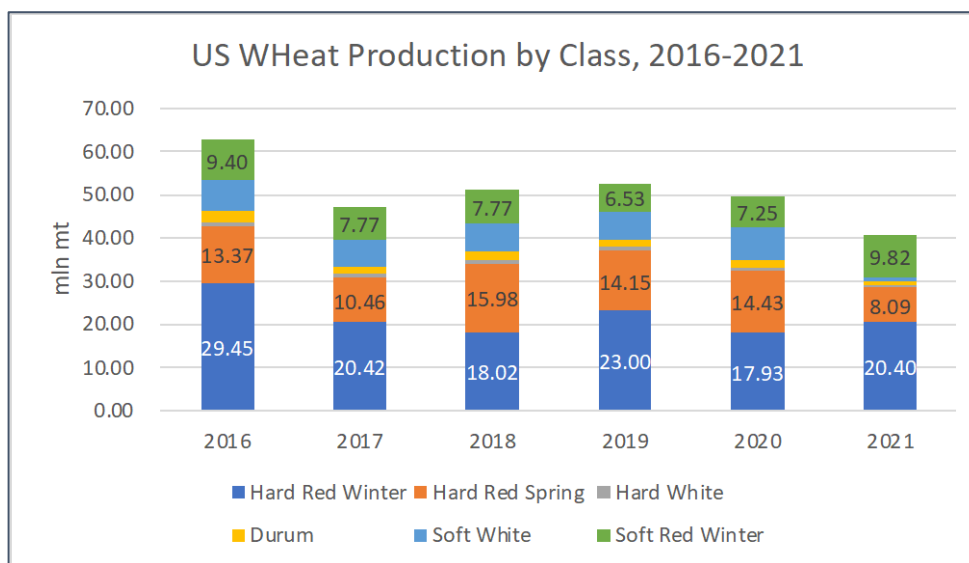
i) Background and Rationale for the Report

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 October 4, 2021

USDA – US Wheat Production by Class:



Source: Mercantile based on most recent USDA data

- According to the USDA Small Grains Summary last week, the 2021 US wheat production dropped by 12% or -5.8 million mt from 2020.
- Specifically, soft White wheat, Hard Red Spring Wheat and Durum wheat production dropped by a big 47%, 44% and 45% respectively.
- The classes Soft Red Winter and Hard Red Winter wheat were the only classes to increase in production and did so by ~ 2.5 million mt each.
- Hard Red Spring Wheat and Durum wheat, which both compete directly with Canadian wheat are down by 6.3 million mt and 840k mt, respectively.

- The following table summarizes the US wheat production data by type of wheat over the past five years:

US Wheat Production By Class, 2016-2021 (USDA data)								
	2016	2017	2018	2019	2020	2021	Δ in %	Δ in mt
Hard Red Winter	29.45	20.42	18.02	23.00	17.93	20.40	114%	2.47
Hard Red Spring	13.37	10.46	15.98	14.15	14.43	8.09	56%	-6.34
Hard White	0.90	1.01	0.89	0.87	0.65	0.55	85%	-0.10
Durum	2.80	1.44	2.08	1.46	1.85	1.01	55%	-0.84
Soft White	6.90	6.20	6.50	6.60	7.60	4.00	53%	-3.60
Soft Red Winter	9.40	7.77	7.77	6.53	7.25	9.82	135%	2.57
Total	62.82	47.30	51.24	52.61	49.71	43.87	88%	-5.84

➤ 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. '21 contract **Chicago winter wheat** closed at 755-2, up 29-6 cents on Friday, up 31-4 cents on the week.
 - Dec. '21 contract **Kansas hard red winter wheat** closed at 759-4, up 27-6 cents in Friday's trade, up 39-6 cents on the week.
 - Dec. '21 **Minneapolis hard red spring wheat** closed at 929-0, up 16-4 cents on Friday, up 13-0 cents on the week.
- USDA reports on Sept. 30th were bullish for wheat which led to a strong rally into the weekend.

CBOT Dec. 2021 Wheat (1 yr.)



KC Dec. '21 Wheat

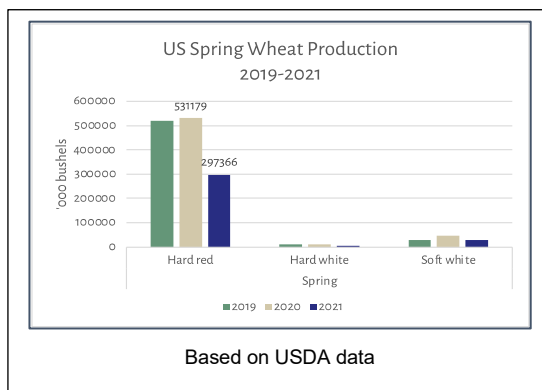


Mpls. Dec. '21 Wheat



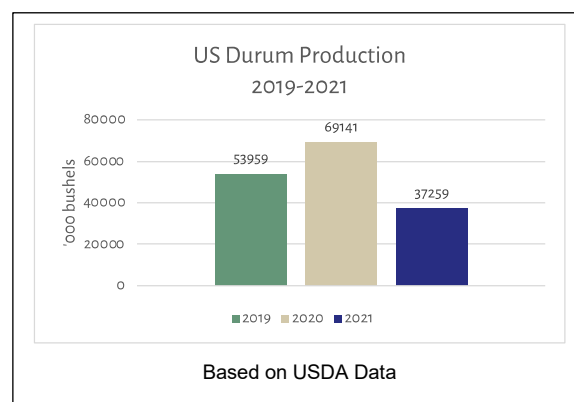
Canadian Wheat:

- USDA lowered US “other spring wheat production” slightly (-12 million bushels) from the August report to 331 million bushels. However, this is down 44% from last year. The decrease this month came largely from a 1.1 million acre cut in harvested acres to 10.165 million acres. US HRS wheat is a strong competitor of Canadian wheat and the shortfall in US production will be positive for Canadian wheat.
- Latest CGC harvest sample data shows that average Canadian protein levels are 14.8%, down 2 points from last week.
- In shipping week 7, Canadian spring wheat exports were 265.3k mt for a season total of 2.34 million mt, 73% (-876.8k mt) of last year’s volume.



(CGC) Grain Handling Summary Wheat	Wk. 8	(Sept 26/'21)			
			Terminal Rcpts.	Bulk exports	Dom. Disappearance
('000 mt)	Prod. Dlvsr.				
Wk. 8	265.9	369.4	265.3	76.4	
Week ago	355.8	364.9	329.4	72.2	
YTD	2,681.0	3,223.9	2,346.1	778.8	
Last YTD	3,336.5	4,478.0	3,222.9	890.2	
YTD less Last YTD	-655.5	-1,254.1	-876.8	-111.4	
YTD over Last YTD	80%	72%	73%	87%	

- It is interesting to note that Canada has already bought 17.9 k mt of US SRW and 3.3k mt of US white wheat this marketing year. This time last year Canada had only purchased 2.4k mt of white wheat. Most of this wheat has not been imported yet, but we expect the majority of the SRW wheat will be brought to mills in S Ontario. Imports of SRW will be higher this year as Canadian mills will need more low protein wheat than usual to blend with high protein Canadian wheat.
- *Bullish USDA numbers for wheat have moved the wheat markets higher. We still do not see reason to expand sales for now as end users continue to expand coverage.*
- **Durum:** According to the USDA small grains summary, US durum production for 2021 was 37.26 million bushels, up 2 million bushels from the August estimate, but down 31.89 million bushels (-46%) from last year.
- Durum stocks in the US as of Sept. 1 were down 34% from last year at 46.9 million bushels (71.0 million bushels last year).
- The record low production and tight stocks in the US will be positive for Canadian durum prices. We have seen this recently as durum bids have risen back to the \$20/bushel level.



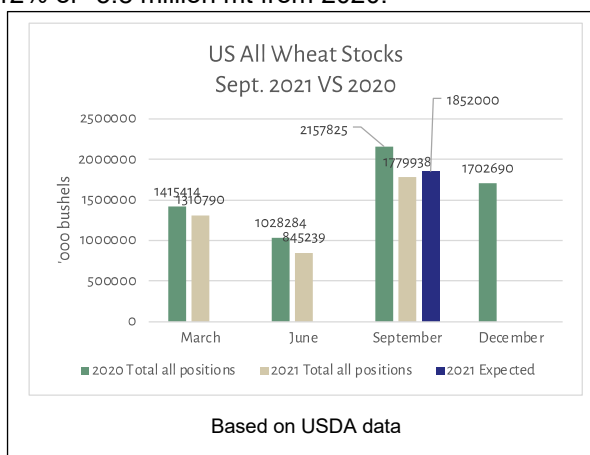
- Shipping week 8 durum exports were 36.5k mt for a season total of 575.7k mt, 39% (139.6k mt) more than last year.

(CGC) Grain Handling Summary Durum	Wk. 8	(Sept 26/'21)		
('000 mt)	Prod. Dlvs.	Terminal Rcpts.	Bulk exports	Dom. Disappearance
Wk. 8	96.6	75.6	36.5	9.8
Week ago	105.3	47.1	63.6	3.4
YTD	583.7	458.5	575.7	31.3
Last YTD	759.0	748.7	436.1	65.8
YTD less Last YTD	-175.3	-290.2	139.6	-34.5
YTD over Last YTD	77%	61%	132%	48%

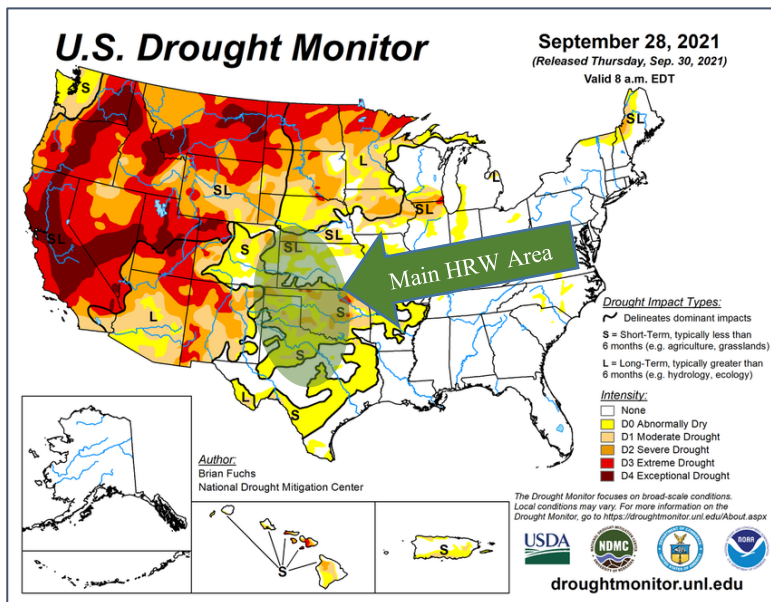
- Local durum bids have started to rise again, reflecting the rise in global wheat prices.

US Wheat:

- USDA reports on Sept. 30th were bullish for wheat which led a strong rally into the weekend.
- In the small grains annual summary, *USDA put US wheat supplies at the lowest level in 14 years.* The 2021 US wheat production dropped by 12% or -5.8 million mt from 2020.
- The decrease in production as per the USDA contributed to the small 1,780 million bushel stock number. This was 72 million bushels less than expected and 378 million bushels less than last year.
- Winter wheat planting in the US is 34% complete.
- The final US wheat samples have been tested, below is a summary of the average grades of the most important quality aspects.
 - HRW: No. 1 HRW. Protein is 11.9% (same as last year) and falling number is 1 second higher than last year at 368 seconds.
 - SRW: No. 2 SRW. Protein is same as last year at 9.4% and falling number is well below last year at 294 seconds (319 last year).
 - White: No. 2 SW. Protein is 11.3% (9.8% last year) and falling number is 334 seconds (323 last year).
 - HRS: No. 1 DNS. Protein is 1% higher than last year at 15.4% and falling number is significantly higher at 425 seconds (390 last year).
 - Durum: No. 1 HAD. Protein is 1.9% more than last year at 15.5% and falling number is slightly higher at 421 seconds.
- Winter wheat planting in the US is 34% complete.



- Dry weather conditions have extended the drought all the way from North Dakota to Texas.



- US HRS for Oct. '21 is valued at \$412.00/ mt FOB PNW (down \$1/mt from last week), FOB Gulf HRW 11/12.5 pro is valued at \$343.60/mt (down \$1.20/mt from last week).

Australian wheat:

- Australian crop prospects remain generally quite good, and China was again reported as a significant buyer this past week.
- Australian new crop FOB APW wheat for Dec.'21 was quoted at \$320.00/mt, unchanged from last week.

Argentine wheat:

- Information on the *Argentine GM wheat situation* remains sketchy and unclear, and for now everything should be treated with caution. However, there are reports that suggest that planting of GM wheat in Argentina is scattered over a wide area, but regions in the south of BA province close to Bahia Blanca are cited. If correct, this will heighten concerns for the export market.
- In response to the GM wheat seed reports, Brazilian flour millers are threatening to stop buying wheat from Argentina if Brazil approves 'GMO' wheat imports.
- Background:
 - Argentina's Bioceres SA has developed a genetically modified wheat resistant to drought and ammonium glufosinate. This GMO wheat has reportedly been planted on 55,000 hectares.
 - Brazil imports 6-7 million mt of wheat annually, most of which comes from Argentina. If a GMO ban were to occur, it could have a considerable impact on world trade and FOB spreads. Argentina might be obliged to find other destinations, which could lead to lower FOB prices to compensate for the higher freight rates to go further afield, always assuming of course that they could find other destinations that would accept GM imports. At the same time, the US, Russia, and the EU would be vying for access to Brazil's market.
- FOB values for Oct. 12% protein Argentine wheat ranged from \$290-295/million mt, unchanged from last week.

EU wheat:

- Matif wheat hit contract highs rising almost €7/mt in the immediate aftermath of the USDA report but gave back €5/mt into the close of the week.
- Aside from the USDA report, support came from ongoing importer demand which continues unabated. Tunisia is back in the market for the Nov-Dec position, and *it should be noted the vast bulk of all recent business is for nearby positions, and forward cover remains poor.*
- FOB prices in the EU: Oct. French 11.5 pro closed at \$309.80/mt, down \$0.90/mt from last week. Oct. German 12.5 pro wheat closed at \$316.00, up 0.20/mt. Oct. Baltic 12.5 pro wheat was at \$314.40/mt, up \$0.80/mt.

Black Sea wheat:

- Black Sea markets are concentrating on the nearby as the Russian export tax continues to rise. Another \$4/mt increase is expected next week. This makes forward positions tough to price.
- There are also still questions about harvested 2021 crop acres and planted acres for the 2022 crop. Dryness was again an issue for seeding, it is now too late in some regions for crops to get established before winter.
- Russian 12.5 pro wheat for Oct. is offered at ~\$310.00/mt, up \$10.00/mt from last week.

➤ **Significant purchases/ trades:**

- **Tunisia** was back in the market over the weekend for 125k mt of wheat for Nov-Dec.'21.
- **Algeria** bought an estimated 450kt of wheat at around \$364/mt.
- **Pakistan** was in the market for 640k mt with the lowest offer put at \$377/mt.
- **Jordan** was in for 120k mt of wheat.
- There are **more Chinese vessels** appearing on the French line-up.
- **US export sales** were again slow at 290k mt leaving the season total of 408 million bu down 20% on last year.

➤ **Wheat Market Outlook:**

Significant events:

- **USDA reports** on Sept. 30th were bullish for wheat which led to a strong rally into the weekend. *USDA put US wheat supplies at the lowest level in 14 years.*
 - According to the USDA Small Grains Summary last week, the 2021 US wheat production dropped by 12% or -5.8 million mt from 2020. Specifically, soft White wheat, Hard Red Spring Wheat and Durum wheat production dropped by a big 47%, 44% and 45% respectively.
 - The decrease in production contributed to the small 1,780 million bushel stock number. This was 72 million bushels less than expected and 378 million bushels less than last year.
- We will need to follow the **Argentine GM wheat situation**; reports so far are sketchy and unclear, but this could lead to changes in trade flows and FOB prices.
- **Matif wheat** hit contract highs rising almost €7/mt in the immediate aftermath of the USDA report.
- Ocean freight continues to rise: The **Baltic Dry Index** soared over 5% Friday to over 12-year highs.

➤ **Outlook:**

The pace and volume of world import demand shows no sign of relenting. The N Hemisphere harvest is only just over, but cash wheat continues to make new highs, and while the S Hemisphere looks good, it cannot solve the overall supply problem. Fears of additional Russian export restrictions hover in the background.

- **Bullish USDA numbers for wheat have moved the wheat markets higher. We still do not see reason to expand sales for now as end users continue to expand coverage.**

iii) Primary Elevator Price Tables and Grade Spreads

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

Date: 04-10-2021					
NW Sask	Spot		NW Sask	Deferred	
	(bu.)	(mt)		Dec. '21 (bu.)	Dec. '21 (mt)
1 CWRS 13.5	\$11.10	\$407.86	1 CWRS 13.5	\$11.14	\$409.33
1 CWAD 13.0	\$18.60	\$683.44	1 CWAD 13.0	\$18.89	\$694.09
1 CPSR 11.5	\$10.13	\$372.22	1 CPSR 11.5	\$10.17	\$373.69
SW Sask			SW Sask		
1 CWRS 13.5	\$10.95	\$402.35	1 CWRS 13.5	\$10.98	\$403.45
1 CWAD 13.0	\$18.62	\$684.17	1 CWAD 13.0	\$18.99	\$697.77
1 CPSR 11.5	\$10.01	\$367.81	1 CPSR 11.5	\$10.05	\$369.28
NE Sask			NE Sask		
1 CWRS 13.5	\$10.84	\$398.30	1 CWRS 13.5	\$10.90	\$400.51
1 CWAD 13.0	\$19.34	\$710.63	1 CWAD 13.0	\$19.50	\$716.51
1 CPSR 11.5	n/a		1 CPSR 11.5	n/a	
SE Sask			SE Sask		
1 CWRS 13.5	\$10.78	\$396.10	1 CWRS 13.5	\$10.81	\$397.20
1 CWAD 13.0	\$19.14	\$703.28	1 CWAD 13.0	\$19.36	\$711.36
1 CPSR 11.5	\$10.03	\$368.54	1 CPSR 11.5	\$10.02	\$368.17

Data source: PDQ, Sept. 13/21

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

Avg. Grade Spread/ Pro Discounts	Cdn\$/bu.	Cdn\$/mt
1 CWRS 13.5	Base Grade	Base Grade
2 CWRS 13.5	(0.15)	(5.51)
1 CWRS 12.5	(0.30)	(11.02)
1 CWAD 13.0	Base Grade	Base Grade
1 CWAD 13.5	0.00	0.00
2 CWAD 13.5	(0.10)	(3.67)
2 CWAD 12.5	(0.30)	(11.02)

Data source: PDQ, Sept. 13/21

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/million mt. During the 2013/14 crop year the export basis for wheat widened to approximately C\$250/million mt, 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 Canadian FOB Prices minus primary elevator bids, the FOB prices are translated into Canadian 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/million mt, depending on number of cars moved and elevator used.
- Approximate relationship between U.S. wheat classes and Canadian wheat classes:
 - DNS 14% in the Pacific North West (PNW) ≈ 1 CWRS 13.5% in Vancouver
 - HRS in the Pacific North West (PNW) ≈ 2 CWRS 13.0% in Vancouver
 - HRW in the Pacific North West (PNW) ≈ 3 CWRS in Vancouver

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.”

- 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.
 - 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.

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

Relevant FOB Prices and Export Basis			04-10-2021	
Type of Wheat	FOB Prices CDA ¹ (calculated)		Street Prices	Export Basis ²
	West Coast (Cdn./mt\$)	Great Lakes (Cdn.\$/mt)	Rosetown (Cdn.\$/mt)	Basis: West Coast-Centr. SK (Cdn\$/mt)
DNS 14.0	\$498.86	\$748.52		
HRS	\$489.61			
HRW 11.5	\$428.58			
SWW 12.0	\$457.25			
1 CWRS 13.5³	\$498.86		\$398.67	\$100.19
2 CWRS 13.0³	\$489.61		\$389.49	\$100.13
3 CWRS³	\$428.58		\$371.11	\$57.47
CPS³	\$450.78		\$367.07	\$83.70
1 CWAD⁴		\$742.05	\$734.88	\$7.17
Competing wheat:	US\$/mt			
Russia 12.5 (Black Sea, 25k mt)	\$310.00	October		
French 11.5 (Rouen)	\$309.80	October		
ASW 10.5 (W Coast)	\$300.00	December		
Argentine 12.0	\$300.00	October		

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

² Export Basis = FOB Prices CDA minus Cdn. Street Price

³ DNS 14% ≈ 1 CRWS 13.5%; HRS ≈ 2 CWRS 13.0%; HRW ≈ 3CWRS; SWW ≈ CPS

⁴ Values derived to Lakehead FOB